BEFORE Independent Commissioners appointed by Tasman District Council

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application by CJ Industries Ltd for land use consent RM200488 for gravel extraction and associated site rehabilitation and amenity planting and for land use consent RM200489 to establish and use vehicle access on an unformed legal road and erect associated signage

EVIDENCE OF WAYNE SCOTT ON BEHALF OF CJ INDUSTRIES LTD SUPPLEMENTARY EVIDENCE ON: (1) NATIONAL POLICY STATEMENT FOR HIGHLY PRODUCTIVE LAND AND (2) APPLICATION FOR DISCHARGE PERMIT

4 November 2022

1. INTRODUCTION

1.1 My full name is Wayne Scott. I am Chief Executive Officer ("CEO") of the Aggregate and Quarry Association ("AQA") and of MinEx.

1.2 The applicant has applied for resource consents authorising 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, and

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

1.3 The applicant has also subsequently applied for resource consent for discharges associated with the proposed activities (RM220578). My evidence addresses the topic of quarrying and groundwater resources.

1.4 Since the applicant lodged its initial application, the Government has produced the National Policy Statement on Highly Productive Land 2022 ("NPS HPL"). My evidence also addresses the NPS HPL, in particular how the proposed activity meets the relevant criteria in clause 3.9.

Qualifications and Experience

1.5 The AQA is the industry body representing construction material companies which produce 50 million tonnes of aggregate and quarried materials consumed in New Zealand each year. MinEx is the national Health and Safety Council for New Zealand's extractive industries.

1.6 I became CEO of the AQA in 2018 and of MinEx in 2017. As CEO I am responsible for the strategic oversight of each organisation and making sure each delivers on their respective responsibilities to the industry. I also have extensive experience in managing quarrying activities, and managing quarry and mine safety in both New Zealand and Australia.

2. EXECUTIVE SUMMARY

Discharge permit

2.1 I have experience of a range of quarries that are located above important groundwater resources. In my experience it is entirely feasible to quarry and backfill in a manner that does not adversely impact the groundwater resource.

NPS HPL

2.2 I understand that there are two discrete parts of the site classified as LUC 3 to which the NPS HPL applies, although one of those sites is subject to significant constraints that affect its productive capacity (it is subject to flooding).

2.3 In these areas aggregate extraction is appropriate if it has a functional or operational need to be located there and if the activity provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand.

2.4 In my opinion the proposed activity has a functional and operational need to locate on the site, because aggregate extraction must be located where aggregate is available. It is locationally constrained.

2.5 I also consider that the proposed activity could provide a significant regional benefit through providing aggregate to meet current and increasing demands for aggregate based products (concrete and chip seal) for essential infrastructure including homes, roads, marae, and coastal and flooding infrastructure.

2.6 These benefits could not otherwise be achieved using resources within New Zealand because of the limited availability of aggregate everywhere (aggregate in other regions is needed for those regions) and because the cost of transporting aggregate from elsewhere would significantly change the end cost of aggregate and products that use aggregate. There are also significant carbon emissions associated with transporting aggregate.

3. EVIDENCE

Discharge permit

3.1 There are a number of alluvial quarries across the South Island that operate successfully within close proximity to groundwater. Quarries in the Yaldhurst area near Christchurch, for example, supply aggregate and sand to the Christchurch market. These quarries extract aggregate to close to the water table with no impact on the groundwater. Other quarries operate within rivers where environmental controls mange not only water quality, but fish passage and bird nesting needs.

Applicability of the NPS HPL to the application site

3.2 "Highly productive land" is defined as:[1]

> 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)

[1] Clause 1.3 Interpretation

3.3 I am advised that 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.

3.4 I understand that the site has two discrete areas classified as LUC 3 one inside and one outside the stopbank and that it is these areas to which the NPS HPL applies.

Use of the site under the NPS HPL

3.5 I have reviewed and am familiar with clause 3.9 of the NPS HPL.

3.6 Clause 3.9(1) tells territorial authorities to avoid the inappropriate use or development of highly productive land that is not land-based primary production. A use or development of highly productive land is inappropriate unless it meets one or more of the criteria in clause 3.9(2) and the measures in clause 3.9(3) are applied.

