MEMORANDUM

DATE:	11 July 2023
то:	Independent Commissioner, David McMahon
FROM:	Russell Bartlett, KC on behalf of the applicant, Hirock Limited
SUBJECT:	Applicant Right of Reply in relation to the Hearing for Linton Quarry Joint Consent Application - PNCC LU 6962 and MWRC APP-2022203991.00

This Reply on behalf of the Applicant contains the following information, as requested by Commissioner McMahon at the joint hearing on 22 June 2023, and in Minute #2, issued 26 June 2023.

- Linton Quarry production volumes 2021-2024
- Commentary on anticipated demand
- Updated quarry heavy vehicle movements
- Noise: Technical memorandum by Marshall Day Acoustics
- Noise Joint Witness Statement dated 6 July 2023 and an agreed set of noise conditions
- Response to Submitter's Question
- Updated Truck Driver Induction Manual
- Kendalls Line stock underpass email advice from PNCC
- A consolidated set of agreed consent conditions

PRODUCTION VOLUMES 2021-2024

At the hearing, Commissioner McMahon requested production volumes for Linton Quarry. The Applicant took over the operation of the quarry in FY2021 and has since produced the following annual volumes –

- FY21 206,791 tons
- FY22 300,322 tons
- FY23 263,434 tons
- FY24 24,313 tons (year to date)

The size of the quarry pit expansion is 4.6ha.

The applicant has prepared further documentation in relation to the matter of anticipated demand (Appendix A).

QUARRY TRUCK MOVEMENTS

As previously outlined in the Applicant's memorandum of 30 June 2023, Hirock have re-assessed the minimum number of truck movements that would enable the next phase of the quarry pit expansion and wish to revise the consent application by way of the following significant reduction in truck movements.

- Maximum of **17** heavy vehicle movements per hour (reduced from **40**)
- Maximum of **170** heavy vehicle movements per day (reduced from **250**)

Limiting truck movements to 17 per hour means noise levels will be below 55dBA at the notional boundary of all dwellings along Kendalls Line. On that basis, acoustic fencing/double glazing is no longer considered necessary, and the Applicant's offer of an acoustic fence has been withdrawn.

In that memorandum, the Applicant provided a breakdown of the quarry operational days, extraction volumes and minimum truck numbers/movements which provides the rationale for the new daily traffic movement limit. An average of 129 truck movements per day are needed to transport 360,000 tons of aggregate annually. The Applicant is now seeking a limit of 170 per day, which provides for peaks and troughs in daily movements, whilst ensuring the 55dBA noise limit is not exceeded.

NOISE TECHNICAL MEMORANDUM

A new technical memorandum titled "Linton Quarry - Reduced truck noise levels", prepared by Marshall Day Acoustics, dated 4 July 2023, document number Mm 003 R01 is attached at Appendix B. The memorandum provides an assessment of noise levels resulting from the proposed new hourly peak and daily maximum truck movement limits.

The memorandum on the reduced traffic volumes and predicted noise levels was the basis upon which post-hearing expert conferencing was carried out between the noise experts on 6 July 2023.

JOINT WITNESS STATEMENT – NOISE AND VIBRATION

Expert conferencing between Jon Farren, the Applicant's noise expert and Nigel Lloyd, noise expert for PNCC occurred on 6 July 2023.

The key items confirmed during caucusing are as follows.

- It was agreed that the potential adverse effects associated with the proposal can be appropriately mitigated through the adoption of the proposed conditions of consent.
- It was agreed that a 60 dB LAeq site boundary noise limit is reasonable.
- Noise mitigation is no longer required as the reduced peak hour truck movements will reduce noise levels to below 55 dB LAeq,1hr at all dwellings.
- A Noise Management Plan is appropriate.
- It was agreed that one round of noise monitoring is appropriate, with further monitoring required on the receipt of justifiable complaints.

There were no outstanding areas of disagreement.

A Joint Witness Statement on Noise and Vibration, including a set of agreed consent conditions is attached to this right of reply at Appendix C.

RESPONSE TO SUBMITTER'S QUESTION

Commissioner McMahon requested that a response be provided by Mr Farren and Mr Lloyd to the following question from Mr Vautier.

"The Applicant's noise expert, Jon Farren has advised that limiting truck movements to 17 per hour means noise levels will be below 55dBA at the notional boundary of all dwellings along Kendalls Line. On that basis, acoustic fencing/double glazing is no longer needed, and the Applicant's offer of an acoustic fence is withdrawn.

Can he please explain how a decrease in truck numbers has an influence on the dBA noise levels?

I would have thought the noise from any truck is associated with the type of truck and how it is driven and this would have no impact on the decibel level."

Attached at Appendix D is a memorandum titled "Linton Quarry – query from Mr Vautier" by Marshall Day Acoustics, dated 7 July 2023, document number Mm 004. In it, Mr Farren describes the logarithmic relationship between the number of truck movements and sound levels. Mr Lloyd has confirmed by email on 7 July 2023, also attached at Appendix D, that he agrees with Mr Farren's explanation of LAeq (being the measurement parameter used to measure traffic noise).

DRIVER INDUCTION MANUAL

At the hearing, Commissioner McMahon requested the Applicant's Driver Induction Manual be updated to include the process for truck drivers, including those of quarry customers, who demonstrate poor driver behaviour. A copy the Applicant's updated Driver Induction Manual is provided at Appendix E. In particular it describes how Hirock management respond to truck drivers who do not adhere to the courtesy speed limit and 'no engine breaking' signage along Kendalls Line.

KENDALLS LINE STOCK UNDERPASS

At the hearing Ilze and Chris Bekker mentioned hearing noise from trucks travelling over their neighbour's stock underpass on Kendalls Line.

As per the Hirock/PNCC Kendalls Line road maintenance MoU, a laser profilometer survey was carried out in June 2023 to assess the surface condition of Kendalls Line. Results were provided to PNCC's Chief Engineer, Stuart Cartwright who has confirmed, following the '22/23 summer improvements to the road surface, the road surface is in good condition and does not require any further maintenance at this time, refer to email correspondence at Appendix F.

The Applicant has made an offer to PNCC to assist with maintenance of the surface of the road above the stock underpass, this offer has been accepted by PNCC. The MoU is to be updated with reference to maintaining the stock underpass. It is expected the timely maintenance of the road surface over the underpass will reduce noise effects experienced by the Bekkers.

CONSOLIDATED SET OF CONDITIONS

A consolidated set of conditions jointly prepared by the planners, Emma Hilderink-Johnson and Natasha Adsett are attached at Appendix G.

In particular I wish to draw your attention to the conditions on:

- Shared lime pathway (Condition 6)
- Site Rehabilitation (Condition 60 and 61 PNCC, Condition 50 and 51 MWRC)

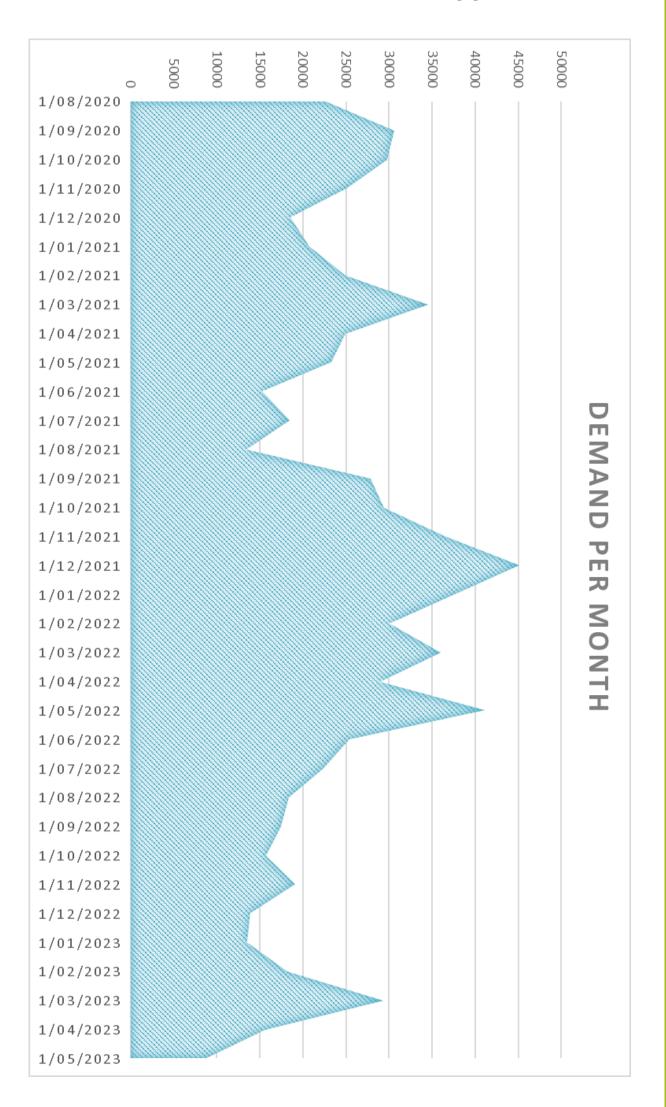
Following pre-lodgement consultation with Kendall's Line residents in 2021, the Applicant offered to construct a shared lime pathway so residents could walk and bike along the northern side of Kendalls Line. It was unclear from the hearing which side of the road the residents now prefer the path to be located. Because of this Condition 6 has been worded to provide flexibility as to its location.

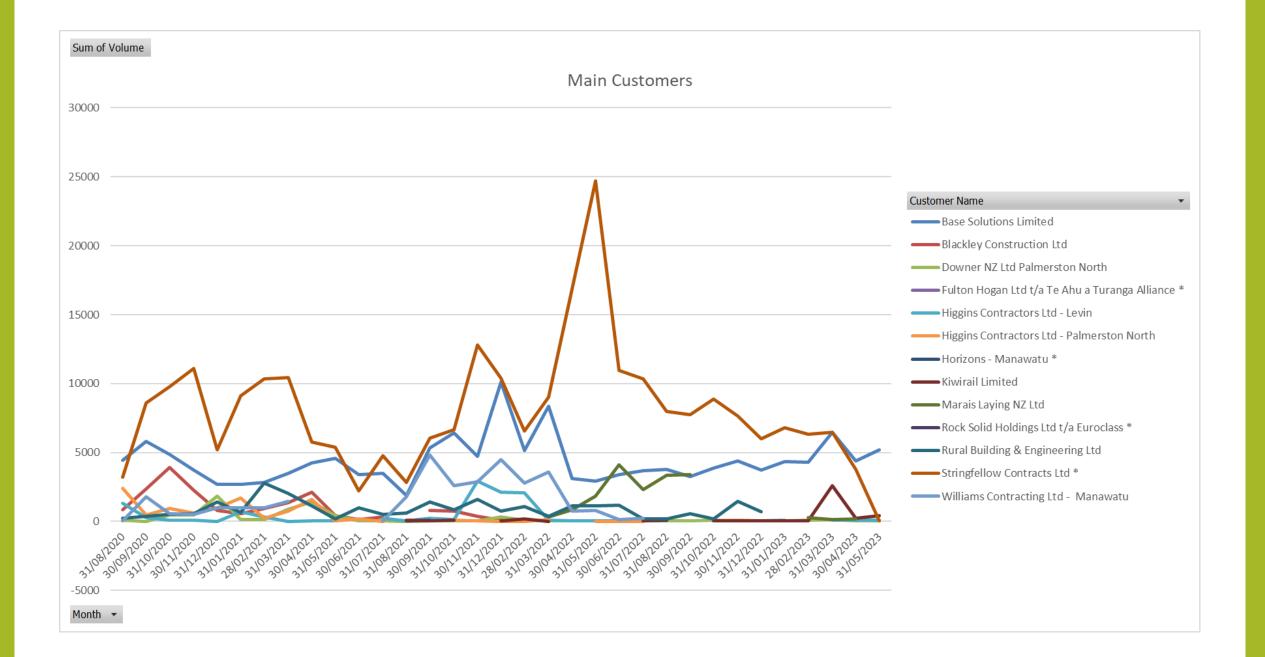
At the hearing, Commissioner McMahon requested site rehabilitation conditions requiring the preparation and technical certification of a Concept Quarry Closure and Rehabilitation Plan (CQCRP) and a Final Quarry Closure and Rehabilitation Plan (FQCRP), be modified to include its purpose and objective. These conditions have been updated accordingly.

Agreed noise and dust conditions from the respective joint witness statements have also been included in this consolidated set of conditions.

Russell Bartlett KC Counsel for Hirock Ltd

Appendix A







By email

3 March 2022

100 Cuba Street Te Aro, Wellington 6011 PO Box 11646 Manners Street Wellington 6142 T 04 384 5708 F 04 385 6960

Josua Grobler Hirock Ltd 501 Main Street, Palmerston North, 4410 PO Box 12075, Palmerston North, 4444

Dear Josua

Greater Wellington Regional Council Flood Protection Support for HiRock Quarry Consent Application

We wish to extend our support for the application to increase the rock resource available for river works within the Wellington Region.

Greater Wellington Regional Council has an ongoing need for good quality rock for flood risk management works and to keep our communities safe from river erosion and flooding. This work is highly dependent on rock supply from quarries such as the Hirock quarry, and we would like to have ongoing rock supply for future works. We also are also concerned about reducing our effects of climate change, which would be increased if we were required to seek rock from further afield.

While we have not formally submitted as part of the quarry expansion consent, we would be happy to have our support noted as part of the process.

Wellington office PO Box 11646 Manners St, Wellington 6142 **Upper Hutt** PO Box 40847 1056 Fergusson Drive Masterton office PO Box 41 Masterton 5840 0800 496 734 www.gw.govt.nz info@gw.govt.nz



Yours sincerely

Etram Coppel.

Graeme Campbell Manager, Flood Protection

Graeme.campbell@gw.govt.nz Mobile: 027 430 0375



Te Ahu a Turanga Site Office | 1600 Napier Road, RD1, Palmerston North 4471

PO Box 68 ASHHURST 4347

17 March 2022

TO WHOM IT MAY CONCERN

RE: Te Ahu A Turanga, Manawatu Tararua Highway Construction – Support for Hirock Quarry Consent Application

We wish to extend our support for the application to increase the rock resource available for scour protection works on the Project.

Greater Wellington Regional Council has an on-going need for good quality rock for stream and river scour protection along with the armouring of swales and drainage channels. This work is highly dependent on rock supply from quarries such as the HiRock quarry.

There is a huge demand across the Lower North Island for Rip Rap and scour protection rock which we need to secure a share from the likes of the HiRock quarry to enable completion of the works. There are some alternative sources however, the associated carbon footprint with these is substantial and as a Project we are seeking opportunities to reduce this.

Please contact me should you require any further information.

Yours faithfully Te Ahu a Turanga: Manawatū Tararua Highway

of al.

Tony Adams Project Director

Mobile 027 437 7246 Tony.Adams@Fultonhogan.com

FW: HIROCK LINTON- AGGREGATE TEST RESULTS



Burger, Anthony <Anthony.Burger@

Cc ○ Bridges, Amy; ○ Els, Renier

Follow up. Start by Wednesday, 29 March 2023. Due by Wednesday, 29 March 2023.

You replied to this message on 30/03/2023 8:33 am.

This message is part of a tracked conversation. Click here to find all related messages or to open the original flagged message. Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

Hi Josua

I am getting in touch as I have been passed your information from the email below.

Stantec (I have included some people helping me with determining rock requirements) are working with Central Hawkes Bay District Council on the cyclone recovery response. We are installing rip rap and armour stone to reinstate and protect badly damaged and scoured bridges. Overall, we believe there to be in the order of 70 sites that require repair before the end of June this year.

We are looking for alternative rock to the current limestone in the area and want to enquire about the nature and quality of the rock HIROCK have available.

We need some basic test data in order to understand this better before we can ascertain if it meets our specifications. CHBDC are wanting the repairs to be fairly permanent and thus trying to secure the right solutions where feasible. Our current specs are:

Density (t/m³)	Absorption (%)	Los Angeles Abrasion (%)	Crushing Resistance (kN/m²)	Weathering Quality Grade	Compression (MPa)
Minimum of 2.6	Maximum capacity of 2	Maximum of 30	Minimum of 130	AA, BA. AB, or BB	Minimum of 14

Would you be able to help us with some information and pricing? Our grading profile is currently

Rock class	Rock size (1) (m)	Rock mass (kg)	Minimum percentage of rock larger than
Facing	0.40	100	0
	0.30	35	50
	0.15	2.5	90
Light	0.55	250	0
	0.40	100	50
	0.2	10	90
¼ tonne	0.75	500	0
	0.55	250	50
	0.3	35	90
			Minimum percentage of rock

Rock class	Rock size (1) (m)	Rock mass (kg)	Minimum percentage of rock larger than
½ tonne	0.90	1000	0
	0.70	450	50
	0.40	100	90
1 tonne	1.15	2000	0
	0.90	1000	50
	0.55	250	90
2 tonne	1.45	4000	0
	1.15	2000	50
	0.75	500	90
4 tonne	1.80	8000	0
	1.45	4000	50
	0.90	1000	90

Any help will be appreciated.

