BEFORE an Independent Commissioner appointed by Tasman District Council

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application by C J Industries Ltd for land use consent RM200488 for gravel extraction and associated site rehabilitation and amenity planting, land use consent RM200489 to establish and use vehicle access on an unformed legal road and erect associated signage, and an application for a permit to discharge a contaminant (clean fill) to land RM220578

OPENING SUBMISSIONS OF COUNSEL FOR CJ INDUSTRIES LIMITED

21 November 2022

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MAY IT PLEASE THE COMMISSIONER

Introduction

1. CJ Industries Limited has applied for resource consents to authorise the extraction of gravel, stockpiling of topsoil, and reinstatement of quarried land, with associated amenity planting, signage and access formation at 134 Peach Island Road, Motueka:

   a. RM200488 land use consent for gravel extraction and associated site rehabilitation and amenity planting.

   b. RM200489 land use consent to establish and use vehicle access on an unformed legal road and erect associated signage.

2. CJ Industries has also sought a discharge permit to authorise backfilling with clean fill (RM220578).

The site

3. The site is in Tasman region, approximately 5.5 km from the centre of Motueka as the crow flies:

Figure 1 Site location

4. The property is at 134 Peach Island Road, and is owned by Tim Corrie-Johnston, who lives onsite with his family. Other Corrie-Johnston family members are shareholders and director of CJ Industries, and Mr Des Corrie-Johnston owns a property to the south at 493 Motueka River West Bank Road.

5. To the east of the site is the Motueka River. To the west of the site is a small overflow channel and the Motueka River West Bank Road. To the north/north-east are residences and an orchard, and to the south is a property owned by Wakatu Inc and currently used for farming beef cattle. Council stopbanks pass through two parts of the site. The site is zoned Rural 1. It has been farmed for many decades.

Proposal summary

Gravel Extraction and Site Rehabilitation

6. CJ Industries proposes to undertake gravel extraction on the property in three stages, within an area of approximately 73,500m^2, and over a 15 year period. The stages are as shown in the image below, however it is now proposed that Stages 2 and/or 3 will be undertaken first, with Stage 1 works only commencing after mitigation planting has established.

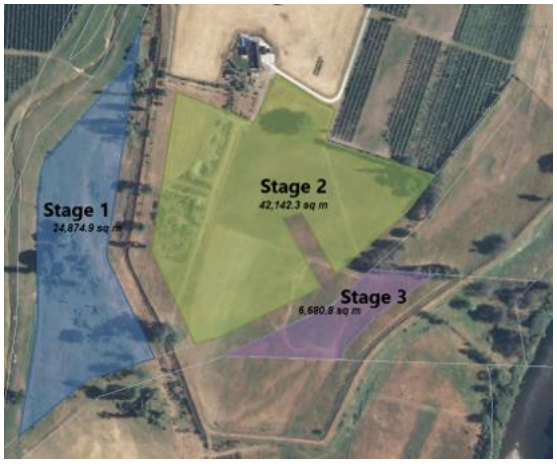

Figure 2 Stages

7. No processing or crushing of gravel will occur on site. Hours of operation will be limited to 7am to 5pm Monday to Friday, with no work during weekends, public holidays or the Christmas period (20 December – 10 January). Heavy machinery will not be operated before 7.30 am.

8. On average the gravel surface is around 0.5 to 1m below ground level (below topsoil and subsoil). The depth of excavation will depend on groundwater levels and weather conditions. No excavation will occur below the groundwater level at the time of excavation except test pitting to confirm groundwater depth. One metre of unexcavated gravel is to be retained between the floor of the excavation pit and actual groundwater level, except that excavation below the 1m freeboard is

permitted provided that at least 0.3m freeboard is provided to groundwater level, groundwater is not rising, and the excavation area is backfilled to a level 1m above groundwater level on the same day. Real-time monitoring of groundwater levels and telemetry systems in excavation equipment will be utilised to manage this.

9. No excavation will occur within 20m of stop banks, on the Motueka River side of the stop bank within Lot 2 DP 2357[1], nor within the land surrounding the dwelling and sheds. Any excavation which approaches property boundaries will have a 1:1.3 - 1:1.7 batter of material (differing gradients relate to upper and lower mantles) which will remain unexcavated. A geo-professional will provide input to verify batter angles are appropriate for actual ground conditions. Any concentrated stormwater flows will also be diverted away from cut faces.

10. Topsoil and subsoil will be removed from the extraction area and will be stockpiled separately. Soil stockpiles will not exceed 3m in height. Aggregates will then be extracted using an excavator and carted from the excavation area using 30-ton dump trucks. The aggregate will be stockpiled in a dedicated Stockpile Area inside the stop bank, as will clean fill to be used as back fill. The Stockpile Area will be 1m below ground level. The maximum height of these stockpiles will be 4m.

11. As the dump truck returns to the extraction area from the Stockpile Area, it will bring clean fill to be used for reinstatement of the extraction area. Clean fill will replace extracted material so that by the end of each day the pit size will be no greater than 1600m^2 (generally 20 x 80m, though shape may vary) except when a new burrow is being started. In this way the extraction site will move daily.

12. Backfilling will generally be undertaken at every possible opportunity even when no new excavation is occurring. Most backfilling and reinstatement will take place within one month of excavation, and this time period will be adhered to for any excavations undertaken adjacent to the 20m stopbank setback and adjacent to property boundaries. However there may be times when excavation is paused when aggregate is not required from this site at the time (e.g if an in-river source of aggregate becomes available). As a backstop, no excavated piece of ground will remain open for longer than 6 months.

[1] The area to the west of the purple 'Stage 3' area in Figure 2.

13. Fill material will be clean and substantially inorganic, and will meet the WasteMINZ definition of 'clean fill'. The top 1m of fill (below the original ground surface level) will comprise stockpiled subsoil and topsoil, with no less than 300mm topsoil.

14. The ground will be reinstated to original levels as far as practicable and the finished ground levels will not result in the obstruction or deflection of flood flows. Pre-start survey and mapping of ground contours and a proposed finished level contour plan will be prepared. Rehabilitation planting and fertilisation of reinstated land will take place. Most of the land will be returned to productive pasture, but 1.35 ha of the Stage 1 land, which has flooding constraints on its productive value, will be enhanced through planting of native river terrace vegetation (along its margins so as to retain capacity for flood flows).

15. For the Stage 1 area, gravel will be extracted progressively in an upstream direction starting at the downstream end of the property, and all excavation will occur in strips aligned parallel to the general direction of flood flow. No material will be stored on the river side of the stop banks except topsoil awaiting reinstatement that day.

16. All works will be undertaken in accordance with professionally prepared management plans: a Noise Management Plan ("NMP"), a Soil Management Plan ("SMP"), a Dust Management and Monitoring Plan ("DMMP"), a Groundwater and Clean fill Management Plan ("GMP), a Landscape Mitigation Plan, a Stage 1 River Terrace Restoration Plan and a Maintenance and Establishment Plan. Drafts of these management plans have been provided with evidence and will be finalised and provided to Council for certification prior to commencement of works.

Transport and access

17. Extracted aggregate will be transferred from stockpiles to truck and trailer units by front end loader. The truck and trailer units will travel to and from the site to CJ Industries' processing plant at 34 Hau Road, Motueka. The truck and trailer units will travel south along the Peach Island paper road, then via a section of marginal strip, then via the access which services 493 Motueka River West Bank Road.

18. The portion of Peach Island Road that will be used and the marginal strip are currently in pasture. A sealed road meeting TRMP requirements for access will be formed. The access will be sealed to at least 3.5m width, with localised widening on corners as necessary, and with gravel shoulders (and passing bays if required). The

access will be adequately maintained by the Applicant for the duration of the activity then removed, unless Council requests that it is retained.

19. The access at Motueka River West Bank Road will be upgraded to a suitable standard to accommodate the proposed heavy vehicle movements, including some tree removals to ensure adequate visibility is achieved. The access crosses the Peach Island overflow channel via a vehicle bridge. The appropriateness of this bridge will be assessed by a suitably qualified engineer and any necessary upgrades will be undertaken prior to access establishment or use. Any upgrade can be completed as a permitted activity.

20. From the access point, trucks will turn left onto Motueka River West Bank Road, then continue south until they are able to cross the Motueka River at the closest bridge at Alexander Bluff. This route has been chosen so as to avoid travelling across the busy Motueka River bridge on State Highway 60 as well as through Brooklyn and Motueka township.

21. Up to 15 trucks will enter/exit the site each day. Truck and trailer units will carry up to 36 tonnes of material each. Returning trucks will carry back fill material as often as possible, in order to minimise vehicle movements.

Signage

22. More than one on-site sign is likely to be required in order to aid in workplace health and safety. There will not be any customers to the site so no advertising or property identification signage will be established, and any signage will be limited to traffic management and health and safety signage to the extent necessary in number and size. Additionally, in order to improve safety associated with the proposed Motueka River West Bank Road vehicle crossing, temporary signage within the marginal strip is proposed.

Amenity (landscape mitigation) and ecological restoration planting

23. In order to limit visual effects from the proposed works, landscape mitigation planting is proposed around the periphery of the working areas, and along the western side of the proposed access. The planting is detailed in the **Landscape Mitigation Plan.**

24. Restoration planting is also proposed to the Stage 1 area following completion of works within that stage., as detailed in the **Stage 1 River Terrace Restoration Plan**. This is for the purposes of ecological and visual amenity betterment. The **Maintenance and Establishment Plan**[2] applies to both types of planting.

Stormwater Management

25. TGgravel extraction zones will be set back at least 20m from permanently flowing water bodies. Removal of vegetation and exposure of topsoil or subsurface layers will potentially expose surfaces to erosion and sediment runoff during rain. Stockpiles of topsoil will be designed to avoid the sedimentation of waterways or contamination of groundwater. Temporary sediment traps will be dug and positioned in appropriate places as a mitigation measure to capture sediments suspended in water. Any internal access roads created for the proposal will be designed so that any sediment laden runoff will be directed to bunded sedimentation traps and not to water bodies. No permanent fixtures such as drainpipes or culverts are proposed to be installed. These measures will be detailed in the SMP.

Noise

26. Noise is expected from truck movements, excavation noise and loading noise. A bund is to be constructed along the north-east site boundary, and sound-reducing deck liners will be used in truck beds. The draft NMP details additional noise mitigation measures.

Dust

27. To minimise any potential adverse effects of dust on the orchard at 131 Peach Island Road, no excavation or topsoil storage will occur within 100 m of the orchard during the months of January to May. Additional measures to minimise dust emissions are covered in the draft DMMP.

Layout

[2] Figures 4 and 5 of Graphic Attachment to Ms Gavin's Evidence in Chief.

28. The site layout is shown in Figure 4 to Ms Gavin's graphic attachment. The restoration planting is shown in Figure 5. Updated version of these Figures are provided as **Attachment 1** to these submissions.

Notification

29. The land use applications and discharge permit were publicly notified at the Applicant's request.

Decision-making framework

30. The decision-making framework is contained in ss 104, 105 and 107, along with Part 2 RMA. Section 16 is also pertinent in respect of noise, and s 217 is relevant due to the Water Conservation (Motueka River) Order 2004. New s 104G relates to certain drinking water sources, but is not relevant to the application. These provisions are addressed below.

