IN THE ENVIRONMENT COURT AT WELLINGTON

I TE KŌTI TAIAO O AOTEAROA KI TE WHANGANUI-A-TARA

Decision No. [2023] NZEnvC 003

IN THE MATTER

of an appeal under s 120 of the Resource

Management Act 1991

BETWEEN

JUDGEFORD ENVIRONMENTAL

PROTECTION SOCIETY INC

(ENV-2022-WLG-000037)

Appellant

AND

GREATER WELLINGTON

REGIONAL COUNCIL and PORIRUA CITY COUNCIL

Respondents

AND

WILLOWBANK TRUSTEE LTD

Applicant

Court:

Environment Judge B P Dwyer sitting alone under s 279 of the

Act

Hearing:

On the papers

Last case event:

Joint memorandum received 21 December 2022

Date of Decision:

17 January 2023

Date of Issue:

17 January 2023

CONSENT ORDER

- A: Under section 279(1)(b) of the Resource Management Act 1991, the Environment Court, by consent, orders that:
 - (1) the appeal is allowed subject to the amendments to conditions of the long term regional and long term district consents as set out in Appendix A; and
 - (2) the short term consent (enabling the continuation of quarrying operations on a short-term basis) is declined; and
 - (3) the appeals are otherwise dismissed.
- B: Under section 285 of the Resource Management Act 1991, there is no order as to costs.

REASONS

Introduction

[1] The Court has read the notice of appeal and the memorandum of the parties dated 19 December 2022 which proposes to resolve the appeal.

Other relevant matters

[2] No person has given notice of an intention to become a party under s 274 of the Act.

Orders

- [3] The Court is making this order under s 279(1) of the Act, such order being by consent, rather than representing a decision or determination on the merits pursuant to s 297. The Court understands for present purposes that:
 - (a) all parties to the proceedings have executed the memorandum requesting this order;

(b) all parties are satisfied that all matters proposed for the Court's endorsement fall within the Court's jurisdiction, and conform to the relevant requirements and objectives of the Act including, in particular,

B P Dwyer
Environment Judge

Appendix A



Greater Wellington Regional Council Conditions

This condition set has been updated following the hearing (note condition numbers and cross references differ from the previous hearing condition set).

Consents granted and associated durations.

Permit	Activity	Description	Consent Duration
37659	Land use consent	To undertake roading and tracking associated with the upgrade of existing farm access tracks.	35 years
	S9(2)	Restricted Discretionary Activity.	
37659	Land use consent	Earthworks exceeding 3000m ² associated with the construction of access tracks, removal and disposal of overburden (cleanfill) and quarry activities.	35 years
38249	Land use consent S9(2)	Discretionary Activity. Land disturbance within a significant natural wetland including excavation associated with the replacement of an existing culvert structure. Non-complying Activity.	35 years
37658	Land use S9(2)	Works within the bed of rivers, including excavation associated with the installation of a temporary culvert in an intermittent stream. Discretionary Activity.	35 years
38309	Land use consent	Reclamation of the beds of ephemeral, intermittent, and perennial tributaries of the Pauatahanui stream.	Unlimited
37657	Water Permit S14	Non-Complying Activity. To permanently divert surface water from ephemeral, intermittent, and perennial tributaries (including a constructed farm dam) of the Pauatahanui Stream into a permanent diversion channel. Discretionary Activity.	Unlimited
38308	Water Permit S14	To temporarily divert surface water from an intermittent tributary associated with the construction of a temporary culvert. Discretionary Activity	15 years
38106	Water Permit S14(2)	To temporarily divert water within 100m of a natural wetland. Non-complying Activity.	15 years
37660	Discharge permit S15	Discharge of contaminants, including sediment-laden water to land where it may enter a surface water body from cleanfilling, earthworks and works in the bed of a river. Discretionary Activity.	15 years

Permit	Activity	Description	Consent Duration
37661	Discharge permit S15	Discharge of contaminants, including sediment-laden water to land where it may enter a significant natural wetland from cleanfilling and earthworks and works in the bed of a significant natural wetland. Non-complying Activity.	15 years
38310	Discharge Permit S15	Discharge of contaminants, including sediment-laden water to land where it may enter a surface water body from quarrying of hard rock. Discretionary Activity	35 years

Glossary / Interpretations

AMP	Adaptive Monitoring Plan	
Annual Period	Defined as the period between [date of consent issue] and [365 days following this date] the following year.	
Annually	Means by the 10 th working day following the end of the preceding Annual Period.	
Applicant	Willowbank Trustee Limited	
Consent Holder		
Application	The applications for resource consents for Willowbank Quarry comprising:	
	 8 November 2021, Willowbank Quarry – Application for Resource Consent and Assessment of Environmental Effects, prepared by Beca Limited. 	
	ii. 11 July 2022, Adaptive Monitoring Plan, prepared by Ridley Dunphy Environmental Limited.	
	iii. 21 June 2021, Appendix A – Proposed Quarry Site and Staging Plans, Prepared by Beca Limited.	
	iv. 21 June 2021, Appendix B – Records of Title, prepared by Beca Limited.	
	v. 10 November 2021, Appendix C – Rules Assessment, prepared by Beca Limited.	
	vi. 11 July 2022, Appendix D – Ecology Impact Assessment, prepared by Cardno (NZ) Limited.	
	vii. 11 July 2022, Appendix E – Erosion and Sediment Control Plan, prepared by Ridley Dunphy Environmental.	
	viii. 10 September 2021, Appendix F - Stormwater Management Report (Rev 1), prepared by Beca Limited.	
	ix. 21 June 2021, Appendix G – Preliminary Geotechnical Report, prepared by Beca Limited.	
	x. 10 September 2021, Appendix H – Air Quality Assessment, prepared by Beca Limited.	
	xi. 21 June 2021, Appendix I – Draft Quarry Management Plan, prepared by Fulton Hogan.	
	xii. 10 September 2021, s92 response received (updated application superseding the original application received on 29 June 2021), prepared by Beca Limited.	
	xiii. 27 October 2021, s92 response received (further information relating to wetlands), prepared by Beca Limited.	
	xiv. 15 November 2021 – Information clarifying TSS limit and zone of reasonable mixing received, prepared by Beca Limited.	

	xv. 10 November 2021 – Additional application under R108 of the PNRP and Rule 54 of the NES-FW received, prepared by Beca Limited.	
	xvi. 2 March 2022 – Information clarifying TSS limit and zone of reasonable mixing received, prepared by Beca Limited.	
	xvii. 5 May 2022 – Information clarifying stream classifications on the subject site received (via email), prepared by Beca Limited.	
ВОМР	Biodiversity Offset Management Plan	
CLG	Community Liaison Group (as required on the Porirua City Council Consents [RC8436 & LU0125/21]).	
Compliance Officer	Any Compliance, Enforcement or Duty Officer, Environmental Regulation, GWRC	
Consent Holder	Willowbank Trustee Limited	
DEB	Decanting Earth Bund	
DOC	Department of Conservation	
Earthworks	The disturbance of a land surface from the time soil is first disturbed on a site until the the site is stabilised. Earthworks includes blading, contouring, ripping, moving, removing placing or replacing soil or earth, by excavation, or by cutting or filling operations, or by root raking.	
	Earthworks do not include:	
	a. cultivation of the soil for the establishment of crops or pasture, and	
	b. the harvesting of crops, and	
	c. thrusting, boring, trenching or mole ploughing associated with cable or pipe laying and maintenance, and	
	d. the construction, repair, upgrade or maintenance of:	
	i. pipelines, and	
	ii. electricity lines and their support structures, including the National	
	iii. grid, and	
	iv. telecommunication structures or lines, and	
	v. radio communication structures, and	
	vi. firebreaks or fence lines, and	
	vii. a bore or geotechnical investigation bore, and	
	e. repair or maintenance of existing roads and tracks, and airfield runways,	
	f. taxiways, and parking aprons for aircraft runways, and	
	g. maintenance of orchards and shelterbelts, and	
	h. domestic gardening, and	

	i. repair, sealing or resealing of a road, footpath, driveway, and
	j. discharge of cleanfill material.
EIA	Ecological Impact Assessment
ESC	Erosion and Sediment Control
ESCP	Erosion and Sediment Control Plan
ESC Guidelines for Wellington Region	Means the current revision of the <i>Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region</i> , available on the Wellington Regional Council's website at the following link: https://archive.gw.govt.nz/assets/Resource-Consents/Erosion-and-Sediment-Control-Guide-for-Land-Disturbing-Activities-in-the-Wellington-Region.pdf
Farm Dam	The constructed farm dam (perennial) which stream 3 flows into and out of
FMP	Flocculation Management Plan
WRC Consents	Greater Wellington Regional Council as the regulatory authority for issuing resource consents
Manager	The Manager, Environmental Regulation, Wellington Regional Council.
NESF	Resource Management (National Environmental Standards for Freshwater) Regulations 2020.
Notification or notice	means email of notification to notifications@gw.govt.nz . Please include the consent reference number (WGN210381) and the name and phone number of a contact person responsible for the proposed works.
NPSFM	National Policy Statement for Freshwater Management 2020
NTU	Nephelometric Turbidity Units – the unit used to measure the turbidity or the presence of suspended particles in water.
Pig Gully	Area proposed as the biodiversity offset area and shown on Figure 6-2 in the EIA.
PNRP	Proposed Natural Resources Plan
Project	The operation and expansion of the Willowbank Quarry and associated works.
Project area	The area within the quarry footprint and any other areas that are covered by this consent including offsetting areas, fill site, and haul roads.
Quarry Website	Means a website, or part of a website, dedicated to the Quarry, maintained by the consent holder for the duration of the consent and on which will be hosted monitoring reports, CLG Minutes and other information required by these conditions.
QMP	Quarry Management Plan