Regards

Anthony Burger



Principal Civil Engineer

Direct Dial +64 7 839 9859 Mobile: +64 27 205 6040 Email: <u>Anthony.Burger@Stantec.com</u>

Stantec New Zealand Physical Address: PWC Centre, Level 3, 109 Ward Street Hamilton Central, Hamilton 3204 New Zealand

Stantec

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

Please consider the environment before printing this email.

From: WISSEL, Peter <<u>Peter.Wissel@fultonhogan.com</u>>
Sent: Wednesday, 14 September 2022 3:36 pm
To: VAN DEVENTER, Ruan <<u>Ruan.vanDeventer@fultonhogan.com</u>>; HILL, Matthew
<<u>Matthew.Hill@hql.co.nz</u>>
Subject: RE: Riverlink - Quarry

Good afternoon Ruan and Matthew,

Further to Roshil's email I would be keen to catch up with you to understand the FH Wellington options providing rip rap to the Riverlink project. A few details ahead of any catch up

- a) FH is tendering the project with McConnell Dowell, Aurecon and Beca as partners
- b) We are still awaiting the tender documents which have been delayed
- c) The project will likely commence late 2023 and will run for approximately 4 years
- d) The project will require approximately 40,000m3 of Grade B rip rap as per GWRC grading curve (attached)
- e) The rock properties are as per the Minimum Requirements
 - Size: Class B GWRC Specification as per GWRC Standard Detail Rock Rip Rap Grading Envelope (RL-5317/29 May 2013)
 - . Density: Rock armouring shall have a density of at least 2.65 t/m3 determined in accordance with NZS 4407
 - . Crushing Resistance: Not less than 150 kN when tested in accordance with NZS4407
 - . Abrasion Resistance: Less than 25% loss of weight after 500 revolutions in accordance with Los Angeles Test NZS4407
 - . Weathering Resistance: AA, BA, AB or BB when tested in accordance with NZS4407, and
 - . Absorption: Less than 0.75% in accordance with NZS3111.

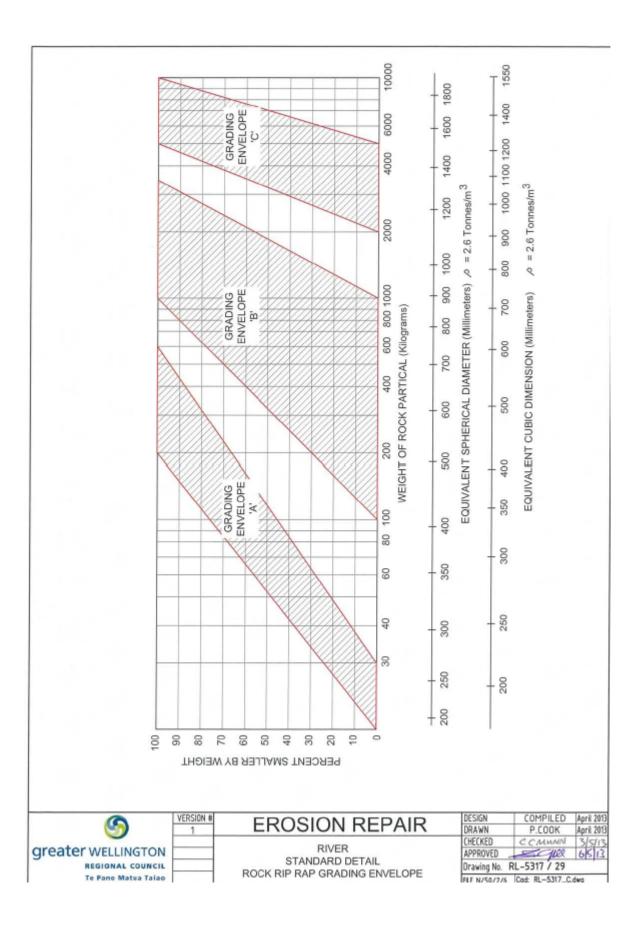
I understand that HiRock was awarded the supply contract for river maintenance rock for GWRC a couple of years ago. The material appears to come from their Linton quarry, but I am not sure.

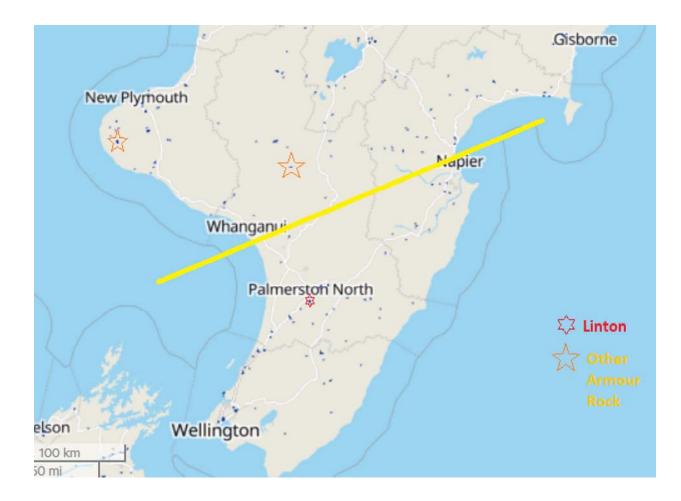
It would be great if you could spare some time in the next days to discuss current situation in Wellington including development plan for Willowbank Quarry. Besides the above mentioned rip rap the project might also require impermeable (clay) material and the full suite of roading and drainage aggregates. Onsite processing of river gravels will likely have to be considered as the current quantities indicate that the project is producing a surplus of material.

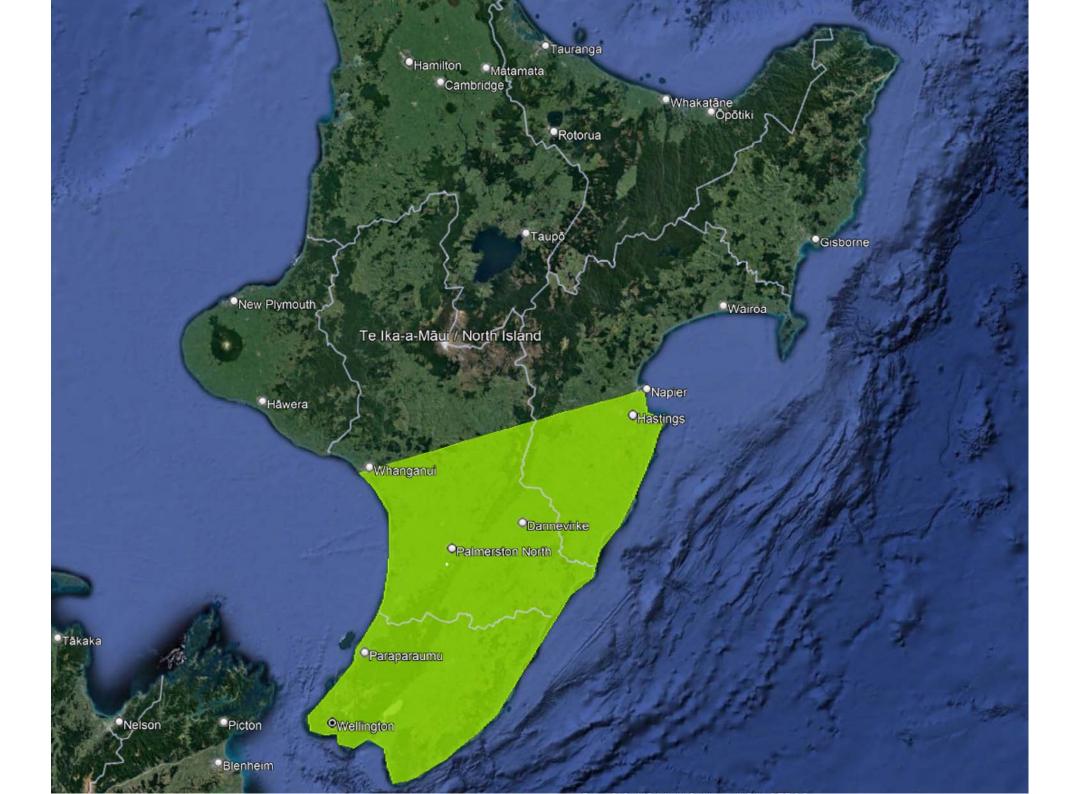
Can you give me an indication which day and time would work best for you for a Teams conference call.

Regards,

Peter Wissel 027 433 2898







Appendix B

MARSHALL DA

MEMO

Project:	Linton Quarry	Document No.:	Mm	003 R01	
То:	Hirock c/o Good Earth Matters	Date: 4 July 2023			
Attention:	Emma Hilderink-Johnson	Cross Reference:			
Delivery:	By email	Project No.:	20210382		
From:	Jon Farren	No. Pages:	2	Attachments:	No
Subject:	Linton Quarry - Reduced truck noise levels				

Emma

Following the Hearing that was adjourned on 22 June 2023, I understand the applicant is proposing to reduce overall truck movements to Linton Quarry. The revised truck movements permit the annual volume of 360,000 tonnes to be achieved, whilst permitting short-term elevations in truck movements to respond to customer demand.

During the application and hearing process, my assessment has focussed on the worst-case noise levels received at dwellings, which occur during peak hour truck movements. I have compared these peak hour noise levels to a guidance value of 55 dB $L_{Aeq,1hr}$ for the protection of residential amenity.

My revised noise level predictions show that 17 truck movements per hour will generate less than 55 dB L_{Aeq,1hr} at all dwellings along Kendalls Line. This represents a substantial reduction from the 40 trucks per hour that was originally sought as part of the application. Correspondingly, the applicant is offering to accept a condition of consent that controls the maximum number of truck movements to 17 per hour (and 170 movements over a ten hour day). In my opinion no further noise mitigation is required at this level of activity.

Table 1 overleaf presents the updated predicted truck noise levels. Specifically, I would highlight:

- The data shows that noise levels from peak hour truck movements are below 55 dB L_{Aeq,1hr} at all locations and, as a result, noise effects will be acceptable. On this basis, the proposed consent condition offering noise mitigation to locations with a noise level above 55 dB L_{Aeq,1hr} is no longer necessary.
- 2. I note that the requested annual volume of 360,000 tonnes corresponds to approximately 130 truck movements per day when assessed on an average basis, which corresponds to relatively low noise levels along Kendalls Line that are consistent with the 50 dB L_{Aeq,16hr} guideline value discussed in the Noise Report. The range of predicted noise levels are 37 to 51 dB L_{Aeq,16hr}, the latter occurring at 33 Kendalls Line a 1 dB excess representing a negligible and imperceptible difference in noise effect.





	Address	Distance to	Noise level, dB	
ID^1		centreline of Kendalls Line,	Peak hour ²	Daily average ³
		metres	LAeq ,1 hr	LAeq ,16 hrs
2	150 Kendalls Line	24	52	50
4	75 Kendalls Line	45	49	46
5	42 & 124-136 Kendalls Line	45	49	46
7	39 Kendalls Line	79	46	43
9	33 Kendalls Line	19	54	51
10	6 Kendalls Line	40	50	47
11	23 Kendalls Line	134	40	37
12	15 Kendalls Line	39	50	47
13	11 Kendalls Line	25	52	49
14	4 Kendalls Line	103	41	38

Table 1: Predicted future noise levels from quarry traffic at dwelling façades on Kendalls Line

Notes:

¹ Properties without existing dwellings have not been taken into account (i.e. ID 1,3 and 6).

² Calculation based on 17 truck movements in the peak hour.

³ Calculation based on long term average of numbers of daily truck movements based on the resource consent application of 360,000 tonnes per year which approximately equates to 130 truck movements per day.

Appendix C

BEFORE THE HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the applications by Hirock Limited to the Palmerston North City Council (LU 6962) and the Manawatū -Whanganui Regional Council (APP-2022203991.00) for resource consents associated with the expansion and operation of an existing quarry at 167-257 Kendalls Line, Palmerston North

EXPERT CONFERENCING

JOINT WITNESS STATEMENT - NOISE AND VIBRATION

6 July 2023

A. INTRODUCTION

- 1. This joint witness statement relates to expert conferencing on the topic of noise.
- This joint witness statement relates to resource consent applications lodged by the Hirock Limited (Applicant) to Palmerston North City Council (PNCC) and Manawatu-Wanganui Regional Council (Horizons), to be processed jointly, for the for the expansion of an existing quarry at 167 - 257 Kendall's Line, Palmerston North.
- 3. The expert conferencing was held by TEAMS meeting on 5 July 2023.
- 4. Attendees at the conference were:
 - a. Nigel Lloyd for PNCC;
 - b. Jon Farren for the Applicant;
- 5. The experience and qualifications of each expert is as set out in their respective statements of evidence.
- 6. The purpose of conferencing was to identify, discuss and highlight points where there is agreement or disagreement on matters pertaining to noise and vibration arising from the resource consent applications, the submissions on them and the joint (PNCC and Horizons) s42A reports, expert evidence and the hearing held on 22 June 2023.
- As directed by Independent Hearing Commissioner David McMahon in his Minute #2 on 26 June 2023, a set of agreed consent conditions has been prepared, and are attached at Annexure B.

B. PRIMARY DATA RELIED ON

- 8. The following documents, data and information have been relied on in this expert conference:
 - Good Earth Matters Limited Linton Quarry Expansion: Resource Consent Application and Assessment of Environmental Effects for Joint Application to Palmerston North City Council and Horizons Regional Council (the Application);
 - Letter from Good Earth Matters Limited on behalf of Hirock to Natasha Adsett, Response to S92 Further Information Request, dated 21 November 2022;

Joint Witness Statement – Noise and Vibration Application No. LU 6962 and APP-2022203991.00 6 July 2023

- c. Letter from Good Earth Matters Limited on behalf of Hirock to Natasha Adsett, Response to S92 Further Information Request, dated 22 December 2022, including Memo from Marshall Day Acoustics dated 21 December 2022, Alternative Overburden Disposal Areas - Noise, project number 20210382;
- d. Section 42A Evidence of Nigel Robert Lloyd, dated 16 May 2023;
- e. Report on and Minutes of the Prehearing Meeting, prepare by Andrea Harris, dated 17 May 2023;
- f. Memo regarding vibration titled TRUCK VIBRATION, prepared by Marshall Day Acoustics, document number Mm 002, dated 29 May 2023;
- g. Section 42A RMA report by Natasha Adsett (PNCC/Horizons), dated 30 May 2023;
- h. Statement of Evidence Noise by Jon Farren on behalf of Hirock, dated 6 June 2023;
- i. Written submissions by Vautiers, Days and Bekkers tabled at the joint hearing on 22 June 2023;
- j. Revised consent conditions by the Applicant, tabled at the joint hearing on 22 June 2023; amd
- Memo titled Linton Quarry Reduced truck noise levels, prepared by Marshall Day Acoustics, document number Mm 003 R01, dated 4 July 2023.

C. AGREED ISSUES

- 9. We agree that the potential adverse effects associated with the proposal can be appropriately mitigated through the adoption of the proposed conditions of consent. Refer to Annexure A.
- 10. For the avoidance of doubt, we specifically confirm the following items that were discussed during the Hearing:
 - a. We agree proposed condition 7 that provides a 60 dB L_{Aeq} site boundary noise limit is reasonable.
 - b. Proposed condition 11 is no longer required as the reduced peak hour truck movements will reduce noise levels to below 55 dB L_{Aeq,1hr} at all dwellings – the text has been struck out.

Joint Witness Statement – Noise and Vibration Application No. LU 6962 and APP-2022203991.00 6 July 2023

- c. We agree the preparation of a Noise Management Plan as required by Condition 12 is appropriate.
- d. We agree that Condition 18 requiring one round of noise monitoring is appropriate, with further monitoring required on the receipt of justifiable complaints amended text has been provided.
- 11. We agree with the conditions as currently written except we note that the deletion of condition 11 causes cross referencing amendments to conditions 12, 14 and 17.