31. Section 104 relevantly provides:

> **104 Consideration of applications**
>
> (1) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2 and section 77M, have regard to–
>
> (a) any actual and potential effects on the environment of allowing the activity; and
>
> (ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and
>
> (b) any relevant provisions of—
>
> (i) a national environmental standard:
>
> (ii) other regulations:
>
> (iii) a national policy statement:
>
> (iv) a New Zealand coastal policy statement:
>
> (v) a regional policy statement or proposed regional policy statement:
>
> (vi) a plan or proposed plan; and
>
> (c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.
>
> (2) When forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect.
>
> …
>
> (3) A consent authority must not,—
>
> (a) when considering an application, have regard to—
>
> (i) trade competition or the effects of trade competition; or

(ii) any effect on a person who has given written approval to the application:

…

(c) grant a resource consent contrary to—

(i) section 107, 107A, or 217:

32. These submissions address the relevant s 104 matters by topic. Relevant provisions of planning instruments have been extensively addressed in the AEE, and in Mr Taylor's primary and supplementary evidence. Accordingly, I address the planning instruments only where a question of interpretation or other legal issue arises.

33. Actual and potential effects arising for consideration are:

a. Positive social and economic effects

b. Land productivity

c. Amenity effects - visual amenity, air quality (dust), and noise

d. Flood and erosion risks

e. Geotechnical stability

f. Groundwater

g. Surface water

h. Terrestrial ecology

i. Traffic

j. Cultural effects

34. The permitted baseline is relevant[3] and enables you (but does not require you) to disregard some effects. The permitted baseline does not require alignment of activities, it requires alignment of effects. While a certain activity may not be permitted, that activity may have the same effects as something that is permitted. In that case, those effects can be left out of the s 104 assessment of effects. There are a range of activities that could be undertaken as of right on the site that have an effect that is sufficiently similar to an effect of the proposal as to warrant consideration as

[3] Section 104(2)

part of the permitted baseline when considering visual effects, noise effects, dust effects, and erosion and sediment movement. These include:

a. Horticultural activities and associated vehicle movements, which could involve heavy machinery.

b. Agricultural activities, including intensive farming and associated vehicle movements, which could involve heavy machinery.

c. Disturbance or recontouring of the land over the entire site. This could include activities like cultivation.

d. Formation of any road or track up to 100m per hectare.

35. The permitted baseline is addressed further in relation to specific effects.

Positive social and economic effects

36. There are positive social and economic effects associated with extraction of the aggregate resource, and through associated employment that are relevant to your assessment of the application.

37. The proposal is to extract river run aggregate, a resource that is essential for high value end products, particularly concrete and sealing chip.[4] The concrete is used in house builds, factories, sheds, driveways, marae, community facilities, and anywhere else that concrete is required. The sealing chip is used in road construction and maintenance.[5] There are limited sources of this material. It is very expensive to bring this material from outside the region and not economical to supply local concrete and sealing chip demand using imported product. There is also a lower carbon impact by using a local product because of the weight of the product and the fuel involved in transporting it.[6]

38. CJ Industries and associated concrete and civil construction businesses reliant on aggregate employ 90 people.[7]

[4] Statement of Evidence of Tim Corrie-Johnston dated 15 July 2022 at 2.1
[5] At 3.1 and 3.2.
[6] At 2.4
[7] At 3.4

Visual amenity

39. Ms Gavin assesses the overall effects on rural character and visual amenity values as low-moderate (minor) during the consent, and low positive effect on completion of consent. This assessment relies on mitigation including limiting excavation to 1600 m^2 areas with progressive backfilling and rehabilitation, locating aggregate and backfill stockpiles behind the stopbank and limiting these to 4 m height (3 m above surrounding ground level), and amenity planting as shown in Ms Gavin's Graphic Attachment. The reporting officer agrees that visual effects will be minor.

40. The viability of landscape mitigation planting is challenged in Mr Taia's evidence.[8] Mr Payne and Ms Gavin have considered his evidence and will recommend some amendments to species proposed to be planted. They otherwise do not agree with Mr Taia's conclusions, and will say that landscape mitigation planting will establish as predicted.

Air quality (dust)

41. Air quality effects were assessed by Mr Bluett. He concludes that dust effects will be less than minor. He has prepared a draft DMMP which sets out a suite of measures aimed at mitigating any dust effects. This includes the use of water for dust suppression, which is enabled through a separate resource consent to take and use water held by Tim Corrie-Johnston.[9] Mr Pigott, in his report for the s 42A addendum[10] agrees with recommendations to avoid, remedy or mitigate effects, agrees that the approach in the DMMP is in line with MFE good practice and the best practicable option, and considers that subject to appropriate conditions of consent, the Applicant can adequately manage the activity so dust will result in less than minor amenity and health impacts. The Applicant accepts Mr Pigott's recommended conditions, except that it has amended a condition in relation to soil stockpiles near the apple orchard boundary, in a manner that achieves the same outcome as sought by Mr Pigott.[11]

[8] Statement of Evidence of Peter Taia dated 11 November 2022 at
[9] RM171337, addressed at paragraph 3.40 of Mr Corrie-Johnson's evidence.
[10] Memorandum from Leif Pigott to Susi Solly, s 42A addendum, p 81
[11] Condition 64.

Noise

42. The noise standards for permitted activities (55 dB L_{Aeq})[12] provide guidance as to what noise levels are reasonable in the Rural 1 Zone. With a highest predicted noise level of 51 dB L_{Aeq}, the proposal will comply with the permitted noise standards.[13]

43. The reporting planner considers that no permitted baseline applies with regard to noise effects[14] because the activity is neither permitted or anticipated in the Rural 1 zone, and the noises associated with gravel extraction would be different in character, intensity and duration to 'typical rural noises' including intermittent and temporary plant activity. An activity does not need to be permitted in order for the permitted baseline to apply to it. Nor does the activity need to be anticipated in a zone, although quarrying is anticipated in the Rural 1 Zone.[15] Mr Hegley considers the Rural 1 zone noise limits do provide a permitted baseline, and says that the TRMPS rules address activities of different character, intensity and duration through the standard acoustic assessment techniques of adopting suitable noise limits for a particular zone, averaging and the use of special audible characteristics[16].

44. Notwithstanding that position, the Applicant also commissioned an assessment of the proposal's noise effects. Mr Hegley undertook that assessment and concludes that:[17]

    a. Noise from the proposal will be apparent, but at levels that are comparable to the existing sound environment. From this, he concludes that the effects of noise from quarrying will range from minor to less than minor on surrounding properties.

    b. While individual trucks may be apparent, there are too few trucks to result in a noticeable change to traffic noise in the surrounding area. As such, noise effects from trucks are less than minor.

45. The s42A report stated:

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[12] Rule 17.5.2.1(c) (Day – defined as 7.00 am to 9.00 pm Monday to Friday inclusive and 7.00 am to 6.00 pm Saturday (but excluding public holidays)).
[13] Statement of Evidence of Rhys Hegley dated 15 July 2022, Table 1.
[14] Paragraphs 6.7 to 6.10 of the s42A report
[15] Statement of Evidence of Hayden Taylor dated 15 July 2022, paragraphs 3.21- 3.23
[16] Statement of Evidence of Rhys Hegley dated 15 July 2022, paragraphs 3.28 – 3.31 and 3.65
[17] At 2.1 and 2.2.

I concur with the Council's Team Leader – Environmental Health that the noise associated with the proposed activity will be noticeable, but it may not necessarily be unreasonable.

but that a definitive conclusion could not be reached on noise effects until additional information had been provided by the Applicant. The s 42A addendum records that this information had since been provided (through Mr Hegley's evidence). Mr Winter[18] agrees with Mr Hegley's methodology, with proposed mitigation measures and with his conclusion on traffic noise, and appears to agree with his conclusion on effects of quarrying noise. Outstanding issues relate to:

a. The appropriate noise limit. Mr Hegley recommended a 55 dB L_{Aeq} limit in accordance with the permitted noise limit. Mr Winter recommends a 51 dB L_{Aeq} limit based on the highest predicted noise level from the proposal. The reporting planner considers that the imposed noise limit needs to ensure that noise associated with the proposed activity is not unreasonable and maintains an appropriate level of amenity[19] and adopt's Mr Winter's recommended noise level – but Mr Winter's recommendation of a 51 dB L_{Aeq} limit is not on the basis that a higher noise limit would not maintain an appropriate level of amenity. The Applicant maintains the TRMP limit of 55 dB L_{Aeq} is appropriate.

b. Whether the noise limit should be "corrected" or "uncorrected". The Applicant's conditions initially referred to noise being uncorrected, and Mr Winter said he has no objection to applying an uncorrected noise limit. However Mr Hegley has since clarified that he considers the noise limit should be corrected, as this is the approach set out in NZS 6802:2008.[20]

46. Mr Lang has produced evidence for Valley RAGE. He disagrees with Mr Hegley's background noise assessments, assessments of noise from various sources, adjustments to measured noise, and whether the noise would comply with TRMP daytime limits. Mr Hegley will address those matters in rebuttal evidence.

47. Section 16 RMA requires every occupier of land to adopt the best practicable option to ensure that the emission of noise does not exceed a reasonable level. With reference to s 16, Mr Lang says he considers that audible machinery noise is unreasonable in this environment, especially because it will contain special audible

[18] Memorandum Daniel Winter to Susi Bernsdorf Solly dated 11 October 2022, s 42A addendum p 73.
[19] Section 42A addendum at 5.6
[20] Supplementary Evidence of Rhys Hegley dated 4 November 2022, paragraphs 2.1 to 2.6.

characteristics. Mr Hegley will say that he disagrees that the equipment has special audible characteristics, and with the manner in which Mr Lang has assessed equipment noise.

48. Noise mitigation measures are detailed in Mr Hegley's evidence[21] and the Noise Management Plan and secured by consent conditions. Measures have been added in response to submissions and matters raised in the s 42A report. Mr Winter agrees with proposed mitigation.[22] It is submitted that the Applicant has adopted the best practicable option for each noise-producing aspect of the proposal.

Land productivity

49. Dr Hill and Mr Nelson provide evidence in relation to the land's existing productivity and potential effects on productive land. Prior to this evidence, the Applicant provided a Land Use Capability ("LUC") and Soil Survey produced by Landvision Ltd,[23] which Dr Hill draws on in his evidence.

50. The LUC and soil survey was undertaken at a 1:6,000 scale. To add certainty, an electromagnetic sensor was run over the survey area sampling about 2,000 points per hectare at depths of 1.5 m and 0.5 m. The results were used to determine where soil pits or auger holes were investigated. Six dominant soil types were recorded. LUC classification is based on five inventory factors: rock type, soil type, slope, erosion and vegetation. For soils formed on gravels, it was the depth to the gravels that differentiated them, and also differentiated the LUC unit assigned by Landvision.

51. In relation to assessment scale, the Landvision report says:

> The LUC classification used by the Tasman District Council is based on 1:50,000 scale information. Under LUC mapping protocols a sample or observation should be taken every square cm on the map irrespective of the mapping scale. Hence if the LUC survey is 1:50,000 scale then one square cm on the map represents 25 ha. Therefore the property may or may not have an observation on it considering the land in question is about 11 ha.

52. This is important when considering whether the land is "highly productive land" for the purpose of the National Policy Statement on Highly Productive Land 2022 ("NPSHPL").