3.7 The criterion in clause 3.9(2)(j) make specific provision for quarrying and aggregate extraction. Aggregate extraction is an appropriate use of highly productive land if:

(a) there is a "functional or operational need" for it to be on the highly productive land; and

(b) it "provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand."

3.8 in my view, the applicant's proposal meets that criterion as discussed below. It is beyond my expertise to comment on clause 3.9(3).

Functional or operational need

3.9 I have been advised that for the purposes of the NPS HPL a "functional need":[2]

> means the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment

and that "operational need":[3]

> 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.

3.10 In my view aggregate extraction meets the definition of "functional need". Aggregate deposits are 'location specific' - limited in quantity, location, and availability. They can only be sourced from where the aggregate is physically located and where the industry is able to access them. The "environment" in which they must occur is an environment that contains river gravel. The site is one such location in the Nelson-Tasman region.

3.11 Logically this means there is also an "operational need" to locate where the aggregate source is located. It is not technically, logistically, or operationally possible to extract aggregate from anywhere other than where the aggregate is located.

3.12 The quarry has other functional and operational needs such as the need to be located close to the end use location, but these are not directly relevant to "functional need" for the NPS HPL.

Significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand

3.13 In my opinion there is a significant regional public benefit from the extraction of river run aggregate at the site.

3.14 This is because on the one hand the region's growing economy and population means there is increasing pressure on existing aggregate sources, and consequently to find other

[2] From the National Planning Standards.
[3] Ibid.

sources. Further aggregate sources are needed to deliver essential public infrastructure now and in the future. And on the other hand, there is a serious shortage of accessible aggregate within the region.

3.15 Beginning with demand, aggregate production in the Nelson Tasman region has been at around 1 million tonnes a year in recent years (in 2020 it dropped to 640,000 due to Covid factors). The region is a higher (per person) user of aggregates than other parts of the country because of its population growth, extensive roading network and lengthy coastal area. Anticipated growth, as reflected in the draft Nelson Tasman Future Development strategy, suggests demand will increase.

3.16 Looking at housing alone, the anticipated 29,000 new homes needed in the next 30 years amounts to 7.2 million tonnes of aggregate, based on industry averages, or 240,000 additional tonnes being required annually. This extra 7.2 million tonnes shows the extent of current shortfall.