D. DISAGREEMENT AND REASONS

12. There are no material matters of disagreement.

Date: 6 July 2023

Nigel Lloyd

Jon Farren

Joint Witness Statement – Noise and Vibration Application No. LU 6962 and APP-2022203991.00 6 July 2023

ANNEXURE A

ACCESS AND TRAFFIC

- 1. Signs must be erected along Kendalls Line advising of a speed limit of 50 km/hr for all Quarry Traffic and advising 'no engine braking'. At a minimum, signage must be located a minimum of 100m from the intersection of Kendalls Line and SH57 and again at the entrance/ exit of the quarry.
- 2. A baseline road condition survey of Kendalls Line is to be undertaken by Hirock annually.
 - (a) Laser profiling baseline survey must be undertaken once every three (3) years to identify road pavement shape and condition and this will determine more accurately future pavement rutting and micro cracking caused by heavy commercial vehicles (HCV) wheel track loadings. In other years, the annual baseline road condition survey may be a visual survey carried out by a suitably qualified roading contractor.
 - (b) The annual baseline road condition survey is to be submitted to PNCC within one(1) month of being undertaken.
- 3. The consent holder must update the Traffic Management Plan to ensure all truck drivers are informed about safe vehicle speeds and braking restrictions and the risk of children moving along the western end of Kendalls Line if school age children are being picked up and dropped off by school bus. A copy of the updated Traffic Management Plan must be submitted to council no later than **1 month after the granting of consent,** for record keeping.
- 4. Traffic generation to/from the site must comply with the following:
 - (a) Total truck movements must not exceed:
 - i. 170 per day; and
 - ii. 17 per hour.

For the avoidance of doubt, a truck movement is defined as single trip either inbound to, or outbound from the site and can be a truck with or without a trailer. A return trip to and from the site constitutes two truck movements.

NOISE

5. The Consent Holder must ensure that quarrying activities (other than the construction of noise bunds) are managed to ensure that noise does not exceed the following at or within

Joint Witness Statement – Noise and Vibration Application No. LU 6962 and APP-2022203991.00 6 July 2023

any residentially zoned site, or at or within the notional boundary of any rural dwelling, aside from the dwelling located at 150 Kendalls Line:

7.00am to 7.00pm 50 dB LAeq(15min)

7.00pm to 10.00pm 45 dB L_{Aeq(15min)}

10.00pm to 7.00am 40 dB L_{Aeq(15min)}

10.00pm to 7.00am 70 dBA L_{max}

Sound levels must be measured in accordance with New Zealand Standard NZS 6801:2008 Acoustics – Measurement of environmental sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise.

The notional boundary is defined as a line **twenty (20) metres** from any side of a dwelling or the legal boundary where this is closer to the dwelling.

6. The Consent Holder must ensure that quarrying activities (other than the construction of noise bunds) must be managed to ensure that noise from the quarrying activity does not exceed the following within the notional boundary of the dwelling situated at 150 Kendalls Line:

7.00am to 7.00pm 51 dB LAeq(15min)

7.00pm to 10.00pm 45 dB L_{Aeq(15min)}

10.00pm to 7.00am 40 dB $L_{Aeq(15min)}$

10.00pm to 7.00am 70 dBA L_{max}

Sound levels must be measured in accordance with New Zealand Standard NZS 6801:2008 Acoustics – Measurement of environmental sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise.

The notional boundary is defined as a line **twenty (20) metres** from any side of a dwelling or the legal boundary where this is closer to the dwelling.

- 7. Quarrying activities (other than the construction of noise bunds) must be managed to ensure that noise does not exceed 60 dB LAeq(15min) at all times at or within the boundary of any other site.
- 8. Noise from the construction of noise bunds must be managed and controlled in accordance with NZS 6803:1999 Acoustics Construction noise.
- Blasting activities must be measured and assessed in accordance with Appendix J of Australian Standard AS 2187-2:2006 "Explosives – Storage and use Part 2: Use of explosives".

Joint Witness Statement – Noise and Vibration Application No. LU 6962 and APP-2022203991.00 6 July 2023

Blasting vibration must not exceed the peak component particle velocity shown as Line 2 in Fig F.1 when measured at the base of any dwelling. Blasting must be managed to ensure that in any calendar year, 95% of airblast levels do not exceed 115 dBL, with a maximum of 120 dBL, when applied at or within any residentially zoned site or at or within the notional boundary of any rural dwelling.

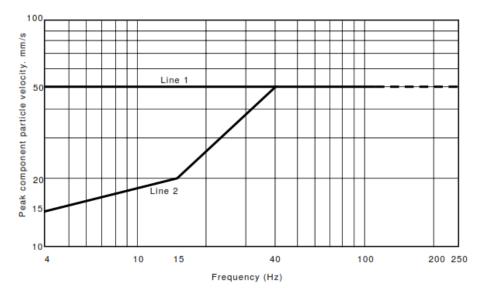


Figure F.1 Blasting Vibration Limits (Line 2)

- 10. Blasting must not occur more than 36 times per year and will only take place between 0900 and 1700 hrs Monday to Friday. All residents on Kendalls Line and within 1 km of the quarry must be alerted to any blasting through the use of a siren and written communication for any blasting outside of the hours of 1000 to 1030 hrs and 1400 to 1430 hrs Monday to Friday.
- 11. Within **6-months** of grant of consent, the consent holder must offer on at least three occasions to install noise mitigation for all dwellings with a façade within 50m of the road centreline as at **[date granted]**. The design and installation of the noise mitigation will be at the sole cost of the consent holder. Any ongoing maintenance of the mitigation will be at the cost of the landowner. The noise mitigation will be designed by a suitably qualified and experienced acoustic consultant in liaison with the property owner and must represent the best practicable option to reduce the noise.
- 12. The Consent Holder must ensure that a Noise Management Plan (NMP) is prepared by a suitably qualified and experienced acoustic consultant. The objective of the NMP is to develop mechanisms and processes to ensure compliance with the noise level maximums specified in Condition 5, 6, 7 and 8 and to specify methodologies for the monitoring of noise levels, including that required by Condition 17/18, training of staff and handling of complaints. The NMP must include but be not limited to:
 - a) the relevant noise limits,

Joint Witness Statement – Noise and Vibration Application No. LU 6962 and APP-2022203991.00 6 July 2023

- b) the relevant blasting airblast and vibration limits,
- c) noise mitigation and maintenance requirements for plant and machinery,
- d) the size and location of noise bunds,
- e) the use of quiet reversing alarms,
- f) general operating procedures,
- g) the speeds on haul roads,
- h) haul road maintenance,
- i) achieving vehicle courtesy speed limits on Kendalls Line,
- j) training of staff,
- k) complaints handling and recording,
- I) staging and minimising the impacts of bund construction, and
- m) quarry noise & blasting (airblast and vibration) monitoring.
- 13. The NMP must be submitted to the Palmerston North City Council's Monitoring Officer for technical certification at least twenty (20) working days before works commence on the site.
- 14. Certification (or withholding certification) is based on whether the NMP meets the requirements of the conditions of this resource consent, with specific focus on **Conditions 5**, **6**, **7**, **8** and **17/18**.
- 15. The Consent Holder must operate the quarry in compliance with the certified NMP at all times.
- 16. The NMP may be amended or updated without the need for certification where the amendment is an administrative change, including nominating personnel.
- 17. Except as provided for in **Condition 16**, amendments to the NMP and any appendices must be certified in writing by the Palmerston North City Council acting in a technical certification capacity prior to the commencement of any works to which the amended NMP relate.
- 18. Noise monitoring must be undertaken within 3 months of the issue of consent, and then annually for the life of the quarry. and on receipt of a justifiable complaint. A copy of the results of each period of monitoring results must be provided to the Palmerston North

City Council within 6 weeks of undertaking the monitoring in a form that demonstrates whether compliance is being achieved with these conditions.

HOURS OF WORK

19. The quarry must not operate outside the hours of 07:00 to 17:00 hrs, Monday to Friday and 07:00 to 15:00 hrs on Saturdays. No quarry activity will take place on Sundays or public holidays. Quarry trucks must not use Kendalls Line outside of the core quarry hours. This restriction does not apply to staff arriving to the site, between 06:30 and 07:00 hrs.

QUARRY MANAGEMENT PLAN

- 20. The consent holder must update the Quarry Management Plan **twelve (12) months** after the grant of this consent and submit it for Technical Certification by PNCC. The updates must include but not be limited to:
 - (a) Updated description of site activities
 - (b) Updated description of cultural values of the site
 - (c) Reference to Ecological Management Plan
 - (d) Reference to Traffic Management Plan
 - (e) Reference to Memorandum of Understanding with Rangitane o Manawatū
 - (f) Reference to Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line
 - (g) Reference to the Dust Management and Monitoring Plan
 - (h) Reference to the Noise Management Plan
 - (i) Updated Erosion and Sediment Control Plan requirements
 - (j) Cleanfill record keeping procedures
 - (k) Updated regulatory framework i.e., resource consents
 - (I) Updated driver induction manual

Advice Note: the requirement for Technical Certification of the Quarry Management Plan is also contained within the Manawatū-Whanganui Regional Council consents ATH-2022205663.00, ATH-2022205664.00 and ATH-2023205983.00.

Joint Witness Statement – Noise and Vibration Application No. LU 6962 and APP-2022203991.00 6 July 2023

REVIEW

- 21. The Palmerston North City Council, under s128 of the Resource Management Act, may once per year, during **July**, serve notice of its intention to review all conditions of this resource consent for the purpose of reviewing the effectiveness of these conditions in avoiding and mitigating any adverse effects on the environment. The review of conditions must allow for:
 - a) deletion or amendments to any conditions of this resource consent to ensure adverse effects (including noise and dust) are appropriately mitigated, and/or
 - b) addition of new conditions as necessary, to avoid, remedy or mitigate any unforeseen adverse effects on the environment.

Appendix D MARSHALL DAY

MEMO

Project:	Linton Quarry	Document No.:	Mm	004	
То:	Hirock c/o Good Earth Matters	Date: 7 July 2023			
Attention:	Emma Hilderink-Johnson	Cross Reference:			
Delivery:	By email	Project No.:	20210382		
From:	Jon Farren	No. Pages:	1	Attachments:	No
Subject:	Linton Quarry – query from Mr Vautier				

Emma

I have been asked to address the following query from Mr Vautier

The Applicant's noise expert, Jon Farren has advised that limiting truck movements to 17 per hour means noise levels will be below 55dBA at the notional boundary of all dwellings along Kendalls Line. On that basis, acoustic fencing/double glazing is no longer needed, and the Applicant's offer of an acoustic fence is withdrawn.

Can he please explain how a decrease in truck numbers has an influence on the dBA noise levels?

I would have thought the noise from any truck is associated with the type of truck and how it is driven and this would have no impact on the decibel level.

The truck noise assessment is based on the equivalent continuous sound pressure level, $L_{Aeq,1hr}$ which essentially describes the sound energy average noise level over a 1 hour period. L_{Aeq} is used extensively as the noise metric that best aligns to a populations' response to noise effects as referenced by both the World Health Organisation and New Zealand Standards

The $L_{Aeq, 1hr}$ noise level increases or decreases with increasing or decreasing numbers of truck movements per hour. The relationship is logarithmic - for example, a reduction in truck movements from 20 to 10 will result in a noise level reduction of 3 decibels.

My quarry truck source data takes account of the variation in truck type based on collected data for quarry trucks at Linton quarry and numerous other sites across New Zealand.

Driver behaviour can influence noise levels, but this is most appropriately mitigated through effective implementation of the driver induction that is required as part of the Quarry Management Plan and sets out the requirement for no engine braking and appropriate speed limits on Kendalls Line (amongst other requirements).



From:	Nigel Lloyd <nigel@acousafe.co.nz></nigel@acousafe.co.nz>
Sent:	Friday, 7 July 2023 1:08 pm
То:	'Jon Farren'; Emma Hilderink-Johnson
Cc:	'Natasha Adsett'
Subject:	RE: Further direction - Response from submitter Vautier - Hirock quarry (Minute #3 of
	Commissioner)

Hi Emma I agree with Mr Farren's explanation of LAeq.

Regards Nigel Lloyd

Acousafe Consulting & Engineering Ltd Ph: +64 274480282

From: Jon Farren <Jon.Farren@marshallday.co.nz> Sent: Friday, July 7, 2023 11:22 AM

To: Emma Hilderink-Johnson < Emma. Hilderink Johnson@goodearthmatters.com>

Cc: Natasha Adsett <natasha@evergreenconsulting.co.nz>; Nigel Lloyd <nigel@acousafe.co.nz>

Subject: RE: Further direction - Response from submitter Vautier - Hirock quarry (Minute #3 of Commissioner)

Hi Emma

Chatting with Nigel, we thought the best way to respond to Mr Vautier would be if I prepare a brief memo (see attached) and Nigel will confirm if he is in agreement (or not). Happy to discuss Jon

Jon Farren



292 Montreal Street, Christchurch marshallday.com | T: 03 365 8455 | M: 021 136 1913 This email is confidential. If it is not intended for you please do not read, distribute or copy it or any attachments. Please notify the sender by return email and delete the original message and any attachments.





TRUCK DRIVER INDUCTION

Linton Quarry has developed this truck driver induction to make you aware of the hazards in the quarry and the controls in place to eliminate or reduce the risk of an accident happening. These procedures have been developed to keep you safe and for our quarry to run smoothly. Unless specified, general road rules/signage apply, e.g. give way to traffic from your right etc.

Kendall's Line Entry/Exit.

- Obey all Traffic signs.
- Speed Limit 50kmph.
- NO ENGINE BREAK AT ANY TIME (If a complaint is made regarding engine break use you will be asked to leave the Quarry, if this behaviour continues you will be Blacklisted from using the Linton Site)
- Report any spillages, damage, or sediment on the road to the Quarry Manager immediately.

Weighbridge Procedure.

- Flashing beacon must be on while in the quarry.
- You must weigh in every time you visit the quarry to get a load.
- Drive slowly on the weighbridge and slowly come to a stop, do not jam the brakes on.
- Weigh yourself in. Ask for help if you are not sure of the process. Use the RT to call for help if nobody is in the office. RT procedure as below.
- Always select "Truck and Trailer" if you have a trailer on, even if both units are taking the same product.
- Every load must be weighed out. All trucks must preferably display their Net Weight on their bins.

RT use in the Quarry. (Risk of collision)

- If you truck is not fitted with an RT programmed to channel 30, take an RT from, the bank on the left of the computer screen and turn it on.
- Your load details have been signalled to the loader operator if you have gone through the weigh in sequence on the computer. He will know what product you want.
- The RT is to help you communicate with him when you get to the stockpile, and if you need something specific to happen. Please mind your language, we may have visitors in the office that can overhear you.
- Press the talk button on the left-hand side of the RT and hold it down when talking, release once finished. If a quarry member has spoken to you, please say "Copy" once they have finished if you understand the instruction and don't need to reply.
- Please return the radio to the charger bank when you weigh out.



Driving through the Quarry (Risk of collision, Blasting, Fly-rock.)

- Quarry vehicles have the right of way at all times, no matter what.
- Only drive on the quarry floor where the stockpiles are located. See map at computer and attached.
- Speed limit in the quarry is 20 kmph and keep to the left of the road.
- No passing of moving vehicles, (single file). Distance between moving vehicles is 10 metres.
- Do not use cell phones while in the quarry and do not litter in the quarry.
- Never pass a loader that is in the process of picking up material or loading a truck, or move into its operating area. Always apply the 5m rule at least.
- If a quarry worker signals you to move on or pass, do so with caution.
- Do not engage in small talk with other drivers while in the quarry.
- **Blasting:** You are safely outside the normal blast radius and access is controlled. Obey all instructions of the blaster when requested. Quarry activities will be stopped for blasting for approximately 15 minutes and generally over breaks or at the end of the day. **Please be patient for your own safety.**

Getting Loaded (Risk of collision, reversing incidents)

- If a loader is already loading a truck in the area you need to go, stay well back until he has finished, and the truck has moved on. (Give the loader operator plenty of room to move)
- Always park 90 degrees to where the loader is going to pick up the material you require, unless otherwise instructed.
- <u>Never get out of your vehicle</u> while a loader is in the process of loading your truck.
- If you need to talk to the loader driver, use your RT (or the one collected from the weighbridge) Start the conversation with "Copy CAT Loader or Komatsu Loader etc), if you don't know the operators name, and wait for a response.
- DO NOT GET OUT OF YOUR TRUCK!

Cleaning of Tail Gates (risk of personal injury)

You may need to clean your tail gate after your truck has been loaded. This is more likely if you are driving a small to medium size truck. Do this in the designated safe zone, which is in front of the parking area on quarry side of office/smoko buildings.