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[21] Statement of Evidence of Rhys Hegley dated 15 July 2022, paragraph 3.17
[22] Section 42A addendum, page 74
[23] Further Information Response dated 8 and 10 june 2022, page 74

53. The NESHPL's objectives and policies apply only to "highly productive land". "Highly productive land" is defined as:[24]

> means land that has been mapped in accordance with clause 3.4 and is included in an operative regional policy statement as required by clause 3.5 (**but see clause 3.5(7) for what is treated as highly productive land before the maps are included in an operative regional policy statement** and clause 3.5(6) for when land is rezoned and therefore ceases to be highly productive land)

54. Clause 3.5(7) applies because maps produced in accordance with clause 3.4 have not yet been included in an operative regional policy statement as required by clause 3.5. Clause 3.5(7) says:

> (7) Until a regional policy statement containing maps of highly productive land in the region is operative, each relevant territorial authority and consent authority must apply this National Policy Statement as if references to highly productive land were references to land that, at the commencement date:
>
> (a) is
>
> (i) **zoned general rural or rural production**; and
>
> (ii) **LUC 1, 2, or 3 land**; but
>
> (b) is not:
>
> (i) identified for future urban development; or
>
> (ii) subject to a Council initiated, or an adopted, notified plan change to rezone it from general rural or rural production to urban or rural lifestyle.

55. "LUC 1, 2, or 3 land" is defined as:

> LUC 1, 2, or 3 land means land identified as Land Use Capability Class 1, 2, or 3, as mapped by the New Zealand Land Resource Inventory **or by any more detailed mapping that uses the Land Use Capability classification**

56. The detailed mapping by Landvision uses the Land Use Capability classification.

57. The site does not contain LUC 1 or 2 land. The site has been identified as containing areas of LUC 3 land. One area of LUC 3 is on the landward side of the stopbanks (shaded blue), and the other area is on the river side of the stopbanks (shaded pink), as shown in Figure 4[25]:

[24] Clause 1.3 Interpretation

[25] Figure 4 is from the Landvision Report and the Soil Management Plan produced by Dr Hill (p 6).

Figure 3 LUC mapping

58. Those LUC 3 areas are "highly productive land" in terms of the NPS HPL. Other parts of the site are not.

59. Ms Langford has assessed this aspect of the application for Council. She accepts that Landvision's detailed mapping is accurate, but her interpretation is that the entire application site is defined as highly productive land because to find otherwise Council "would have to accept the more detailed mapping" which it is not able to do "without the guidance document."[26] That is an incorrect interpretation of the NPS HPL, which enables either the default New Zealand Land Resource Inventory or more detailed mapping to be used to determine LUC class. Mr Hill also says that if a category were to be applied to the whole site it would be LUC 4, which is the predominant category.

60. Dr Campbell says he is confident based on his experience that the soils have moderate to high productive potential and this is consistent with the highly productive classification in the NPS-HPL.[27] However, that is also not how highly productive land is defined in the NPS-HPL.

61. The structure of the NPSHPL is that it provides a "default" objective and policy direction that highly productive land is protected for use in land-based primary production, both now and for future generations.[28] In particular Policy 8 is that

[26] Memorandum Mirka Langford to Susi Solly, p 102.
[27] Statement of evidence of Iain Campbell at 17
[28] Objective 2.1 and Policies 1, 4 and 8.

"Highly productive land is protected from inappropriate use and development". That default approach is subject to a number of specific and directive provisos or exceptions. Correctly interpreted, those more specific and directive provisos will prevail over more general policy wording.[29] Clause 3.9 is of most relevance to "use and development" of highly productive land. Relevant parts of clause 3.9 are set out below:

> (1) Territorial authorities must avoid the inappropriate use or development of highly productive land that is not land-based primary production.
>
> (2) A use or development of highly productive land is inappropriate except where at least one of the following applies to the use or development, and the measures in subclause (3) are applied:
>
> > (j) it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:
> >
> > (iv) aggregate extraction that provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand.
>
> (3) Territorial authorities must take measures to ensure that any use or development on highly productive land:
>
> > (a) Minimises or mitigates any actual loss or potential cumulative loss of the availability and productive capacity of highly productive land in their district; and
> >
> > (b) Avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on land-based primary production activities from the use or development.

62. The proposal comes within clause 3.9:

a. It is associated with aggregate extraction that provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand. Mr Corrie-Johnston sets out the high values uses that the aggregate is put to, and Dr Kaye-Blake describes the significant benefits that accrue. Along with Mr Scott, they also set out why aggregate cannot simply be acquired from elsewhere (it is in demand everywhere, and it is very heavy and therefore has high transport costs and CO_2 emissions).

b. It has a functional and operational need to be on the highly productive land (noting that a functional **or** operational need meets the policy, it does not have to be both). Functional need "means the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur

[29] *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38

in that environment"[30]. Operational need "means the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints". Mr Corrie-Johnston and Mr Scott also describe the limitations that mean an aggregate quarry can functionally only locate where the aggregate source exists, and additional constraints such as the need for the source to be close to its end use location that provide both functional and operational need.

c. The use will minimise or mitigate any actual loss or potential cumulative loss of the availability and productive capacity of highly productive land. Dr Hill's evidence is that adherence to the Soil Management Plan will ensure that the removal, management and placement of soil avoids or minimises impacts on the soil properties prior and following placement, and that the re-established soil can over the long term retain or exceed the soil versatility of the original soil on the site.[31] He considers that reduced site productivity and impacts on soil physical properties following reinstatement of the soil post gravel extraction are anticipated in the short term (0-3 years), but that careful soil management throughout the operation and following reinstatement of the soil will reduce impacts on soil properties such that any impacts are likely to only be short term (0-3 years) while the pasture establishes and restores soil structure and soil biology.[32]

63. In the alternative, Dr Hill's evidence shows the activity would also meet clause 3.9(2)(g) given its short-term impacts:

> (g) it is a small-scale or temporary land use activity that has no impact on the productive capacity of the land.

64. Clause 3.10 contains additional policy "exemptions" for highly productive land that is subject to permanent or long-term constraints. Territorial authorities may only allow highly productive land to be subdivided, used, or developed (for activities not otherwise enabled under clauses 3.7, 3.8, or 3.9) if satisfied that all of the criteria in 3.10(1) are met. They are:

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[30] National Planning Standards, 2019, p 58.
[31] Statement of evidence of Reece Hill dated 15 July 2022 at 2.9.
[32] At 2.12.

(a) there are permanent or long-term constraints on the land that mean the use of the highly productive land for land-based primary production is not able to be economically viable for at least 30 years; and

(b) the subdivision, use, or development:

(i) avoids any significant loss (either individually or cumulatively) of productive capacity of highly productive land in the district; and

(ii) avoids the fragmentation of large and geographically cohesive areas of highly productive land; and

(iii) avoids if possible, or otherwise mitigates, any potential reverse sensitivity effects on surrounding land-based primary production from the subdivision, use, or development; and

(c) the environmental, social, cultural and economic benefits of the subdivision, use, or development outweigh the long-term environmental, social, cultural and economic costs associated with the loss of highly productive land for land-based primary production, taking into account both tangible and intangible values.

65. To meet 3.10(1)(a) the Applicant must demonstrate that the permanent or long-term constraints on economic viability cannot be addressed through any reasonably practicable options that would retain the productive capacity of the highly productive land, by evaluating options.[33] The Applicant does not need to rely on this clause, because the proposal is provided for by clause 3.9. However, clause 3.10 is met with respect to the land outside the stopbank, which is subject to permanent or long-term constraints due to its propensity to flood.

66. Issues in dispute as between the Applicant and reporting office or submitter witnesses include:

a. Whether the proposed aggregate extraction provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand

b. Whether there is a "functional or operational need".

c. Whether soil restoration will be effective.

d. Whether the proposal is a small-scale or temporary use of productive land.

[33] There is a non-exhaustive list of possible options including alternate forms of land-based primary production, improved land-management strategies, alternative production strategies, water efficiency or storage methods, reallocation or transfer of water and nutrient allocations, boundary adjustments (including amalgamations), lease arrangements.

e. Whether land outside the stopbank has long-term constraints that mean primary production is not economically viable on it.

Significant national or regional public benefit that could not otherwise be achieved

67. Ms Hollis, giving planning evidence for Valley RAGE, says that neither Dr Kaye-Blake nor Mr Scott have undertaken a detailed analysis of alternative sites (both in the region and elsewhere in New Zealand) that may be available to undertake the proposed gravel extraction, nor a cost-benefit analysis on those sites (as has been undertaken for the application site). I submit a cost-benefit analysis of alternative sites in the region is not required; what must be demonstrated is that the significant benefit could not otherwise be achieved - and the Applicant's evidence demonstrates this. The suggestion that other sites outside the region elsewhere in New Zealand should be assessed is unrealistic - Dr Kaye-Blake says that the price of aggregate doubles when it is hauled 30 km from its source quarry, and additional costs flow through to the rest of the economy, first to concrete then to building, wholesaling, retailing etc.[34] CO_2 emissions also increase steeply.

"Functional or operational need"

68. The s 42A addendum says the proposal does not have a functional need to locate at this particular river environment/location because "whilst the proposed extraction is bound by the availability of the gravel resource, this does not mean that the proposed activity can only occur on the application site."[35] The s 42A addendum accepts the proposed quarry has an operational need.[36]

69. Ms Hollis, giving planning evidence for Valley RAGE, says that:

a. There is not a functional need for the proposed gravel extraction to be on highly productive land as alternative sources of aggregate are available (that are not on highly productive land) according to Mr Campbell and as evidence from the GNS Science database referred to in Mr Harvey's evidence.[37]

[34] Statement of Evidence of Bill Kaye-Blake at 3.8.
[35] Section 42A Addendum at 7.16
[36] Section 42A Addendum at 7.20
[37] Statement of evidence of Jessica Hollis dated 11 November 2022 at 37

b. The NPS-HPL requires there be a functional need for aggregate extraction to be on highly productive land.[38]

c. The Applicant has not provided sufficient evidence that there is an operational need for the proposal to be on highly productive land. The primary drivers for utilising the application site for gravel extraction appear to be that the Applicant owns the land at 134 Peach Island and the cost of transporting the material is lower than other sites.[39]

d. The Applicant should be required to consider possible alternative locations (not on highly productive land) for the activity in greater detail, including a comparison of the technical, logistical or operational characteristics or constraints that exist at alternative sites. This consideration of alternatives should also include the opportunity to extract increased amounts of gravel under the Council's global resource consent.[40]

70. The Reporting Officer and Ms Hollis misunderstand what the policy requires, and Ms Hollis' assessment has overlooked evidence that has already been provided.

71. Establishing a functional need does not require that no other site is available for the activity.

72. The "functional need" relates to the environment, not the highly productive land. Only highly productive land uses have a functional need to be on highly productive land – and these uses do not need to be the subject of an exception clause. This is supported by the Section 32 report for the NPSHPL[41] which said that clause 3.9(2)(j) describes further appropriate uses of HPL including "[s]pecific activities that have a functional or operational need to locate on HPL", i.e. "infrastructure, … and mineral extraction activities that are locally constrained in terms of where they can locate and may necessarily be located on HPL in certain circumstances (eg, where a road needs to be extended through HPL, **or the mineral resource is located on HPL**)". It went on to say that "Infrastructure, defence and mineral activities are also activities that can deliver significant economic and social benefits to people and communities. Therefore, clause 3.9(2)(j) **makes allowance for such activities** ...."