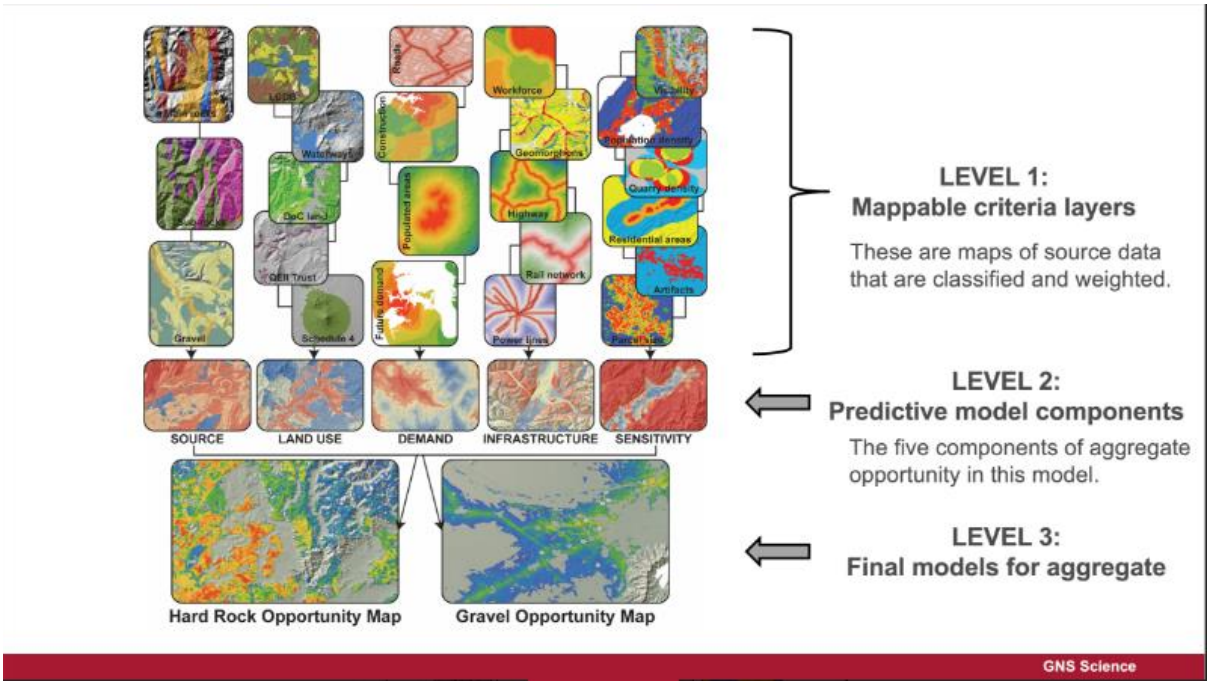
3.17 As Mr Corrie-Johnston has explained in his primary evidence dated 15 July 2022, the aggregate from the site will be used predominantly for concrete and sealing chip. It is highly valued for these uses because of its hardness and because river gravel is one of the few rock sources that can be used to make concrete and sealing chip to meet NZ specifications (M06 Sealing Chip Specifications 2019).

3.18 It is also important to note the regional public benefit stemming from the role of aggregates in strengthening resilience to natural hazards and climate change. Aggregates, for example, are needed for flood protection and to adapt to sea level rise and coastal erosion through strengthening of sea walls etc. They will be needed to repair damage to coastal infrastructure and to make infrastructure generally more resilient to greater intensity storms and extreme weather events.

3.19 In terms of climate change mitigation and the reduction of emissions, aggregate plays a role in, for example, the construction of wind farms. New wind capacity for New Zealand, expected by the Climate Change Commission in the next 15 years, will require an additional 1 million tonnes of aggregate and sand.

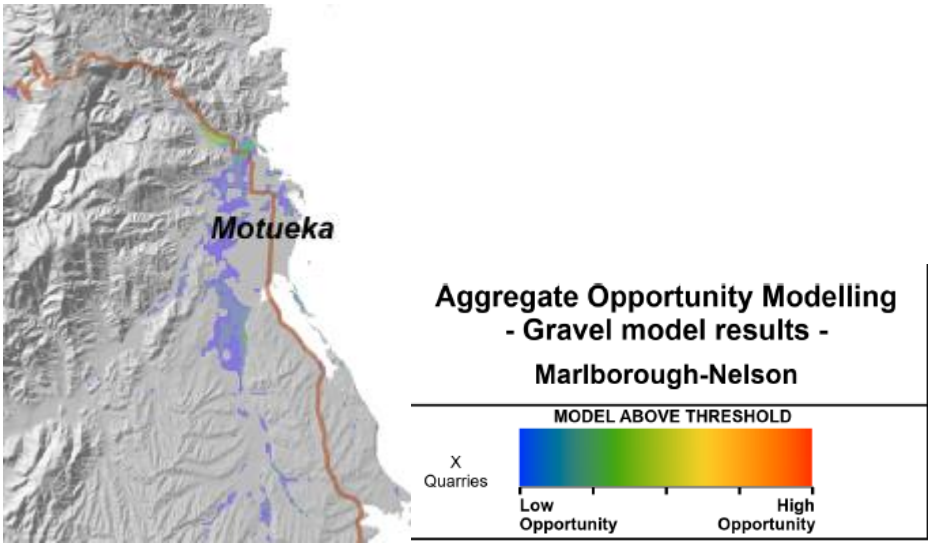
3.20 Lastly, the recent flooding events in the Nelson and Tasman regions caused significant damage to these regions' roads which has also increased the demand for chip seal.