RFP	Regional Freshwater Plan for Wellington
RMA	Resource Management Act 1991
RPDL	Regional Plan for Discharges to Land
RSP	Regional Soil Plan
SRP	Sediment Retention Pond
Stabilised	means inherently resistant to erosion, or rendered resistant to erosion through the application of the proven methods of stabilisation, specified in <i>Section E3 of the ESC Guidelines for Wellington Region</i> , or alternative methods with the prior agreement of Wellington Regional Council. Where seeding, grassing or hydroseeding is used, the surface is considered stabilised once a minimum of 80% vegetative cover has been established over the entire surface.
Stage	Means project stages, as set out in the application documents and shown on the drawings included in Appendix 1 of the application
Stream Livening	Means the time at which water is diverted into the constructed stream channel
SWMP	Stream and Wetland Works Management Plan
ULR	Unformed Legal Road
The Quarry	Willowbank Quarry (application site)
Quarterly period	Is defined as the three-month periods respectively beginning 1st January, April, July and October.
Quarterly	Means by the 10 th working day following the end of the preceding period by the 10 th of April 10 th of July 10 th of October 10 th of January
Zone of reasonable mixing	means a distance downstream of the point of discharge equal to seven times the width of the wetted channel of the perennial tributary to the Pāuatahanui Stream, and Hutt River catchment tributaries but which distance shall be not less than 50m. This is identified in the Adaptive Monitoring Plan.

General conditions

Apply to all consents

- 1. The location, design, implementation and operation of the activity shall be in general accordance with the following application documents, and further information:
 - 8 November 2021, Willowbank Quarry Application for Resource Consent and Assessment of Environmental Effects, prepared by Beca Limited.
 - ii. 11 July 2022, Adaptive Monitoring Plan, prepared by Ridley Dunphy Environmental Limited.
 - iii. 21 June 2021, Appendix A Proposed Quarry Site and Staging Plans, Prepared by Beca Limited.
 - iv. 21 June 2021, Appendix B Records of Title, prepared by Beca Limited.
 - v. 10 November 2021, Appendix C Rules Assessment, prepared by Beca Limited.
 - vi. 11 July 2022, Appendix D Ecology Impact Assessment, prepared by Cardno (NZ) Limited.
- vii. 11 July 2022, Appendix E Erosion and Sediment Control Plan, prepared by Ridley Dunphy Environmental.
- viii. 10 September 2021, Appendix F Stormwater Management Report (Rev 1), prepared by Beca Limited.
- ix. 21 June 2021, Appendix G Preliminary Geotechnical Report, prepared by Beca Limited.
- x. 10 September 2021, Appendix H Air Quality Assessment, prepared by Beca Limited.
- xi. 21 June 2021, Appendix I Draft Quarry Management Plan, prepared by Fulton Hogan.
- xii. 10 September 2021, s92 response received (updated application superseding the original application received on 29 June 2021), prepared by Beca Limited.
- xiii. 27 October 2021, s92 response received (further information relating to wetlands), prepared by Beca Limited.
- xiv. 15 November 2021 further s92 response received, information relating to sedimentation effects and erosion and sediment control prepared by Beca Limited.
- xv. 10 November 2021 Additional application under R108 of the PNRP and Rule 54 of the NES-FW received, prepared by Beca Limited.
- xvi. 25 February2022 Information clarifying TSS limit and zone of reasonable mixing received, prepared by Beca Limited.
- xvii. 5 May 2022 Information clarifying stream classifications on the subject site received (via email), prepared by Beca Limited.

Where there may be contradiction or inconsistencies between the application and further information provided by the applicant, the most recent information takes precedence. In addition, where there may be inconsistencies between information provided by the applicant and conditions of the consent, the conditions take precedence.

Advice Note: Any change 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.

- 2. The Consent Holder shall ensure that a copy of this consent, and all documents and plans referred to in this consent, are:
 - kept on site at all times and presented to any Greater Wellington Regional Council (GWRC)
 Compliance Officer upon request; and
 - b) the relevant documents relating to specific activities will be provided to each operator or contractor undertaking the works authorised by this consent, prior to works commencing.

The Consent Holder shall ensure that contractors are verbally briefed on the requirements of the conditions of this consent prior to works commencing.

Management Plans

- 3. Unless otherwise agreed in writing by the Manager, the Consent Holder shall undertake all works, monitoring, and reporting in general accordance with the certified Management Plans and conditions of consent.
- 4. The certification of management plans shall follow the process in (a) to (d) below:
 - a) The management plans listed in Table 1 shall be submitted to the Manager for certification at least 20 working days prior to the commencement of any activities associated with or controlled by the specific management plans (unless otherwise specified in Table 1). The certification process shall be confined to confirming that the Management Plan appropriately gives effect to the relevant condition(s).

Table 1: Timeframes for providing management plans

Management Plan	Submission timeframe to Council's Compliance Monitoring Officer
Quarry Management Plan (QMP)	No later than 20 working days prior to the commencement of any activity authorised by this consent.
Erosion and Sediment Control Plan (ESCP)	No later than 20 working days prior to the commencement of any activity authorised by this consent.
Adaptive Monitoring Plan (AMP)	No later than 20 working days prior to the commencement of any activity authorised by this consent.
Flocculation Management Plan (FMP)	No later than 20 working days prior to the commencement of any activity authorised by this consent.
Streams and Wetland Works Management Plan (SWMP)	The first part of the SWMP shall be submitted to the Manager for certification no later than 20 working days prior to the commencement of any stream or wetland works authorised by this consent and shall include the detail for when the remaining information shall be provided.
	All subsequent sections shall be submitted to the Manager for certification no later than 10 working days prior to the commencement of activities to which the SWMP relates.
Biodiversity Offset and Monitoring Plan (BOMP)	At least 20 working days prior to the commencement of any biodiversity offset works.
Quarry Rehabilitation Plan	Five years prior to the decommission of the Quarry.

- b) If 20 working days have passed since the management plan has been provided to the Manager under clause (a) above, and the Consent Holder has not received a response from the Manager, the Management Plan shall be deemed to be certified.
- c) If the Manager (s') response is that they are not able to certify the Management Plan they must provide the Consent Holder with reasons and recommendations for changes to the Management Plan in writing. The Consent Holder shall consider the reasons and recommendation of the Manager and resubmit an amended Management Plan to be certified.
- d) If the Consent Holder has not received a response from the Manager within 10 working days of the date of resubmission under clause (c) above, the Management Plan will be deemed to be certified.
- e) The Consent Holder may request amendments to the certified management plans by submitting the amendments in writing for the certification of the Manager, in accordance with (b) (d) above. Except as provided for in (b) (d), the amendments sought shall not be implemented until the Consent Holder has received notice in writing that the amended management plan has been certified by the Manager.
- 5. The AMP must be reviewed as a minimum every 12 months, and updated as required. The updates shall take into consideration monitoring results, practical experience gained from the site, and improvements and innovations in erosion and sediment control practice and any relevant regulatory changes. As a minimum the outcome of the review will be reported to the Manager and confirmation sought that an update is not required. This review must be submitted at least 20 working days prior to the conclusion of the annual period.
- 6. Once the quarrying of hard rock commences, the Consent Holder may request a reduction in the monitoring requirements as set out in the relevant management plans and consent conditions by submitting a request in writing for certification of the Manager. This includes winter works by Conditions 28 and 29, weekly audits by Condition 22, and quarterly reporting by Condition 21.

Compliance results shall be used to determine if a reduction is considered appropriate at the discretion of the Manager.

Quarry Management Plan

- 7. The Consent Holder shall prepare a final **Quarry Management Plan** (QMP) prior to the commencement of activities authorised by this consent. The objective of the QMP is to is to ensure that operations and environmental risks are managed appropriately, and within the conditions of the resource consents issued by Wellington Regional Council.
 - The QMP shall be prepared in consultation with the contractor undertaking the works and shall be submitted to the Manager for certification in accordance with the process set out in Condition 4.
- 8. The final QMP shall be based on the draft QMP received with the application but shall be updated to incorporate requirements of this consent.

The final QMP must include at a minimum:

- a. Stages of quarrying activity, fill sites and access and timings for each stage;
- Information relating to the day-to-day management of the quarry site including the management of the discharge of dust to air and sediment laden/chemically treated water to freshwater;

- c. Information regarding how the management plans required by this consent will be given effect to and who will be responsible for their implementation;
- d. Specific design details, construction and certification procedures to ensure long term stability of finished and stabilised slopes, faces and batters;
- e. Maintenance, monitoring, and inspection procedures;
- f. Site plan indicating the location of quarry equipment, infrastructure and all other relevant information;
- g. Guidelines for vehicle movements, including how vehicle loads shall be secured;
- h. Complaint's procedures;
- i. Dust, management and monitoring procedures which are to include:
 - Identification of roles and responsibilities of site personnel including responsibility for ensuring the effective application of dust control measures;
 - Procedures for undertaking a daily inspection of the site when quarrying is occurring and summarising the outcome of the inspection in a daily environment diary – this to include but not be limited to operation of a water cart or other water application methods, wind speed and direction as determined from the climate station, noting any speeds over 5 m/s;
 - Description of air quality monitoring to be implemented at the site, noting Ms Ryan's comment that it should be done in the vicinity of the boundary with 327 and 328 Murphys Road and a suitable instrument would be a light scattering instrument to continuously measure particulate matter as PM10 and PM2.5 as an indicator for dust leaving the site;
 - Requirement for a dust monitor to be installed and maintained on the boundary between Willowbank Farm and 233A Murphys Road;
 - Procedures for using and reporting the results of the air quality monitoring to inform the dust management on the site;
- j. Designated vehicle refuel and repair locations;
- k. Earthworks Management Plan (including requirement for management of overburden);
- I. Safety Management Plan;
- m. Site Specific Hazard Management Plan (as relevant to the consents); and
- n. Key contact details for staff members responsible for ensuring compliance with this consent.