[38] At 37
[39] At 39
[40] At 40
[41] Ministry for the Environment. 2022. National Policy Statement for Highly Productive Land: Evaluation report under section 32 of the Resource Management Act. Wellington: Ministry for the Environment.

Together, "[t]hese provisions recognise that, while the overarching NPS-HPL objective is to protect HPL for use in land-based primary production, **there are other activities and uses that are necessarily or appropriately located on HPL in certain circumstances**. The criteria in clause 3.9(2) clarify the types of activities and uses that may be appropriate on HPL …." These sub-clauses have a number of environmental, economic and social benefits, namely "**enabling activities to be located in close proximity to the activities they support or to the resource they rely on (in the case of mineral or aggregate extraction)**, thus reducing transport impacts and/or other potential adverse environmental effects associated with choosing a sub-optimal location for an activity, so it avoids HPL" whilst supporting "local, regional and national economies" and "communities".

73. The most recent decision on interpretation of functional need and operational need is the High Court's decision in *Poutama Kaitiaki Charitable Trust v Taranaki Regional Council*.[42] This concerned an appeal against a decision of the Environment Court granting resource consents and notices of requirement for a new 6km stretch of road (SH3) north of New Plymouth. A key issue before the Court was whether the Environment Court's was correct to find that there was a "functional need" for the road where it was located - and therefore that it was exempt from the directive policy to avoid loss of extent of natural inland wetlands in the NSPFM 2020. The appellant contended that that the "functional need" test was not met because there was an existing road, and there was an alternative route option available. The High Court rejected this. It found that the "functional need" test does not require an applicant to show that the proposed location is the single only possible location for the activity (as Council's s 42 assessment suggests is the test in this case). Rather the question is "a context and fact specific inquiry, in which the Environment Court considered the comparatively short distance the project traverses, the nature of linear infrastructure, the environment it is proposed to traverse, as well as the alternatives considered"[43].[44] It is obvious that this proposal similarly has a functional need to be in this environment:

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[42] *Poutama Kaitiaki Charitable Trust v Taranaki Regional Council* [2022] NZHC 629

[43] At [21].

[44] The High Court's finding in *Poutama* that the "functional need" test does not require the proposed location to be the single only possible location for the proposed activity aligns with the findings of its earlier decision *Te Runanga o Ngāti Awa v Bay of Plenty Regional Council* [2019] NZEnvC 196. As summarised by the High Court in *Poutama* (at 51): The case concerned the variation of land use consent conditions relating to the taking of groundwater as part of the

a. First and foremost, aggregate extraction needs to be located where aggregate is geologically present, just as water needs to be extracted from a water source, or a new road connecting two pieces of existing road needs to join the two. The fact there may be other possible sources of aggregate (just as there may be other water sources or road locations) does not mean the "functional need" test is not met.

b. The river run gravel found at the Site is only found at a limited number of other locations and, as Mr Scott's evidence shows, an even more limited number can be viably accessed. There is no assurance of access elsewhere. The limitations on aggregate available under Council's global permit have been comprehensively described by Mr Corrie-Johnston.

c. As the evidence of Mr Scott and Mr Corrie-Johnston show, the nature of river run aggregate means that extraction close to the market in which it will be used is critical. There is a shortfall of aggregate nationally so there is no certainty equivalent aggregate could be gained from other parts of the country.[45] Aggregate is heavy and so expensive to transport, meaning costs are significantly increased if it must be transported long distances.

74. The primary driver for utilising the application site for gravel extraction is **not** that the Applicant owns the land at 134 Peach Island. There is no evidence before you on which Ms Hollis could properly rely to reach that opinion. To the contrary, CJ Industries extracts aggregate from riverbeds (generally owned by LINZ and managed under Council's global consent) whenever this source is made available.

Effectiveness of soil restoration

75. Dr Campbell disputes whether the site can be effectively remediated, and Ms Langford says:

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expansion of a water bottling operation. It was argued that water extraction did not fulfil the definition of "rural processing activity" under the relevant plan. To fulfil this definition a rural land use activity was required to have a "functional need" for a rural location. Gault J agreed with the majority finding of the Environment Court that there was a functional need for the activity, notwithstanding that it might have been able to occur in other locations as "finding suitable supplies of water is not a certainty"

[45] Evidence Mr Scott Attachment A.

> Whilst evidence from Dr Hill describes an improvement of the productive capacity, this is reliant upon the successful implementation of the Soil Management Plan. This has not been shown as possible elsewhere in the district …

76. In his primary and supplementary evidence, Dr Hill discusses the examples cited by Dr Campbell, and says these examples do not mean that successful restoration cannot be achieved and the productivity capacity of the restored soil retained. They do not demonstrate that soil restoration is inherently difficult in this region. They are simply examples of poor practice.[46] It is not unusual for achievement of a restoration outcome to be dependent on implementation of a management plan. Mr Corrie-Johnston has reviewed the SMP requirements and says there is nothing in it that appears to be difficult to implement from an operational perspective.[47]

Small-scale or temporary use of productive land with no impact on productive capacity

77. The reporting officer and Ms Hollis do not accept that the proposed use is small-scale or temporary. They also consider there is an impact on productive capacity. This relates back to the effectiveness of restoration, but also whether a temporary impact is relevant – the Applicant says a temporary 0-3 year) loss of productive capacity is not relevant because productive capacity is concerned with its ability to support primary production over the long term.

Long-term constraints that mean primary production is not economically viable

78. The reporting officer accepts that the land outside the stopbank is subject to permanent or long-term constraints. This is not accepted by Ms Hollis who relies on Dr Campbell's evidence that whilst frequently flooded soils are downgraded for potential productive use, this does not preclude their use for very productive purposes. Ms Hollis considers that insufficient evidence has been provided to demonstrate that flood risk, in and of itself, is a permanent or long-term constraint in terms of the NPS-HPL. The Applicant considers this constraint has been established, but will address this matter further in rebuttal evidence.

79. Land productivity is also relevant to TRMP objectives and policies. The TRMP uses the term "high productive value" which it defines as:

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[46] Supplementary evidence of Reece Hill dated 4 November 2022 at 3.37
[47] Supplementary evidence of Tim Corrie-Johnston dated 4 November 2022 at 2.8.

'High productive value – in relation to land, means land which has a combination of at least two of the following features, one of which must be (a):

(a) a climate with sufficient sunshine that supports sufficient soil temperature;

(b) a slope of up to 15 degrees;

(c) imperfectly-drained to well-drained soils;

(d) soil with a potential rooting depth of more than 0.8 metres and adequate available moisture;

(e) soil with no major fertility requirements that could not be practicably remedied;

(f) water available for irrigation;

where that combination is to such a degree that it makes the land capable of producing crops at a high rate or across a wide range.'.

80. The correct interpretation of this definition is that land must meet feature (a), **and** at least one other feature in (b) to (f), **and** the final criterion relating to capability of producing crops.

81. This definition is assessed for the Applicant by Dr Hill (the features in (a) to (f)) and Mr Nelson (the final consideration relating to productivity for crops). They conclude that the land meets several of the features in (a) to (f) but not the final criterion - the site is not capable of producing crops at a high rate or across a wide range.[48] This is disputed by Ms Langford for Council and Ms Hollis (although it is not apparent that Ms Hollis has considered the definition). Ms Langford interprets the land as meeting the final criterion **because** it meets several of the criteria above – an incorrect interpretation. Ms Langford does appear to have expertise in the productivity of land for crops specifically, and Mr Nelson's evidence on this point should be preferred.

82. Despite assessing the site as not meeting the TRMP "high productive value" definition, Dr Hill has nonetheless gone on to also consider whether the proposal will avoid loss of value of (any) productive land in accordance with relevant TRMP policies.[49] He concludes that provided the SMP is implemented, the TRMP policies will be achieved.

Flood risks

83. Mr Aiken has addressed the impact of the activity on floodplain hydraulics and offsite flooding-related effects (i.e., changes in water level and velocity), in particular

[48] Statement of Evidence of Mike Nelson at 3.10 to 3.12.
[49] At 3.19 – 3.20.

in relation to effects on the Peach Island stopbanks. His assessment included the Peach Island stopbanks, immediate adjacent channel and floodplain areas upstream and downstream of the proposed borrow pits. It was focused on the Stage 1 area because Stages 2 and 3 are located behind the stopbanks and so are protected from all but the most extreme flood events.[50] He concluded that at worst there would be an almost indiscernible attenuation of flood flows if the excavation [within the Stage 1 area] was inundated during the operation of the borrow pit and that there is no evidence to suggest this activity will worsen existing flood hazard, impact natural drainage patterns or negatively impact the flood plain storage or conveyance capacity.[51]

84. Dr Harvey's evidence raises concerns about the potential erosion of the extraction pit headwall and head cut into the upstream floodplain.[52] Mr Aiken will address this in rebuttal evidence. Much of Dr Harvey's evidence is not relevant to the site in question, and seems designed to cast doubt on the site's suitability by using unrelated information and images – such as his Figure 3, which shows overtopping of a stopbank some 1.5 km downstream of the site, and his images of headcut erosion at Douglas Road - which Mr Aiken will say is not an appropriate comparison.

85. Mr Griffith is Council's River and Coastal Engineer. He confirmed that there is unlikely to be an adverse effect on river control and flood protection aspects but queried the earlier landscape mitigation planting and proposal to store topsoil in bunds (in the Stage 1 area) as further noise mitigation.[53] In response, the planting plan was amended to remove vegetation from within the flood channel,[54] and only the topsoil to be used for that day's restoration of Stage 1 will be stored outside the stopbanks. If heavy rain is forecast, any unused soil will be moved inside the stopbanks.[55] With those changes, Mr Aiken and Mr Griffiths agree that flooding and associated stopbank stability effects are not of concern.[56]

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[50] Statement of Evidence of Simon Aiken dated 15 July 2022 at 3.12
[51] Statement of Evidence of Simon Aiken dated 15 July 2022 at at 3.15
[52] Statement of Evidence of Michael Harvey dated 11 November 2022
[53] Section 42A report at 11.10
[54] Figure 4, Graphic Attachment to Ms Gavin's evidence dated 15 July 2022.
[55] Condition 67
[56] Statement of evidence of Simon Aiken at 3.28; Section 42A addendum at 8.7

Geotechnical stability

86. Mr Averill has assessed the related issue of the proposal's effects on the geotechnical slope stability of the existing stopbank surrounding Peach Island. His assessment is that the proposed works are not expected to affect the stability/function of the stopbank.[57] He recommends additional measures at the point where the Applicant proposes to have vehicles crossing the stopbank. These will involve a pre-works condition survey of the crossing point, placement of a sacrificial metal course (to be maintained throughout construction, removal on completion of the works, followed by a condition survey. This approach has been adopted in the conditions.

87. Mr Averill also addresses stability with respect to adjacent properties and recommended batter slopes and a requirement for inspection of the excavation areas by a Geo-professional to verify ground conditions; those recommendations have been adopted in the conditions.