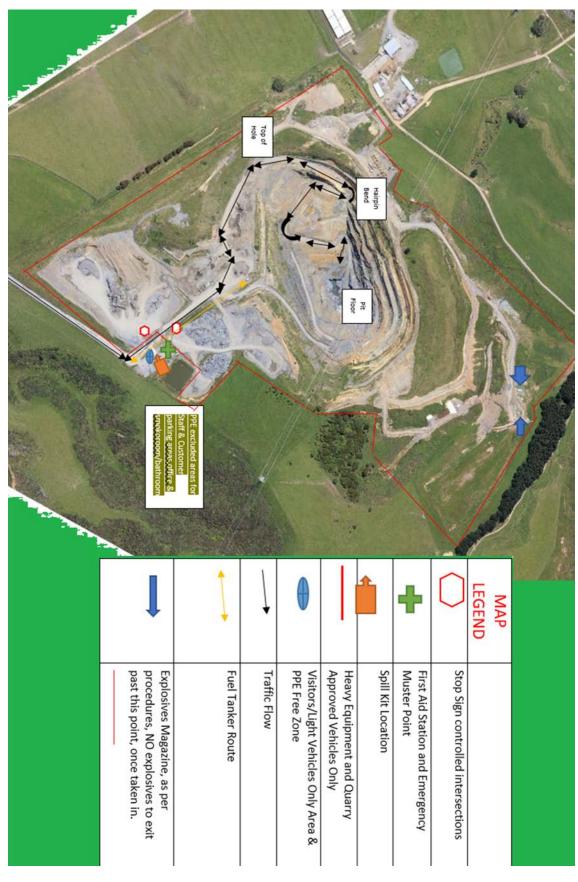
- After the loader has finished loading you and moved away, you can drive to the designated safe zone where you can get out of your truck and clean the tail gate, provided you are wearing all the required PPE. (Hi Vis upper clothing, safety footwear, hard hat, safety glasses and gloves.)
- Only clean your tail gate in this area, never move to another area and clean your tail gate. You can use the water hose if necessary.
- If other trucks are waiting to get into the area where you are let them wait.
- Always wear the required PPE when getting out of your truck on site.

By signing this form, you confirm that you have a copy of this 2-page Truck Driver Induction, you are familiar with the procedures and understand what is required while you are in the quarry.

Name:	Signed:	Date:
	-	
Company:	Mobile Number	
Hirock Linton Quarry Staff Member		

"Linton Quarry: *Revision 3.0 (04/07/2023)*









"Linton Quarry: Revision 3.0 (04/07/2023)

TO ALL WEIGHBRIDGE USERS/DRIVERS

- If you have not been inducted, please take one of these and read.
- Sign and return the back page to the office as soon as you can.
- Keep the map and a copy of the Induction form for yourself.
- If there is any part that you need explained, please see either Dave or Lynnette.

Thank you...

Appendix F

L

From: Stuart Cartwright <<u>stuart.cartwright@pncc.govt.nz</u>>
Sent: Friday, June 23, 2023 10:56 AM
To: Shane Higgins <<u>shane.h@hfhl.co.nz</u>>; Desiree Harvey <<u>desiree.harvey@pncc.govt.nz</u>>
Subject: RE: Kendalls Line Stop underpass - MOU

Caution: This email has come from an external address – please use caution when opening any attachments or clicking on any links.

Hi Shane,

Re: Hirock Undertaking additional Pavement Maintenance Works on Kendalls Line at their cost

The below direction you wish to undertake is acceptable to PNCC where this correspondence will be added as an addendum to the MOU Kendalls Line agreement between Hirock and PNCC.

Regards

Stuart Cartwright



Stuart Cartwright Chief Engineer

Palmerston North City Council Te Marae o Hine – 32 The Square Private Bag 11034, Palmerston North 4442

06 356 8199 021 240 5517 pncc.govt.nz

From: Shane Higgins <<u>shane.h@hfhl.co.nz</u>>
Sent: Friday, 23 June 2023 10:41 am
To: Stuart Cartwright <<u>stuart.cartwright@pncc.govt.nz</u>>
Subject: Kendalls Line Stop underpass

Good Morning Stuart,

As discussed Hirock have been in a consent hearing for truck movements and quarry operations at Kendall's Line.

The commissioner has requested that we go back to him with a remedy over the uneven surface at the underpass adjacent to number 31 Kendall's line, the residents have brought up that the noise and vibration is still apparent when trucks cross this area of roadway.

I know the laser profile completed and submitted to you recently shows there is no issue, but below I purpose a solution.

Should the PNCC receive numerous complaints about this area of the road through the normal process of residents ringing the PNCC and the job being logged, and upon the PNCC contractor or staff deeming a repair is required that Hirock will pay for this work to remedy the problem.

To ensure that we have a confined area perhaps the width of the carriageway and a length of 10 mts each side of the physical structure be the area concerned, this would allow for a dig out type fix or asphalt overlay to the area.

This repair would be triggered by the normal PNCC process and contractor, but Hirock would pay the costs.(or Hirock with PNCC approval could engage an authorised sub-contractor to complete to PNCC standards the work if there is a time delay)

Could you please consider the above, I know we have the MOU but happy for this to sit outside of that document as an amendment

Regards Shane

Shane Higgins Director

Higgins Family Holdings Limited

P: 06 280 2537 | M: 027 445 3915 | 18 El Prado Drive, Palmerston North, 4414 | PO Box 12075, Palmerston North, 4444

This e-mail is privileged and confidential. If you are not the intended recipient please delete the message and notify the sender. Any views or opinions presented are solely those of the author. Higgins Family accepts no liability for any loss caused either directly or indirectly by a virus arising from the use of this message or any attached file.

From: Stuart Cartwright <<u>stuart.cartwright@pncc.govt.nz</u>>
Sent: Wednesday, June 21, 2023 12:41 PM
To: Emma Hilderink-Johnson <<u>Emma.HilderinkJohnson@goodearthmatters.com</u>>; Desiree Harvey
<<u>desiree.harvey@pncc.govt.nz</u>>
Cc: Shane Higgins <<u>shane.h@hfhl.co.nz</u>>
Subject: RE: Kendalls Line road maintenance MoU - Hirock Linton Quarry

Caution: This email has come from an external address – please use caution when opening any attachments or clicking on any links.

Hi Emma,

PNCC accepts the agreement initiatives as attached / outlined.

2e: With the recent reseal of Kendalls Line and pre-reseal pavement repairs, there is minimal evidence as per attached email (PNCC site audit review) that there is a requirement to correct the pavement post the attached baseline survey.

3: PNCC will monitor via the council's network maintenance contractor on any proposed road related maintenance / renewal submissions for Kendalls Line and align against the MOU correspondence requirements and MOU partner responsibilities.

Regards

Stuart Cartwright

From: Emma Hilderink-Johnson <<u>Emma.HilderinkJohnson@goodearthmatters.com</u>>
Sent: Monday, 19 June 2023 2:34 pm
To: Stuart Cartwright <<u>stuart.cartwright@pncc.govt.nz</u>>
Cc: Shane Higgins <<u>shane.h@hfhl.co.nz</u>>
Subject: RE: Kendalls Line road maintenance MoU - Hirock Linton Quarry

Hi Stuart,

Here is the baseline road condition survey of Kendalls Line, commissioned by Hirock following the completion of the summer 2022/2023 repair and re-seal, as per Agreed initiative 2 a. and b. of the attached MoU.

Can you please confirm that this is acceptable, and if there is anything further needed in accordance with initiatives 2 e, and 3.

Kind regards, Emma

Emma Hilderink-Johnson My office hours are Monday - Friday 9.30 am - 2.30 pm



Unit 2, 234 Broadway Avenue • Palmerston North P 06 352 9941 • emma.hilderinkjohnson@goodearthmatters.com



PNCC RESOURCE CONSENT CONDITIONS

Application Details:	
THE APPLICANT:	HIROCK LTD
LOCATION:	167-257 KENDALLS LINE, PALMERSTON NORTH
ZONING:	RURAL ZONE
ACTIVITY STATUS:	DISCRETIONARY ACTIVITY
PROPOSAL:	EXPANSION AND OPERATION OF AN EXISTING QUARRY
APPLICATION:	LU 6962

GENERAL ACCORDANCE

- 1. The consent holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with the Palmerston North City Council on 21 November 2022, and the information included in the following further information responses and plans:
 - A. Site plan titled Linton Quarry Expansion, drawn by Good Earth Matters, dated July 2022 and attached as Appendix B to the application.
 - B. Ecological Effects Assessment titled "ASSESSMENT OF ECOLOGICAL EFFECTS OF QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, prepared by Wildlands, dated October 2022 and updated December 2022, contract report number 6016.
 - C. Traffic Management Plan prepared by Hirock Limited, titled "LINTON QUARRY SITE SPECIFIC TRAFFIC MANAGEMENT PLAN (SSTMP), Revised 06/05/2020 Version 5 JG.
 - D. Quarry Management Plan prepared by Hirock, titled "LINTON QUARRY, QUARRY MANAGEMENT PLAN, dated 12/11/2020 Version: 2.0.
 - E. Water Monitoring Results and Monitoring Plan, prepared by Good Earth Matters, titled "Linton Quarry Monitoring Plan - Settlement Pond 1/SRP, Hirock Limited, Dated November 2022 and updated December 2022.
 - F. Linton Quarry Pit Expansion Erosion and Sediment Control Plan November 2022 Hirock Limited FOR RELODGEMENT". Prepared by Good Earth Matters Consulting Ltd and dated November 2022, including the plan 'Erosion and Sediment Control Overview Plan. Drawing Number 76506.002 Rev A'.
 - G. Ecological Management Plan, Titled ECOLOGICAL MANAGEMENT PLAN FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, prepared by Wildlands, dated September 2022 and updated December, contract report number 6016b.
 - H. Powelliphanta Snail Survey Titled POWELLIPHANTA SNAIL SURVEY AT HIROCK LINTON QUARRY, PALMERSTON NORTH, prepared by Wildlands, dated October 2022, contract report number 6016e.
 - Further information response dated 22 December 2022 including Memo from Marshall Day Acoustics dated 21 December 2022, Alternative Overburden Disposal Areas - Noise, project number 20210382 and Memo from Good Earth Matters, dated 22 December 2022, Discharge Treatment and Expected Standards, Instream Effects and Discharge

Volumes - Linton Quarry Expansion Joint Consent Application APP-2022203991.00 & RC-LU-6962.

- J. Memo from Tonkin and Taylor, dated 22 December 2022 Linton Quarry Geotechnical Assessment of Proposed Overburden Disposal Areas, Job No: 1018486.1000 including design of proposed overburden areas.
- K. LIZARD SURVEY AND INCIDENTAL DISCOVERY PROTOCOL FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, prepared by Wildlands, dated January 2023, contract report number 6016c.
- L. BAT SURVEY REPORT FOR PROPOSED QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, prepared by Wildlands, dated February 2023, contract report number 6016d.
- M. Memo regarding the Memorandum of Understanding with Rangitāne o Manawatū, dated 27 April 2023, from Good Earth Matters.
- N. Memo regarding the Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line, dated 27 April 2023, from Good Earth Matters.
- O. Dust Management and Monitoring Plan, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Draft 1.
- P. Dust Monitoring Report, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Issue 1.
- Q. Plan titled "Kendalls Line/SH57 Intersection Proposed Improvements", prepared by BECA Limited, dated 30 May 2023, drawing number 3823296-TA-1005, Rev. B.
- R. Memo regarding vibration titled TRUCK VIBRATION, prepared by Marshall Day Acoustics, dated 29 May 2023, document number Mm 002.
- S. Memo titled "Linton Quarry Reduced truck noise levels", prepared by Marshall Day Acoustics, dated 4 July 2023, document number Mm 003 R01.
- T. Truck Driver Induction Manual prepared by Hirock Limited, Revision 3.0 04/07/2023.

Where there may be inconsistencies between the information provided by the Consent Holder and conditions of the resource consent, or the condition requires a specific plan to be updated, the conditions of the resource consent will apply.

- 2. The consent holder must be responsible for all contracted operations related to the exercise of this resource consent; and must ensure contractors are made aware of the conditions of this resource consent and ensure compliance with those conditions.
- 3. A copy of this consent must be kept onsite at all times that physical works authorised by this resource consent are being undertaken and must be produced without unreasonable delay upon request from a servant or agent of the Palmerston North City Council.

ACCESS AND TRAFFIC

- 4. Signs must be erected along Kendalls Line advising of a speed limit of 50 km/hr for all Quarry Traffic and advising 'no engine braking'. At a minimum, signage must be located a minimum of 100m from the intersection of Kendalls Line and State Highway 57 and again at the entrance/ exit of the quarry.
- 5. A baseline road condition survey of Kendalls Line is to be undertaken by Hirock annually.

- (a) Laser profiling baseline survey must be undertaken once every three (3) years to identify road pavement shape and condition and this will determine more accurately future pavement rutting and micro cracking caused by heavy commercial vehicles (HCV) wheel track loadings. In other years, the annual baseline road condition survey may be a visual survey carried out by a suitably qualified roading contractor.
- (b) The annual baseline road condition survey is to be submitted to PNCC within **one (1) month** of being undertaken.

Advice Note: Condition 5 has been included on an Augier Basis, based on a Memorandum of Understanding between PNCC – Roading Team and the Applicant.

Advice Note: The report can be submitted to PNCC via email <u>steve.mcnicholl@pncc.govt.nz</u> and <u>planning.services@pncc.govt.nz</u> quoting reference LU 6962, Condition 5.

6. No later than **6 months** after the grant of consent, the consent holder must provide a separated 1.0 m (minimum) wide lime chip path, adjacent to the roading corridor of Kendalls Line, between 4 and 75 Kendalls Line to allow for safe movement of pedestrians and cyclists between the rural residential properties.

Advice Note: Details of the location of the lime chip path shall be finalised in consultation with adjacent landowners along with the consideration of the road widening requirements under Condition 12.

7. The consent holder must update the Traffic Management Plan to ensure all truck drivers are informed about safe vehicle speeds and braking restrictions and the risk of children moving along the western end of Kendalls Line if school age children are being picked up and dropped off by school bus. A copy of the updated Traffic Management Plan must be submitted to council no later than **1 month after the granting of consent,** for record keeping.

Advice Note: The report can be submitted to PNCC via email <u>steve.mcnicholl@pncc.govt.nz</u> and <u>planning.services@pncc.govt.nz</u> quoting reference LU 6962, Condition 7.

- 8. Traffic generation to/from the site must comply with the following:
 - (a) Total truck movements must not exceed:
 - i. 170 per day; and
 - ii. 17 per hour.

For the avoidance of doubt, a truck movement is defined as single trip either inbound to, or outbound from the site and can be a truck with or without a trailer. A return trip to and from the site constitutes two truck movements.

- 9. Truck movements to the site which result in right-turn movements from State Highway 57 into Kendalls Line, must not exceed:
 - (a) 40 per day (averaged monthly, excluding Sundays and public holidays); and
 - (b) 6 per hour

- 10. The consent holder must provide an annual report to Palmerston North City Council's compliance monitoring officer which summarises the following:
 - (a) A record of the number and type of vehicles per day using the SH57 and Kendalls Line intersection as parts of an annual report to ensure that **Conditions 8 and 9** are complied with; and
 - (b) Photographs of the intersection of Kendalls Line and SH57 to assist PNCC and Waka Kotahi in making a decision on the need for any vegetation maintenance to assist with sight lines and/or maintenance of the road markings.
 - (c) The annual report for the previous calendar year must be submitted no later than **31** January the following year.

Advice Note: The report can be submitted to PNCC via email <u>steve.mcnicholl@pncc.govt.nz</u> and <u>planning.services@pncc.govt.nz</u> quoting reference LU 6962, Condition 10.

Advice Note: The Road Controlling Authority is responsible for the maintenance of vegetation to assist with sight lines and the maintenance of road markings, not the consent holder.

11. The annual report required by **Condition 10** must be submitted to Waka Kotahi for its record keeping purposes. The annual report for the previous calendar must be submitter no later than **31 January** the following year.

Advice Note: The report can be sent to environmentalplanning@nzta.govt.nz quoting number 2021-0337.

- 12. The Consent Holder shall submit for approval by Palmerston North City Council and Waka Kotahi, detailed design plans for improvements to Kendalls Line, in accordance with the concept plan "Kendalls Line/SH57 Intersection Proposed Improvements", prepared by Beca Group Limited, drawing number 3823296-TA-1005, Rev B, dated 2 June 2023.
- 13. The Consent Holder shall undertake improvements at the Kendalls Line/SH57 intersection in accordance with the approved plan, required by **Condition 12**, within six (6) months of the consent being granted.

NOISE

14. The Consent Holder must ensure that quarrying activities (other than the construction of noise bunds) are managed to ensure that noise does not exceed the following at or within any residentially zoned site, or at or within the notional boundary of any rural dwelling, aside from the dwelling located at 150 Kendalls Line:

7.00am to 7.00pm 50 dB L_{Aeq(15min)}
7.00pm to 10.00pm 45 dB L_{Aeq(15min)}
10.00pm to 7.00am 40 dB L_{Aeq(15min)}
10.00pm to 7.00am 70 dBA L_{max}

Sound levels must be measured in accordance with New Zealand Standard NZS 6801:2008 Acoustics – Measurement of environmental sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise. The notional boundary is defined as a line **twenty (20) metres** from any side of a dwelling or the legal boundary where this is closer to the dwelling.