Advice Note: The Quarry Management Plan shall be the overarching management document relating to the site. It shall incorporate and give effect to the other management plans required by this consent.

9. A work programme shall be provided to the Manager annually. The work programme shall outline the general work in each area to be undertaken in the next annual period (including soil disturbance, vegetation removal and overburden filling activities).

Pre-construction site meeting

10. The Consent Holder shall arrange and conduct a pre-construction site meeting prior to the commencement of works authorised by this consent and invite, with a minimum of 5 working days' notice, GWRC and the contractor undertaking the works.

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

Uncontrolled discharges and groundwater interception

- 11. The consent holder, will prior to commencing Stage 4 of the quarry plan, engage a hydrologist to undertake a groundwater study, including the installation of piezometers as required, that will identify the groundwater profile below RL 242m.
- 12. The Consent Holder shall **immediately** notify the Manager by calling the Environmental Regulation hotline on 0800 496 734 if any contaminants (including sediment) are released from the site and enter any watercourse, due to any of the following:
 - a. Discharges from un-stabilised areas that are not treated by sediment control measures required under this consent;
 - a. Discharge from machinery or equipment;
 - b. Failure of any erosion and sediment control measure; or
 - c. Any other incident which either directly or indirectly causes or is likely to cause adverse ecological effects in the receiving environment.

Advice Note: For the avoidance of doubt, the Consent Holder is required to notify the Manager immediately once any of these situations is identified. In the event that the release of contaminants occurs when no one is present on site, the incident should be reported as soon as it is identified.

13. The Consent Holder shall not intercept groundwater as part of any activity authorised by this consent. If groundwater is intercepted, works shall cease immediately and the Consent Holder shall immediately notify the Manager by calling the Environmental Regulation hotline on 0800 496 734.

Complaints

- 14. The Consent Holder shall maintain a permanent electronic record of any complaints received alleging adverse effects that have or could have resulted in a condition or conditions of this consent being contravened for the duration of works authorised by this consent.
 - a) This record shall include:
 - i. The name and address of the complainant;
 - ii. The date and time that the complaint was received;
 - iii. Details of the alleged event;
 - iv. Weather conditions and wind direction at the time of the complaint;
 - v. Any measures undertaken by the Consent Holder in response to the complaint and response provided to the complainant; and
 - vi. Any other relevant information.
 - b) Complaints received shall be forwarded to the Manager within 24 hours of receiving the complaint.

- c) The Consent Holder shall create a summary of complaints and measures undertaken and provide it to the CLG meetings, and to other parties on request.
- d) The Consent Holder shall maintain the Quarry Website for the duration of the consent and shall ensure that it includes provision for members of the public being able to upload complaints to the Quarry Website, and for a receipt of these complaints lodged to be provided to the complainant.

Discovery of artefacts

15. If koiwi, taonga, waahi tapu or other archaeological material is discovered in any area during the works, work in the immediate vicinity of that discovery shall immediately cease and the Consent Holder shall notify GWRC, Te Rūnanga o Toa Rangatira Inc, and Taranaki Whānui (PNBST) (only if relevant to Fill Site 2 works) and Heritage New Zealand Pouhere Taonga (Heritage New Zealand) as soon as possible, but within twenty-four hours. If human remains are found, the New Zealand Police shall also be contacted. The Consent Holder shall allow the above parties to inspect the site and in consultation with them, identify what needs to occur before work can resume.

Notification must be emailed to;

- a. Te Rūnanga o Toa Rangatira Inc, resourcemanagement@ngatitoa.iwi.nz; and
- b. If the discovery is related to Fill Site 2 works: Taranaki Whānui (PNBST), taiao@portnicholson.org.nz
- c. GWRC, notifications@gw.govt.nz
- d. Heritage New Zealand, information@heritage.org.nz

Heritage New Zealand must also be contacted by phone on 04 472 4341 (National Office).

No works may resume at the affected location until the Consent Holder has received written notification that consultation with the parties identified above has been undertaken to the satisfaction of the Manager.

Advice Note: Evidence of archaeological material may include burnt stones, charcoal, rubbish heaps, shell, bone, old building foundations, artefacts and human burials.

Partnership with iwi on Management Plans, site auditing, and annual reporting

16. At least 30 working days prior to the commencement of activities on Fill Site 2, the Consent Holder must engage Te Rūnanga o Toa Rangatira Inc and Taranaki Whānui (PNBTS) for a hui to discuss management and monitoring in relation to Fill Site 2, prior to any works commencing for Fill Site 2.

The purpose of the hui is to:

- a) Provide opportunity for Taranaki Whānui consultation in relation to Fill Site 2 works;
- b) Provide an opportunity for Te Rūnanga o Toa Rangatira Inc and Taranaki Whānui (PNBTS) to provide kaitiaki inputs into the Project in relation to Fill Site 2, as set out in Condition 19; and
- c) Ensure appropriate tikanga and kawa (customary practices and protocols) are being applied throughout the development and implementation for this area of works in the Project.

Advice Note 1: Should any group choose not to take up the offer, or if no comment is received within the above timeframe, this does not constitute a non-compliance of this consent condition.

Advice Note 2: The Consent Holder shall respectively reimburse Te Rūnanga o Toa Rangatira Inc and Taranaki Whānui all fair and reasonable cost for their time and input into any monitoring, review, or hui associated with this consent and Conditions 15 - 19). It is recommended that a Cost Recovery Agreement be entered into between the consent holder and mana whenua.

17. **At least 30 working days prior to** submitting the respective SWMP, ESCP (including FMP and AMP), BOMP, LMP, QMP and QRP to the Manager for certification, the Consent Holder shall arrange a hui between themselves [including any relevant experts] and Te Rūnanga o Toa Rangatira Inc [and Taranaki Whānui (PNBTS) in relation to Fill Site 2] to provide an overview of the respective management plan.

This includes providing Te Rūnanga o Toa Rangatira Inc [and Taranaki Whānui (PNBTS) in relation to Fill Site 2] with draft copies of the respective SWMP, BOMP, LMP, ESCP (including FMP and AMP), and QMP for review and comment at least 30 working days prior to submitting the management plan to the Manager for certification.

Advice Note 1: Should any group choose not to take up the offer, or does not respond to the offer, that does not constitute a non-compliance of this consent condition.

Advice Note 2: The LMP is captured under the Porirua City Council condition set.

18. Any comments and inputs received from Te Rūnanga o Toa Rangatira Inc [and Taranaki Whānui where relevant to Fill Site 2] shall be provided to the Consent Holder within 20 working days of receipt of the respective management plan. Comments shall be considered by the Consent Holder, and the Consent Holder shall update the Management Plans to incorporate feedback received.

Where the Consent Holder does not adopt any of the feedback received or recommendations made, the Consent Holder shall provide a description of the feedback or recommendations together with an explanation of why those changes were not made, and submit this to the Manager and mana whenua groups at the same time as providing the Management Plans for certification.

Advice Note: Should any group choose not to take up the offer, or does not respond to the offer, that does not constitute a non-compliance of this consent condition.

19. The Consent Holder shall invite trustees of Te Rūnanga o Toa Rangatira (and Taranaki Whānui (PNBST) if they so choose in relation to Fill Site 2) to undertake bi-annual kaitiaki monitoring on the site, on reasonable terms acceptable to mana whenua.

Monitoring information recorded during site visits shall be included in the annual reports (as required under Condition 20).

Advice Note: Should any group choose not to take up the offer, or does not respond to the offer, that does not constitute a non-compliance of this consent condition.

Reporting, and Site Auditing

- 20. Results of the annual surveys and reporting undertaken in accordance with the certified AMP shall be shall be uploaded to the Quarry Website, and provided to the following groups annually:
 - a. The Manager at GWRC;
 - b. Te Rūnanga o Toa Rangatira Inc;
 - c. Taranaki Whānui (PNBTS) for surveys relating to discharges from Fill Site 2
 - d. Department of Conservation (DOC);
 - e. CLG.

- 21. On a quarterly basis the Consent Holder shall compile and submit to the Manager <u>and upload to the Quarry Website</u>, the results of records and monitoring undertaken during the quarterly period in accordance with the following consent conditions:
 - Summary of any complaints received (Condition 14);
 - Summary of any uncontrolled discharges to any watercourse (Condition 12);
 - Summary of the results of water quality monitoring undertaken in accordance with the AMP (conditions 48-51);
 - Summary of any exceedances of water quality compliance limits (Condition 48-51).
- 22. The Consent Holder shall ensure that the site is audited by a suitably experienced person on a minimum of a weekly basis to ensure that the erosion and sediment control methods are being maintained in accordance with the certified ESCP required by Condition 36 of this consent.