88. With those measures secured, Mr Griffiths confirms he is comfortable with stopbank stability.[58]

89. Dr Harvey agrees with Mr Averill that provided that the 20m setback from the stopbank toe is maintained, the proposal is unlikely to adversely affect the stability of the existing Peach Island stopbanks,[59] but raises concerns with the existing integrity of the stopbanks, and the potential for stockpiled material to be at risk of erosion if the stopbanks fail, with consequential effects on sediment loading to Motueka River and Tasman Bay. The stopbanks failing would have a similar impact to the stopbanks being overwhelmed – which Mr MacNeil addresses:[60]

> …if the stop banks are overwhelmed and material even 20 m away is transported to the river, it is highly probable there are numerous simultaneous inputs from the surrounding landscape, as flooding and associated land run-off will not be restricted to the gravel works. The dilution factor for any contaminants present is also likely to be extremely large in such circumstances. Whilst fish habitat may be disrupted by flooding and fish strandings may occur in the aftermath, in my opinion any effect of the proposed gravel extraction works will

[57] Statement of evidence of Dave Averill dated 15 July 2022 at 2.3
[58] Section 42A addendum at 8.7
[59] Statement of evidence of Michael Harvey
[60] Statement of evidence of Calum MacNeil dated 15 July 2022 at 3.09

be minimal (less than minor) in comparison to the overall impacts of the flood and all the other anthropogenic features of the floodplain, such as forestry and farmland.

Groundwater

90. The discharge permit seeks consent to discharge a contaminant to land in circumstances where it may enter water. The discharge of clean fill meets the RMA definition of "contaminant", which covers any substance that when discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged. This broad RMA definition of contaminant[61] means that deposited material can be a contaminant even where it does not "contaminate" water, in the sense of adversely affecting water quality, and that is the situation here. The "change" that triggers the "contaminant" definition is replacement of the existing strata at the site with clean fill, which changes the physical structure of the land and – because the clean fill may have a different structure, porosity, geology, and/or chemistry - potential consequential changes in the chemistry of the groundwater.[62]

91. Mr Nicol has produced evidence in relation to groundwater, and clean fill parameters.[63] In his opinion, any changes in the groundwater characteristics in the area immediately downgradient of the quarry, will be attenuated with increasing distance from the filled areas, such that widespread changes in groundwater characteristics are not expected.[64] Effects on groundwater are avoided or mitigated primarily through parameters of the activity, such as excavation depth and clean fill requirements, detailed in the GMP. The proposal is predicted to have less than minor effects on groundwater quality, and not to cause an adverse effect on downgradient groundwater users or the wider system.[65] This assessment is now supported by an analysis of groundwater at CJ Industries' Douglas Rd site which has been quarried for several years and is nearing the end of its operational life. This quarry has less stringent groundwater-related consent conditions, including allowing

[61] Section 2 RMA
[62] Supplementary evidence of Ryan Nicol dated 4 November 2022 at 3.1 – 3.2.
[63] Statement of evidence of Ryan Nicol dated 15 July 2022; Supplementary evidence of Ryan Nicol dated 4 November 2022.
[64] At 3.2.
[65] At 3.4.

for exposure of groundwater within the excavation pit, but bore testing did not show any parameters were above "trigger levels" for drinking water..[66]

92. In addition to managing at source, the Applicant proposes to incorporate groundwater quality "trigger levels" which prompt further action. The proposed trigger levels:

a. Use half maximum acceptable values (MAV) and guideline values (GV) from the New Zealand Drinking Water Standards 2005 (revised 2018) and its replacements, the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 and Aesthetic Values for Drinking Water Notice 2022.[67]

b. Are generally consistent with the trigger values approved as part of consent conditions for a resource consent granted to Fulton Hogan Limited for a similar activity at Miners Road, Canterbury.[68]

93. The reporting officer and Dr Rutter have identified outstanding matters in the s 42A addendum report.[69] Those matters have been addressed in Mr Nicol's and Mr Taylor's supplementary evidence. One outstanding issue related to insufficient information on the current state of groundwater quality/background levels. In response, Mr Nicol has commissioned a further round of testing (November 2022) which is covered in a second Supplementary Evidence statement.[70] The results show background concentrations below the relevant trigger levels with the exception of iron and manganese.[71]

94. Another outstanding issue relates to the proposal to use trigger levels which are "based on drinking water standards but not necessarily consistent with the NPSFM and Te Mana o Te Wai". In terms of specific bottom lines in the NPSFM (e.g. for nitrate-nitrogen)[72], Mr Nicol identifies that these bottom lines are expressly for surface water.[73] I submit it is not appropriate for the bottom lines to be applied to a

[66] At 3.16 – 3.25. Exposed groundwater within the pit (as opposed to bores) showed high E.Coli measurement.
[67] The 2005 standards have been revoked and replaced by the 2022 standards
[68] CRC204349
[69] At 7.43.
[70] Second Supplementary Statement of Evidence of Ryan Nicol dated 21 November 2022.
[71] At 2.3.
[72] Section 42A addendum at 7.49 – 7.51.
[73] Supplementary Evidence of Ryan Nicol dated 4 November 2022 at 3.49.

different waterbody type that they are not intended for. In response to the reporting officer's comments on Te Mana o Te Wai:

a. The reporting officer refers to being "on a journey with iwi" in regard to interpretation and implementation of Te Mana o Te Wai. The Applicant acknowledges that iwi input is clearly important to implementation of Te Mana o Te Wai, but "while expressed in te reo Māori, Te Mana o te Wai benefits all New Zealanders".[74]

b. The reporting officer says that implementing the principles of Te Mana o te Wai covers a wider scope than simply the management of potential contaminants "up to" a standard, guideline or environmental bottom line … as a minimum, the current state of groundwater quality needs to be maintained".[75] The proposal is categorically not seeking to "pollute up to" a standard. The trigger levels are triggers for action and response, not limits to pollute up to. The primary mechanism for upholding the fundamental concept of Te Mana o Te Wai is the careful management of the activity to ensure that any effects on groundwater will be less than minor.

95. It is important to acknowledge the distinction between a **change** and an **adverse effect**. Here, a change in water chemistry may occur in a localised area - similar to a zone of reasonable mixing - but will not adversely affect water quality (in other words, water quality will be maintained). Beyond that zone, no changes in the characteristics are anticipated. [76]

96. The issue of whether change associated with an activity is different from an adverse effect was most recently directly addressed in *Goodwin v Wellington City Council*.[77] This involved an appeal against grant of consent to construct, maintain and operate a zipline in Wellington. The appellants' contended that the movement of people along the zipline would have unacceptable adverse effects on visual amenity. The Court disagreed, finding that the zipline would result in a visual change but not a visual adverse effect:

> [56] We appreciate that the movement of persons using the zipline will be visible to residents of the houses but nothing in the evidence we heard identified any adverse effects

[74] *Aratiatia Livestock Limited v Southland Regional Council* [2019] EnvC 208 at [20].
[75] At 7.56.
[76] Supplementary evidence of Ryan Nicol at 3.47
[77] *Goodwin v Wellington City Council* [2021] NZEnvC 9

> of that fairly distant visibility (200m - 300m at the closest points to each of the houses) other than a contended perception of intrusion. We heard no evidence from any of the Appellants as to factors peculiar to themselves, their residential or visual amenity, their properties or the relationship of their properties to the Site which might give rise to such perceptions. **We accept that installation and use of the zipline will constitute a change to the Site but change of itself is not an adverse effect.**

97. This finding aligns with earlier findings of the Environment Court in *Yaldhurst Quarries Joint Action Group*[78] (*Yaldhurst*) and in *Cresswick Valley Residents Association Inc v Wellington City Council*[79]. In *Yaldhurst* the Court said that:[80]

> …change per se does not mean that there is an adverse effect on rural character or an effect on amenity values. To test the proposition that the scale and intensity of effects will be adverse, experts need first to establish the baseline environment against which the effects are evaluated.

98. A number of decisions have authorised the discharge of a contaminant to water since the introduction of the NPSFM 2020. For example, *Re New Zealand Transport Agency*[81] concerned direct referral of applications for consent for 'Riverlink Project', involving discharge of sediment-laden water to water. Discharges were proposed to be managed through a suite of conditions covering timing, method, and location of construction activities, preparation of a sediment and erosion control plan, monitoring, imposition of trigger values requiring specific action if met. The Court found the conditions to be "both wide ranging and comprehensive for managing and controlling erosion and sediment discharges for protecting the quality of the water …".[82] The Court specifically considered the NPSFM 2020 and the hierarchy of obligations that make up Te Mana o te Wai and found "…the provisions of the NPS-FM 2020 not to be an impediment to approving the NORs and resource consent applications.".[83]

99. Similarly in *Tararua District Council v Manawatu-Wanganui Regional Council* [2022] NZEnvC 160 the Court upheld the grant of consents for ongoing operation of the Woodville Wastewater Treatment Plant after considering the contaminant discharges in terms of the NPSFM.[84]

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[78] *Yaldhurst Quarries Joint Action Group* [2017] NZEnvC 3118
[79] *Cresswick Valley Residents Association Inc v Wellington City Council* [2015] NZEnvC 149. See also *Stacey v Auckland City Council* [2011] NZEnvC 109 at [23]; *Groome v West Coast Regional Council* [2010] NZEnvC 199 at [167].
[80] At [116]. The finding was upheld on appeal to the High Court: *Harewood Gravel Co Ltd v Christchurch City Council* [2018] NZHC 3118.
[81] *Re New Zealand Transport Agency* [2022] NZEnvC 161
[82] At paras 130-152.
[83] At 690-700
[84] At 89.

100. On that basis, and in reliance on Mr Nicol's assessment, I submit that the application is consistent with the NPSFM, including the fundamental concept of Te Mana o Te Wai, in relation to groundwater.

101. The Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 apply only to activities that have the potential to affect a registered drinking water supply. There are no registered drinking water supplies near the site. The reporting officer agrees with this.[85]

102. The s 42A addendum also refers to the Drinking-water Standards for New Zealand 2005 (revised 2018) ("2005 Standards"). These standards were revoked by the Water Services (Drinking Water Standards for New Zealand) Regulations 2022[86], which took effect on 14 November 2022 ("2022 Regulations") [87] The 2005 Standards included MAVs and GVs. In terms of MAVs relevant to this proposal, the 2022 Regulations are the same as the 2005 Standards. The GVs are not in the 2022 Regulations but instead are now contained in the Aesthetic Values for Drinking Water Notice 2022,[88] which - for GVs relevant to this proposal - mirror the GVs in the 2005 Standards with the exception of the GV for iron. The Applicant's proposed trigger levels reflect the revised value for iron in the Aesthetic Values for Drinking Water Notice 2022.

103. New s 104G RMA was inserted by section 206(1) of the Water Services Act 2021 and requires consent authorities to consider the actual or potential effect of the proposed activity on the source of a registered drinking water supply and any risks the proposed activity may pose to the source of a drinking water supply identified in a source water risk management plan prepared in accordance with the Water Services Act 2021:

> **104G Consideration of activities affecting drinking water supply source water**
>
> When considering an application for a resource consent, the consent authority must have regard to—
>
> (a) the actual or potential effect of the proposed activity on the source of a drinking water supply that is registered under section 55 of the Water Services Act 2021; and

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[85] Section 42A addendum report at 6.10.
[86] Regulation 5.
[87] The 2022 Regulations set drinking water standards which must be complied with by drinking water suppliers: Water Services Act 2021, s 22.
[88] Notice issued pursuant to section 48(1) of the Water Services Act 2021 (Act) by the Chief Executive of Taumata Arowai–the Water Services Regulator (Taumata Arowai).