15. The Consent Holder must ensure that quarrying activities (other than the construction of noise bunds) must be managed to ensure that noise from the quarrying activity does not exceed the following within the notional boundary of the dwelling situated at 150 Kendalls Line:

7.00am to 7.00pm 51 dB L_{Aeq(15min)}
7.00pm to 10.00pm 45 dB L_{Aeq(15min)}
10.00pm to 7.00am 40 dB L_{Aeq(15min)}
10.00pm to 7.00am 70 dBA L_{max}

Sound levels must be measured in accordance with New Zealand Standard NZS 6801:2008 Acoustics – Measurement of environmental sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise.

The notional boundary is defined as a line **twenty (20) metres** from any side of a dwelling or the legal boundary where this is closer to the dwelling.

- 16. Quarrying activities (other than the construction of noise bunds) must be managed to ensure that noise does not exceed 60 dB LAeq(15min) at all times at or within the boundary of any other site.
- 17. Noise from the construction of noise bunds must be managed and controlled in accordance with NZS 6803:1999 Acoustics Construction noise.
- 18. Blasting activities must be measured and assessed in accordance with Appendix J of Australian Standard AS 2187-2:2006 "Explosives Storage and use Part 2: Use of explosives".

Blasting vibration must not exceed the peak component particle velocity shown as Line 2 in Fig F.1 when measured at the base of any dwelling. Blasting must be managed to ensure that in any calendar year, 95% of airblast levels do not exceed 115 dBL, with a maximum of 120 dBL, when applied at or within any residentially zoned site or at or within the notional boundary of any rural dwelling.

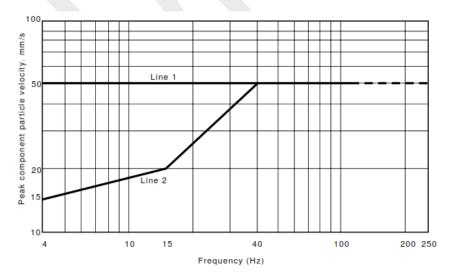


Figure F.1 Blasting Vibration Limits (Line 2)

- 19. Blasting must not occur more than 36 times per year and will only take place between 0900 and 1700 hrs Monday to Friday. All residents on Kendalls Line and within 1 km of the quarry must be alerted to any blasting through the use of a siren and written communication for any blasting outside of the hours of 1000 to 1030 hrs and 1400 to 1430 hrs Monday to Friday.
- 20. The Consent Holder must ensure that a Noise Management Plan (NMP) is prepared by a suitably qualified and experienced acoustic consultant. The objective of the NMP is to develop mechanisms and processes to ensure compliance with the noise level maximums specified in Condition 14, 15, 16 and 17 and to specify methodologies for the monitoring of noise levels, including that required by Condition 26, training of staff and handling of complaints. The NMP must include but be not limited to:
 - a) The relevant noise limits,
 - b) the relevant blasting airblast and vibration limits,
 - c) noise mitigation and maintenance requirements for plant and machinery,
 - d) the size and location of noise bunds,
 - e) the use of quiet reversing alarms,
 - f) general operating procedures,
 - g) the speeds on haul roads,
 - h) haul road maintenance,
 - i) achieving vehicle speed limits on Kendalls Line
 - j) training of staff,
 - k) complaints handling and recording,
 - I) staging and minimising the impacts of bund construction, and
 - m) quarry noise & blasting (airblast and vibration) monitoring.
- 21. The NMP must be submitted to the Palmerston North City Council's Monitoring Officer for technical certification at least twenty (20) working days before works commence on the site.
- Certification (or withholding certification) is based on whether the NMP meets the requirements of the conditions of this resource consent, with specific focus on Conditions 14, 15, 16, 17 and 26.
- 23. The Consent Holder must operate the quarry in compliance with the certified NMP at all times.
- 24. The NMP may be amended or updated without the need for certification where the amendment is an administrative change, including nominating personnel.
- 25. Except as provided for in **Condition 24**, amendments to the NMP and any appendices must be certified in writing by the Palmerston North City Council acting in a technical certification capacity prior to the commencement of any works to which the amended NMP relate.
- 26. Noise monitoring must be undertaken within 3 months of the issue of consent and on receipt of a justifiable complaint. A copy of the monitoring results must be provided to the Palmerston North City Council within 6 weeks of undertaking the monitoring in a form that demonstrates whether compliance is being achieved with these conditions.

GEOTECHNICAL

27. Annual visual monitoring recording of any changes in slope stability in the pit walls must be recorded photographically (oblique and UAV photos) and assessed by a suitably qualified geotechnical engineer. Results from this monitoring must be provided to Palmerston North City Council.

Advice Note: The report can be submitted to PNCC via email <u>steve.mcnicholl@pncc.govt.nz</u> and <u>planning.services@pncc.govt.nz</u> quoting reference LU 6962, Condition 27.

28. An annual comparison of as built topography against the proposed 2(h):1(v) surface proposed for final design for the overburden sediments must be provided to the Palmerston North City Council by **31 January** each year.

Advice Note: The report can be submitted to PNCC via email <u>steve.mcnicholl@pncc.govt.nz</u> and <u>planning.services@pncc.govt.nz</u> quoting reference LU 6962, **Condition 28.**

29. There must be no further excavation within **15 metres** of the protected indigenous forest area as identified on the Site plan titled Linton Quarry Expansion, drawn by Good Earth Matters, dated July 2022 and attached as Appendix B to the application.

HOURS OF WORK

30. The quarry must not operate outside the hours of 07:00 to 17:00 hrs, Monday to Friday and 07:00 to 15:00 hrs on Saturdays. No quarry activity will take place on Sundays or public holidays. Quarry trucks must not use Kendalls Line outside of the core quarry hours. This restriction does not apply to staff arriving to the site, between 06:30 and 07:00 hrs.

PROTECTION OF ECOLOGICAL AREAS

- 31. An Ecological Management Plan (EMP) must be submitted prior to the expansion of the quarry pit, for technical certification by PNCC, including a summary of consultation undertaken with Rangitāne o Manawatū in the development of the plan. As part of the certification PNCC may seek advice from the Manawatu-Wanganui Regional Council. The EMP must include but not be limited to:
 - (a) Mapping the distribution and abundance of pest plant species.
 - (b) Methods for the control of pest plant species.
 - (c) A summary of active pest animal management and further recommendations (if required).
 - (d) Indigenous revegetation recommendations, including planting schedules, and site preparation and monitoring requirements.
 - (e) Recommendations for the protection of habitats, including fencing.
 - (f) Incidental Discovery Protocol for lizard, bat and Powelliphanta sp.

(g) Indigenous Vegetation Monitoring Plan to monitor and report on the health of existing trees on a five (5) yearly basis, in the pukatea-tawa-māhoe-(tītoki)-(nīkau) forest including how health is assessed, frequency of assessment and how to identify what level of deterioration is significant and how to attribute any losses to the quarry activity or unrelated events and recommendations for addressing adverse effects.

Advice Note: the intent of this condition is for PNCC to undertake the technical certification of the plan, and they may choose to seek advice or feedback from the Manawatu-Wanganui Regional Council as part of this process.

- 32. All works must be undertaken in accordance with the approved EMP unless otherwise restricted by the conditions of this consent.
- 33. Within **six (6) months** of grant of consent a 15-metre setback fencing must be constructed around the indigenous forest remnant area (except along the north/north west edge where the fence shall be set back as far as practical) as identified on the site plan titled Linton Quarry Expansion, drawn by Good Earth Matters, dated July 2022 and attached as Appendix B to the application.
- 34. Prior to removal of the nikau palms, Rangitāne o Manawatū must be invited to undertake any desired procedures and tikanga. Hirock must provide **two (2) weeks'** notice of their intention to remove the trees.

Advice Note: Condition 34 has been included on an Augier basis following a Mana Enhancing Agreement between the Applicant and Rangitāne o Manawatū.

- 35. Harvesting of nikau palm seeds from the existing trees on site must be undertaken by a suitably qualified person for planting in the reforestation area along the unnamed tributary of the Kahuterawa Stream.
- 36. Grass that is not grazed within the proposed quarry expansion zone must be mowed to maintain a continuous length of less than 150mm between **1st August to 31st March** annually, to discourage pipits from nesting.
- 37. Within **two (2) years** of grant of consent, planting of the reforestation area along the unnamed tributary of the Kahuterawa Stream as proposed in the EMP must be carried out. The reforestation area must be planted with nikau palms grown from the recovered seed pods and all other plants must be sourced locally from the Manawatū Plains Ecological District.
- 38. The final planting plan for the reforestation area along the unnamed tributary of the Kahuterawa Stream and the Indigenous Vegetation Monitoring Plan must be prepared in consultation with Whakapai Hauora, and feedback must be incorporated into the final documents prior to planting taking place under **Condition 37**.

Advice Note: Condition 38 has been included on an Augier basis following a Mana Enhancing Agreement between the Applicant and Rangitāne o Manawatū.

- 39. Pest control in accordance with the EMP must be undertaken in the indigenous forest area and the reforestation area along the unnamed tributary of the Kahuterawa Stream (once planted).
- 40. A QEII covenant, or similar scheme which protects the site in perpetuity, must be entered into within **ten (10) years** of the grant of consent for the reforested area along the unnamed tributary of the Kahuterawa Stream.

DUST

- 41. There must be no discharge of airborne particulate matter that is objectionable to the extent that it causes an adverse effect at or beyond the boundary of the subject property.
- 42. The Consent Holder must ensure that a water truck/tank, in serviceable condition and able to be used to dampen dust in accordance with their Dust Monitoring and Management Plan, is available on-site at all times.
- 43. The Consent Holder must install a wheel wash within six (6) months of the commencement of the consent and the site must be configured so that all trucks exiting the site pass through it. The wheel wash must be maintained at all times.
- 44. The Consent Holder must ensure that dust producing plant (e.g. crushers and shaker screens) have sprinklers or other dust mitigating mechanisms in place at all times.
- 45. The Consent Holder must provide the Palmerston North City Council with a Dust Monitoring and Management Plan (DMMP) for technical certification. The DMMP must include but not be limited to:
 - (a) A description of the activity including:
 - i. site layout,
 - ii. the nature of any earthworks, quarrying stages, and
 - iii. location of overburden disposal.
 - (b) Identification of any residential dwellings or other sensitive receptors within 100 metres of the site boundary.
 - (c) A description of the sources of dust and the dust management methods that will be applied, including any specific mitigation measures if sensitive receptors are located within 200 metres of the property boundary, including for example:
 - i. Use of water dust suppression on crushing and screening equipment;
 - ii. Use of watercarts and/or pea gravel on unsealed haul roads and the area of the site accessible by the public;
 - iii. On site speed limits;
 - iv. Sealing of site accessways;
 - v. Monthly sweeping/washing of sealed portions of the site roads and yards and the public road up to the entrance of 150 Kendalls Line; and
 - vi. Use of wheel wash.
 - (d) Dust management responsibilities for site staff.
 - (e) Dust complaint investigation and response procedures.

- (f) Methods that will be used to monitor dust (as PM10) and wind for dust management including but not limited to:
 - i. A description of the monitoring equipment
 - ii. A description of the maintenance of the monitoring equipment
 - iii. A description of the location of the monitoring equipment at the western boundary of the quarry within 10 metres of Kendalls Line.
 - iv. A description of how monitoring data will be used to trigger dust control if concentrations exceed the following limits:
 - Threshold Concentration: 50 µg/m³ (24-hour mean)
 - Permissible Excess: One 24-hour period in any 12-month period
 - v. A description of how data from the monitoring equipment will be reported to the Consent Holder and how information will be stored.
- (g) A description of where the meteorological monitor is located, how the data is logged, and how staff are alerted to wind speeds being over 10 m/s.
- (h) A description of the contingency measures that will be used to control dust if the monitoring data exceeds the concentration limits specified in (f)(iv) above.
- (i) A description of how monitoring data will be provided to the Palmerston North City Council.
- (j) Processes for review and updating of the DMMP, including provision of updates to the regulatory authority for its approval.
- 46. The DMMP must be submitted to the Palmerston North City Council's Enforcement and Monitoring Officer for technical certification at least **twenty (20) working days** before works commence on the site. Palmerston North City Council may undertake the review in consultation with the Manawatu-Whanganui Regional Council in regard to the compliance, or otherwise, with the One Plan, particularly rule 15-14.

Advice Note: the intent of this condition is for PNCC to undertake the technical certification of the plan, and they may choose to seek advice or feedback from the Manawatu-Wanganui Regional Council as part of this process.

- 47. Certification (or withholding certification) is based on the Palmerston North City Council's assessment of whether the DMMP meets the requirements of the conditions of this resource consent, with specific focus on **Condition 45**.
- 48. The Consent Holder must operate the quarry in compliance with the certified DMMP at all times.
- 49. The DMPP may be amended or updated without the need for certification where the amendment is an administrative change, including nominating personnel.

- 50. Except as provided for in **Condition 49**, amendments to the DMMP and any appendices must be certified in writing by the Palmerston North City Council acting in a technical certification capacity prior to the commencement of any works to which the amended DMMP relate.
- 51. The Consent Holder must carry out on an annual basis six months of real time PM10 monitoring at the western boundary of the quarry within 10 metres of Kendalls Line after 1st November and before 30th April, for the first three (3) years following the grant of the consent to determine the extent of any nuisance dust effects from the quarry including quarry traffic along Kendalls Line.
- 52. To monitor compliance with **Condition 51**, the consent holder shall continuously measure the following parameters to obtain 1 hour and 24-hourly averages:
 - (a) Particle Concentration
 - i. PM10; and
 - ii. the total dust load
 - (b) Time lapse video.
 - (c) Meteorological data (wind speed, wind direction and rainfall).
- 53. If, after three years, the monitoring required by **Condition 51** demonstrates there are no nuisance dust effects from the quarry including quarry traffic along Kendalls Line, then dust monitoring need only be carried out in accordance with the approved Dust Management and Monitoring Plan, or when two (2) or more substantiated complaints are received by the Consent Holder, Palmerston North City Council or Manawatu-Whanganui Regional Council within a 12-month period.
- 54. An annual report shall be provided to the Palmerston North City Council with the results of the monitoring required by **Conditions 51 and 53** and any remedial actions undertaken by the Consent Holder.

Advice Note: Palmerston North City Council may choose to provide the annual report to Manawatu – Whanganui Regional Council in regard to the compliance, or otherwise, with the One Plan, particularly rule 15-14.

- 55. Following the receipt of results of the monitoring required by **Conditions 51 and 53**, if it is shown that the site is generating concentrations of PM10 that are greater than 50 μ g/m³ (24-hour mean), the Palmerston North City Council may request in writing that the consent holder provide a report, prepared by a suitably qualified person, which investigates options for controlling dust from the site.
- 56. The consent Holder shall implement the recommendations of the report within six months of the report being finalised and provide an updated version of the DMMP as per **Condition 50**.

SOIL AND EROSION CONTROL

57. The Consent Holder must provide a copy of the Erosion and Sediment Control Plan as certified by the Manawatū-Whanganui Regional Council to the Palmerston North City Council within five (5) working days of its technical certification.

Advice Note: the requirement for certification of the Erosion and Sediment Control Plan is within the conditions contained within the Manawatū-Whanganui Regional Council consents ATH-2022205663.00, ATH-2022205664.00 and ATH-2023205983.00

QUARRY MANAGEMENT PLAN

- 58. The consent holder must update the Quarry Management Plan **twelve (12) months** after the grant of this consent and submit it for Technical Certification by PNCC. The updates must include but not be limited to:
 - (a) Updated description of site activities
 - (b) Updated description of cultural values of the site
 - (c) Reference to Ecological Management Plan
 - (d) Reference to Traffic Management Plan
 - (e) Reference to Memorandum of Understanding with Rangitane o Manawatū
 - (f) Reference to Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line
 - (g) Reference to the Dust Management and Monitoring Plan
 - (h) Updated noise monitoring requirements
 - (i) Updated Erosion and Sediment Control Plan requirements
 - (j) Cleanfill record keeping procedures
 - (k) Updated regulatory framework i.e., resource consents
 - (I) Updated driver induction plan

Advice Note: the requirement for Technical Certification of the Quarry Management Plan is also contained within the Manawatū-Whanganui Regional Council consents ATH-2022205663.00, ATH-2022205664.00 and ATH-2023205983.00

SITE REHABILITATION

- 60. A Concept Quarry Closure and Rehabilitation Plan (CQCRP) must be submitted **two (2) years** after the grant of this consent for certification by PNCC, including a summary of consultation undertaken with Best Care (Whakapai Hauora) Charitable Trust in the development of the plan. The CQCRP must cover the entire quarry site and must produce a final "walk away" landform that is geotechnically stable that blends aesthetically into the surrounding landforms, yet as far as possible does not limit possible future land uses. Measure to achieve this objective are as follows (but not limited to):
 - (a) Measures to ensure long term slope stability
 - (b) Filling of pit and measures required to ensure water quality is suitable

- (c) Riparian planting of pit areas where applicable
- (d) Pest control and maintenance / protection of indigenous vegetation
- (e) Measures to reduce the height of the overburden areas/bunds and integrate them with the surrounding landform
- (f) Planting or grassing of the overburden areas/bunds

Advice Note: Condition 60 has been included on an Augier basis following a Mana Enhancing Agreement between the Applicant and Rangitāne o Manawatū.

