Waimakariri District Council Proposed Waimakariri District Plan

Recommendations of the PDP Hearings Panel

Recommendation Report 12

Hearing Stream 5 Part 2: District-wide matters – EW-Earthworks

This report should be read in conjunction with **Report 1** and **Recommendation Reports 2, 15, 17 and 31.**

Report 1 contains an explanation of how the recommendations in all subsequent reports have been developed and presented, along with a glossary of terms used throughout the reports, a record of all Panel Minutes, a record of the recommendation reports and a summary of overarching recommendations. It does not contain any recommendations per se.

Recommendation Report 2 contains the PDP Panel's recommendations on the PDP's Part 2: District-wide Matters – Strategic directions - SD Strategic directions objectives and policies.

Recommendation report 15 contains the PDP Panel's recommendations on the PDP's HH- Historical Heritage Chapter.

Recommendation report 17 contains the PDP Panel's recommendations on the PDP's EI- Energy and Infrastructure Chapter.

Recommendation report 31 contains the PDP Panel's recommendations on the PDP's TEMP- Temporary Activities Chapter.

Appendix 1: Schedule of attendances

Appendix 2: Recommended amendments to the Proposed Plan - Tracked from notified version (provisions not consequentially renumbered)

The Hearings Panel for the purposes of **Hearing Stream 5** comprised Commissioners Gina Sweetman (Chair), Allan Cubitt, Gary Rae, Megen McKay, Neville Atkinson and Niki Mealings.

1. Introduction

Report outline and approach

- 1. This is Report 12 of 37 Recommendation Reports prepared by the PDP Hearings Panel appointed to hear and make recommendations on submissions to the Proposed Waimakariri District Plan (PDP).
- The report addresses the objective, policies, rules and other provisions relating to the EW - Earthworks Chapter and the submissions received on those provisions. The relevant provisions are:
 - Objectives EW-O1
 - Policies EW-P1
 - Standards EW-S1, EW-S2 and EW-S5
 - Advice Notes EW-AN1
- 3. We have structured our discussion on this topic as follows:
 - (a) **Section 2** summarises key contextual matters, including relevant provisions and key issues/themes in submissions;
 - (b) **Sections 3 8** contains our evaluation of key issues and recommended amendments to provisions; and
 - (c) **Section 9** contains our conclusions.
- 4. This Recommendation Report contains the following appendices:
 - (a) **Appendix 1: Schedule of attendances** at the hearing on this topic. We refer to the parties concerned and the evidence they presented throughout this Recommendation Report, where relevant.
 - (b) Appendix 2: Recommended amendments to the Proposed Plan Tracked from notified version. This sets out the final amendments we recommend be made to the PDP provisions relating to this topic. The amendments show the specific wording of the amendments we have recommended and are shown in a 'tracked change' format showing changes from the notified version of the PDP for ease of reference. Where whole provisions have been deleted or added, we have not shown any consequential renumbering, as this method maintains the integrity of how the submitters and s42A Report authors have referred to specific provisions, and our analysis of these in the Recommendation Reports. New whole provisions are prefaced with the term 'new' and deleted provisions are shown as struck out, with no subsequential renumbering in either case.
- 5. We record that all submissions on the provisions relating to the EW Chapter have been taken into account in our deliberations. In general, submissions in support of the PDP have not been discussed but are accepted or accepted in part. More detailed descriptions of the submissions and key issues can be found in the relevant s42A

Reports, Responses to Preliminary Questions and written Reply Reports, which are available on the Council's website.

- 6. In accordance with the approach set out in Report 1, this Report focuses only on 'exceptions', where we do not agree fully or in part with the s42A report authors' recommendations and / or reasons, and / or have additional discussion and reasons in respect to a particular submission point, evidence at the hearing, or another matter. Original submissions have been accepted or rejected as recommended by the s42A report author unless otherwise stated in our Recommendation Reports. Further submissions are either accepted or rejected in conformance with our recommendations on the original submission to which the further submission relates.
- 7. The requirements in clause 10 of the First Schedule of the Act and s32AA are relevant to our considerations of the PDP provisions and the submissions received on those provisions. These are outlined in full in Report 1. In summary, these provisions require among other things:
 - (a) our evaluation to be focussed on changes to the proposed provisions arising since the notification of the PDP and its s32 reports;
 - (b) the provisions to be examined as to whether they are the most appropriate way to achieve the objectives; and
 - (c) as part of that examination, that:
 - i. reasonable alternatives within the scope afforded by submissions on the provisions and corresponding evidence are considered;
 - ii. the efficiency and effectiveness of the provisions is assessed;
 - iii. the reasons for our recommendations are summarised; and
 - iv. our report contains a level of detail commensurate with the scale and significance of the changes recommended.
- 8. We have not produced a separate evaluation report under s32AA. Where we have adopted the recommendations of Council's s42A report authors, we have adopted their reasoning, unless expressly stated otherwise. This includes the s32AA assessments attached to the relevant s42A Reports and/or Reply Reports. Those reports are part of the public record and are available on the Council website. Where our recommendation differs from the s42A report authors' recommendations, we have incorporated our s32AA evaluation into the body of our report as part of our reasons for recommended amendments, as opposed to including this in a separate table or appendix.
- 9. A fuller discussion of our approach in this respect is set out in Section 5 of Report 1.

2. Summary of provisions and key issues

Outline of matters addressed in this section

- 10. In this section, we provide relevant context around which our evaluation of the notified provisions and submissions received on them is based. Our discussion includes:
 - (a) summary of relevant provisions;
 - (b) themes raised in submissions; and
 - (c) identification of key issues for our subsequent evaluation.

Submissions

11. There are 231 original submission points on the Earthworks chapter provisions. 133 are in support of the provision/s as notified, 97 are opposed and/or request amendment, 1 is neutral. There were 77 further submissions, 2 neutral, 42 in opposition, 27 in support and 6 unstated.

Key issues

12. The key issues in contention on this chapter are the relationship between the Energy and Infrastructure provisions and the Earthworks provisions, and technical aspects of earthworks activities.

3. Integration with the Energy and Infrastructure Chapter

- 13. Through the hearing process, it was clearly identified that there was need for integration between the Earthworks and Energy and Infrastructure Chapters, which was addressed in the JWS¹ and S42A report author memo². Recommendation Report 17 on the Energy and Infrastructure Chapter, outlines our recommendations on integration between both Chapters. We do not repeat that content in this report, and direct readers to that report, which also contains our reasons for these recommendations. However, we note that integration between the two chapters resulted in substantial amendment to the Earthworks Chapter.
- 14. However, for completeness, we summarise below the amendments that we have made to the EW Chapter, over and above the amendments recommended by the s42A report author, to better integrate with the EI Chapter:

Provisions	Panel recommendations
How to interpret and apply	Include a new section on "How to interpret and
the rules	apply these rules" which states "The activity
	rules within the EW Chapter do not apply to
	energy and infrastructure activities in the EI
	Chapter. However, the EW standards may apply
	to energy and infrastructure activities if these
	are specifically included in the EI rules ".
EW-R3	Delete EW-R3.
EW-R8	Delete EW-R8.
Table EW-1	Include new advisory note in Table EW-1:
	General standards for earthworks which states
	"These standards do not apply to earthworks
	associated with linear infrastructure works

¹ Energy and Infrastructure Integration Joint Witness Statement, 28 November 2023

² Memo on Integration between EI Chapters and the rest of the Proposed Plan, Andrew Maclennan, 12 July 2023

	within roads, provided any open trenches do not exceed 1m in width".
EW-S2	Add an advice note to exclude the Standard from applying to "(1) earthworks associated with linear infrastructure works within roads, provided any open trenches do not exceed 1m in width".