The weekly audits shall include, but not be limited to, the following information

- a. Date;
- b. Name of auditor;
- c. Site condition;
- d. Weather conditions;
- e. Sediment management (including identification of problem areas that are not being treated by sediment control measures, and any measures put in place to treat these areas);
- f. Runoff control (check of diversion channels and check sediment retention ponds);
- g. Condition of sediment control measures, including silt fences, contour drains and sediment retention ponds;
- h. Maintenance required and the date this will be completed by;
- i. Contractor responsible for the maintenance; and
- j. General comments.

The frequency of the audits may be reduced at the discretion of the Compliance Officer.

23. The results of the audits as required by Condition 22 shall be submitted to the Manager or the Compliance Officer on a monthly basis, or as deemed necessary at the discretion of the Compliance Officer as outlined in Condition 6.

Discharges to air

- 24. Dust management shall be undertaken in accordance with methods outlined in QMP certified in accordance with Condition 4.
- 25. The Consent Holder shall ensure that there are no discharges to air resulting from the exercise of this consent that are noxious, dangerous, offensive or objectionable at or beyond the property boundary.
- 26. The Consent Holder shall install a site climate station on site that is able to measure and record wind speed, wind direction, temperature and rainfall within three months of grant of this consent.

27. The Consent Holder shall undertake dust monitoring in accordance with the dust monitoring procedures provided for in Condition 8(i). The results of the monitoring shall be included in the Annual Report.

Winter works

- 28. Unless otherwise approved in writing by the Manager, all earthworked areas shall be stabilised during the period between 1 June to 30 September inclusive each year. The stabilised surface shall be maintained to the satisfaction of the Manager.
- 29. Unless otherwise approved in writing by the Manager, no earthworks or streamworks authorised by this consent, other than those necessary for the maintenance of erosion and sediment controls, shall take place during the period of 1 June to 30 September inclusive each year.
 - **Advice Note 1**: Conditions 28 and 29 are applicable to works at Fill Site 2 and apply to any stripping and overburden removal only, not to the excavation of hard rock.
 - **Advice Note 2**: Any request to undertake Winter Works shall be made to the Manager no less than 20 working days prior to the proposed commencement date of the works and may be in the form of an amendment to the certified ESCP and accompanied by:
 - A description of the proposed works, duration of the works, and method(s) of stabilisation;
 - A plan showing the areas that have already been stabilised and any additional erosion and sediment controls proposed;
 - A summary of the environmental performance of the site, including any relevant monitoring results.

Advice Note 3: Any request for Winter Works approval will be assessed by the Manager against the following criteria:

- a) Scale and duration of the works
- b) Effectiveness of existing controls
- c) Prior compliance history, including effectiveness of monitoring and reporting
- d) Likely effectiveness of the proposed controls and methods of stabilisation
- e) Sensitivity of the receiving environment

Quarry Rehabilitation Plan

- 30. The Consent Holder shall prepare a **Quarry Rehabilitation Plan** (QRP) five years prior to the decommissioning of the quarry. The purpose of the QRP is to detail by way of report and illustrative plans, the longer-term re-establishment and rehabilitation of the site.
 - The QRP shall be prepared by a suitably qualified and experienced Landscape Architect in consultation with the contractor undertaking the works and shall be submitted to the Manager for certification in accordance with the process set out in Condition 4. No decommissioning works shall commence until the Plan has been certified by the Manager.
- 31. The QRP shall include, as at a minimum:
 - a) The final location, physical appearance and treatment of stockpiles/fill sites and bunds in a manner that reflects the character of the immediately surrounding landscape.

- b) The rehabilitation of areas used for carparks, site offices and laydown areas.
- Decommissioning of sediment erosion controls and integration of sediment ponds (should it be required).
- d) A phasing plan to illustrate order of rehabilitation works and timeframes, including details of the proposed plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting.
- e) Treatment of quarry faces, including details of terraces and their landscape and soil treatments.
- f) Details of any complementary measures to ensure success of rehabilitation, such as stockproof fencing to protect the planting and/or planted setbacks from the top of steep quarry faces within safety fences to enable revegetation on steep faces.
- g) A programme of establishment and post establishment protection and maintenance (fertilising, weed removal/spraying, replacement of dead/poorly performing plants, watering to maintain soil moisture, maintenance programme).
- h) Documented outcomes to determine adequacy of rehabilitation against targets and an explanation of what happens if rehabilitation is not achieved as stated.
- i) Itemised details of the post closure landscape costs and details of the funding mechanism for provision of the post closure ongoing rehabilitation of the quarry.
- j) Details of the post closure health and safety risks and mitigations.
- k) Details of engagement with mana whenua including agreement to the proposed long-term rehabilitation and identification of opportunities for ongoing mana whenua involvement in the implementation of the rehabilitation.

No decommissioning works shall commence until the Plan has been certified by the Manager.

Advice Note: The purpose of the QRP is to ensure the quarry site is left in an improved state in the long term. It is expected that this will be prepared in conjunction with ecological remediation/mitigation initiatives and seek an integrated solution to landscape and ecological rehabilitation. The QRP shall also include a suitable landscape and maintenance monitoring framework.

Review condition

- 32. GWRC may review any or all conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, within one month of each anniversary of the commencement of this consent, for any of the following reasons:
 - a) To review the adequacy of any plan and/or monitoring requirements, and if necessary, amend these requirements outlined in this consent;
 - b) To deal with any adverse effects on the environment that may arise from the exercise of this consent; and which are appropriate to deal with at a later stage;
 - To require the implementation of Best Practicable Options, in respect to new methodologies for the undertaking of the works to avoid, remedy or mitigate any significant adverse effect on the environment arising from the works;
 - d) On the notification of any proposed freshwater plan and on the date of notification of any approved freshwater plan; and

e) To enable consistency with any relevant Regional Plans or any National Environmental Standards or Regulations.

The review of conditions shall allow for the deletion or amendment of conditions of this consent; and the addition of such new conditions as are shown to be necessary to avoid, remedy or mitigate any significant adverse effects on the environment.

10 year review condition

- 33. The Consent Holder shall, 10 years after the commencement of consent, and again at 19 years, and 27 years after the commencement of consent shall:
 - a) Commission a report from a suitably qualified erosion and sediment control expert and freshwater ecologist that:
 - i. examines the effectiveness of the on-site erosion and sediment control measures and the broader operational aspects of the overburden and construction water management on the site;
 - ii. reviews the improvements that have been made on an annual basis since the last review point;
 - iii. reviews the monitoring data in terms of sediment lost from the site;
 - iv. identifies any trends in that data;
 - v. provides recommendations as to what further best practicable options exist for further minimizing the loss the of sediment from the Quarry operations; and
 - vi. reviews of any reports conducted on the condition of the Pāuatahanui Inlet.
 - b) Commission a report from a suitably qualified independent expert that describes the most up to date regulatory planning framework applying to the Pāuatahanui Inlet and particular to the catchment within which the quarry is located. The report shall:
 - i. identify the controls that apply at that time,
 - ii. how those controls differ from those that existed at the time of the commencement of consent, and
 - iii. what new standards might apply to the discharge of sediment into any tributaries within the catchment
 - iv. Any recommended updates to the conditions of consent and/or management plans to reflect any changes identified in i-iii above.
 - The report should also assess the findings of the report in (a) above, and provide an opinion as to whether or not the discharge standard being achieved at the outlet of the lowest sediment retention pond(s) is consistent with any discharge standards applying at the time.
 - c) Arrange a hui between themselves (including any relevant experts) and Ngāti Toa Rangatira to provide an overview of the draft reports in (a) and (b) above. Following the hui:
 - copies of the draft reports shall be provided to Ngāti Toa Rangatira for review and comment;
 - ii. any comments and inputs received from Ngāti Toa Rangatira shall be provided to the Consent Holder within 30 working days of receipt of the reports in (a) and (b). Comments shall be considered by the Consent Holder, and the reports updated (where relevant); and
 - iii. where the Consent Holder does not adopt any of the feedback received or recommendations made, the Consent Holder shall provide a description of the feedback or recommendations together with an explanation of why those changes

were not made, and submit this to the Manager and mana whenua at the same time as

d) Commission a report from Ngāti Toa Rangatira on the kaitiaki monitoring that they have undertaken over the previous 10 year, 9 year and 8 year period, including reporting on any cultural health indicator monitoring that might have been undertaken within the quarry or within a 500m reach of stream below the quarry (i.e. within the Willowbank farm property).

providing the reports to Wellington Regional Council.

Advice Note: Should Ngāti Toa Rangatira choose not to take up the offer, or if no comment is received within the above timeframes, this does not constitute a non-compliance of this consent condition.

Advice Note: The Consent Holder shall reimburse Ngāti Toa Rangatira all fair and reasonable cost for their time and input into reporting, review, and/or hui associated with the consent and conditions above).

- 34. All reports required under condition 33 shall be provided to GWRC no later than 6 months after the 10 year, 19 year and 27 year stages. When these reports are provided to GWRC, the Consent Holder shall clearly identify what changes (if any) are proposed to the operations of the quarry that might further reduce sediment loss and/or align any conditions with those that are applicable to similar activities within the quarry's catchment. The Consent Holder's report to GWRC assessing these options shall also identify the capital and operating costs of adopting any of those options relative to the likely environmental improvements arising from the adoption of those options.
- 35. Within 3 months of receiving the reports required under condition 33, GWRC may, in addition to its powers under condition 32, commence a formal review of the consent conditions or request the Consent Holder to update any management plans in order to implement any changes to the consent conditions that it considers to be appropriate following a review of the material in the reports.