Advice Note: the requirement for Technical Certification of the CQCRP is also contained within the Manawatū-Whanganui Regional Council consents ATH-2022205663.00, ATH-2022205664.00 and ATH-2023205983.00

- 61. A Final Quarry Closure and Rehabilitation Plan (FQCRP) must be submitted at least **twelve (12) months** prior to closure of the quarry to PNCC for certification, including a summary of consultation undertaken with Rangitāne o Manawatū in the development of the plan and highlight any changes from the CQCRP required by **Condition 60** and why. The FQCRP must cover the entire quarry site and must produce a final "walk away" landform that is geotechnically stable that blends aesthetically into the surrounding landforms, yet as far as possible does not limit possible future land uses. Measure to achieve this objective are as follows (but not limited to):
 - (a) Geotechnical rehabilitation design report including measures to ensure long term slope stability
 - (b) Filling of pit and measures required to ensure water quality is suitable
 - (c) Riparian planting of pit areas where applicable
 - (d) Pest control and maintenance / protection of indigenous vegetation
 - (e) Measures to reduce the height of the overburden areas/bunds and integrate them with the surrounding landform
 - (f) Planting or grassing of overburden areas/bunds

Advice Note: Condition 61 has been included on an Augier basis following a Mana Enhancing Agreement between the Applicant and Rangitāne o Manawatū.

Advice Note: the requirement for Technical Certification of the FQCRP is also contained within the Manawatū-Whanganui Regional Council consents ATH-2022205663.00, ATH-2022205664.00 and ATH-2023205983.00

ACCIDENTIAL DISCOVERY

62. If at any time during the excavations or filling authorised by this consent, potential historic artefacts or cultural remains or koiwi items are discovered, then all work must stop and the Consent Holder must immediately advise the Palmerston North City Council's Monitoring Officer, Manawatu-Whanganui Regional Council, Tanenuiarangi Manawatū Inc, Heritage New

Zealand – Pouhere Taonga and in the case of koiwi tangata remains, the New Zealand Police Nga Pirihimana o Aotearoa. Further excavations or at the site must be suspended should Tanenuiarangi Manawatū Inc wish to carry out their procedures and tikanga for removing taonga. Work at the site must not recommence until approval to do so has been given by the Palmerston North City Council and the Manawatu-Whanganui Regional Council.

REVIEW

- 63. The Palmerston North City Council, under s128 of the Resource Management Act, may once per year, during **July**, serve notice of its intention to review all conditions of this resource consent for the purpose of reviewing the effectiveness of these conditions in avoiding and mitigating any adverse effects on the environment. The review of conditions must allow for:
 - a) deletion or amendments to any conditions of this resource consent to ensure adverse effects (including noise and dust) are appropriately mitigated, and/or
 - b) addition of new conditions as necessary, to avoid, remedy or mitigate any unforeseen adverse effects on the environment.

MONITORING

64. The Consent Holder must pay a monitoring fee of \$724 (GST incl.) at the time the resource consent is granted for the monitoring associated with the development. Upon completion of the works required by these conditions, the consent holder must give written notice to the Monitoring Officer that the conditions have been complied with. On receipt of this notice, the Monitoring Officer or nominee shall carry out an inspection to ensure all conditions have been complied with.

The fees will be payable by the consent holder for any subsequent monitoring of the conditions of this consent. This fee is set in accordance with Section 36(1) (c) of the Resource Management Act 1991.

Advice Note: The current fee for monitoring is set at \$181 per hour. This amount may alter in the future if fees are reviewed. The monitoring fee charged will be the fee applicable at the time of monitoring and will be charged on each additional inspection or hour of work undertaken until full compliance with consent conditions is achieved.

65. A fee will be payable by the consent holder if any non-compliance with the conditions of this consent are discovered as a result of monitoring. This fee is set in accordance with Section 36(1)(c) of the Resource Management Act 1991 and Section 690A of the Local Government Act 1974.

LAPSE

66. This resource consent will lapse if the Consent Holder has not given effect to the consent within **five (5) years** of the date of granting.

MWRC RESOURCE CONSENT CONDITIONS

1. Discharge Permit, Cleanfill Discharge (to Land)

The following details the location, classifications and conditions associated with the activity.

Authorisation Number	ATH-2023205983.00
Activity Type	Discharge to Land
Activity Class	Discretionary Activity
Primary Activity Purpose	Industrial, Waste Management, Solid Waste, Cleanfill
Replaces Authorisation	Not Applicable

Location

The following summarises the authorised location for the consented activity.

Activity Location Description	310 KENDALLS LINE LINTON
Valuation Number	14450 351 01
Legal Description	LOT 1 DP 410502
Map References	LOC-2022101885 (Centroid: BM34:208-205)

Classifications

The following summarises the classifications associated with the application activity.

Groundwater Management Zone	Manawatū
Water Management Zone	Manawatu Catchment, Coastal Manawatu, Lower Tokomaru (Mana_11a)
Associated River	MANAWATU RIVER, Tokomaru River, Unnamed Tributary

Descriptive Specification

- This consent authorises the discharge of cleanfill material onto and into land on the property legally described Lot 1 DP 410502 (hereafter referred to as the property), at approximate map reference BM34:208-205, as shown on the Site Plan LOC-2022101885 attached to and forming part of this resource consent.
- 2. The consent holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with Manawatū-Whanganui Regional Council on 21 November 2022, and the information included in the following further information responses and plans:
 - A. Site plan titled Linton Quarry Expansion, drawn by Good Earth Matters, dated July 2022 and attached as Appendix B to the application.
 - B. Ecological Effects Assessment titled "ASSESSMENT OF ECOLOGICAL EFFECTS OF QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated October 2022 and updated December 2022, contract report number 6016.
 - C. Traffic Management Plan written by Hirock Limited, titled "LINTON QUARRY SITE SPECIFIC TRAFFIC MANAGEMENT PLAN (SSTMP), Revised 06/05/2020 Version 5 JG
 - D. Quarry Management Plan written by Hirock, titled "LINTON QUARRY, QUARRY MANAGEMENT PLAN, dated 12/11/2020 Version: 2.0.
 - E. Water Monitoring Results and Monitoring Plan, written by Good Earth Matters, titled "Linton Quarry Monitoring Plan Settlement Pond 1/SRP, HiRock Limited, Dated November 2022 and updated December 2022.
 - F. Linton Quarry Pit Expansion Erosion and Sediment Control Plan November 2022 Hirock Limited FOR RELODGEMENT". Prepared by Good Earth Matters Consulting Ltd and dated November 2022, including the plan 'Erosion and Sediment Control Overview Plan. Drawing Number 76506.002 Rev A'.
 - G. Ecological Management Plan, Titled ECOLOGICAL MANAGEMENT PLAN FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated September 2022 and updated December, contract report number 6016b.
 - H. Powelliphanta Snail Survey Titled POWELLIPHANTA SNAIL SURVEY AT HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated October 2022, contract report number 6016e.
 - Further information response dated 22 December 2022 including Memo from Marshall Day Acoustics dated 21 December 2022, Alternative Overburden Disposal Areas - Noise, project number 20210382 and Memo from Good Earth Matters, dated 22 December 2022, Discharge Treatment and Expected Standards, Instream Effects and Discharge Volumes - Linton Quarry Expansion Joint Consent Application APP-2022203991.00 & RC-LU-6962.

- J. Memo from Tonkin and Taylor, dated 22 December 2022 Linton Quarry Geotechnical Assessment of Proposed Overburden Disposal Areas, Job No: 1018486.1000 including design of proposed overburden areas.
- K. LIZARD SURVEY AND INCIDENTAL DISCOVERY PROTOCOL FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated January 2023, contract report number 6016c.
- L. BAT SURVEY REPORT FOR PROPOSED QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated February 2023, contract report number 6016d.
- M. Memo regarding the Memorandum of Understanding with Rangitāne o Manawatū, dated 27 April 2023, from Good Earth Matters.
- N. Memo regarding the Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line, dated 27 April 2023, from Good Earth Matters.
- O. Dust Management and Monitoring Plan, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Draft 1.
- P. Dust Monitoring Report, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Issue 1.
- Q. Plan titled "Kendalls Line/SH57 Intersection Proposed Improvements", prepared by BECA Limited, dated 30 May 2023, drawing number 3823296-TA-1005, Rev. B.
- R. Memo regarding vibration titled TRUCK VIBRATION, prepared by Marshall Day Acoustics, dated 29 May 2023, document number Mm 002.
- S. Memo titled "Linton Quarry Reduced truck noise levels", prepared by Marshall Day Acoustics, dated 4 July 2023, document number Mm 003 R01.
- T. Truck Driver Induction Manual prepared by Hirock Limited, Revision 3.0 04/07/2023.

Where they may be inconsistences between information provided by the Applicant and conditions of the resource consent, the conditions of the resource consent will apply.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

3. The conditions in the attached General Condition Schedule apply to this consent.

Environmental Standards

4. The Consent Holder must ensure that all materials to be discharged is cleanfill material that when buried or placed will not breakdown, decay, give rise to gas or leachates, is not combustible, is not toxic or damaging to humans, animals or plants. Acceptable cleanfill material must consist of those materials listed within Table 4.1 of the MfE "Guide to the Management of Cleanfills' 2002 which includes: cured asphalt, bricks, ceramics, concrete (no exposed reinforcing), fibre cement products (non-asbestos), glass, road sub-base, tiles, gravels, rock, clay, sand and soil.

- 5. Natural timber (tree stumps, branches (over 80 mm diameter) and roots) may be disposed of at the cleanfill site provided it accounts for no more than 5% of the total cleanfill material used at the site. Such material must be evenly dispersed throughout the matrix of cleanfill material.
- 6. Building plastics (plumbing pipes and plastic sheeting) must be removed from cleanfill material where practicable. Any small quantities of building plastics remaining within the cleanfill materials may be disposed of at the site provided that it is dispersed throughout the matrix of cleanfill material.

ADVICE NOTE: In terms of this condition, 'small quantities' means any plastics remaining after each load of cleanfill material has been examined and visible plastics have been removed.

Operational Restrictions

7. The consent holder must ensure that only overburden material sourced from Lot 1 DP 410502, and a maximum of 50,000 cubic metres (m³) of fill from other external sources that complies with the criteria outlined above in **Condition 4, 5, and 6** is discharged onto the site.

ADVICE NOTE: Signage may be needed to advise the type of material that can be disposed of.

Monitoring Provision

- 8. The Consent Holder must keep records of the following:
 - i. The source, composition and volume of all material disposed of at the site.
 - ii. The nature and volume of all materials removed from the cleanfill (i.e. prohibited materials and plastics) and/or rejected from the site.

This log must be maintained and provided to the Regulatory Manager, Manawatū-Whanganui Regional Council, by **31st May each year** and made available to the Manawatū-Whanganui Regional Council on request.

Review

- 9. The Manawatū-Whanganui Regional Council, under s128 of the Resource Management Act, may once per year, during July, serve notice of its intention to review all conditions of this resource consent (including those conditions contained in the general condition schedule) for the purpose of reviewing the effectiveness of these conditions in avoiding and mitigating any adverse effects on the environment. The review of conditions shall allow for:
 - a. deletion or amendments to any conditions of this resource consent to ensure adverse effects are appropriately mitigated; and / -OR-
 - b. addition of new conditions as necessary, to avoid, remedy or mitigate any unforeseen adverse effects on the environment; and / -OR-
 - c. if necessary and appropriate, the adoption of the best practicable options to avoid, remedy or mitigate any adverse effects on the environment.

Lapse and Duration

- 10. This resource consent will lapse if the Consent Holder has not given effect to the consent within five years of the date of the commencement of consent.
- 11. The resource consent will expire on **1 July 2033.**

2. Land Use, Land Disturbance

Authorisation Number	ATH-2022205663.00
Activity Type	Land Use, Land
Activity Class	Discretionary Activity
Primary Activity Purpose	Mining Gravel or Sand Aggregates

The following details the location, classifications and conditions associated with the activity.

Location

The following summarises the authorised location for the consented activity.

Activity Location Description	310 KENDALLS LINE LINTON
Valuation Number	14450 351 01
Legal Description	LOT 1 DP 410502
Map References	LOC-2022101885 (Centroid: BM34:208-205), LOC-2022101885 (Centroid: BM34:208-205)

Classifications

The following summarises the classifications associated with the application activity.

Groundwater Management Zone	Manawatū
Water Management Zone	Manawatu Catchment, Coastal Manawatu, Lower Tokomaru (Mana_11a)
Associated River	MANAWATU RIVER, Tokomaru River, Unnamed Tributary

Descriptive Specification

- This consent authorises the large-scale land disturbance and the associated discharge of sediment to water associated with the expansion and operation of Linton Quarry on the property legally described Lot 1 DP 410502 (hereafter referred to as the property), at approximate map reference BM34:208-205, as shown on the Site Plan LOC-2022101885 attached to and forming part of this resource consent.
- 2. The consent holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with Manawatū-Whanganui Regional Council on 21 November 2022, and the information included in the following further information responses and plans:
 - A. Site plan titled Linton Quarry Expansion, drawn by Good Earth Matters, dated July 2022 and attached as Appendix B to the application.
 - B. Ecological Effects Assessment titled "ASSESSMENT OF ECOLOGICAL EFFECTS OF QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated October 2022 and updated December 2022, contract report number 6016.
 - C. Traffic Management Plan written by Hirock Limited, titled "LINTON QUARRY SITE SPECIFIC TRAFFIC MANAGEMENT PLAN (SSTMP), Revised 06/05/2020 Version 5 JG.
 - D. Quarry Management Plan written by Hirock, titled "LINTON QUARRY, QUARRY MANAGEMENT PLAN, dated 12/11/2020 Version: 2.0.
 - E. Water Monitoring Results and Monitoring Plan, written by Good Earth Matters, titled "Linton Quarry Monitoring Plan Settlement Pond 1/SRP, Hirock Limited, Dated November 2022 and updated December 2022.
 - F. Linton Quarry Pit Expansion Erosion and Sediment Control Plan November 2022 Hirock Limited FOR RELODGEMENT". Prepared by Good Earth Matters Consulting Ltd and dated November 2022, including the plan 'Erosion and Sediment Control Overview Plan. Drawing Number 76506.002 Rev A'.
 - G. Ecological Management Plan, Titled ECOLOGICAL MANAGEMENT PLAN FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated September 2022 and updated December, contract report number 6016b.
 - H. Powelliphanta Snail Survey Titled POWELLIPHANTA SNAIL SURVEY AT HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated October 2022, contract report number 6016e.
 - Further information response dated 22 December 2022 including Memo from Marshall Day Acoustics dated 21 December 2022, Alternative Overburden Disposal Areas - Noise, project number 20210382 and Memo from Good Earth Matters, dated 22 December 2022, Discharge Treatment and Expected Standards, Instream Effects and Discharge Volumes - Linton Quarry Expansion Joint Consent Application APP-2022203991.00 & RC-LU-6962.

- J. Memo from Tonkin and Taylor, dated 22 December 2022 Linton Quarry Geotechnical Assessment of Proposed Overburden Disposal Areas, Job No: 1018486.1000 including design of proposed overburden areas.
- K. LIZARD SURVEY AND INCIDENTAL DISCOVERY PROTOCOL FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated January 2023, contract report number 6016c.
- L. BAT SURVEY REPORT FOR PROPOSED QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated February 2023, contract report number 6016d.
- M. Memo regarding the Memorandum of Understanding with Rangitāne o Manawatū, dated 27 April 2023, from Good Earth Matters.
- N. Memo regarding the Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line, dated 27 April 2023, from Good Earth Matters.
- O. Dust Management and Monitoring Plan, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Draft 1.
- P. Dust Monitoring Report, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Issue 1.
- Q. Plan titled "Kendalls Line/SH57 Intersection Proposed Improvements", prepared by BECA Limited, dated 30 May 2023, drawing number 3823296-TA-1005, Rev. B.
- R. Memo regarding vibration titled TRUCK VIBRATION, prepared by Marshall Day Acoustics, dated 29 May 2023, document number Mm 002.
- S. Memo titled "Linton Quarry Reduced truck noise levels", prepared by Marshall Day Acoustics, dated 4 July 2023, document number Mm 003 R01.
- T. Truck Driver Induction Manual prepared by Hirock Limited, Revision 3.0 04/07/2023.