4. EW-01

15. The Panel's recommended amendment to EW-O1, over and above the amendment recommended by the s42A report author, is summarised below:

Provisions	Panel recommendations
EW-O1	Replace 'minimises' with 'manages'

Amendment and Reasons

- 16. The submissions we consider here are NZ Pork³, Horticulture New Zealand⁴, Waka Kotahi⁵ and KiwiRail⁶ who sought that EW-O1 be reframed to enable earthworks and avoid, remedy or mitigate adverse environmental effects.
- 17. The s42 report author recommended the submission be rejected, preferring the notified PDP version which requires earthworks to be undertaken in a way that 'minimises' adverse effects. He said that all earthworks alter the surface of the land, usually permanently, and 'minimising' effects enables earthworks, whilst accounting for the nature and degree of land disturbance.
- 18. The Panel notes that it is often impossible to minimise the adverse environmental effects of earthworks, and instead, adverse effects can be appropriately managed. Throughout the hearing process, we asked several s42A report authors whether it is appropriate to use the word 'manage' in objectives and policies. There was general agreement that 'manage' may be an appropriate term provided it is further qualified in the objective, or in the associated policies, as to how something is to be managed. Mr Maclennan, author of the Energy and Infrastructure s42A report, articulated in his reply report that 'manage' enables a range of management methods and is a commonly used term within plan drafting. We agree and prefer 'manage' instead of 'minimise', noting however that the policies associated with EW-O1 do provide clarity about how earthworks are to be managed. This is consistent with the remainder of the Plan, where 'manage' is used in other objectives and policies, albeit mostly in policies.

³ 169.22

⁴ 295.101 and FS47

⁵ FS110

⁶ FS99

19. Although we have not agreed to rephrase the objective to enable earthworks (noting also that the policy EW-P1 is enabling of earthworks), the term 'manage' effects provides partial relief, and accordingly, we accept the submissions in part.

5. Objectives – EW-P1

20. The Panel's recommended amendment to EW-P1, over and above the amendment recommended by the s42A report author, is summarised below:

Provisions	Panel recommendations
EW-P1	Delete clause (6)

Amendment and Reasons

- 21. The submissions we consider here are Summerset Retirement Villages (Rangiora) Limited⁷ and Kāinga Ora⁸ who sought that EW-P1(6) be deleted because the drafting is unclear and, in any event, is already covered by EW-P1(1). Clause 1 enables earthworks where they are compatible with character, values and qualities of the location and surrounding environment. Clause 6 enables earthworks where land disturbance is minimised on the visual amenity of the surrounding areas.
- 22. The s42A report author agreed that Clause 6 was unclear and recommended:
 - (a) In clause 1, replace 'character' with amenity values; and
 - (b) In clause 6, delete visual amenity.
- 23. We understand the reasoning for those recommendations. However, we also agree with the submitters that clause 6 should be deleted in its entirety because, despite the recommended amendment, it does not to provide any further policy direction than already provided for in clause 1. We recommend that the submissions be accepted and that clause 6 be deleted.

6. Rules – EW-R6

24. The Panel's recommended amendment to EW-R6, over and above the amendment recommended by the s42A report author, is summarised below:

Provisions	Panel recommendations
EW-R6	Amend to not duplicate the NES-CS and align with our recommendation to remove EW-P6 because it is inconsistent with the functions of
	District Councils.

⁷ 207.16

⁸ FS88

Amendment and Reasons

- 25. The submission we consider here is Z Energy Limited, BP Oil New Zealand Limited, Mobil Oil New Zealand Limited⁹ who sought a new rule be included in the earthworks chapter for the removal or replacement of underground fuel storage tanks. Specifically, they requested that earthworks associated with the operation, maintenance, removal, or replacement of existing underground assets be permitted, provided that: (1) the Earthworks Standards are met, and (2) the disturbance does not permanently alter the profile, contour, or height of the land.
- 26. The s42A report author agreed that there was a gap in the rule framework, accepted the submission and provided drafting for the new recommended rule. He recommended that earthworks undertaken in relation to the removal or replacement of a fuel storage system be permitted where (1) it complies with the National Environmental Standard on Contaminated Soil to Protect Human Health Regulations 2011 (NES-CS), (2) is setback from rivers, lakes and wetlands, and (3) complies with EW-S4, EW-S6 and EW-S7.
- 27. We support the inclusion of a new rule as recommended by the s42A report author but do not accept the proposed drafting in full. In our view, clause (1) is unnecessary, as the NESCS applies independently of the District Plan and does not require explicit reference. Clause (2) is also not supported, as it addresses water quality matters that fall within the functions of the Regional Council, not the District Council. This position is consistent with our earlier decision to delete EW-P6 for the same reasons. We do recommend accepting clause (3), which requires compliance with EW-S4, EW-S6, and EW-S7.
- 28. The s42A report author did not address the submitters' proposed requirement that earthworks must not permanently alter the profile, contour, or height of the land. In our view, this condition is unnecessary and not aligned with the purpose of enabling necessary maintenance and replacement of existing infrastructure. Permanent changes to landform may be appropriate in some circumstances and are already managed through the relevant earthworks standards (EW-S4, EW-S6, and EW-S7), which address environmental effects such as slope stability, sediment control, and amenity impacts. Accordingly, the submission is accepted in part only.

7. Standards – EW-S1, EW-S2 and EW-S5

29. The Panel's recommended amendments to TEMP-R5, EW-S2, EW-S5, EW-MD7(3) and EW-P6 over and above the amendments recommended by the s42A report author, are summarised below:

⁹ 276.40

Provisions	Panel recommendations
EW-S1 and Table EW-1	Amend to permit earthworks in a SNA up to a
	maximum of 5m ³ within a 12-month period for
	TMTA in accordance with TEMP-R5
EW-S2	Exempt EW-S2 setbacks for activity that has a
	building consent granted.
EW-S5 and EW-MD7(3)	Retain EW-S5 permitted maximum depth for
	burial of dead animals and offal pits at 2 metres
	below ground level.
	Retain "of any water body" in EW-MD7(3)

EW-S1 and TEMP-R5 Temporary Military Training Activities

- 30. The submission we consider here is the New Zealand Defence Force (NZDF)¹⁰ who submitted that the earthworks standard EW-S1 is too restrictive in a SNA or ONF–Ashley River/Rakahuri Saltwater Creek Estuary (Rakahuri ONF). They sought amendment to Table EW-1 from no permitted maximum volume in any 12-month period per site to 5m³.
- 31. This submission crosses several chapters of the District Plan, those being:
 - (a) Temporary Activities (TEMP) Chapter as the NZDF submission and evidence is focused on temporary military training activities (TMTA) rather than permanent activities in these areas.
 - (b) Natural Features and Landscape (NFL) Chapter which provides the rule framework for the Rakahuri ONF.
 - (c) Ecosystems and Indigenous Biodiversity (ECO) Chapter which provides the rule framework for SNAs.
- 32. The purpose of each Chapter differs, which are generally summarised as being:
 - (a) For the EW Chapter, to manage earthworks across the district, recognise earthworks are integral to various land use activities but have the potential to generate adverse effects on people, property and the environment.
 - (b) For the TEMP chapter, to enable temporary activities across all areas of the district.
 - (c) For the NFL chapter, to recognise and provide for the protection of natural landscapes and features.
 - (d) For the ECO Chapter, to protect and maintain SNAs of indigenous biodiversity.
- 33. The EW s42A report author, Mr Wilson, recommended the NZDF submission to increase the maximum volume in any 12-month period per site from 0 to 5m³ be rejected. He thought it was appropriate to require a consent for earthworks in an SNA and the Rakahuri ONF to protect the sensitive nature of these areas. He acknowledged that his recommendation aligns with that of the NFL s42A report author, Ms Milosavljevic. The ECO s42A report author, also Ms Milosavljevic, did not comment on the appropriateness of TMTA in a SNA.