Earthworks

Apply to consents 37659, 38249, 37660, 37661, 38310

Erosion and Sediment Control Plan

- 36. The Consent Holder shall prepare a final **Erosion and Sediment Control Plan** (ESCP) prior to the commencement of any activities authorised by this consent. The purpose of the ESCP is to outline the approach to water management (including erosion and sediment control) that will be implemented to ensure best practice will be applied at all times and that the discharges from the quarry are appropriately and effectively managed.
 - The ESCP shall be prepared in consultation with the contractor undertaking the works and shall be submitted to the Manger certification in accordance with the process set out in Condition 4.
- 37. The ESCP shall be in general accordance with the "Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region", dated 2021, and shall be based on the draft ESCP received with the application but updated to incorporate requirements of this consent. The final ESCP must include at a minimum:
 - Updated ESC drawings and calculations for all overburden fill sites, including finalised extent of works, finalised location and discharge points of sediment retention devices, finalised fill contours including area and volume;
 - b) Specific methodologies for earthworks and construction works;
 - c) Confirmation of the finalised location of any stockpiling areas;
 - d) A maintenance schedule for all sediment control measures, and a template checklist to be used for weekly compliance audits by the Consent Holder to fulfil the requirements of Condition 22;
 - e) Catchment boundaries for the sediment controls, and stormwater flow directions;
 - f) A staging programme for managing exposed areas, including progressive stabilisation; and
 - g) Identification of experienced staff to ensure the consent conditions and ESCP are adhered to, including emergency contact phone numbers for those person(s).
- 38. Prior to a constructed erosion and sediment control device becoming operational, the Consent Holder shall provide the Manager with "As-builts", signed by a suitably experienced person, to confirm that the erosion and sediment control(s) have been constructed in accordance with the ESCP.
 - **Advice Note**: As-built check sheets are available on the Wellington Regional Council's website at the following link: gw.govt.nz/earthworks.
- 39. All erosion and sediment control measures shall remain the responsibility of the Consent Holder. No erosion and sediment control measures shall be permanently removed or decommissioned prior to receiving written certification as confirmation from the Manager that the catchment is stabilised.

Flocculation Management Plan

40. The Consent Holder shall prepare a final **Flocculation Management Plan** (FMP) prior to the commencement of works authorised by this consent. The purpose of the FMP is to provide specific direction on the use of flocculants to be used to treat all sediment treatment devices, and protocols for monitoring, maintenance, spills, storage and decommissioning.

The FMP shall be prepared in consultation with the contractor undertaking the works and shall be submitted to the Manger certification in accordance with the process set out in Condition 4.

- 41. The final FMP shall be based on the draft FMP provided with the application and must include as a minimum:
 - a) Confirmation of the flocculants to be used and the method of flocculation to be used, including any alternatives if that method is found to be ineffective after use on site (including timeframes for making the change between methods);
 - 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) Procedures for the storage of flocculation chemical(s) onsite;
 - f) A spill contingency plan;
 - g) A plan for the decommissioning of flocculated sediment retention ponds; and
 - h) Details of the person or entities that are responsible for long-term operation and maintenance of the flocculant treatment system and the organisational structure that will support this system.
- 42. All sediment retention devices must be treated in accordance with the certified FMP.

Overburden Fill Sites

- 43. The Consent Holder shall progressively stabilise all disturbed or unstabilised overburden fill areas in accordance with the ESCP (Condition 36 and 37).
- 44. Upon achieving the desired completion levels for the overburden fill site (as identified in the QMP and ESCP) the Consent Holder shall ensure that all areas subject to overburden filling are stabilised in accordance with the ESCP certified under Condition 4.
- 45. All fill material used in the overburden disposal area shall:
 - a. Be restricted to natural material, such as clay, soil and rock and other inert materials as detailed
 in the definition of cleanfill material in section 2.2 of the Ministry for the Environment publication
 'A guide to the Management of Cleanfills, 2002';
 - b. Be restricted to those materials listed as acceptable in table 4.1 of the *Ministry for the Environment* publication 'A guide to the Management of Cleanfills, 2002'; and
 - c. Be restricted to the overburden extracted from the project area.
- 46. All overburden fill material shall be placed and compacted so as to avoid erosion and instability. Any erosion of soil, including failure of cut and fill batters, that is attributable to the works shall be contained, remedied and mitigated by the Consent Holder to the satisfaction of the Manager.
- 47. Stockpiles of overburden fill shall not be placed adjacent to any watercourse, wetland or in any location where efficient treatment of sediment-laden runoff is impeded.

Adaptive Monitoring Plan

- 48. The Consent Holder shall prepare a final **Adaptive Monitoring Plan** (AMP) prior to the commencement of works authorised by this consent. The purpose of the AMP is to:
 - a) Identify discharge and sampling locations, monitoring triggers and procedures; and
 - b) manage the effects of sediment discharge through monitoring and adaptive management.

The AMP shall be prepared in consultation with the contractor undertaking the works and shall be submitted to the Manger certification in accordance with the process set out in Condition 4.

49. The final AMP shall be based on the draft AMP received with the application, be prepared in consultation with the contractor undertaking the works, and must include as a minimum:

Discharge locations and sampling points:

- a) Identification of all discharge points to surface water from erosion and sediment control devices and where sampling will occur (sampling shall be of water from the sediment control device prior to entering the surface water body);
- b) Identification of sampling points located upstream of the active area of earthworks within the stream and at the downstream extent of the zone of reasonable mixing taken from the most downstream discharge point in both the Pāuatahanui Stream and Hutt River Catchments; and
- c) Location and setup details of an onsite automated rain gauge with telemetry to record rainfall and provide notifications when the triggers outlined in (d)(i) and (ii) are exceeded.

Monitoring and Sampling Methodology:

- d) A description of how turbidity (measured in NTU) and pH will be measured in the discharge from sediment control devices and in the receiving environment and who will be responsible for undertaking the sampling at the locations identified in accordance with (a) and (b) as soon as practicable during the following times:
 - During any dry weather or planned/ routine discharges from the quarry site or fill sites; or
 - ii. Within 12 hours of any rainfall event of greater than 7mm in 1 hour or 20mm in a 24-hour period as measured at the onsite automatic rain gauge station.
- e) The AMP shall specify that sampling is required at individual discharge locations outlined in (a) (above), only if the individual sediment retention device is discharging.
- f) The AMP shall specify that sampling at the points outlined in (b) (i.e. upstream of the quarry site and at the downstream extent of the zone of reasonable mixing taken from the most downstream discharge point from the quarry site) is required whenever an event triggered under (d) occurs.
- g) Procedures for freshwater effects monitoring and annual surveys in the receiving environments, including the annual survey and reporting required by Conditions 20 and 21.
- h) Procedures for devices and receiving environment monitoring, this may include the use of a telemetered or automated monitoring system at locations specified in (a) and (b).

Water Quality Triggers and Actions:

i) The AMP shall specify that the following water quality limits will be used as triggers for remedial action on site:

- i. A turbidity level of greater than 170NTU from any device discharge point outlined in
 (a);
- ii. A pH outside the range of 5.5-8.0 units at any discharge point outlined in (a);
- iii. A change in pH of +/- 0.5 at the downstream sampling point compared to the upstream sampling point as specified in (b);
- iv. An increase in turbidity of 33% at the downstream sampling point compared to the upstream sampling point as specified in (b).
- j) The AMP shall specify that in the event that water quality monitoring in accordance with the AMP demonstrates that the triggers in (i) are exceeded, the Consent Holder shall notify the Manager as soon as practicable but within 48 hrs that the exceedance has occurred. The notification shall include:
 - i. Water quality monitoring results and interpretation;
 - ii. Investigations that are being and/or will be undertaken on site to identify the cause of the exceedance;
 - iii. Remedial actions that have been and/or will be undertaken on site to reduce the likelihood of a recurrence of the exceedance; and
 - iv. Time frames for undertaking remedial actions (short-term and long term).

k) Annual survey

- The AMP shall specify final methodologies for annual and event driven surveys and reporting, including:
 - i. Details on who shall undertake the surveys and reporting (a suitably qualified freshwater ecologist);
 - ii. Details on how the level of effect to the receiving environment will be quantified and reported annually i.e. effects are shown to be less than minor, minor, more than minor or significant.

Total Suspended Solids

- 50. The discharge of treated sediment laden run-off to a surface water body within the Pauatahanui and Hutt River Catchments from any sediment retention device shall not at any time have a concentration of Total Suspended Solids (TSS) exceeding 150 milligrams per litre, except in the following circumstances:
 - a) In a rain event greater than a 2-year 6-hour (approximately 47mm/6hr) duration determined utilising the onsite automatic rain gauge and the Niwa High Intensity Rainfall Design System.
- 51. Unless otherwise agreed to in writing by the Manager, monitoring for TSS (in accordance with Condition 50) shall be undertaken in general accordance with the steps below:
 - a) For the first 1 year of quarry operations authorised under this consent, the Consent Holder shall take samples from the outlet of any active sediment retention device within 12 hours of any rainfall event of greater than 7mm in 1 hour or 20mm in a 24-hour period as measured at the onsite automatic rain gauge station.
 - b) Water quality shall be measured in terms of TSS and turbidity (NTU) to establish a defined NTU-TSS relationship, including a buffer (noted as x% and to be confirmed) to account for any

- statistical differences. Thereafter, water quality sampling of TSS is only required in the event that NTU sampling in accordance with the AMP indicates an exceedance of x% of the TSS concentration outlined in Condition 47.
- c) If water quality sampling for TSS is required, the Consent Holder shall take sample(s) of the discharge(s) from the outlet of the relevant sediment retention device(s) at the same time as sampling for turbidity results in accordance with the certified AMP as per Condition 46.
- d) In the event that TSS concentration in Condition 47 is exceeded, the Consent Holder shall notify the Manager as soon as practicable but within 48 hrs that the exceedance has occurred, including the following (if relevant):
 - i. Investigations that are being and/or will be undertaken on site to identify the cause of the exceedance;
 - ii. Remedial actions that have been and/or will be undertaken on site to reduce the likelihood of a recurrence of the exceedance; and
 - Time frames for undertaking any identified remedial actions (short-term and long term).