Where they may be inconsistences between information provided by the Applicant and conditions of the resource consent, the conditions of the resource consent will apply.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

3. The conditions in the General Condition Schedule apply to this consent.

Review

4. The Manawatū-Whanganui Regional Council, under s128 of the Resource Management Act, may once per year, during July, serve notice of its intention to review all conditions of this resource consent (including those conditions contained in the general condition schedule) for the purpose of reviewing the effectiveness of these conditions in avoiding and mitigating any adverse effects on the environment. The review of conditions shall allow for:

- a. deletion or amendments to any conditions of this resource consent to ensure adverse effects are appropriately mitigated; and / -OR-
- b. addition of new conditions as necessary, to avoid, remedy or mitigate any unforeseen adverse effects on the environment; and / -OR-
- c. if necessary and appropriate, the adoption of the best practicable options to avoid, remedy or mitigate any adverse effects on the environment.

Duration

- 5. This resource consent will lapse if the Consent Holder has not given effect to the consent within five years of the date of the commencement of consent.
- 6. This resource consent will expire on **1 July 2033.**

3. Discharge Permit, to Water

The following details the location, classifications and conditions associated with the activity.

Authorisation Number	ATH-2022205664.00
Activity Type	Discharge to Water
Activity Class	Discretionary Activity
Activity Primary Industry	Mining
Activity Primary Purpose	Mining Gravel or Sand Aggregates

Location

The following summarises the authorised location for the consented activity.

Activity Location Description	310 KENDALLS LINE LINTON
Valuation Number	14450/351.01
Legal Description	LOT 1 DP 410502
Map References	LOC-2022101885 (Centroid: BM34:208-205), LOC-2022101885 (Centroid: BM34:208-205)

Classifications

The following summarises the classifications associated with the application activity.

Groundwater Management Zone	Manawatū
Water Management Zone	Manawatu Catchment, Coastal Manawatu, Lower Tokomaru (Mana_11a)
Estuary Management Zone	MANAWATU RIVER, Tokomaru River, Unnamed Tributary

Descriptive Specification

- This consent authorises the discharge of washwater from the washing of rock and gravel and the associated discharge of sediment to water associated with the expansion and operation of Linton Quarry on the property legally described Lot 1 DP 410502 (hereafter referred to as the property), at approximate map reference BM34:208-205, as shown on the Site Plan LOC-2022101885 attached to and forming part of this resource consent.
- 2. The consent holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with Manawatū-Whanganui Regional Council on 21 November 2022, and the information included in the following further information responses and plans:
 - A. Site plan titled Linton Quarry Expansion, drawn by Good Earth Matters, dated July 2022 and attached as Appendix B to the application.
 - B. Ecological Effects Assessment titled "ASSESSMENT OF ECOLOGICAL EFFECTS OF QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated October 2022 and updated December 2022, contract report number 6016.
 - C. Traffic Management Plan written by Hirock Limited, titled "LINTON QUARRY SITE SPECIFIC TRAFFIC MANAGEMENT PLAN (SSTMP), Revised 06/05/2020 Version 5 JG.
 - D. Quarry Management Plan written by Hirock, titled "LINTON QUARRY, QUARRY MANAGEMENT PLAN, dated 12/11/2020 Version: 2.0.
 - E. Water Monitoring Results and Monitoring Plan, written by Good Earth Matters, titled "Linton Quarry Monitoring Plan Settlement Pond 1/SRP, Hirock Limited, Dated November 2022 and updated December 2022.
 - F. Linton Quarry Pit Expansion Erosion and Sediment Control Plan November 2022 Hirock Limited FOR RELODGEMENT". Prepared by Good Earth Matters Consulting Ltd and dated November 2022, including the plan 'Erosion and Sediment Control Overview Plan. Drawing Number 76506.002 Rev A'.
 - G. Ecological Management Plan, Titled ECOLOGICAL MANAGEMENT PLAN FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated September 2022 and updated December, contract report number 6016b.
 - H. Powelliphanta Snail Survey Titled POWELLIPHANTA SNAIL SURVEY AT HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated October 2022, contract report number 6016e.
 - Further information response dated 22 December 2022 including Memo from Marshall Day Acoustics dated 21 December 2022, Alternative Overburden Disposal Areas - Noise, project number 20210382 and Memo from Good Earth Matters, dated 22 December 2022, Discharge Treatment and Expected Standards, Instream Effects and Discharge Volumes - Linton Quarry Expansion Joint Consent Application APP-2022203991.00 & RC-LU-6962
 - J. Memo from Tonkin and Taylor, dated 22 December 2022 Linton Quarry Geotechnical Assessment of Proposed Overburden Disposal Areas, Job No: 1018486.1000 including design of proposed overburden areas.

- K. LIZARD SURVEY AND INCIDENTAL DISCOVERY PROTOCOL FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated January 2023, contract report number 6016c.
- L. BAT SURVEY REPORT FOR PROPOSED QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated February 2023, contract report number 6016d.
- M. Memo regarding the Memorandum of Understanding with Rangitāne o Manawatū, dated 27 April 2023, from Good Earth Matters.
- N. Memo regarding the Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line, dated 27 April 2023, from Good Earth Matters.
- O. Dust Management and Monitoring Plan, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Draft 1.
- P. Dust Monitoring Report, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Issue 1.
- Q. Plan titled "Kendalls Line/SH57 Intersection Proposed Improvements", prepared by BECA Limited, dated 30 May 2023, drawing number 3823296-TA-1005, Rev. B.
- R. Memo regarding vibration titled TRUCK VIBRATION, prepared by Marshall Day Acoustics, dated 29 May 2023, document number Mm 002.
- S. Memo titled "Linton Quarry Reduced truck noise levels", prepared by Marshall Day Acoustics, dated 4 July 2023, document number Mm 003 R01.
- T. Truck Driver Induction Manual prepared by Hirock Limited, Revision 3.0 04/07/2023.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

3. The conditions in the General Condition Schedule apply to this consent.

Review

- 4. The Manawatū-Whanganui Regional Council, under s128 of the Resource Management Act, may once per year, during July, serve notice of its intention to review all conditions of this resource consent (including those conditions contained in the general condition schedule) for the purpose of reviewing the effectiveness of these conditions in avoiding and mitigating any adverse effects on the environment. The review of conditions shall allow for:
 - a. deletion or amendments to any conditions of this resource consent to ensure adverse effects are appropriately mitigated; and / -OR-
 - b. addition of new conditions as necessary, to avoid, remedy or mitigate any unforeseen adverse effects on the environment; and / -OR-
 - c. if necessary and appropriate, the adoption of the best practicable options to avoid, remedy or mitigate any adverse effects on the environment.

Duration

5. This resource consent will expire on **1 July 2033.**

Descriptive Specification

- The consent holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with Manawatū-Whanganui Regional Council on 21 November 2022, and the information included in the following further information responses and plans:
 - A. Site plan titled Linton Quarry Expansion, drawn by Good Earth Matters, dated July 2022 and attached as Appendix B to the application.
 - B. Ecological Effects Assessment titled "ASSESSMENT OF ECOLOGICAL EFFECTS OF QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated October 2022 and updated December 2022, contract report number 6016.
 - C. Traffic Management Plan written by Hirock Limited, titled "LINTON QUARRY SITE SPECIFIC TRAFFIC MANAGEMENT PLAN (SSTMP), Revised 06/05/2020 Version 5 JG.
 - D. Quarry Management Plan written by Hirock, titled "LINTON QUARRY, QUARRY MANAGEMENT PLAN, dated 12/11/2020 Version: 2.0.
 - E. Water Monitoring Results and Monitoring Plan, written by Good Earth Matters, titled "Linton Quarry Monitoring Plan Settlement Pond 1/SRP, Hirock Limited, Dated November 2022 and updated December 2022.
 - F. Linton Quarry Pit Expansion Erosion and Sediment Control Plan November 2022 Hirock Limited FOR RELODGEMENT". Prepared by Good Earth Matters Consulting Ltd and dated November 2022, including the plan 'Erosion and Sediment Control Overview Plan. Drawing Number 76506.002 Rev A'.
 - G. Ecological Management Plan, Titled ECOLOGICAL MANAGEMENT PLAN FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated September 2022 and updated December, contract report number 6016b.
 - H. Powelliphanta Snail Survey Titled POWELLIPHANTA SNAIL SURVEY AT HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated October 2022, contract report number 6016e.
 - Further information response dated 22 December 2022 including Memo from Marshall Day Acoustics dated 21 December 2022, Alternative Overburden Disposal Areas - Noise, project number 20210382 and Memo from Good Earth Matters, dated 22 December 2022, Discharge Treatment and Expected Standards, Instream Effects and Discharge Volumes - Linton Quarry Expansion Joint Consent Application APP-2022203991.00 & RC-LU-6962.
 - J. Memo from Tonkin and Taylor, dated 22 December 2022 Linton Quarry Geotechnical Assessment of Proposed Overburden Disposal Areas, Job No: 1018486.1000 including design of proposed overburden areas.

- K. LIZARD SURVEY AND INCIDENTAL DISCOVERY PROTOCOL FOR HIROCK LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated January 2023, contract report number 6016c.
- L. BAT SURVEY REPORT FOR PROPOSED QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH, written by Wildlands, dated February 2023, contract report number 6016d.
- M. Memo regarding the Memorandum of Understanding with Rangitāne o Manawatū, dated 27 April 2023, from Good Earth Matters.
- N. Memo regarding the Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line, dated 27 April 2023, from Good Earth Matters.
- O. Dust Management and Monitoring Plan, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Draft 1.
- P. Dust Monitoring Report, prepared by K2 Environmental Limited, report number Y0135, 1 June 2023, Issue 1.
- Q. Plan titled "Kendalls Line/SH57 Intersection Proposed Improvements", prepared by BECA Limited, dated 30 May 2023, drawing number 3823296-TA-1005, Rev. B.
- R. Memo regarding vibration titled TRUCK VIBRATION, prepared by Marshall Day Acoustics, dated 29 May 2023, document number Mm 002.
- S. Memo titled "Linton Quarry Reduced truck noise levels", prepared by Marshall Day Acoustics, dated 4 July 2023, document number Mm 003 R01.
- T. Truck Driver Induction Manual prepared by Hirock Limited, Revision 3.0 04/07/2023.

Where there may be inconsistencies between the information provided by the Consent Holder and conditions of the resource consent, or the condition require a specific plan to be updated, the conditions of the resource consent will apply.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

Pre-Development Assurance

- 2. The Consent Holder must be responsible for all contracted operations related to the exercise of these resource consents; and must ensure contractors are made aware of the conditions of these resource consents and ensure compliance with those conditions.
- 3. A copy of these consents must be kept onsite at all times that physical works authorised by these resource consents are being undertaken and must be produced without unreasonable delay upon request from a servant or agent of the Manawatū-Whanganui Regional Council.

ADVICE NOTE: An electronic version on a smartphone or electronic device is acceptable.

- 4. Within **10 working days** of commencement of consent the Consent Holder must appoint a representative(s) who shall be the Manawatū-Whanganui Council's principal contact person(s) in regard to matters relating to this resource consent. The consent holder must inform the Manawatū-Whanganui Regional Council of the representative's name and how they can be contacted. Should that person(s) change during the term of this resource consent, the consent holder must immediately inform the Manawatū-Whanganui Regional Council and must also give written notice to the Manawatū-Whanganui Region Council of the new representatives' name and how they can be contacted.
- 5. The consent holder must, no later than **3 months** from the commencement of consent, install the ESCP measures as per those proposed in documents listed in **Condition 1** and as modified by the plans required under **Conditions 8, 9 and 10 below**.
- 6. The consent holder must inform the Manawatu-Whanganui Regional Council in writing at least **5 working days** prior to the commencement of construction of the ESCP measures required under **Condition 5**.
- 7. The consent holder must arrange and conduct a pre-construction site meeting and invite, with a minimum of 5 working days' notice, the Manawatu-Whanganui Regional Council, the site representative(s) nominated under Condition 4 of this consent, the contractor, and any other party representing the consent holder prior to any work authorised by this consent commencing on site. The following information must be made available at the pre-start meeting:
 - (a) Timeframes for key stages of the works authorised under this consent
 - (b) Resource consent conditions
 - (c) Finalised Erosion and Sediment Control Plan
 - (d) Chemical Treatment Management Plan
 - (e) Dewatering Management Plan

Advice Note: In the case that any of the invited parties, other than the site representative does not attend this meeting, the consent holder will have complied with this condition, provided the invitation requirement is met.

 Prior to the commencement of works required under Condition 5, a Finalised Erosion and Sediment Control Management Plan (ESCP) must be prepared in accordance with Greater Wellington Regional Council's *Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region* (February 2021) (GWRC Guidelines) and Condition 9 below, and submitted to Council for technical certification.

- 9. The Finalised Erosion and Sediment Control Plan required by **Condition 8** must contain sufficient detail to address the following matters:
 - (a) Details of all principles, procedures and practices that will be implemented to undertake erosion and sediment control;
 - (b) Methodologies for implementation of the activities with details of all nonstructural erosion and sediment controls including staging and sequencing of works;
 - (c) Timing and duration of construction and operation of control works (in relation to the staging and sequencing of earthworks)
 - (d) Details relating to the management of exposed areas and stabilisation in accordance with GWRC Guidelines
 - (e) Specific design of erosion and sediment control measures in accordance with GWRC Guidelines
 - (f) Maintenance, monitoring and reporting procedures;
 - (g) Rainfall response and contingency measures including procedures to minimise adverse effects in the event of extreme rainfall events, flood events and/or the failure of any key erosion and sediment control structures;
 - (h) Procedures and timing for review and/or amendment to the E&SCP;
 - (i) Identification and contact details of personnel responsible for the operation and maintenance of all key erosion and sediment control structures; and
 - (j) A site contour plan of a suitable scale to identify;
 - i. The extent of soil disturbance and vegetation removal;
 - ii. Locations of stockpiles;
 - iii. All key erosion and sediment control structures;
 - iv. The boundaries and area of catchments contributing to all erosion and sediment control devices;
 - v. The locations of all specific points of discharge to the environment; and
 - vi. Any other relevant site information
- 10. The ESCP must be certified in writing by the Manawatu-Whanganui Regional Council acting in a technical certification capacity prior to any activities authorised by this resource consent commencing. The consent holder must undertake all earthworks authorised by this consent in accordance with the certified ESCP.

ADVICE NOTE: Regarding Manawatū-Whanganui Regional Council Technical Certification – Several conditions require the technical certification of the Manawatū-Whanganui Regional Council. That technical certification (or withholding of approval) shall be based on the Manawatū-Whanganui Regional Council's assessment of whether the matters being considered achieve the objective of minimising sediment discharges from the site to the extent practicable.

- 11. The ESCP may be amended or updated without the need for certification where the amendment is an administrative change, including nominating personnel.
- 12. Except as provided for in **Condition 11**, amendments to the ESCP and any appendices must be confirmed in writing by the Consent Holder and certified in writing by the Manawatū-Whanganui Regional Council acting in a technical certification capacity prior to the commencement of any works to which the amended ESCP relate.
- 13. The consent holder must ensure that a copy of the certified ESCP including any certified amendments, is kept onsite and this copy is updated within **five (5) working days** of any amendments being certified.
- 14. The consent holder must ensure that all sediment laden run-off from the site is treated by sediment retention structures. These structures must be fully operational before bulk earthworks commence (ie excavation of the quarry pit expansion area) and must be maintained to perform at least at 80% of their operational capacity.
- 15. Prior to excavation of the quarry pit expansion area or within four months of commencement of consent whichever is the earliest, a certificate signed by a suitably qualified and experienced person must be submitted to the Manawatu-Whanganui Regional Council, to certify that the erosion and sediment controls have been constructed in accordance with the certified ESCP required by **Conditions 8, 9 and 10**. Certified controls must include Sediment Retention Ponds, Dirty Water Diversions, and Clean Water Diversions. The certification for these subsequent measures must be supplied within **5 working days** upon completion of construction of those measures. Information supplied if applicable, must include:
 - (a) Confirmation of contributing catchment area;
 - (b) The location, capacity and design of each structure, including shape, volume and design of the structure (dimensions of structure);
 - (c) Position of inlets/outlets; and
 - (d) Stabilisation of the structure
 - (e) Measures to control erosion; and
 - (f) Any other relevant matter.

Advice Note: The format for certification is available on the Manawatu-Whanganui Regional Council website.