¹⁰ 166.30

- 34. In response to a NZDF submission¹¹ on the TEMP Chapter, that s42A report author, Ms Benny, recommended the following changes to TEMP-R5:
 - (a) Amend the heading to include ancillary buildings and structures; and
 - (b) Delete the SNA exception because the SNA rules on indigenous vegetation clearance apply to the TEMP Chapter.
- 35. We accepted Ms Benny's recommendations in our TEMP Chapter Report, agreeing that the previous restriction on activities within an SNA were overly restrictive. TMTA will be subject to rules in other chapters which are relevant to the specific site of the activity, for example the EW rules. Furthermore, TEMP-R5(2) requires the site to be restored to the same condition as prior to the temporary activity, which provides additional protection for earthworks associated with TMTA and Emergency Services Training Exercises (ESTA) in SNA's. Permitting TMTA, including ancillary buildings and structures, in an SNA will by its nature include some form of earthworks. Consequently, we recommend amending Table EW-1: General standards for earthworks to earthworks in an SNA up to a maximum of 5m³ within a 12-month period for TMTA in accordance with TEMP-R5. We have preferred the evidence of Ms Benny over that of Mr Wilson in this regard and accept this part of the NZDF submission.
- 36. We did not receive sufficient evidence from NZDF or any other submitter that would lead us to a similar recommendation for the Rakahuri ONF. We agree with Mr Wilson that a resource consent should be required for earthworks in the Rakahuri ONF, regardless of whether they are temporary or permanent, unless expressly permitted elsewhere in the Plan. We consider this appropriate when reviewing the objectives and policies of each Chapter, and particularly the NFL chapter, which is that most relevant to the Rakahuri ONF. The NFL Chapter identified three natural features and landscapes considered to be significant at a district scale, those being the Puketeraki Mountains, Waimakariri River and Rakahuri ONF. Parts of the Rakahuri ONF were also identified as having Significant Amenity Landscapes. All the rules in the NFL Chapter are more restrictive for activities in the Rakahuri ONF compared to the Puketeraki Mountains and Waimakariri River. Except for a discretionary activity status in NFL-R1 for an addition to an existing building, all other rules have non-complying activity status. This indicates to the Panel that activities in the Rakahuri ONF are strongly discouraged and do not fit the desired outcomes for this area. We recommend that this part of the NZDF submission is rejected.

EW-S2 Setback Standards and the Building Act

37. The submissions we consider here are MainPower¹², Summerset Retirement Villages (Rangiora) Limited¹³ and Kāinga Ora¹⁴, who sought an exemption to the general setback standards in EW-S2 where the activity has been approved by a building consent.

^{11 166.25}

¹² 249.25

¹³ 207.20

¹⁴ FS88

- 38. The s42A report author initially rejected the submissions but changed his recommendation to 'accept in part' in his initial reply report¹⁵. He said that the Building Act and Building Code primarily deal with environmental effects during the period of construction only and the RMA (and therefore the Plan) must deal with wider issues such as land stability, reverse sensitivity and nuisance impact on surrounding properties. He recommended amending EW-S2 so that the standard did not apply to earthworks wholly within the footprint of a building that has a building consent.
- 39. Planner expert for MainPower, Ms Foote¹⁶, presented evidence that to require a resource consent application for earthworks where a building consent has been granted would result in unnecessary duplication because erosion and sediment controls are considered as part of a building consent. Ms Dale, Planner expert for Kāinga Ora¹⁷, agreed and provided evidence on the approach taken by surrounding Councils where the Selwyn District Plan and Christchurch District Plan exempt earthworks where a building consent has been granted.
- 40. We prefer the evidence of Ms Foote and Ms Dale. In our experience, the surrounding councils' approach is the norm, practical and prevents duplication. We do not recommend limiting the exemption to the footprint of the building and instead recommend that the setback exemption applies to any earthworks required for the building, as granted in the building consent. We accept the submissions and recommend a full exemption from EW-S2 where there is an application for a building consent or where a building consent has been granted.

Water quality considerations in EW-S5 and EW-MD7(3)

- 41. The submissions we consider here are Fulton Hogan¹⁸, Summerset Retirement Villages (Rangiora) Limited¹⁹ and Kāinga Ora²⁰, who sought all sought various amendments to the earthworks chapter that manage effects on water because it is a regional council function and governed by the Canterbury Land and Water Regional Plan (CLWRP)
- 42. The report author provided advice on the relationship between the District Plan and CLWRP, in his s42A report, written response to preliminary questions²¹ and initial reply report²². He recommended:
 - (a) Delete EW-P6 which relates to earthwork effects on ground and surface water and shift policy direction for 'mahinga kai' protection to EW-P1(2);
 - (b) Amend EW-S5 to a maximum depth below ground level from 2m to 1m to be consistent with the CLWRP; and
 - (c) Delete 'and water quality of any water body' from EW-M7(3).

¹⁵ 29 September 2023

¹⁶ Paragraphs 66-67, Statement of Evidence of Melanie Foote, 7 August 2023

¹⁷ Paragraphs 4.2 and 4.8-4.11 Statement of Primary Evidence of Clare Dale on behalf of Kāinga Ora, 7 August 2023

¹⁸ 41.35

¹⁹ 207.21

²⁰ FS88

²¹ 18 August 2023

²² 29 September 2023

- 43. We agree with his assessment that, where the effects were solely related to water quality, controlled by the CLWRP, and unrelated to a District Council function, they should be deleted from the Plan.
- 44. We adopt the s42A report author's analysis and recommendations for EW-P6, EW-P1(2) and EW-M7 but with a slight amendment to the later where we recommend retaining "of any water body".
- 45. In our view, avoiding overlap between the regional and district council functions is desirable, however, it is appropriate for each Plan to have different rules when managing different effects. EW-S5 is specific to earthworks required to bury dead animals and for offal pits. The CLWRP will manage effects of these activities on water and the District Plan will manage the land stability, visual amenity, nuisance and reverse sensitivity effects of these activities. We recommend that the notified version of EW-S5 is retained, which permitted a maximum depth of 2m.
- 46. We recommend that the submissions are accepted, except for those related to EW-S5, which we recommend are accepted in part.

8. Advice Notes – EW-AN1

47. The Panel recommends minor amendments to EW-AN1 which differ from the recommendation of the s42A report author, as summarised below:

Provisions	Panel recommendations
EW-AN1(6)	Additional sentence added to clause 6 relating to earthworks that could affect an archaeological site, to better align with HH-AN4 in the Historic Heritage Chapter.

Amendment and Reasons

- 48. The submission we consider here is Heritage New Zealand Pouhere Taonga²³, who sought amendment to the advice note to make clear what works could affect an archaeological site, and to enable consistency with the recommendations of the Historic Heritage Chapter s42A report author.
- 49. In response to similar submissions, the HH Chapter s42A report author recommended the following amendments to the HH Chapter:
 - (a) In HH-AN4, add 'archaeological' before the word 'site'; and
 - (b) In HH-AN2 and HH-AN3, add the sentence "Works that could affect archaeological sites include but are not limited to earthworks, gardening, cultivation, and the disturbance of land for the installation of fence posts".