3.21 As regards supply, work was recently undertaken by GNS Science for the New Zealand Infrastructure Commission to identify hard rock and gravel sources around New Zealand to rate the extraction accessibility of those on a spectrum from 'Low Opportunity' to 'High Opportunity'. The Opportunity rating of a particular site or area was based on the extent to which it was impacted by a set of 23 mappable layers coming with five categories: source, land use, demand, infrastructure, sensitivity, with each category having a range of criteria layers feeding into it as shown in the graphic below:[4]



3.22 The picture for the Nelson Tasman region can only be described as dire, for both gravel and hard rock, with overall Opportunity being low and much of what is available being classified as Low Opportunity or Medium Opportunity at best. The maps showing this are provided in **Attachment A**, with a clip from the Aggregate Opportunity Map showing the Motueka area below:

[4] https://www.gns.cri.nz/research-projects/aggregate-modelling/



3.23 This means that to meet the need for aggregate it is critical that all sites that presents a strong and workable opportunity for extraction are capitalised on. It cannot be assumed that there will be other, "better" locations.

3.24 I understand from Mr Corrie-Johnston's evidence that the concrete produced from the aggregate extracted from the site will be used for a broad spectrum of activities from house builds, factories, sheds, driveways, marae, community facilities, infrastructure, and any other use where concrete is required. In addition, I understand that the technical experts advising the applicant are of the view that the effects of aggregate extraction can be appropriately avoided, remedied, or mitigated. It therefore seems to me to provide a significant regional public benefit.

3.25 Turning to the second part of this criterion, in my opinion the regional benefit to be gained from the aggregate available at the site could not otherwise be achieved using resources within New Zealand. This is because, although aggregate could theoretically be sourced from elsewhere in New Zealand and brought to the Nelson and Tasman regions, this is likely to be both unachievable in reality and impractical.

3.26 First, there is extremely high demand for aggregate around the country – nowhere does supply exceed demand. This means that even though aggregate is sourced in other parts of New Zealand, it is very unlikely there will be any surplus available to provide for the demands of regions other than the region in which the quarry is located. This situation is compounded by policy that only provides for quarrying where it has a significant regional benefit, such as the NPS HPL, as it makes it unlikely that a quarry in one region could be used to supply the aggregate needs of a different region.

3.27 Second, in the unlikely event excess aggregate were available to be sourced from outside the region, the costs, both economic and environmental, mean it is impractical and in some cases not viable. Aggregate is typically transported by diesel powered trucks. This has a high carbon emission footprint, and additional truck movements can result in traffic congestion and damage to roading infrastructure. These factors mean bringing in aggregate from elsewhere can be prohibitive from a social licence perspective. If those factors are disregarded and aggregate is available and is brought into the region from elsewhere, the cost per tonne becomes significantly more expensive. This means that the final cost of the product goes up significantly, potentially prohibitively, which reduces the regional benefit that the quarry provides.

3.28 For completeness I also note that any flow on benefits from the activity, such as direct employment and indirect (associated with monitoring etc) employment will not be realised if aggregate it sourced outside the region.