(b) any risks that the proposed activity may pose to the source of a drinking water supply that are identified in a source water risk management plan prepared in accordance with the requirements of the Water Services Act 2021.

104. As there are no drinking water supplies meeting those terms, s 104 G is not presently relevant.

Surface water

105. Dr MacNeil has assessed the effects of the proposal on surface waterbodies, specifically the Motueka River and the Peach Island overflow channel, and freshwater ecology. He concludes that the main potential effect on water quality is from elevated suspended and deposited sediment, but that with the minimum 20 m distance of the excavations from the stop bank, no workings occurring on the Moteuka River side of the stop bank, and no extraction at or near the Moteuka River itself, such potential effects should not occur. He has made recommendations in relation to land management to mitigate sediment runoff and these recommendations have been adopted by the Applicant.

106. The s 42A report referred to NPSFM Policy 7 and Clause 3.24, which require no loss of river extent and values unless the Council is satisfied: (a) that there is a functional need for the activity in that location, and; (b) the effects of the activity are managed by applying the effects management hierarchy.' These policies are intended to apply to loss of extent or values of riverbed rather than applying to activities on land that may affect surface or groundwater quality[89], and as such are not applicable to the proposal. The reporting officer now appears to agree with this[90]. The reporting officer agrees that the proposal will not have direct effects on surface water quality, the effects of dust, sediment and erosion can be appropriately managed with conditions of consent,[91] and indirect effects on surface water via groundwater, including on the Motueka River, are negligible.

107. With respect to Policy 2 NPSFM and Māori freshwater values, the Applicant's witnesses have sought to address this based on the information available, while acknowledging that it is for tangata whenua to identify these values and effects on values and "holding the space" for tangata whenua to do so. Dr MacNeil said:

[89] Statement of Evidence of Hayden Taylor at 3.96
[90] At 7.45
[91] At 7.46

> I understand that rivers like the Motueka River are tūpuna to Ngāti Rārua and Wakatū, and that each river has mauri, wairua, tapu and mana of its own, but I have no expertise on those matters. I cannot comment on the adverse effects of the proposal on these things specifically. However, to the extent that they align with avoiding adverse effects on water quality and ecosystem health, and avoiding loss of riverbed extent, I consider, as noted above, that the proposal is consistent with those outcomes.

108. Mr Taylor similarly stated that:

> Whilst I am unable to comment conclusively regarding Māori freshwater values, given that adverse physical effects on water quality will be avoided and loss of river extent (and associated values) will be avoided, if there is alignment between Māori freshwater values and the physical, chemical and biological characteristics of water then adequate information appears to be available for a conclusion to be drawn that these values will also be maintained. I will reconsider this opinion should further information become available from tangata whenua.

109. The reporting officer identified effects on cultural values and identification of māori freshwater values as a key issue in the first s 42A report. In the s 42A addendum she says she is not able to reach a conclusion without a cultural impact assessment but acknowledges the Applicant has endeavoured to identify and provide for Māori freshwater values in accordance with Policy 2 NPSFM.[92]

110. The Joint evidence of Ngāti Rārua and Te Ātiawa refers to the first s 42A report and agrees that Māori freshwater values have not been clearly identified or provided for. The evidence helpfully describes the relationship of Te Ātiawa and Ngāti Rārua to Motueka awa. The evidence says that the particular aspects of concern in relation to the activity have been outlined in the submissions, notes the measures to address environmental effects as outlined in revised application documents and reports, and recommends additional measures to avoid, remedy or mitigate cultural effects[93] (not limited to freshwater values). The Applicant proposes to adopt most of these recommendations but would like the opportunity to hear from representatives of Te Ātiawa and Ngāti Rārua in order to gain a better understanding of what some of the recommendations would entail. Subject to completing that process, I submit the proposal is consistent with policies requiring that māori freshwater values are provided for.

111. Mr Taylor describes the extent to which the Water Conservation (Motueka River) Order 2004 is applicable to the proposal.[94] The WCO itself provides that "no resource consent shall be granted" that would cause one of the effects in clause 9 of

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[92] Section 42A addendum at 7.48
[93] At 35 to 56.
[94] At 3.98 to 3.99.

the WCO. In the context of the **land use** application, that prohibition is a matter to have regard to under s 104(1)(c). Dr MacNeil has assessed this requirement and his opinion is that the proposal is consistent with the WCO. Additionally, s 217 RMA relevantly provides that a consent authority must not grant a **discharge permit** if the grant would be contrary to any restriction or prohibition or any other provision of the order.[95] There are no aspects of the discharge permit that have the potential to contravene the WCO.

Terrestrial ecology

112. Mr Payne assessed effects on terrestrial ecology in response to submissions that raised concerns about flora and fauna within the site and in the wider Motueka River bermlands. He assessed both quarry areas and the haul road. There is no "indigenous vegetation" within the site, no species of conservation significance, no wetlands, and the existing quality of land-based ecological values is "very poor".[96] However, there are values at the site which could be enhanced to create and link ecological corridors and to protect local ecological functions.[97] With the proposed restoration of 1.35 ha of Stage 1 using eco-sourced native trees, shrubs and sedges, there will be an overall net ecological benefit from the proposal.[98] The s 42A report accepts Mr Payne's evidence that any adverse effects on terrestrial ecological values will be low.

113. While the restoration proposed for Stage 1 will provide ecological betterment, it is not proposed to offset or compensate for another effect so it is questionable whether it comes within s 104(1)(a) as a positive effect or s 104(1)(ab).

Traffic

114. The Applicant initially produced an assessment of site access suitability, but has subsequently also produced an assessment of traffic effects on the wider road network (both by Mr Clark). Mr Clark concludes that a safe and effective access can be provided, and the activity can operate safely and efficiently within the existing road environment with any effects being less than minor[99]. He specifically considers

[95] Section 217(2)(a). Sections 217(2)(b) and (c) are not relevant because they concern discharges of contaminants into water, which is not proposed.
[96] Statement of Evidence of Tony Payne at 2.4
[97] At 2.7
[98] At 2.9.
[99] Statement of Evidence of Gary Clark at 9.6

users of the Great Taste Trail. There is a large measure of agreement between Mr Clark and the reporting officer (and Mr Fon) with all recommended conditions being accepted by the Applicant other than the recommendation for passing bays within the site which Mr Clark maintains are not needed given the very low likelihood of public use of that part of the haul road where public access is legally possible.[100] The Applicant will install passing bays if you conclude these are necessary.

Cultural effects

115. The Applicant does not fully agree with the history of engagement as described in the joint Ngāti Rārua and Te Ātiawa evidence, and relies on the summary in Appendix A of Mr Taylor's evidence.[101] However, the Applicant accepts that its engagement with Ngāti Rārua and Te Ātiawa has not been effective, or satisfactory to iwi. It is committed to improving its relationship with iwi.

116. The Applicant understands and accepts that it is for tangata whenua to identify cultural effects. On that basis, it has sought to support the preparation of a Cultural Impact Assessment, in order to understand and address any cultural effects arising. It has not been possible for iwi to prepare a Cultural Impact Assessment.[102] The Applicant has also sought to understand cultural values and assess effects through consideration of :

a. Statutory Acknowledgements: Ngāti Toa Rangatira, Ngāti Rārua, Te Ātiawa o Te Waka-a-Māui, Ngāti Kuia and Ngāti Tama ki Te Tau Ihu have Statutory Acknowledgements over the Motueka River and its tributaries. These Statutory Acknowledgements apply to those parts of the river and its bed that is owned by the Crown.[103]

b. Iwi Management Plans: specifically the Ngāti Rārua Environmental Strategy Poipoia Te Ao Tūroa, Te Ātiawa Iwi Environmental Management Plan and Ngāti Tama ki Te Waipounamu Trust Environmental Management Plan 2018.[104] The

[100] Supplementary Evidence of Gary Clark at 2.5 – 2.8.
[101] Statement of Evidence of Hayden Taylor dated 15 July 2022, Appendix A
[102] Joint Evidence of Ngāti Rārua and Te Ātiawa dated 11 November 2022.
[103] Considered in Mr Taylor's Evidence dated 15 July 2022 at 3.109
[104] Mr Taylor's Evidence dated 15 July at 3.110 to 3.116

iwi submitters' Joint statement of Evidence notes the importance of these management plans for understanding the wider range of cultural values.[105]

c. Submissions by Ngāti Rārua and Te Ātiawa and the submission by Wakatū Inc; and

d. the Joint Statement of Evidence by Ngāti Rārua and Te Ātiawa.

117. In the Joint Statement of Evidence, Ngāti Rārua and Te Ātiawa "…submit that the range of cultural effects are wider than just 'Māori freshwater values' and cultural heritage sites listed in the TRMP."[106]

118. As set out above, the Applicant has considered the consent conditions that Ngāti Rārua and Te Ātiawa request if the Application is granted, and generally agrees with them, subject to some clarifications. In particular:[107]

a. With respect to iwi monitoring of all land disturbance within cultural layers, the Applicant would like to better understand what constitutes cultural layers, and how this monitoring would work in practice.

b. The Applicant accepts in principle a requirement for Cultural Health Index monitoring, however any condition relating to this will need to include more detail on the specific nature of the monitoring that would be undertaken, and by whom.

119. The Applicant is happy to work with Te Ātiawa and Ngāti Rārua to refine these details before the conditions are finalised.

120. The Applicant does not agree that a shorter consent term for the land use consents or discharge permits is appropriate. The reasons for the 15 year duration of the land use consent term are set out in Mr Corrie-Johnston's evidence - this duration is appropriate to enable efficient use of resources. The discharge consent term is for 17 years rather than 15 years to enable post-extraction groundwater monitoring to occur.

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[105] At 26.
[106] Joint Evidence of Ngāti Rārua and Te Ātiawa dated 11 November 2022
[107] Mr Taylor has noted some addition clarifications which he can speak to or discuss directly with Ngāti Rārua and Te Ātiawa.

Submissions

121. Submissions raised issues relating to all of the actual and potential effects on the environment that have been addressed above. Those issues have been comprehensively addressed by the Applicant's witnesses where relevant. I address below some issues raised or outcomes sought that are not relevant to your assessment.

Compliance with other resource consents

122. Several submitters refer to what they believe to be non-compliance by CJ Industries at other sites, particularly at Douglas Rd. The law is entirely clear that the past conduct of an applicant is a matter of enforcement and does not provide a legitimate ground for refusing to grant a resource consent.[108] An applicant is entitled to be treated on the basis that it will comply with the consents it holds, and with the Act.[109] There are good reasons not to bring compliance considerations into the consenting context. One reason is that establishing non-compliance requires a clear understanding of what it is that the consent holder is required to comply with. In this case, many submitters have made assumptions about what activities are authorised at Douglas Rd, and have assumed that features they have seen (such as exposure of groundwater) are non-compliant, when in fact the consent authorises this.

Other possible quarries

123. Some submitters refer to potential future quarries that may be established nearby by the Applicant or related entities. Any future quarries (beyond the small scale 50 m^3 permitted quarrying activity) would require resource consent as a discretionary activity and as such do not form part of the "environment" in terms of s 104. They are not relevant to your assessment.