²³ 178.10 and 178.25 (HH Chapter) and 178.50 (EW Chapter)

- 50. She considered these changes would enable plan users to better understand the relationship between earthworks and archaeological sites, and that potential impacts can occur for smaller scale activities. We accepted this assessment and amendments in our recommendation report on the HH Chapter.
- 51. The EW Chapter s42A report author did not bring across these changes into his final recommendations on EW-AN4 which relates to earthworks activities requiring an archaeological authority from HNZPT. Instead, he recommended adding "The provisions of the Taonga o onamata Historic Heritage Chapter apply".
- 52. The Panel accepts this would be an improvement, but we consider that the reference to the provisions of the HH chapter should be stated up front. We also recommend that the reference to minor scale earthworks that may require an authority from HNZPT should not include the word 'earthworks' because this is separately defined in the PDP and its use in this advice note may cause confusion. Accordingly, we have provided amended wording in the advice note which will still make clear to plan users that small scale activities could impact on an archaeological site, and this will be consistent with the HH Chapter advice note.
- 53. Whilst this does not provide the precise relief sought by the submitter, it enables consistency across the two chapters, and provides partial relief to the submission, which we recommend be accepted in part.

9. Minor amendments

54. We have made minor amendments, over and above the amendments recommended by the s42A report author, which are summarised below:

Provisions	Panel recommendations
EW-MD1(14)	Deleted "including specified infrastructure"

55. We have recommended that "including specified infrastructure" is removed from EW-MD1(14), which requires consideration of the safe and efficient functioning of infrastructure, as we believe this term introduces unnecessary confusion and the matter of discretion is sufficiently clear without the qualification.

10. Conclusion

- 56. For the reasons summarised above, we recommend the adoption of a set of changes to the PDP provisions relating to Part 2: District-wide Matters EW Earthworks. Our recommended amendments are shown in Appendix 2.
- 57. Overall, we find that these changes will ensure the PDP better achieves the statutory requirements, national and regional direction, and our recommended Strategic Directions, and will improve its useability.

Attendee Speaker Submitter N		
Council Reporting Officer	Peter Wilson	N/A
Fulton Hogan Limited	Mr Timothy Ensor	41
Mainpower New Zealand	Mir Hinoury Ensor Mir Mark Appleman	249 FS 58
Limited	Minimark Appleman Ms Melanie Foote	24910.00
Linited		
	Ms Catherine HeppelthwaiteJo Appleyard	
	Annabelle Lee	
Chorus New Zealand Ltd,	Annabelle Lee Mr Chris Horne	62 FS 95
Spark New Zealand Trading	 Mr Graeme McCarrison 	021033
Limited, Connexa Limited,	 Mr Graeme McCarrison Mr Andrew Kantor 	
One New Zealand Group	Mr Andrew Kantor Mr Colin Clune	
Limited, FortySouth	 Ms Fiona Matthews 	
NZ Pork Industry Board and	Mrs riona matthews Mrs riona matthews Mrs Vance Hodgson	295,169 FS
Horticulture New Zealand Ltd	 Ms Sarah Cameron 	47
	 Mr Brent Kleiss 	-17
	 B G Williams 	
	R E Robilliard	
Transpower New Zealand Ltd	Ms Ainsley McLeod	195 FS 92
	 Mr Jordan Shortland-Witehira 	1001002
	 M Conway, K Viskovic 	
Canterbury Regional Council	M Sonway, R Viscovic Ms Joanne Mitten	316
Ravenswood Developments	S Eveleigh, S Schulte	347
Limited		011
Waimakariri Irrigation Limited	Ben Williams	210
	Kirsty Jacomb	
Canterbury Botanical Society	Mr Tom Ferguson	122
Tabled Evidence		
Fuel Companies	Miles Rowe	276 FS 104

Appendix 1: Submitter attendance and tabled evidence for Earthworks - Hearing Stream 5

Appendix 2: Recommended amendments to the Proposed Plan - Tracked from notified version (provisions not consequentially renumbered)

EW - Ketuketu whenua - Earthworks

Introduction

This chapter provides for and manages earthworks across the District and recognises that earthworks are an integral part of the use and development of land for residential activities, <u>industrial</u>,¹ rural and commercial activities at a variety of scales.

Earthworks also have the potential to generate adverse effects on people, property, infrastructure and the environment, including effects on natural, cultural and amenity values, and from displacement of flood water.

The provisions in this chapter are consistent with the matters in Part 2 - District Wide Matters -Strategic Directions and give effect to matters in Part 2 - District Wide Matters - Urban Form and Development.

Other potentially relevant District Pplan provisions:

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

- Energy and Infrastructure: this chapter contains provisions relating to energy and infrastructure activities that involve earthworks;
- Contaminated Land: this chapter contains objectives and policies relating to contaminated land that may be relevant to earthworks involving contaminated land;
- Sites and Areas of Significance to Māori: this chapter contains provisions for earthworks that affect culturally important locations.
- Special Purpose Zone (Kāinga Nohoanga): how the Earthworks provisions apply in the Special Purpose Zone (Kāinga Nohoanga) is set out in SPZ(KN)-APP1 to SPZ(KN)-APP5 of that chapter.
- 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.
- <u>Canterbury Land and Water Regional Plan Rule 5.175 which outlines setbacks for earthworks</u> adjacent to waterbodies.²

Objectives

EW-O1	Earthworks Earthworks are undertaken in a way that minimises manages adverse effects on amenity values, cultural values, property, infrastructure and the health and safety of people and the environment.
Policies	
EW-P1	Enabling earthworks Enable earthworks where they:

¹ Daiken New Zealand Limited [145.23].

² Environment Canterbury [316.154].

	 are compatible with the character<u>amenity</u> values and qualities³ of the location and surrounding environment; avoid, remedy or mitigate any adverse effects on any sites or areas identified as ONL, ONF, SAL, Coastal Environment Overlay, SNA, <u>mahinga kai</u>⁴ and sites and areas of significance to Māori, Natural Open Space Zone, surface freshwater bodies and their margins, or any notable tree, historic heritage or heritage setting; minimise erosion and avoid adverse effects from stormwater or sediment discharge from the site; avoid increasing the risk to people or property from natural hazards; maintain the stability of land including adjoining land, infrastructure, buildings and structures; <u>and</u> minimise adverse dust, vibration and visual effects beyond the site.
EW-P2	 Earthworks within Flood Assessment Overlays Allow earthworks within the Urban Flood Assessment Overlay and Non-Urban Flood Assessment Overlay where: the earthworks do not increase the flooding risk to the site or neighbouring sites through the displacement of flood waters; the earthworks associated with proposed subdivision, development or use do not increase the risk to life or property; and the ability to convey flood waters is not impeded as a result of the earthworks.
EW-P <mark>32</mark>	 Archaeological sites, and sites and areas of significance to Māori Earthworks avoid, remedy or mitigate adverse effects on archaeological sites and sites and areas of significance to Māori, by having regard to: the particular cultural or historical values of the site and the extent to which these values may be affected; any consultation with mana whenua, in particular any identified mitigation measures or the incorporation of mātauranga Māori into the scale and extent of the earthworks; and any consultation with HNZPT.
EW-P4 <u>3</u>	 Scale of earthworks within or adjacent to urban environments Minimise adverse effects related to the scale of earthworks on character, and amenity values within or adjacent to urban environments by: encouraging the integrated design and management of earthworks associated with subdivision, development and use; minimising any off-site effects of earthworks by controlling the duration and sequencing of earthworks. avoiding quarry, landfill, cleanfill area, mining, or dam activities within or adjacent to urban environments.⁷
EW-P <mark>54</mark>	 Rehabilitation Require site rehabilitation during or immediately following the completion of earthworks activity to: 1. minimise adverse effects on amenity values, natural values, cultural values, quality of the surrounding environment and the future use of the site, and

³ Summerset [207.16].
⁴ Environment Canterbury [316.156], Summerset [207.16].
⁵ Summerset [207.16].
⁶ Environment Canterbury [316.81].
⁷ Environment Canterbury [316.81].