Reasonable mixing zone

- 52. Notwithstanding the requirements of any other conditions of this consent the discharge shall not give rise to any of the following effects in the Tributaries of the Hutt/ Dry Creek and the Tributary of Pauatahanui Stream after the zone of reasonable mixing no less than 50m from the downstream discharge point:
 - a. The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
 - b. Any conspicuous change in the colour or a decrease in visual clarity of 30% when compared to water clarity above the point of discharge; or
 - c. Any emission of objectionable odour; or
 - d. The rendering of fresh water unsuitable for consumption by farm animals; or
 - e. Any significant adverse effects on aquatic life including but not limited to a decrease in the Quantitative Macroinvertebrate Community Index of no more than 20%.
 - f. The method for measuring visual clarity shall be using a black disc, clarity tube or other method certified by the Manager.
 - g. The consent holder shall undertake monitoring to demonstrate compliance with Condition 52 if required to do so in writing by the Manager.

Stream works, diversions and biodiversity offsetting

Apply to consents 38249, 37658, 38309, 37657, 38308, 38106, 37661

Stream and Wetland Works Management Plan

- 53. The Consent Holder shall prepare a **Stream and Wetland Works Management Plan** (SWMP) prior to the commencement of works authorised by this consent. The purpose of the SWMP is to:
 - a) set out the detailed designs for the proposed the stream diversions, culvert works and works in proximity to natural wetlands; and
 - b) detail the overall ecological management programme to be implemented to manage effects on ecological values and post-construction monitoring.
- 54. The SWMP shall be developed in consultation with a suitably qualified and experienced freshwater ecologist the contractor undertaking the works and shall be submitted to the Manager certification in accordance with the process set out in Condition 4.
- 55. The SWMP shall include details of the following (as relevant to the management of effects for that work or Project stage):
 - a) Final detailed design for the permanent stream diversion channels, including:
 - i. Overall site plan showing final design contours of and location for each channel section;
 - ii. Long sections showing the final levels for each channel section;
 - iii. Calculations to support the use of each channel lining solution prepared by a Chartered Professional Engineer with experience in designing stream channels and scour protection;
 - iv. Construction drawings detailing how suitable habitat values will be created in the new or altered channel (including appropriate provision of pools, runs, riffles, and other in-stream habitat features) as recommended by a suitably qualified freshwater ecologist and plans for riparian planting as allowed by the limitations of bench widths; and
 - v. Details for the provision of ongoing maintenance of suitable aquatic in-stream habitat.
 - b) Final detailed design of the permanent and temporary culverts, including:
 - i. Final construction drawings including culvert sizing and supporting calculations;
 - ii. The process for notifying the Manager within 15 working days prior to the removal of the temporary culvert including the provision of a decommissioning plan which details how culverts will be removed and the stream bed remediated to ensure that adverse effects to freshwater fish, stream habitat and stream bed erosion are no more than minor.
 - iii. A monitoring and maintenance plan, which includes:
 - i. How the monitoring and maintenance will be done;
 - ii. The steps to be taken to avoid any adverse effects on the passage of fish; and
 - iii. The steps to be taken to ensure that the structure's provision for the passage of fish does not reduce over its lifetime.
 - c) Construction methodology for all stream dewatering, permanent and temporary stream works (undertaken in consultation with a suitably qualified freshwater ecologist), and works near wetlands including:

- i. Methods for avoiding adverse effects to wetland areas, including methods to avoid drainage and stream bank erosion to wetland areas;
- ii. Dewatering methods and details including timing and rate of release of water from the existing farm dam including methods to mitigate erosion at the point of discharge; and
- iii. Construction methodology for stream diversion channels, culvert works in wetlands and streams and the decommissioning of the existing streambed.

d) Freshwater fish, including:

- i. An assessment undertaken by a suitably qualified freshwater ecologist to demonstrate that the designs submitted in accordance with (a) and (b) provides adequate fish passage for species reasonably expected to occur upstream of the stream diversion and that culverts have been designed in accordance with relevant standards and regulations, including the New Zealand Fish Passage Guidelines (NZFPG);
- ii. How fish rescue and relocation shall occur, including ensuring all fish rescue is undertaken by a suitably qualified and experienced person with the required permits; and
- iii. Details of the process for providing all fish rescue data, including the number, length, and species of each captured fish, to the Manager within 10 working days of completion of the new stream channel.
- e) An assessment of how mana whenua values will be included the design of works, construction, and post construction monitoring, in consultation with mana whenua.
- f) Post construction environmental monitoring, including:
 - i. Timing and monitoring methods to assess the ecological success of the diversion including monitoring relating to the provision of surface flow from the time the stream is livened (including a description of at what stage the diversion channel are considered to be livened), fish passage including through culverts and the provision of habitat for native fish;
 - ii. Success targets, timeframes and triggers (including success targets relating to the provision of surface flow from the time the stream is livened, fish passage and aquatic habitat);
 - iii. Process if success targets are not met;
 - iv. Process for reporting to the Manager on all monitoring, measuring for success and measures proposed in the event that targets are not met; and
 - v. Any other relevant matters to ensure compliance with all conditions.

Advice Note: In accordance with condition 55 (d)(ii), it is the responsibility of the Consent Holder to ensure that they secure any necessary authorisations from the Department of Conservation, the Ministry of Primary Industry and Fish and Game New Zealand, prior to the commencement of any fish rescue.

Culverts and structures

- 56. The consent holder shall inspect the temporary culvert (if still in use) and permanent culvert:
 - a) Two years after installation of the culvert; and
 - b) following a significant natural hazard which is likely to affect the structure.

Advice Note: This is required by Regulation 69 (2)(c) of the Resource Management (National Environmental Standard for Freshwater) Regulations 2020.

- 57. The consent holder shall provide the information required by Regulation 62 (general structures), Regulation 63 (culverts) and Regulation 68(2) (ramps) of the National Environmental Standards for Freshwater 2020 by uploading the culvert details into the NIWA fish passage Assessment Tool and providing the Manager with the response number once the upload is complete.
- 58. The Consent Holder shall prepare a Monitoring and Maintenance Plan for the structure that includes:
 - a) How the monitoring and maintenance will be done;
 - b) The steps to be taken to avoid any adverse effects on the passage of fish;
 - c) The steps to be taken to ensure that the structure's provision for the passage of fish does not reduce over its lifetime;
 - d) An updated version of the information relating to the structure that was required for the original resource consent, in accordance with Condition 55, for the purpose of reassessing the structure's effect on the passage of fish; and
 - e) A process for providing that information.

Advice Note 1: This plan is required by regulation 69(2) of the Resource Management (National Environmental Standard for Freshwater) Regulations 2020.

Advice Note 2: Updated information relating to the structure can be emailed to notifications@gw.govt.nz.

- 59. The Consent Holder shall remain responsible for the structure and shall ensure that it is maintained at all times to the satisfaction of the Manager, so that:
 - a) Any erosion, scour or instability of the stream bed or banks that is attributable to the works carried out as part of this consent is remedied by the consent holder; and
 - b) Any adverse effects caused by the presence of the structure that limit, restrict or prevent fish passage shall be rectified by the consent holder; and
 - c) The structural integrity of the culvert and ancillary structures remains sound in the opinion of a Professional Chartered Engineer; and
 - d) The waterway within or around the structure remains clear of debris.

Advice Note: Maintenance does not include any works outside of the scope of the application. Further resource consents may be required for any additional works (including structures, reshaping or disturbance to the bed of the watercourse).

60. If the structure is no longer required, and/or the structure is not being maintained in accordance with Condition 55 of this consent, or sustains irreparable damage then the consent holder shall remove the structure within a timeframe that is to the satisfaction of the Manager.

Advice Note: Removal of the structure is not within the scope of this consent. Further resource consents may be required for the removal of the structure.

Certification of constructed diversion reaches prior to livening

- 61. Prior to the livening of the constructed streams channels, the Consent Holder must provide as-built plans of the diversion channels as well as assessments including (but not limited to) a detailed photographic record of the stream diversion channels undertaken by a suitably qualified ecologist and suitably qualified Professional Engineer, concluding that the channels have been constructed in accordance with the designs approved in accordance with Condition 55.
- 62. No livening of the new constructed stream channels shall occur until the Consent Holder has received written confirmation that the diversion channel is stabilised and certified by the Manager.

Maintenance of works

63. All stream diversions undertaken in accordance with this consent shall remain the responsibility of the Consent Holder for the duration of the consent; and any erosion, scour or instability of the stream bed or banks that, in the opinion of the Manager, is attributable to the diversion that is authorised by this consent; shall be remedied by the Consent Holder to the satisfaction of the Manager.

Maintenance of Structures

- 64. The Consent Holder shall remain responsible for all culverts authorised by this consent and shall monitor and maintain the structure at all times in accordance with the requirements of this consent, including ensuring the following:
 - a) That the provision for the passage of fish does not reduce over time;
 - b) Any erosion, scour or instability of the stream bed or banks that is attributable to the works carried out as part of this consent is remedied by the Consent Holder;
 - c) Any adverse effects caused by the presence of the structure that limit, restrict or prevent fish passage shall be rectified by the Consent Holder;
 - d) The structural integrity of the culvert remains sound in the opinion of a qualified Engineer; and
 - e) The waterway within or around the structure remains clear of debris.