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[108] *Walker v Manukau CC* EnvC C213/99, applying a line of authority beginning with the Court of Appeal in *Barry v Auckland CC* [1975] 2 NZLR 646; (1975) 5 NZTPA 312 (CA). See also *Gulf District Plan Assn Inc v Auckland CC* EnvC A101/03.

[109] *Guardians of Paku Bay Assn Inc v Waikato RC* (2011) 16 ELRNZ 544, [2012] 1 NZLR 271 (HC).

Proprietors of Wakatu and Ors v Attorney-General [2017] NZSC 17

124. The submission by Wakatū Inc refers to a Supreme Court decision[110] in support of their objection to use of the marginal strip as part of the haul road. The Wakatū submission says that any Crown land is subject to a legal claim by Mr Stafford. Wakatū Inc object to CJ Industries' proposed route over any land held by the Crown as a result of the potential for a claim to be made as a result of the Supreme Court decision.

125. The Supreme Court decision relates to a New Zealand Company purchase in 1839. In March 1845, Commissioner William Spain found, in an award under the Land Claims Ordinance 1841, that the 1839 purchase of substantial territory in the top of the South had been "on equitable terms". This "Spain award" cleared the land of native title and vested it as Crown land, able to be granted by the Governor to the Nelson Company. However, under the Spain award, land amounting to one-tenth of the grant to the Company was to be reserved for the benefit of the original Māori owners. In addition to the tenths reserves, all Māori occupied land within the grant was to be excepted and reserved for the occupiers. Only around 5,000 acres of the tenths land was reserved, and some of the reserved land was subsequently lost.

126. The Supreme Court decision allowed in part the appeal by Mr Stafford (other appellants, including Wakatū Inc were held to lack standing), and made declarations that the "Crown owed fiduciary duties to reserve 15100 acres for the benefit of customary owners and, in addition, to exclude their pa, urupa and cultivations from the land obtained by the Crown following the 1845 'Spain award'." Questions of liability, loss and remedy were remitted to the High Court for determination. No such determination has been made, and given the complexity of the issues, is not expected for some time.

127. Separately (but related to the above), the Ngāti Kōata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, and Te Ātiawa o Te Waka-a-Māui Claims Settlement Act 2014 (the Settlement Act) established a right of first refusal (RFR) process in relation to future disposals of land in Te Tau Ihu (including land within the Spain award area) owned either by the Crown or by a "Crown body". Under the RFR process, if a decision is made by the Crown or a Crown body to dispose of any land within the area, it must

[110] *Proprietors of Wakatu and Ors v Attorney-General* [2017] NZSC 17.

first be offered to the Trustees of recipient trusts under the Act (effectively the eight iwi of Te Tau Ihu).

128. A more recent and related High Court judicial review decision[111] considered Mr Stafford's request for a moratorium to protect all Crown land in the Spain award area. While Mr Stafford's request failed in respect of land owned by Crown entities (such as ACC), with respect to land owned by the "core" Crown, the Court concluded that the "early warning system" known as the Land Protection Mechanism ("LPM") put in place in 2017 needed upgrading. The extent of this upgrade was not outlined by the Court because the parties had been negotiating on the matter. The LPM before the Court required LINZ to report to Mr Stafford on a monthly basis whether there is any pending proposal to dispose of Crown-owned land within the Spain award area.

129. The marginal strip land is within the Spain award area and is therefore subject to a potential legal claim by Mr Stafford. The Wakatū submission does not say whether the marginal strip was occupied by Māori, or whether it is affected by the more general obligation to reserve land amounting to one-tenth of the Company grant. As at 21 April 2017, Mr Stafford was compiling a list of the occupied land and it is not clear whether that process is complete or has identified the marginal strip site specifically.

130. The application by CJ Industries for resource consents that include use of the marginal strip as a haul road for a 15 year period is not in any way inconsistent with any future legal claim by Mr Stafford. Questions of land ownership and other interests in land, including the potential for a future claim by Mr Stafford, are not relevant to your consideration of the application for resource consent. The separate authorisation of marginal strip formation and use required under the Conservation Act 1987 has been granted by the Department of Conservation.

Sections 105 and 107

131. Section 105 relevantly says:

105 Matters relevant to certain applications

[111] *Stafford v Attorney-General* [2021] NZHC 335

> (1) If an application is for a discharge permit or coastal permit to do something that would contravene section 15 or section 15B, the consent authority must, in addition to the matters in section 104(1), have regard to—
>
> > (a) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and
> >
> > (b) the applicant's reasons for the proposed choice; and
> >
> > (c) any possible alternative methods of discharge, including discharge into any other receiving environment.

132. Section 107 provides that a consent authority must not grant a resource consent for a discharge if:

> …after reasonable mixing, the contaminant or water discharged (either by itself or in combination with the same, similar, or other contaminants or water), is likely to give rise to all or any of the following effects in the receiving waters:
>
> (c) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials:
>
> (d) any conspicuous change in the colour or visual clarity:
>
> (e) any emission of objectionable odour:
>
> (f) the rendering of fresh water unsuitable for consumption by farm animals:
>
> (g) any significant adverse effects on aquatic life.

133. The Applicant's evidence has provided information on the nature of the discharge, the sensitivity of the receiving environment, and why the discharge of clean fill to land is proposed for the purposes of s 105. The Applicant's evidence also establishes that none of the effects described in s 107 will arise as a result of the discharge, and the reporting officer agrees.[112]

Part 2

134. Section 104(1) states that your consideration of the Application is subject to Part 2 of the RMA. Case law provides that you may have regard to Part 2 RMA for the purposes of a resource consent application, but that it may be unnecessary to do so, if the relevant planning instruments can be considered to give effect to Part 2.[113] I submit that while the TRMP is somewhat dated and will soon be reviewed, there is sufficient national direction on matters of environmental importance that are relevant to the proposal that recourse to Part 2 is not necessary. Should you decide out of precaution to consider Part 2, relevant provisions are ss 5, 6(a), 6(e), 6(h), 7(a), 7(aa), 7(b), 7(c), 7(d), 7(f), 7(g), 7(h), 7(i) and 8. All relevant matters arising in those

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[112] Section 42A addendum at 6.28.

[113] *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316.

provisions have been covered in the Applicant's evidence and where necessary in these submissions. The application is consistent with Part 2.

Conditions

135. The Applicant's preferred conditions have been amended throughout the process in response to matters raised in submissions, s 42A reports and evidence. The Applicant will produce a further revision with its Right of Reply that responds to matters arising during this hearing. There are no legal issues arising in relation to the conditions that the Applicant seeks to address at this stage.

Conclusion

136. The proposal is to extract a resource that is in high demand in the region for high value products used for a range of projects that contribute to people's social and economic wellbeing. The effects of the activity will be managed in a manner that is consistent with all relevant planning instruments and with the purpose of the RMA. It is appropriate that consent is granted subject to the conditions proposed by the Applicant.

Sally Gepp
Counsel for CJ Industries Limited

LEGEND

SITE BOUNDARY

ACCESS INTO THE SITE

20m SETBACK FROM STOPBANK

ADJOINING MARGINAL CONSERVATION STRIP

STOCKPILE + SERVICE AREA

EXTRACTION PIT
- MAXIMUM SIZE = 80 x 20m

PROPOSED EARTH BUND
- 3m HIGH

EXTRACTION SITES STAGE BOUNDARIES

STAGE 1 BOUNDARY

STAGE 2 BOUNDARY

STAGE 3 BOUNDARY

MITIGATION PLANTING
- NEW TREES TO BE PLANTED MINIMUM OF 5m FROM BOTTOM OF STOPBANK

(AREA A) ALL NATIVE SPECIES
-PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW (ONLY NATIVES), PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT SHRUB GRADE SOURCED LOCALLY, AND 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

(AREA B) NO POPULUS 'CROWS NEST'
-PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW MINUS POPULUS 'CROWS NEST', PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT SHRUB GRADE SOURCED LOCALLY, AND 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

(AREA C) INFILL UNDERSTOREY PLANTING
-PLANTING TO BE A MIX OF THE UNDERSTOREY SPECIES, PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT SHRUB-GRADE SOURCED LOCALLY, AND 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

TALL TREES
EUCALYPTUS GLOBOIDEA - WHITE STRINGYBARK
DACRYCARPUS DACRYDIOIDES - KAHIKATEA
POPULUS 'CROWS NEST' - CROWS NEST POPLAR
POPULUS NIGRA - LOMBARDY POPLAR

UNDERSTOREY
ALECTRYON EXCELSUS - TITOKI
ARISTOTELIA SERRATA - MAKOMAKO
CARPODETUS SERRATUS - PUTAPUTAWETA
COPROSMA ROBUSTA - KARAMU
CORDYLINE AUSTRALIS - CABBAGE TREE
DODONAEA VISCOSA - AKEAKE
KUNZEA ERICOIDES - KANUKA
LEPTOSPERMUM SCOPARIUM - MANUKA
MELICYTUS RAMIFLORUS - MAHOE
MYRSINE AUSTRALIS - MAPOU
MYOPORUM LAETUM - NGAIO
PHORMIUM TENAX - SWAMP FLAX
PITTOSPORUM EUGENIOIDES - LEMONWOOD
PITTOSPORUM TENUIFOLIUM - KOHUHU
PLAGIANTHUS REGIUS - RIBBONWOOD
PSEUDOPANAX ARBOREUS - FIVE FINGER
SOPHORA MIRCROPHYLLA - KOWHAI

MAINTENANCE & ESTABLISHMENT PLAN

TIMING
1. Planting to be undertaken between the months of April and October to take advantage of optimum rainfall and climatic conditions best suited to plant growth.

PREPARATION
2. The contractor shall carry out the works to protect the existing subsoil structures and prevent excessive soil structure damage. Ensure at least 50mm of topsoil present.

3. Prepare planting area by spraying planting zone areas as required to reduce initial weed and grass growth.

4. Plants should be of the species on the drawings. Plants shall be vigorous, well established, hardened off, of good form consistent with the specie or varieties, not soft or forced, free from disease and insect pests, with large healthy root systems and no evidence of being restricted or damaged. The trees shall have a single leading shoot.

SETOUT
5. The planting hole shall be twice the root ball width and twice the root ball depth. Planting holes , except for wetland plants, shall be loosened for at least 75mm each side of the under plant prior to planting.

6. Each plant shall be watered thoroughly after planting, ensuring that the moisture has penetrated to the full depth of the root ball (initial watering is also important to settle the soil around the roots).

PEST MANAGEMENT
7. To minimise rabbit damage to plants apply telgrow foliage spray after planting and as required after heavy rain and install cardboard, biodegradable plant guards around plants.

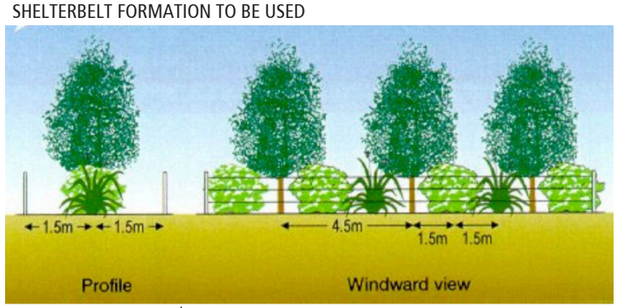
8. Plant pests to be controlled by continual weeding and regularly monitored for a period of three years or until plant specimens become fully sufficiently established.