	2. encourage rehabilitation that incorporates ecological enhancement and habitat for indigenous fauna and the use of locally sourced indigenous vegetation.
EW-P6	Water resources
	- Avoid, Manage adverse effects of earthworks on ground and surface water bodies that could result in water contamination and adverse effects on mahinga kai. ⁸

Activity Rules

<u>Rules</u>

How to interpret and apply the rules

(1) The activity rules within the EW Chapter do not apply to energy and infrastructure activities in the EI Chapter. However, the EW standards may apply to energy and infrastructure activities if these are specifically included in the EI rules⁹

EW-R1	Earthworks for the maintenance and repart carparks and accessways ¹⁰	air of roads, footpaths, cycleways, tracks,
All Zones	Activity status: PER Where: 1. EW-S4 and EW-S7 are met; 2. the earthworks are within the formed area of the road, footpath, cycleway, track, carpark or accessway; and 3. the earthworks are contained within ground previously disturbed through construction of the road, footpath, cycleway, track, carpark or accessway:	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes ¹¹
EW-R <mark>21</mark>	Earthworks for interment within a burial	ground, cemetery, or urupā
All Zones	Activity status: PER	Activity status where compliance not achieved: N/A
EW-R3	Earthworks for maintenance of existing community scale irrigation/stockwater networks, ¹² public water races or drains ¹³	
All Zones	Activity status: PER Where: 1. EW-S1 to EW-S7 are met;	Activity status where compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location

⁸ Environment Canterbury [316.156], Summerset [207.16].

¹² WIL [210.43, 210.44].

⁹ Chorus, Spark and Vodafone [62.6], Transpower [195.23, 195.68] and Mainpower [249.1, 249.24, 249.47, 249.48] ¹⁰ Transpower [195.105].

¹¹ Chorus NZ, Spark NZ Trading Ltd and Vodafone NZ Ltd [62.6], Transpower [195.23].

¹³ Chorus, Spark and Vodafone [62.6], Transpower [195.23, 195.68] and Mainpower [249.1, 249.24, 249.47, 249.48]

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	 the disposal or stockpiling of any dredged material to land shall meet EW-S1, EW- R9 (stockpiling), EW-S2 and EW- R5 (overland flow paths),¹⁴ and the activity is undertaken by the Crown, Regional Council, District Council or their nominated agent. 	EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna
EW-R4	Earthworks for community scale natural	hazards mitigation works
	Activity status: PER Where: 1. EW-S1 to EW-S7 are met ¹⁵	Activity status where compliance not achieved: DIS
EW-R5	Earthworks within an overland flow path	
Assessment	Activity status: PER Where: 1. EW-S1 to EW-S7 are met; and 2. the height of any filling does not exceed 0.25m above the ground level at (18 September 2021); or activity does not exacerbate flooding on any other property by displacing or diverting floodwater on surrounding land in a 0.5% AEP event 3. the filling is for a building platform that is located greater than 2m from any site boundary within the Urban Flood Assessment Overlay, or greater than 10m from any site boundary within the Non- Urban Flood Assessment Overlay; or. 4. the flood depth in a 0.5% AEP event is less than 100mm. ¹⁶	Activity status where compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD4 - Natural hazards
	whether the site is located within an o	ed in accordance with NH-S1(b) will identify overland flow path. railable information showing flood modelling
EW-R <mark>62</mark>	Earthworks for wells, test pits or bores	

¹⁴ Environment Canterbury [316.157] and [316.81].
 ¹⁵ Environment Canterbury [316.157] and [316.81].
 ¹⁶ Environment Canterbury [316.158] and [316.81].
 ¹⁷ Environment Canterbury [316.81].

All Zones	Activity status: PER Where: 1. any test pit of 1m ³ or greater shall be located a minimum of 5m from the foundation of any habitable building.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD4 - Natural hazards EW-MD5 - Rehabilitation
	 Advisory Note Test pits or bores should be filled and compacted, or capped to ground level upon completion of testing. 	
EW-R <mark>7<u>3</u></mark>	Earthworks for firebreaks	
All Zones	 Activity status: PER Where: the earthworks are located outside of a SNA, and EW-S1 to EW-S76 are met; or the firebreak is required by FENZ for purposes under the Fire and Emergency Act 2017. 	Activity status when compliance not achieved: DIS
	Advisory Note • The NESPCF ¹⁸ regulates	earthworks for forestry purposes.
EW-R8	Earthworks for underground infrastructure including underground components of above ground infrastructure ^{19_20} This rule does not apply to any treatment plants, pump stations, canals, infiltration basins open raw water storage ponds/lakes and treated water reservoirs provided for under EW R11.	
All Zones	Activity status: PER- Where: 1. the activity is permitted under <u>EI-R4</u> , EI-R10, <u>EI-</u> <u>R46</u> -	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna TREE-MD1 - Pruning, root protection area, trunk and crown, removal TREE-MD2 - Extent of benefit or need for the activity or works
EW-R <mark>94</mark>	Earthworks stockpiling	
All Zones	Activity status: PER Where:	Activity status when compliance not achieved: RDIS

¹⁸ s44A(6) RMA.

 ¹⁹ Chorus New Zealand, Spark New Zealand Trading Limited, Vodafone New Zealand Limited [62.52]; Waimakariri Irrigation Ltd [210.52]; Mainpower [249.30]. and RMA Schedule 1 Clause 16(2) consequential amendment
 ²⁰ Statement, Chorus, Spark and Vodafone [62.6], Transpower [195.23, 195.68] and Mainpower [249.1, 249.24, 249.47,

²⁰ Statement, Chorus, Spark and Vodafone [62.6], Transpower [195.23, 195.68] and Mainpower [249.1, 249.24, 249.47, 249.48]

	 EW-S1 to EW-S76 are met; any stockpile shall not exceed 250m³ and 4m in height; the activity shall not be located within 20m of the bank of any river or lake, 50m from the margin of any wetland; and any stockpile is located greater than 100m from any sensitive activity on an adjoining site in different ownership. 	EW-N EW-N EW-N EW-N EW-N	of discretion are restricted to: AD1 - Activity operation, scale, form and location AD2 - Nuisance and reverse sensitivity AD4 - Natural hazards AD5 - Rehabilitation AD6 - Coastal environment and hazards AD7 - Water bodies, vegetation and fauna AD8 - Outstanding natural features and landscapes
	 Advisory Note Where the volume specifie specified in EW-S1 will appreciate the specified in EW-S1 will apprec		51 is less than 250m ³ , the maximum volume 2).
EW-R10	Earthworks for farm quarries ²¹		
General Rural Zone	Activity status: PER Where: 1. EW-S1 to EW-S7 are met; and 2. the maximum area of any fail shall be 1500m ² -per site.	rm quarry	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes
EW-R <mark>115</mark>	Earthworks not subject to Rule	s EW-R1 t	to EW-R10
All Zones	Activity status: PER Where: 1. EW-S1 to EW-S 76 are met. 2. NH-R4 and NH-R6 are met		Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural Hazards EW-MD5 - Rehabilitation

²¹ RMA Schedule 1 Clause 16(2)