Advice Note: Maintenance does not include any works outside of the scope of the application. Further resource consents may be required for any additional works (including structures, reshaping or disturbance to the bed of the watercourse).

Biodiversity Offset and Monitoring Plan

- 65. The Consent Holder shall prepare a **Biodiversity Offset and Monitoring Plan** (BOMP) prior to the commencement of any biodiversity offset works. The purpose of the BOMP is to detail objectives and actions to achieve, as a minimum, the quantum and quality of biodiversity offset and ecological regeneration in Pig Gully as shown in Figure 6-2 of the EIA.
 - The BOMP shall be prepared by a suitably qualified and experienced ecologist in consultation with the contractor undertaking the works and shall be submitted to the Manger Compliance Monitoring Officer for certification in accordance with the process set out in Condition 4.
- 66. The BOMP shall include detailed design and actions for the following, and must include the following:
 - a) A programme for implementation of all ecological riparian planting (pioneer and enrichment) required under Condition 65 of this consent;
 - A plan demonstrating the location and area where riparian planting is to be implemented, with a minimum planting width of 20m per stream edge (inclusive of existing riparian planting);
 - c) Details of the plant species, the relevant composition of plant species and planting densities;
 - d) Details of and a programme for maintenance, monitoring and measuring success of the required riparian planting;
 - e) Process if success targets are not met;

- f) Process for reporting to the Manager on all monitoring, measuring for success and measures proposed in the event that targets are not met; and
- g) Measures outlining how the legal and physical protection of the riparian planting required by Condition 65 will be achieved in perpetuity.

Advice Note 1: the BOMP will also include requirements for terrestrial regeneration, however, this will be detailed in the District Consent Conditions and certified by Porirua City Council.

Advice Note 2: Conditions 66 – 71 relate to the riparian planting only.

67. All pioneer biodiversity offset planting shall be undertaken within 2 years of the consent being given effect to. All enrichment planting shall be undertaken between 3 and 5 years of the pioneer planting being undertaken.

Biodiversity offset success measurements

- 68. The Consent Holder shall ensure all biodiversity offset required by Conditions 65 and 66 of this consent be subject to a 5-year maintenance period, which shall commence from the time pioneer planting is undertaken. Success monitoring shall be undertaken after a 10-year period following pioneer planting being undertaken. The Consent Holder shall undertake and maintain biodiversity offset planting to achieve the following standards by the 10-year success monitoring period:
 - a. 80% canopy cover of planted species;
 - b. The replacement of dead or diseased plants to achieve 80% survival of planted species; and
 - c. The control of pest animals (and pest plants) to achieve (a) and (b) above.

Maintenance of the ecological mitigation works shall be to the satisfaction of the Manager.

- 69. At the 10-year success monitoring point for the biodiversity offset works identified in Condition 65, the Consent Holder shall engage an ecologist to carry out a review of the success of the revegetation in any areas subject mitigation planting as required by this consent. The review shall include:
 - a) Survival and growth rates of planted species;
 - b) Whether ecological mitigation planting has successfully achieved 80% canopy cover;
 - c) Whether or not the mitigation requirements have been implemented in accordance with BOMP;
 - d) Success of pest control (animal and plant); and
 - e) Identification of any remedial actions that need to be carried out (if any).

Within 1 month of the end of the 10-year period following pioneer planting, the Consent Holder shall provide a report recording the findings of the review, to the Manger for certification.

70. If any of the maintenance or canopy cover requirements prescribed in Condition 65 are not achieved at the 10-year success monitoring point, the Consent Holder shall also include in the report, for certification, details of additional measures/works, a proposed timeframe for implementing those measures/works and any additional monitoring required to achieve the prescribed maintenance requirements. The Consent Holder shall implement the measures/works and undertake additional monitoring in accordance with the report.

Any additional mitigation monitoring shall only be terminated when the Manager provides written confirmation that the mitigation requirements have been met.

- 71. To achieve ongoing physical protection of the biodiversity offset planting required by Condition 65 of this consent, the mechanisms to achieve protection of the above shall be set out in the BOMP and shall manage:
 - a) The felling, removal, burning or taking of any native trees, shrubs, plants or native fauna;
 - b) the planting of any trees, shrubs, or plants be undertaken with a preference for specimens sourced from the ecological district in which the land is situated;
 - c) The introduction of any noxious substance or substance otherwise injurious to plant life except as required for the control of pests;
 - d) access by stock by providing and maintaining fences and gates, except where the Provisions of the Fencing Act 1978 apply;
 - e) the control of deer, goats, pigs to achieve the conditions of this consent, and to prevent significant loss of existing natural values;
 - All weeds and pests to the extent required by any statute and in particular comply with the provisions of, and any notices given under the Biosecurity Act 1993 and the Wild Animal Control Act 1977.
- 72. The Consent Holder shall ensure that the legal and physical mechanisms to achieve ongoing protection of the ecological mitigation planting are approved by the Manager, Environmental Regulation, Wellington Regional Council, prior to giving legal effect to those mechanisms.

Porirua City Council Conditions

This condition set has been updated following the hearing (note condition numbers and cross references differ from the previous hearing condition set). All changes are accepted, and comments removed.

Glossary / Interpretations

Abbreviation / Term	Meaning
Access Road	Road within Willowbank Farm, running from State Highway 58 to Willowbank Quarry
BNVMP	Blasting Noise Vibration Management Plan
вро	Best Practicable Option
BOMP	Biodiversity Offset Management Plan
CLG	Community Liaison Group
Compliance and Monitoring Officer	Any Compliance, Enforcement or Duty Officer, Resource Consents and Monitoring, Porirua City Council
DOC	Department of Conservation
EIA	Ecological Impact Assessment (version 2.1 dated 7 July 2022)
ESCP	Erosion and Sediment Control Plan
Heavy vehicle movement	Truck or truck and trailer travelling to or from Willowbank Quarry either carrying or intending to carry aggregate or overburden.
GWRC	Greater Wellington Regional Council
LMP	Lizard Management Plan
Maintenance	Includes repair, parts replacement, servicing and any required safety improvements
Manager	The Manager, Resource Consents and Monitoring, Porirua City Council
NMP	Noise Management Plan
NSP	Noise Survey Plan
Pig Gully	Area proposed for biodiversity off-setting and mitigation and shown on Figure 6-2 in the EIA.
PCC	Porirua City Council
PDP	Proposed District Plan

The Property Boundary	means land owned by Willowbank Trustee Limited as shown on the area shown on drawing "Willowbank Farm Property Boundary".
Project	The operation and expansion of the Willowbank Quarry and associated works.
Project Area	The area within the quarry footprint and any other areas that are covered by this consent including offsetting areas, fill site, and haul roads.
QMP	Quarry Management Plan
QRP	Quarry Rehabilitation Plan
Quarry Site	Willowbank Quarry (application site)
Quarry Website	Means a website, or part of a website, dedicated to the Quarry, maintained by the consent holder for the duration of the consent and on which will be hosted monitoring reports, CLG Minutes and other information required by these conditions.
SH58	State Highway 58
SRP	Sediment Retention Pond
Stage	means project stages, as set out in the application documents and shown on the drawings included in Appendix 1 of the application
TMP	Traffic Management Plan
ULR	Unformed Legal Road
Quarterly Period	Is defined as the three-month periods respectively beginning 1st January, April, July and October.
Quarterly	Means by the 10th working day following the end of the preceding period by the - 10th of April - 10th of July - 10th of October - 10th of January

General conditions

 The location, design, implementation and operation of the activity shall be in general accordance with the following application documents and information submitted in support of application RC8436 & LU0125/21:

Supporting information and technical reports:

- a) Willowbank Quarry Application for Resource Consent and Assessment of Environmental Effects, prepared by Beca Limited, 29 July 2021.
- b) Proposed Quarry Site and Staging Plans, Prepared by Beca Limited, 21 June 2021.
- c) Records of Title, prepared by Beca Limited, 21 June 2021.
- d) Landscape and Visual Assessment, prepared by Beca Limited, 29 July 2021.
- e) Traffic Impact Assessment, prepared by Tim Kelly Transportation Planning Limited, 21 July 2021.
- f) Acoustic Effects Assessment, prepared by Marshall Day Acoustics Limited, 31 May 2021.
- g) Preliminary Geotechnical Assessment, prepared by Beca Limited, 16 June 2021.
- h) Air Quality Assessment, prepared by Beca Limited, 8 September 2021 [updated]
- i) Ecology Impact Assessment, prepared by Cardno (NZ) Limited, 7 July 2022 [updated].
- j) Erosion and Sediment Control Plan, prepared by Ridley Dunphy Environmental, July 2022 [updated].
- k) Draft Quarry Management Plan, prepared by Fulton Hogan, June 2021.
- I) Further information provided in response to Council's s92 requests for information and supplementary information provided by the applicant,
 - i. Response to s92 Request for Information [first tranche consisting of noise and vibration, transport, and quarry design], dated 24 September 2021, prepared by Beca (and subsequent email from Aimee Brown to Karen Williams clarifying information within this response, dated 22 October 2022).
 - ii. Response to s92 Request for Information [second tranche consisting of landscape and visual amenity, and ecology], dated 22 October 2021, prepared by Beca
 - iii. Supplementary response to s92 Landscape and Visual Assessment Housing Inventory, Dated 28 January 2022, prepared by Beca
 - iv. Response to Transportation Questions, dated 24 February 2022, prepared by Tim Kelly Transportation Planning Ltd
 - v. Supplementary response to s92 Avian Community, dated 17 March 2022, prepared by Stantec
 - vi. Response to outstanding information, dated 11 March 2022, prepared by Beca
 - vii. Willowbank Quarry Unformed Legal Road Alternative Access, dated July 2022, prepared by Beca
 - viii. Landscape Visual Mitigation Plan, Access Road, and Bund Cross Sections, dated August 2022, prepared by Beca
 - ix. Memo Updated operational noise modelling results, dated 16 August 2022, prepared by Marshall Day Acoustics
 - x. File note from Tim Kelly "Willowbank Quarry: Traffic Assessments Applicant Position", dated 12 July 2022

- xi. Fill Site Plans dated 19 August 2022
- xii. Letter to David McMahon with Biodiversity Offset amendments, dated 16 August 2022, prepared by Stantec

Advice Note: Where there may be contradiction or inconsistencies between the application and further information provided by the applicant, the most recent information applies. In addition, where there may be inconsistencies between information provided by the applicant and conditions of the consent, the conditions apply.