9. All planting next to stock paddocks to be fenced off.

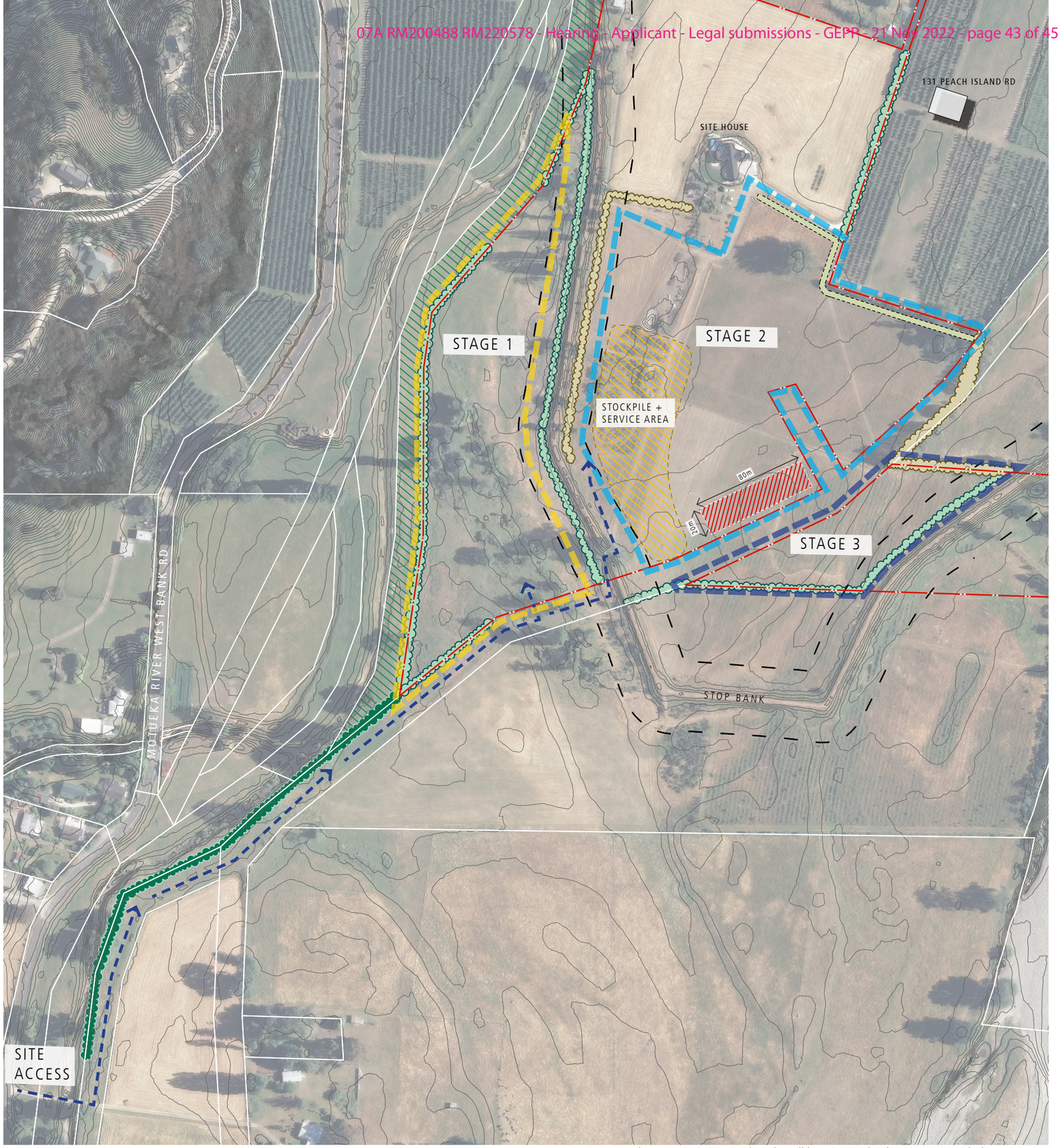
MAINTENANCE
9. General maintenance shall include watering, weed removal, plant trimming, cultivation, insect and disease control, checking stakes and ties, pruning and other accepted horticultural operations to ensure normal and healthy plant establishment and growth.

10. Any plants that fail are to be replaced and planted during the next available planting season as defined above.

SHELTERBELT FORMATION TO BE USED



Boffa Miskell



Note: Contours shown are existing. Earthworks will be reinstated to be consistent with these contours

OVERALL LANDSCAPE MITIGATION PLAN **FIGURE 4**

CJ INDUSTRIES, MOTUEKA
PROJECT 21120 | NOVEMBER 2022 | 4
VERSION 2 FOR CONSENT HEARING

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LEGEND

- SITE BOUNDARY
- PROPOSED FENCING FOR LIVESTOCK
- 20m SETBACK FROM STOPBANK
- ADJOINING MARGINAL CONSERVATION STRIP
- STAGE 1 EXTRACTION SITE BOUNDARY

MITIGATION PLANTING
- NEW TREES TO BE PLANTED MINIMUM OF 5m FROM BOTTOM OF STOPBANK

(AREA A) ALL NATIVE SPECIES
-PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW (ONLY NATIVES), PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT SHRUB GRADE SOURCED LOCALLY, AND 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

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TALL TREES
EUCALYPTUS GLOBOIDEA - WHITE STRINGYBARK
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UNDERSTOREY
ALECTRYON EXCELSUS - TITOKI
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COPROSMA ROBUSTA - KARAMU
CORDYLINE AUSTRALIS - CABBAGE TREE
DODONAEA VISCOSA - AKEAKE
KUNZEA ERICOIDES - KANUKA
LEPTOSPERMUM SCOPARIUM - MANUKA
MELICYTUS RAMIFLORUS - MAHOE
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PITTOSPORUM TENUIFOLIUM - KOHUHU
PLAGIANTHUS REGIUS - RIBBONWOOD
PSEUDOPANAX ARBOREUS - FIVE FINGER
SOPHORA MIRCROPHYLLA - KOWHAI

STAGE 1 RIVER TERRACE RESTORATION: TOTAL AREA = 1.35ha

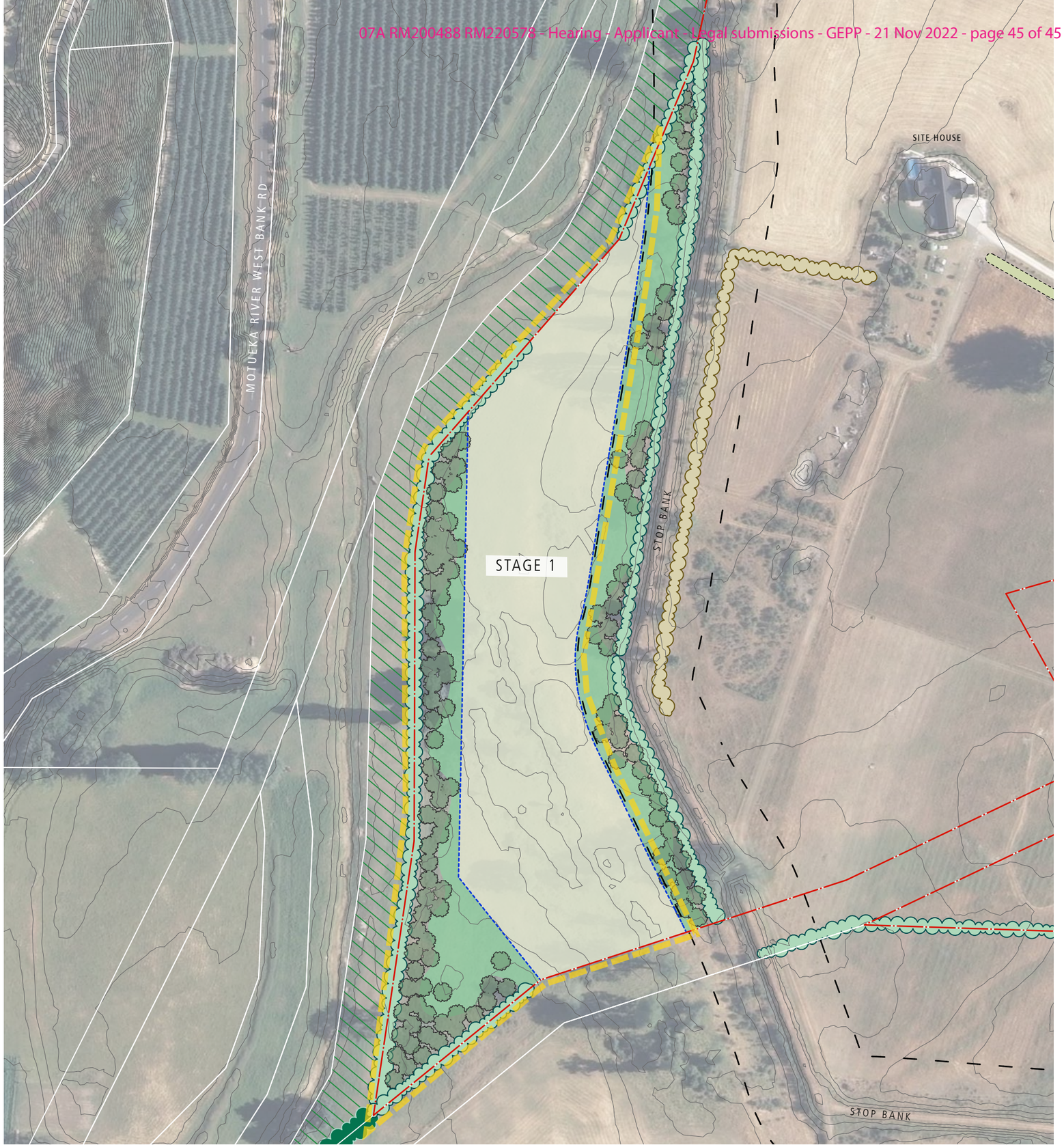
NATIVE GRASSES / SEDGES
-PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW, PLANTED AT 1.5/2m SPACINGS FOR SHRUBS WITH RT GRADE SOURCED LOCALLY.

COPROSMA PROPINQUA - MINGIMINGI
CORTADERIA RICHARDII - SOUTH ISLAND TOETOE
PHORMIUM TENAX - NZ FLAX

NATIVE TREES
-PLANTING TO BE A MIX OF THE FOLLOWING LIST BELOW, PLANTED AT 4.5m SPACINGS FOR TREES WITH PB18 SPECIMEN TREE GRADE.

CORDYLINE AUSTRALIS - CABBAGE TREE
DACRYCARPUS DACRYDIOIDES - KAHIKATEA
HOHERIA ANGUSTIFOLIA - NARROW-LEAVED LACEBARK
PENNANTIA CORYMBOSA - KAIKOMAKO
PLAGIANTHUS REGIUS - LOWLAND RIBBONWOOD

STAGE 1 PASTURE LAND: TOTAL AREA = 1.66ha
-TO BE FENCED AND KEPT CLEAR OF NEW PLANTING



Note: Contours shown are existing. Earthworks will be reinstated to be consistent with these contours

Boffa Miskell

STAGE 1 RIVER TERRACE RESTORATION **FIGURE 5**