		EW-MD6 - Coastal environment and hazards
		EW-MD7 - Water bodies, vegetation
		and fauna
		EW-MD8 - Outstanding natural features and landscapes
EW-R136	Earthworks undertaken in relation to the	removal or replacement of a fuel storage
	<u>system</u>	
<u>All zones</u>	Activity status: PER	Activity status when compliance not achieved: RDIS As set out in the
	Where:	<u>relevant built form standards²²</u>
	1. <u>EW-S2, EW-S6 and EW-S7 are</u> <u>met;</u>	
EW-R127	Earthworks to modify, alter or remove sa	nd dunes or vegetation on sand dunes
Coastal Environment Overlay	Activity Status: DIS	Activity status when compliance not achieved: N/A

This is Earthworks Standards

EW-S1 General standards for earthworks	
 Unless otherwise specified in EW-R1 to EW- R11, earthworks shall comply with Table EW-1. Where zone or overlay thresholds differ, the lower threshold shall apply. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Natural features and landscapes

Table EW-1: General standards for earthworks

Maximum volume or area in any 12 month period	od (unless otherwise specified) per site:
Medium Density Residential Zone, General Residential Zone, Settlement Zone, Open Space Zone, Sport and Active Recreation Zone, Special Purpose Zone (Hospital), Special Purpose Zone (Kāinga Nohoanga) - sites within Tuahiwi Precinct	200m ³ or 30m ³ per 100m ² of site area, whichever is greater

²² Fuel Companies [276.39].

Neighbourhood Centre Zone and Mixed Use Zone	250m ³
Special Purpose Zone (Pegasus Resort), Special Purpose Zone (Museum and Conference Centre), Special Purpose Zone (Pines Beach and Kairaki Regeneration Zone), Local Centre Zone, Large Format Zone, Town Centre Zone, Industrial Zones	1000m2 <u>or 50m³ per 100m² of site area.</u> whichever is greater ²³
Large Lot Residential Zone, Special Purpose Zone (Kāinga Nohoanga) - sites within Large Lot Residential Precinct <u>, Special Purpose Zone</u> (Rangiora Airfield) ²⁴	500m ³
General Rural Zone, Rural Lifestyle Zone, Special Purpose Zone (Kāinga Nohoanga) - sites outside of Tuahiwi Precinct	500m ³ or 100m ³ per ha, whichever is greater
ONF - Waimakariri River or SAL Ashley River/Rakahuri	10m ³ except for gravel extraction in the river bed
ONL – Putekeraki Range and Oxford Foothills	 For the construction and maintenance of stock water ponds – 500m² per pond. Earthworks to level the ground for the installation of water tanks – 50m² per tank. Earthworks required for the installation or maintenance of water pipes shall comply with EW-S1 for the zone. All other activities - 10m² on any one site.
ONF – Ashley River/Rakahuri Saltwater Creek Estuary, <mark>SNA,</mark> Heritage Setting	None permitted
<u>SNA</u>	None, except up to 5m ³ may be undertaken within a 12 month period where it is for a TMTA undertaken under TEMP-R5
Coastal Environment Overlay	25m ³ within any continuous five year period
Natural Open Space Zone	10m ³
	•

Advisory Note

- For ONF Waimakariri River or SAL Ashley River/Rakahuri, the following may apply:
 - o Waimakariri River Regional Plan 2004;
 - o Canterbury Land and Water Regional Plan 2018; and
 - Regional Coastal Environment Plan 2005.
- <u>These standards do not apply to earthworks associated with linear infrastructure works within</u> roads, provided any open trenches do not exceed 1m in width²⁵

²³ Ngai Tahu Property [411.30].

²⁴ Daniel Smith [10.1].

²⁵ Chorus, Spark, Vodafone [62.53]; Waimakariri Irrigation Ltd [210.54]

 EW-S2 General setbacks This standard does not apply to: Earthworks associated with linear infrastructure works within roads, provided any open trenches do not exceed 1m in width²⁶; or earthworks which are or will be subject to building consent²⁷. 		
 Earthworks more than 300mm in height or depth shall be set back a minimum of 2m from any boundary of a site in different ownership. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes	
EW-S3 Setback from water bodies ²⁸ 1. Earthworks shall not be undertaken: a. within 20m from the bank of any stream, river; or b. within 50m of the edge of any wetland or lake.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD7 - Water bodies, vegetation and fauna	
EW-S4 <u>3</u> Setback from root protection area		
 Earthworks shall not occur within 3m of the root protection area of a notable tree listed in TREE1 – Schedule of Notable Trees, except as provided for by EI-R46. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: TREE-MD1 - Pruning, root protection area, trunk and crown, removal TREE-MD2 - Extent of benefit or need for the activity or works	
EW-S54 Excavation and filling		
 Except for the burial of dead animals, and for offal pits, earthworks shall achieve the following: a maximum height of 1.5m above ground level, a maximum depth of 2m²⁹ below ground level; c material used for filling of land must be cleanfill material. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards	

²⁶ Chorus, Spark, Vodafone [62.3]; Waimakariri Irrigation Ltd [210.54]
 ²⁷ MainPower [249.25], Summerset Retirement Villages (Rangiora) Limited [207.20] and Kāinga Ora [FS88]
 ²⁸ Federated Farmers [414.171].

²⁹ Summerset [207.21]

	EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes
EW-S65 Earthworks maximum slope	
 Earthworks shall not be undertaken on land that has a slope of more than 1:4 (25%) where the volume of cut exceeds 10m³ or the volume of filling exceeds 30m³ within any 12 month period. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD5 - Rehabilitation EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Natural features and landscapes
EW-S76 Earthworks sediment control	
 While earthworks are being undertaken or rehabilitated, sediment from the earthworks shall be prevented from entering any water body, drain or stockwater race. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD4 - Natural hazards EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes

 The Canterbury Regional Council Erosion and Sediment Control Toolbox for Canterbury provides guidance on sediment control measures for a range of earthworks and different types of sites.

Advice Notes

EW-AN1	Activities and structures may also be subject to controls outside the District Plan. Reference should also be made to any other applicable rules or constraints within other legislation or ownership requirements including the following:
	 Earthworks may require building consent under the Building Act 2004. The Stockwater Race Bylaw 2019, the Waimakariri River Regional Plan 2004, and the Canterbury Land and Water Regional Plan 2018 may apply. Resource consent may be required under regional plans including the Canterbury Land and Water Regional Plan 2018 and the Canterbury Air Regional Plan 2017. Earthworks within the beds <u>and on the margins</u> of lakes and rivers is <u>are</u> regulated under the regional planning

	 framework (Canterbury LWRP) and earthworks in the coastal marine area under the Canterbury Regional Coastal Environment Plan.³⁰ 4. The NESPQF³¹ regulates earthworks for forestry purposes, and the NESCS manages the effects on human health from the disturbance or removal of contaminated soil. Specific activities (i.e. soil sampling and removing or replacing fuel storage systems) are regulated under the NESCS as well as under the rules of this chapter.³² Earthworks managed under the NESCS and NESPQF³³ are not subject to provisions in this chapter other than where the District Plan deals with terms and conditions not covered in the NES or in the circumstances where the District Plan is allowed to be more stringent. The District Plan can be more stringent than the NESPCF for forestry in outstanding natural features and landscapes, and SNAs, or more stringent or lenient where in relation to afforestation.³⁴ 5. The NESETA and the NESTE have controls for earthworks in relation to infrastructure. Earthworks managed under the NESTF and the NESTF are not subject to provisione in this chapter other than where they address terms and conditions not covered in the NES, or in the circumstances where the District Plan is allowed to be more stringent than the NESTF, including if the activity is located: a. within the root protection area of a notable tree or other vegetation in the road reserve listed in the District Plan; b. within the root protection area of a notable tree, group of trees, or other vegetation outside the road reserve described); e. in an andscape feature identified an the District Plan as having heritage values; d. in a landscape feature identified in the District Plan as a significant habitat for indigenous vegetation (however described); f. on an area identified in the District Plan as a significant habitat for indigenous vegetation; f. in an area identified in the District Plan as an outstanding natural landscape or f
EW-AN2	For guidance refer to the Erosion and Sediment Control Toolbox for Canterbury prepared by the Regional Council.
EW-AN3	If an archaeological site is located during any earthworks, the following Accidental
	Discovery Protocol applies:

³⁰ Environment Canterbury [316.159]. ³¹ s44A RMA.