Wayne Scott

4 November 2022

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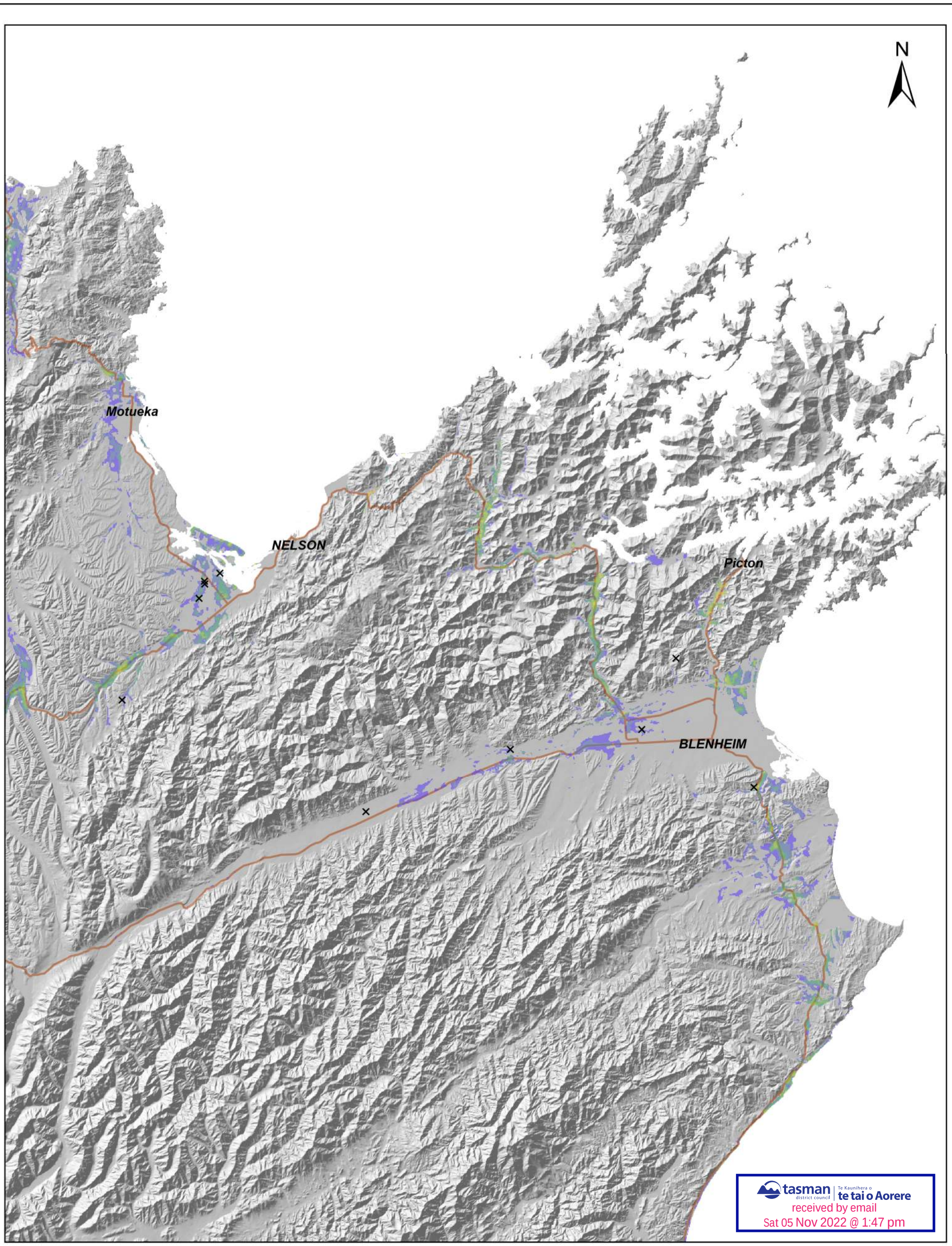

SCALE BAR: 0 5 10 15 20 25 km

EXPLANATION:
Results of aggregate opportunity modelling for gravel includes lithology types of river gravels, beach gravels, dune sand, volcanic sediments (pumice, ignimbrite, tuff) and other unconsolidated material.
When using these results, please also cite and consult report:
Hill, M. P. (2021) "Aggregate Opportunity Modelling for New Zealand", GNS Science Report: 2021/10. 96 p. (doi:10.21420/ 1RKC-QB05).

PROJECTION: NZGD 2000 New Zealand Transverse Mercator

DRW: MPH

CHK:

GNS SCIENCE TE PŪ AO

Aggregate Opportunity Modelling - Gravel model results - Marlborough-Nelson

MODEL ABOVE THRESHOLD

X Quarries

Low Opportunity — High Opportunity

APPENDIX 2

Map 22

REPORT: GNS SR 2021/10

DATE: March 2021