- 16. Prior to the commencement of works required under **Condition 5**, a Chemical Treatment Management Plan (CTMP) must be prepared by an appropriately qualified and experienced person and submitted to Council. No earthworks in the quarry pit expansion area may commence until written certification is provided by Council that the CTMP meets the requirements of GWRC Guidelines, and the measures referred to in that plan have been put in place. The CTMP must include as a minimum:
 - (a) Specific design details of a chemical treatment system based on a rainfall activated methodology for any impoundment devices (Sediment Retention Ponds) and any other approved impoundment devices;
 - (b) Monitoring, maintenance (including post storm) and contingency programme (including a record sheet);
 - (c) Details of optimum dosage (including assumptions);
 - (d) Results of initial chemical treatment trial;
 - (e) A spill contingency plan; and
 - (f) Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.
- 17. Sediment control devices that discharge off site must be chemically treated throughout the duration of earthworks in accordance with the approved Chemical Treatment Management Plan.
- 18. Any changes proposed to the CTMP must be confirmed in writing by the consent holder and certified in writing by the Manawatu-Whanganui Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.
- 19. The CTMP may be amended or updated without the need for certification where the amendment is an administrative change, including nominating personnel.
- 20. The consent holder must ensure that a copy of the certified CTMP including any certified amendments, is kept onsite and this copy is updated within **five (5) working days** of any amendments being certified.
- 21. Prior to the commencement of any pumping activity to the sediment retention structures, and associated discharges from treatment devices on the subject site to the Unnamed stream which forms part of the Tokomaru River catchment, a Dewatering Management Plan must be prepared and submitted to Council for technical certification. No pumping activity or discharges at the subject site is to commence until confirmation

from Council is provided that the final management plan meets the required standards set out below.

The Dewatering Management Plan must contain sufficient detail to address the following matters:

- (a) Details of how any water pumped from the quarry pit will not overload the sediment retention pond, including how pumping will be managed during rain events.
- (b) Written records of all pumping operations, to include details of personnel managing the pumping operations.
- 22. The Dewatering Management Plan must be certified in writing by the Manawatu-Whanganui Regional Council acting in a technical certification capacity prior to any activities authorised by this resource consent commencing. The consent holder must undertake all earthworks authorised by this consent in accordance with the certified Dewatering Management Plan.

ADVICE NOTE: Regarding Manawatū-Whanganui Regional Council Technical Certification – Several conditions require the technical certification of the Manawatū-Whanganui Regional Council. That technical certification (or withholding of approval) shall be based on the Manawatū-Whanganui Regional Council's assessment of whether the Dewatering Management Plan contains adequate details as described in **Condition 21**.

- 23. Any changes proposed to the Dewatering Management Plan must be confirmed in writing by the consent holder and certified in writing by the Manawatu-Whanganui Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.
- 24. The Dewatering Management Plan may be amended or updated without the need for certification where the amendment is an administrative change, including nominating personnel.
- 25. The consent holder must ensure that a copy of the certified Dewatering Management Plan including any certified amendments, is kept onsite and this copy is updated within five (5) working days of any amendments being certified.

Environmental Standards

26. The Consent Holder must always operate the site in compliance with the certified ESCP, certified through **Conditions 8, 9 and 10**.

- 27. Sediment retention devices must be designed and operated to achieve the following performance targets:
 - (a) the pH of any discharge from sediment retention devices to any water body must not be less than 5.5 or greater than 8.5;
 - (b) the turbidity of any discharge from sediment retention devices to any water body must not be higher than 150 NTU; with a trigger value for investigation of 75 NTU;
 - (c) and a discharge clarity of greater than 100mm measured by clarity tube.
 - (d) the Consent Holder must ensure that the soluble chloride concentration must not exceed 230 mg/L at the reasonable mixing zone.

ADVICE NOTE: The reasonable mixing zone is defined as being 7 times the bed width at median flow.

- 28. The consent holder must ensure that sediment losses to natural water arising from the exercise of this resource consent are minimised during the duration of the works and during the term of this consent. In this regard, erosion and sediment control measures must be established and maintained in accordance with Greater Wellington Regional Council's Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region (February 2021) and in accordance with **Condition 5**. The consent holder must also ensure the outfall(s) of these systems are protected against erosion.
- 29. All earthmoving machinery, pumps, generators and ancillary equipment must be operated in a manner, which ensures spillages of fuel, oil and similar contaminants are prevented, particularly during refuelling and machinery servicing and maintenance. Refuelling and lubrication activities must be carried out away from any water body, ephemeral water body, or overland flow path, such that any spillage can be contained so that it does not enter surface water.

Operational Restrictions

- 30. The quarry must not operate outside the hours of 07:00 to 17:00 hrs, Monday to Friday and 07:00 to 15:00 hrs on Saturdays. This restriction does not apply to staff arriving to the site, between 06:30 and 0700 hrs.
- 31. There must be no discharge of airborne particulate matter that is objectionable to the extent that it causes an adverse effect at or beyond the boundary of the subject property.

ADVICE NOTE: An odour will only be considered objectionable, after a warranted Manawatū-Whanganui Regional Council officer has considered the Frequency, Intensity, Duration, Offensiveness/Character and Location of Exposure of the discharge to determine whether the discharge is Offensive, Objectionable, Noxious and/or Dangerous

(i.e the FIDOL Factors). Definitions of these are provided in Chapter 15 of the One Plan (2018), or any superseding Regional Plan.

Post-Development Assurance

- 32. The removal of any erosion and sediment control measure from any area where soil has been disturbed as a result of the exercise of this resource consent must only occur after consultation and written approval has been obtained from the Manawatū-Whanganui Regional Council acting in a technical certification capacity. In this respect, the main issues that will be considered by the Manawatū-Whanganui Regional Council include:
 - (a) The adequacy of the soil stabilisation and/or covering vegetation;
 - (b) The quality of the water discharged from the rehabilitated land; and
 - (c) The quality of the receiving water.
- 33. The consent holder must ensure those areas of the site which have been completed must be progressively stabilised against erosion as soon as practically possible and within a period not exceeding **3 days** after completion of any works authorised by this resource consent. Stabilisation must be undertaken by providing adequate measures (vegetative and/or structural) that will minimise sediment runoff and erosion and in accordance with Greater Wellington Regional Council's Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region (February 2021). The consent holder must monitor and maintain the site until vegetation is established to such an extent that it prevents erosion and prevents sediment from entering any surface water.
- 34. Re-vegetation and/or stabilisation of all disturbed areas must be completed in accordance with the measures detailed in Greater Wellington Regional Council's Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region (February 2021).

Monitoring Provision

- 35. To monitor compliance with **Condition 27** the consent holder must monitor the following parameters:
 - (a) Once per Month;
 - i. pH
 - ii. Turbidity (NTU and clarity tube)
 - iii. Chloride
 - iv. DRP

- v. The time and date, and the weather and flow conditions at the time of monitoring must be recorded.
- vi. Observations of any conspicuous oil or grease films, scums or foams, and any emission of objectionable odour.
- (b) During rain events and/or when water is pumped from the pond at the base of the quarry pit into the SRP1;
 - i. pH;
 - ii. Turbidity (NTU and clarity tube);
 - iii. DRP
 - iv. The time and date, and the weather and flow conditions at the time of monitoring must be recorded;
 - v. Observations of any conspicuous oil or grease films, scums or foams, and any emission of objectionable odour.
- (c) When malfunctioning of the dosing equipment or malfunctioning of the sedimentation pond is suspected/confirmed;
 - i. pH;
 - ii. Turbidity;
 - iii. Chloride;
 - iv. DRP
 - v. The time and date, and the weather and flow conditions at the time of monitoring must be recorded;
 - vi. Observations of any conspicuous oil or grease films, scums or foams, and any emission of objectionable odour.
- (d) Measurements and samples should be taken at the following locations:
 - i. pH, NTU and Clarity and DRP: discharge on the quarry side of the bund
 - ii. NTU and visual clarity: discharge on the quarry side of the bund
 - iii. Chloride: just beyond the reasonable mixing zone as specified in the certified monitoring plan.
 - iv. Any measuring equipment used should be manufactured for the respective purpose and calibrated according to the manufacturer's guidelines.

Rainfall event is defined as being 3 millimetres of rainfall (within 24 hours) measured at a weather station agreed in the monitoring plan. Monitoring should be undertaken as soon as possible, and no later than 24 hours after each rainfall event begins.

ADVICE NOTE: The reasonable mixing zone is defined as being 7 times the bed width at median flow.

36. Where a performance target in **Condition 27 a, b, c or d** is not achieved, an investigation, including a written report, must be undertaken to:

- (a) confirm the reason why performance target has not been achieved, with reference to the relevant catchment; and
- (b) develop and implement response measures to achieve the performance targets in the future including ensuring onsite management aligns with the current, certified, ESCP.
- 37. Following the completion of the investigation required by **Condition 36**, all recommended response measures must be implemented within with **fifteen (15) working days**, except where the Manawatū-Whanganui Regional Council and Whakapai Hauora agrees in writing to a longer timeframe for the implementation of response measures.

Advice Note: Condition 37 has been included on an Augier basis following a Mana Enhancing Agreement between the Applicant and Rangitāne o Manawatū.

A report that summarises the investigation and response measures required by Condition
 37 must be provided to the Manawatu-Wanganui Regional Council and Whakapai Hauora in writing within fifteen (15) working days of the performance target not being achieved.

Advice Note: Condition 38 has been included on an Augier basis following a Mana Enhancing Agreement between the Applicant and Rangitāne o Manawatū.

- Monitoring data required by Condition 27 and 35 must be recorded and made available to the Manawatu-Whanganui Regional Council on request and within five (5) working days.
- 40. Monitoring of parameters according to **Conditions 27 and 35** must be undertaken for a period of at least 24 months, at which point the monitoring plan must be reviewed and updated based on the results and submitted to the Manawatu-Wanganui Regional Council's Team Leader Consents Monitoring for Technical Certification. The report must be prepared by a suitably qualified person and cover:
 - (a) The results of all monitoring undertaken in the previous 24 months;
 - (b) Any non-compliances and subsequent investigations;
 - (c) Discussion of any trends evident from the monitoring data;
 - (d) Recommendations for a future monitoring plan;
- Following the report completed under Condition 40, any changes proposed to the monitoring under Conditions 27 and 35, in the form of an update to the monitoring must be certified in writing by the Manawatu-Whanganui Regional Council acting in a technical certification capacity taking into account the requirements of Conditions 42, 43 and 44.
- 42. If the parameters within **Condition 27 a and b** are met following the completion of the 24-month reporting period, monitoring of pH and turbidity may be reduced to major

rainfall events and if and when malfunctioning of the dosing equipment or malfunctioning of the sedimentation pond is suspected/confirmed, only.

ADVICE NOTE: Major rainfall event is defined as being 25 millimetres of rainfall (within 24 hours). Monitoring should be undertaken as soon as possible, and no later than 24 hours after each rainfall event begins.

- 43. If the parameter with **Condition 27 c and d** are met following the completion of the 24month reporting period, monitoring of chloride may be reduced to quarterly and if and when malfunctioning of the dosing equipment or malfunctioning of the sedimentation pond is suspected/confirmed, only.
- 44. If DRP concentrations are at or below a median of > 0.018 mg/L after the 24-month reporting period, monitoring of DRP may be reduced to quarterly and if and when malfunctioning of the dosing equipment or malfunctioning of the sedimentation pond is suspected/confirmed, only. If DRP is found to above a median of > 0.018 mg/L then monitoring must continue as per Condition 27 and 35 with reporting required under Condition 45.
- 45. The consent holder must, by **30 June 2026, 30 June 2029 and 30 June 2031**, undertake a review of the adequacy and effectiveness of the site erosion and sediment control measures over the previous three years, and identify:
 - (a) if there have been any changes in guidelines and best practice for erosion and sediment control measures since the last review;
 - (b) identify any changes required to the site erosion and sediment control measures to meet current best practice; and
 - (c) identify a timeframe for upgrading the stie erosion and sediment control measures to meet best practice.
 - (d) Identify any changes that are required in relation to **Condition 44** and the monitoring of DRP, particularly if it is found that the DRP is found to be above a median of > 0.018 mg/L.

The outcomes of the review must be provided to the Consents Monitoring Team Leader, Manawatū-Whanganui Regional Council, no later than one month following the completion of the review.

- 46. The Consent Holder must ensure that all erosion and sediment control structures are inspected on a weekly basis and within **24 hours** of each rainstorm event that is likely to impair the function or performance of the controls and must maintain records detailing:
 - (a) The date, time and results of the maintenance undertaken; and
 - (b) The erosion and sediment controls that required maintenance; and
 - (c) The date and time when the maintenance was completed.

These records must be provided to the Manawatū-Whanganui Regional Council at all reasonable times and within **72 hours** of a written request to do so.

- 47. If any complaints are received by the consent holder regarding the activities authorised by this resource consent, the consent holder must notify the Manawatū-Whanganui Regional Council of those complaints as soon as practicable and no longer than one working day after receiving the complaint. If complaints are received, the consent holder must record the following details in a Complaints Log:
 - (a) Time and type of complaint, including details of the incident, e.g. duration, any effects noted;
 - (b) Name, address and contact phone number of the complainant (if provided);
 - (c) Location from which the complaint arose;
 - (d) The weather conditions and wind direction at the time of any dust complaint;
 - (e) The likely cause of the complaint;
 - (f) The response made by the consent holder including any corrective action undertaken by the consent holder in response to the complaint; and
 - (g) Futures actions proposed as a result of the complaint.
- 48. The consent holder must record the volume and number of truckloads of cleanfill deposited at the site for the duration of this consent. The consent holder must maintain an on-site register of each truck entering the site, including details of the day, date, time, truck identification, fill volume, composition and source. This register must be made available to the Manawatu-Whanganui Regional Council's Consents Monitoring Team within **one (1) working day** upon request.

ADVICE NOTE: For the purposes of this consent, the volume may be stated as the number of truck loads and the capacity of the truck.

- 49. The consent holder must update the Quarry Management Plan **twelve (12) months** after the grant of this consent and submit it for Technical Certification by PNCC. The updates must include but not be limited to:
 - (a) Updated description of site activities
 - (b) Updated description of cultural values of the site
 - (c) Reference to Ecological Management Plan
 - (d) Reference to Traffic Management Plan
 - (e) Reference to Memorandum of Understanding with Rangitane o Manawatū

- (f) Reference to Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line
- (g) Reference to the Dust Management and Monitoring Plan
- (h) Updated noise monitoring requirements
- (i) Updated Erosion and Sediment Control Plan requirements
- (j) Cleanfill record keeping procedures
- (k) Updated regulatory framework i.e., resource consents
- (I) Updated driver induction plan

Advice Note: the requirement for Technical Certification of the Quarry Management Plan is also contained within the Palmerston North City consents LU 6962.

- 50. A Concept Quarry Closure and Rehabilitation Plan (CQCRP) must be submitted **two (2) years** after the grant of this consent for certification by PNCC, including a summary of consultation undertaken with Best Care (Whakapai Hauora) Charitable Trust in the development of the plan. The CQCRP must cover the entire quarry site and must produce a final "walk away" landform that is geotechnically stable that blends aesthetically into the surrounding landforms, yet as far as possible does not limit possible future land uses. Measure to achieve this objective are as follows (but not limited to):
 - (a) Measures to ensure long term slope stability
 - (b) Filling of pit and measures required to ensure water quality is suitable
 - (c) Riparian planting of pit areas where applicable
 - (d) Pest control and maintenance / protection of indigenous vegetation
 - (e) Measures to reduce the height of the overburden areas/bunds and integrate them with the surrounding landform
 - (f) Planting or grassing of the overburden areas/bunds

Advice Note: Condition 50 has been included on an Augier basis following a Mana Enhancing Agreement between the Applicant and Rangitāne o Manawatū.

Advice Note: the requirement for Technical Certification of the CQCRP is also contained within the Palmerston North City consents LU 6962.

51. A Final Quarry Closure and Rehabilitation Plan (FQCRP) must be submitted at least twelve (12) months prior to closure of the quarry to PNCC for certification, including a summary of consultation undertaken with Rangitāne o Manawatū in the development of the plan and highlight any changes from the CQCRP required by Condition 50 and why. The FQCRP

must cover the entire quarry site and must produce a final "walk away" landform that is geotechnically stable that blends aesthetically into the surrounding landforms, yet as far as possible does not limit possible future land uses. Measure to achieve this objective are as follows (but not limited to):

- (a) Geotechnical rehabilitation design report including measures to ensure long term slope stability
- (b) Filling of pit and measures required to ensure water quality is suitable
- (c) Riparian planting of pit areas where applicable
- (d) Pest control and maintenance / protection of indigenous vegetation
- (e) Measures to reduce the height of the overburden areas/bunds and integrate them with the surrounding landform
- (f) Planting or grassing of overburden areas/bunds

Advice Note: Condition 61 has been included on an Augier basis following a Mana Enhancing Agreement between the Applicant and Rangitāne o Manawatū.

Advice Note: the requirement for Technical Certification of the FQCRP is also contained within the Palmerston North City consents LU 6962.