³² Z Energy Limited, BP Oil New Zealand Limited, Mobil Oil New Zealand Limited [276.39].

³³ s44A RMA.

³⁴ s44A RMA.

³⁵ Transpower [195.106].

	1. The earthworks must cease immediately in the vicinity of the site;
	2. HNZPT must be notified and application must be made for the appropriate
	archaeological authority if required;
	 Te Ngāi Tūāhuriri Rūnanga must be notified of the discovery and site access must be provided to enable appropriate cultural procedures and tikanga to be undertaken;
	4. If human remains (koiwi) are uncovered then the NZ Police must also be notified;
	 Works affecting the archaeological site shall not resume until HNZPT, the Police (if human remains are involved) and Te Ngāi Tūāhuriri Rūnanga have each given the necessary approval for work to continue; and
	 Evidence of archaeological sites can include oven stones, charcoal, shell middens, ditches, banks, and pits, building foundations, artefacts of Māori and Non-Māori origin or human burials.
EW-AN4	These standards do not apply in the following situations:
	a) during a state of emergency or transition period declared or where direction to
	undertake specific earthworks has been issued by the controller or recovery
	manager under the Civil Defence Emergency Management Act 2002; or during a
	biosecurity emergency declared by an authorised person under the Biosecurity
	<u>Act 1993.</u> ³⁶

Matters of Discretion

EW-MD1	Activity operation, scale, form and location
	1. Location, volume and area of earthworks.
	2. The operational need or functional need for the earthworks in the location.
	 Any effects on the natural character and amenity values of the site and surrounding area.
	 Any effects on archaeological sites, heritage values or the heritage setting of the site or within the surrounding area.
	 Any disturbance of culturally significant sites and any proposed mitigation measures.
	Any effects on the health and structural integrity of any notable tree and any effects on the values that have been identified for the notable tree.
	 Public health and safety including contingency provisions for emergency response. Mitigation including fencing, planting and landscaping.
	9. Effects on soil quality.
	10. Final contour and ground level resulting from excavation or filling.
	11. Vehicle movements associated with earthworks.
	 Any effects on the operation, maintenance, upgrade and development of the National Grid <u>and transmission lines³⁷</u>.
	13. Any constraint on the future development potential of the site or surrounding sites.
	14. <u>The safe and efficient functioning of infrastructure, including specified</u> <u>infrastructure.</u> ³⁸
EW-MD2	Nuisance and reverse sensitivity
	 The extent to which dust, sediment and water or wind erosion effects can be avoided or mitigated including through landscape treatment.

 ³⁶ Federated Farmers [414.170, 414.173].
 ³⁷ Mainpower [249.33].
 ³⁸ Waka Kotahi [275.42], Waimakariri Irrigation Ltd [210.60].

	 Reverse sensitivity effects such as the effect of a sensitive activity locating near earthworks activities. Any effects on other sites including noise, vibration, dust, siltation, sedimentation, visual effects on amenity values and traffic generation. The effectiveness of any environmental management plan.
EW-MD3	 Land stability 1. Any effects on land stability, including stability of adjoining land, and any susceptibility to subsidence, slumping or erosion. 2. Any alteration of natural ground levels and consequently to the height of structures and buildings that may be erected on the site.
EW-MD4	 Natural hazards Risk to the health and safety of people, property, any building or infrastructure. The location, or identification, of the site within any natural hazard category or overlay, and the ability to manage risk associated with any natural hazard that is identified. Any effect on sites of cultural significance. Any effect on drainage, inundation run-off, flooding risk, overland flow paths or water table level on the site or surrounding land, and any mitigation works proposed. The effect of the earthworks on flow of floodwater through the site, including any effects on the entry and exit points for floodwater. The extent to which the earthworks will displace or divert floodwater from the site onto any other site. Any effect on the operation and function of roads or other infrastructure. Any effect on the operation and function of roads or other infrastructure.
EW-MD5	 Rehabilitation Any proposed site rehabilitation, considering: a. the location, gradient and depth of the earthworks; b. availability of clean fill material and time frames for rehabilitation; c. any adverse effects on traffic, dust, groundwater, drainage and landscape; d. any re-vegetation, including the use of indigenous <u>and non indigenous plant</u> <u>varieties</u> from seed sourced from the relevant ecological district within which the planting is to take place³⁹, and any weed and pest control proposed, and e. any mitigation or proposed mitigation. Any quarry site rehabilitation plan, prepared by a person suitably qualified or experienced in site rehabilitation.
EW-MD6	 Coastal environment and hazards Any increase in sedimentation in the coastal environment. The extent to which the proposal will maintain, preserve or enhance the natural character attributes of the coastal environment. Any effects from the clearance of vegetation, or disturbance of habitat in the coastal environment. Any effects on the nature, form and resilience of the sandy beach, dunes or rocky shoreline including the protection they provide from coastal inundation. Any effects on the functioning of coastal processes. Any positive or adverse effects on risk to life, property and the environment posed by coastal hazards.

³⁹ Federated Farmers [414.29].

	 The extent to which earthworks would remedy or mitigate coastal hazard or be compatible with existing coastal hazard mitigation works or structures. The extent to which the earthworks will restrict or enable public access and enjoyment of the coastal environment. The extent to which earthworks restrict public access to and along the CMA and water bodies with high values. The extent to which the earthworks will be supervised by either a Chartered Professional Engineer with experience in coastal processes or a professional Engineering Geologist (IPENZ registered). Any effects on culturally significant sites.
EW-MD7	 Water bodies, vegetation and fauna The extent to which the disturbance of the soil, including disturbance of contaminated land, adversely affects areas of significant indigenous vegetation and significant habitats of indigenous fauna. Any removal of, or disturbance to, indigenous vegetation shall be in accordance with the provisions in the ECO chapter.⁴⁰ Any effects on the natural character and water quality⁴¹-of any water body. The extent to which the earthworks will restrict public access and enjoyment of the margin of any water body. The extent to which the habitat of trout, salmon, and indigenous aquatic species, may be adversely affected by any disturbance on the riparian margin margin of the water body⁴². Fencing, planting and landscaping. The extent to which the land use will adversely affect wahi taonga and mahinga kai. For ngā wai, the matters specified in SASM-MD3 Nga Wai.
EW-MD8	Outstanding natural features and landscapes 1. Where earthworks are located in any ONF or ONL: a. the timing, duration, area and location of the activity; b. any vegetation that is to be retained; c. any vegetation screening and backdrop; d. the relationship of the activity to landform including prominent ridgelines; e. natural character values, amenity values and landscape values, including revegetation type and density; f. earthworks location and management, including revegetation, of cuts and fills; and g. any effects on the stability and life-supporting capacity of soil.

EI-R52	Earthworks (other than quarry or landfill)⁴³ and the disturbance of land for the installation of fence posts⁴⁴ within a National Grid Yard	
All Zones	Activity status: PER Where: 1. around National Grid support towers: ⁴⁵	Activity status when compliance with EI-R52 (1) not achieved: RDIS Matters of discretion are restricted to:

⁴⁵ Transpower [195.44].

 ⁴⁰ DOC [419.123].
 ⁴¹ Environment Canterbury [316.156], Summerset [207.16], Federated Farmers [414.171].

⁴² DOC [419.123]. ⁴³ Transpower [195.44]. ⁴⁴ Transpower [195.44].

earthworks and the	EI-MCD1 - Historic heritage, cultural values and
disturbance of land for the	the natural environment ⁵³
installation of fence posts	EI-MCD12 - National Grid ⁵⁴
shall be no deeper than	
300mm within 6m of a	Activity status when compliance with EI-R52 (2) to
foundation of a National	(5) not achieved: NC
Grid support structure; ⁴⁶	Notification
a. depth shall be no	An application for a restricted discretionary activity
deeper than 300mm	under this rule is precluded from being publicly
within 6m of a	notified, but may be limited notified only to
foundation of a	Transpower NZ Ltd where the consent authority
National Grid support	considers this is required, absent its written approval.
structure;	
b. depth shall be no	
deeper than 3m:	
i. between 6m and	
12m from the	
foundation of a	
220kV or a	
350kV National	
Grid support	
structure; or	
ii. between 6m and	
10m from the	
foundation of a	
66kV National	
Grid support	
structure; ⁴⁷	
2. earthworks and the	
disturbance of land for the	
installation of fence	
posts ⁴⁸ shall not	
compromise the stability of	
a National Grid support	
structure;	
3. earthworks <u>and the</u>	
disturbance of land for the	
installation of fence posts ⁴⁹	
shall not result in a	
reduction in the ground to	
conductor clearance	
distances below what is	
required by Table 4 of	
NZECP 34:2001 New	
Zealand Electricity Code of	
Practice for Electricity Safe	
Distances; and	

 ⁴⁶ Transpower [195.44].
 ⁴⁷ Transpower [195.44].
 ⁴⁸ Transpower [195.44].
 ⁴⁰ Transpower [195.44].

 ⁴⁹ Transpower [195.44].
 ⁵³ Transpower [195.84] and Chorus, Spark and Vodafone [62.50 and 62.51].
 ⁵⁴ Chorus, Spark and Vodafone [62.29]

4. earthworks <u>and the</u> <u>disturbance of land for the</u> installation of fence posts ⁵⁰	
shall not result in <u>existing</u> ⁵¹ vehicular access to a	
National Grid support	
structure being permanently obstructed.	
5. <u>the activity is not located in</u> SASM (except where	
located in a road corridor) ⁵² .	

Where: EI-MCD12 1. earthworks are more than 300mm deep and less Activity status v 300mm deep and less MC than 3m deep: Notification a. between 6m and 12m from the foundation of a 220kV or a 350kV National Grid notified, but may Transpower NZ L	retion are restricted to: 2 National Grid chen compliance not achieved: a restricted discretionary activity precluded from being publicly be limited notified only to Ltd where the consent authority required, absent its written

⁵⁰ Transpower [195.44].
 ⁵¹ Transpower [195.44].
 ⁵² Chorus, Spark and Vodafone [62.6], Transpower [195.23, 195.68] and Mainpower [249.1, 249.24, 249.47, 249.48]
 ⁵⁵ Transpower [405, 44].

⁵⁵ Transpower [195.44].

⁵⁷ Transpower [195.44]

 4. <u>earthworks and the</u> <u>disturbance of land for the</u> <u>installation of fence posts</u> <u>shall-does not result in</u> <u>existing vehicular access</u> <u>to a National Grid support</u> <u>structure being</u> <u>permanently obstructed.</u> 5. <u>the activity is not located</u> <u>in SASM (except where</u> <u>located in a road</u> <u>corridor)⁵⁶.</u>
 Exemptions This rule does not apply to: earthworks undertaken by a network utility (other than for the reticulation and storage of water in canals, dams or reservoirs including for irrigation purposes);⁵⁸ earthworks undertaken as part of agricultural or domestic cultivation; or repair, sealing or resealing of a road, footpath, driveway or farm track; and earthworks for which a dispensation has been granted by Transpower NZ Ltd under the NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances.
Advisory NoteNational Grid transmission lines are shown on the planning map.

EI-R54	Earthworks adjacent to a 66kV	or 33kVmajor ⁵⁹ electricity distribution liner
All Zones	 Activity Status: PER Where: <u>earthworks are setback at least 6m from the centreline of a major electricity distribution line as shown on the planning map; or⁶⁰earthworks shall not exceed 3m in depth between6m and 10m from the visible outer edge of a foundation of a 66kV or 33kV electricity distribution line pole or tower⁶¹;</u> <u>earthworks meet the following requirements:</u> 	Activity status when compliance not achieved: RDIS-NC ⁶⁷ Matters of discretion are restricted to: EI-MD13 - Major electricity distribution lines ⁶⁸ Notification An application for a restricted discretionarynon- complying ⁶⁹ 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.

⁵⁶ Chorus, Spark and Vodafone [62.6], Transpower [195.23, 195.68] and Mainpower [249.1, 249.24, 249.47, 249.48]

⁵⁸ Transpower [195.44].

 ⁵⁹ Mainpower [249.92].
 ⁶⁰ Mainpower [249.92].
 ⁶¹ Mainpower [249.92].

⁶⁷ Mainpower [249.93]. 68 Mainpower [249.93].

⁶⁹ Mainpower [249.93]

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<u>a. be no deeper than</u>	
300mm within 2.2m	
of the foundation of	
the major electricity	
distribution line	
pole, pi-pole or	
tower; and	
<u>b. be no deeper than</u>	
0.75m between	
2.2m and 6m from	
the foundation of	
the major electricity	
distribution line	
pole, pi-pole or	
tower; and ⁶²	
a.c. shall not	
destabilise a	
66kV or 22kV (major ⁶³	
33kV<u>major</u>63	
electricity	
distribution line	
pole, <u>pi-pole</u> ⁶⁴ or	
tower; and	
2.<u>3.</u>earthworks <mark>shall</mark> <u>do</u> 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;	
4. the activity is not located	
in SASM (except where	
located in a road	
corridor) ⁶⁵ ;	
5. the activity complies	
with Earthworks standard	
<u>s EW-S1, EW-S2, EW-</u>	
<u>S4, EW-S5, EW-S6, and</u>	
<u>54, EW-35, EW-36, and</u> <u>EW-S7</u> . ⁶⁶	
<u>EVV-3/</u>	

 ⁶² Mainpower [249.92].
 ⁶³ Mainpower [249.92].
 ⁶⁴ Mainpower [249.92].
 ⁶⁵ Chorus, Spark and Vodafone [62.6], Transpower [195.23, 195.68] and Mainpower [249.1, 249.24, 249.47, 249.48]
 ⁶⁶ Transpower [195.84] and Chorus, Spark and Vodafone [62.50 and 62.51].

 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 or their approved contractor on behalf of the network utility operator⁷⁰ (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 prior written consent has been provided⁷¹ 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.⁷²
 Advisory Notes <u>66kV/33kV Major</u>⁷³ 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 Code of Practice for Electricity Safe Distances.

 ⁷⁰ Mainpower [249.92].
 ⁷¹ Mainpower [249.92].
 ⁷² Mainpower [249.92].
 ⁷³ Mainpower [249.92].