2. The duration of this consent shall be limited to a period of 35 years from the time consent is given effect. The site shall be rehabilitated in general accordance with the Quarry Rehabilitation Plan required by Condition 92.

Surrendering the short term consent

3. The Short Term Consent (RC7695 – LU0055/20) will be surrendered upon the exercise of the land use component of the Long Term Consent (RC8436 – LU0125/21).

Pre-construction requirements

- 4. The Consent Holder shall ensure that a copy of this consent, and all documents and plans referred to in this consent, are:
 - a) kept on site at all times and presented to any Porirua City Council Compliance Officer upon request; and
 - b) the relevant documents relating to specific activities will be provided to each operator or contractor undertaking the works authorised by this consent, prior to works commencing.

The Consent Holder shall ensure that all contractors are verbally briefed on the requirements of the conditions of this consent prior to works commencing.

5. The Consent Holder shall contact Council's Resource Consents Monitoring and Enforcement Officers at least 48 hours prior to any physical work commencing on the site and give notice of the date upon which such works will commence. This notice shall quote the RC number of this consent and the address of the site, and shall be in the form of an email to RMAMonitoring@poriruacity.govt.nz.

Discovery of artefacts

6. If koiwi, taonga, waahi tapu or other archaeological material is discovered in any area during the works, work in that vicinity shall immediately cease and the Consent Holder shall notify PCC, Te Rūnanga o Toa Rangatira Inc, and Taranaki Whānui (PNBST) (only if relevant to Fill Site 2 works) and Heritage New Zealand Pouhere Taonga (Heritage New Zealand) as soon as possible, but within twenty-four hours. If human remains are found, the New Zealand Police shall also be contacted. The Consent Holder shall allow the above parties to inspect the site and in consultation with them, identify what needs to occur before work can resume.

Notification shall be emailed to;

- Te Rūnanga o Toa Rangatira Inc, resourcemanagement@ngatitoa.iwi.nz
- If the discovery is related to Fill Site 2 works, also notify Taranaki Whānui (Port Nicholson Block Settlement Trust), taiao@portnicholson.org.nz
- PCC, RMAMonitoring@poriruacity.govt.nz
- Heritage New Zealand, information@heritage.org.nz

Heritage New Zealand shall also be contacted by phone on 04 472 4341 (National Office).

No works may resume in the area of the discovery until the Consent Holder has received written notification that consultation with the parties identified above has been undertaken to the satisfaction of the Council's Compliance Monitoring Officer.

Advice Note: Evidence of archaeological material may include burnt stones, charcoal, rubbish heaps, shell, bone, old building foundations, artefacts and human burials.

Hours of Operation

7. The hours of operation and the quarry activities that may be undertaken during those hours are limited to those set out in **Table 1**.

Table 1: Hours of quarry activities and other associated activities

Day/time			Allowable activities	
At all times			Maintenance of machinery, refuelling providing that it occurs after 7am or before 6pm, dust suppression, the management and maintenance or on-site sediment control structures, works associated with monitoring, and security requirements	
Daytime	Monday to Friday, excluding public holidays	7:00am to 6:00pm	All quarry activities Up to 60 heavy vehicle movements per hour	
	Saturday (except Easter Saturday, which shall be treated as a public holiday for the purposes of these conditions)	7:00am to 3:00pm	All quarry activities Up to 60 heavy vehicle movements per hour	
	Monday to Friday, excluding public holidays	11:00am to 3:00pm	Blasting activities (no more than 1 per 3 week when averaged over any rolling 12 month period)	
	Monday to Friday, excluding public holidays	8:00am to 5:00pm	Construction activities (limited to the access road bund construction and maintenance of the access road)	
Evening	Monday to Friday on up to 60 evenings per 12 month rolling period of which no more than 10 evenings are permissible during the months that daylight saving hours apply to. There shall be no quarry activity at all on public holidays	6:00pm to 10:00pm	All quarry activities excluding blasting Up to 24 heavy vehicle movements per hour	

and the period from 20		
December to 5 January		
Inclusive.		

Evening operations

8. Notice must be given to the Council's Compliance Monitoring Officer and to affected neighbours via the proposed Community Liaison Group, or similar at least 5 working days before evening works commence. The notice shall outline the reason(s) that evening works are required. The Consent Holder shall maintain a log record of every such evening on which this exemption is utilised.

Complaints

- 9. The Consent Holder shall maintain and keep an electronic record of complaints regarding all aspects of operations at the site related to the exercise of this consent, received by the Consent Holder.
 - a) The record shall include:
 - i. The name and address of the complainant;
 - ii. The date and time that the complaint was received;
 - iii. Details of the alleged event/incident;
 - iv. The weather conditions and wind direction at the time of the complaint;
 - v. Any measures undertaken by the Consent Holder in response to the complaint and response provided to the complainant; and
 - vi. Any other relevant information.
 - b) Complaints received shall be forwarded to Council's Compliance Monitoring Officer within 24 hours of receiving the complaint.
 - c) The Consent Holder shall create a summary of complaints and measures undertaken and provide it to the CLG meetings, and to other parties on request.
 - d) The consent holder shall maintain the Quarry Website for the duration of the consent and shall ensure that it includes provision for members of the public being able to upload complaints to the Quarry Website, and for a receipt of these complaints lodged to be provided to the complainant.

Community Liaison Group

- 10. The Consent Holder shall establish and facilitate the continued operation of a Community Liaison Group (CLG) in accordance with the following requirements:
 - a) The purpose of the CLG includes, but is not limited to, the following:
 - i. To promote effective engagement on an on-going and regular basis about matters associated with the quarrying operations;
 - ii. To promote the flow of information between the local community and the Consent Holder so as to, wherever possible, address any issues that may arise;
 - iii. To discuss the results of monitoring and any matters that may arise as a result of the monitoring; and
 - iv. To discuss any feedback on effectiveness of management plans and conditions.

- b) The CLG must initially comprise up to two representatives of the quarry operator and the Consent Holder must invite one representative of the Porirua City Council, one from Wellington Regional Council, three representatives of community members (including at least one from Murphys Road residents), and lwi representatives.
 - **Advice Note:** This condition only governs initial membership for the purposes of convening the first meeting of the CLG. On-going membership requirements will be determined by the CLG.
- c) The Consent Holder shall ensure that members of the CLG are provided with the opportunity and facilities to meet:
 - i. At least 30 working days prior to the start of any extraction activities; and
 - No-less frequently than quarterly during the first year of quarrying operations and biannually thereafter, unless all members of the CLG agree there is no need for a meeting;
- d) If the Consent Holder, in progressing any element of the quarry, wishes to call a meeting of the CLG to obtain community input, the meeting regime may be shifted to accommodate such a request;
- e) The time, date and venue of proposed meetings shall be notified to members of the CLG (by email) at least 10 working days in advance of the meeting;
- f) Minutes of the CLG meetings shall be kept by the Consent Holder and be made publicly available and uploaded to the Quarry Website;
- g) The Consent Holder shall engage an independent chairperson to facilitate CLG meetings;
- h) The Consent Holder shall meet the reasonable administrative costs of the CLG meetings (e.g. meeting invitations; meeting venue; preparation of meeting minutes) and chairing duties; and
- i) The Consent Holder shall, in consultation with the CLG, develop a preferred method for communicating with the surrounding residents and hosting key documents (for example, a website, or other document hosting portal).

Advice Note: In the event that it is not possible to establish a CLG or convene meetings through lack of interest or participation from the local community, then such failure to do so will not be deemed a breach of these conditions. Should the local community wish to re-establish meetings after a period of inactivity, then the conditions above shall continue to apply.

Review of Noise and Vibration Management Plans by the CLG

10A. The Consent Holder shall provide draft copies of the Noise Survey Plan and Blasting Noise and Vibration Management Plan to the CLG for review and comment at least 30 working days prior to submitting the management plan(s) to the Manager for certification.

- a) Any comments and inputs received from the CLG shall be provided to the Consent Holder within 20 working days of receipt of the respective management plan. Comments shall be considered by the Consent Holder, and the Consent Holder shall update the Management Plans to incorporate feedback received.
- b) Where the Consent Holder does not adopt any of the feedback received or recommendations made, the Consent Holder shall provide a description of the feedback or recommendations together with an explanation of why those changes were not made, and submit this to the Manager and the CLG at the same time as providing the Management Plan(s) for certification.

Advice Note: Should the CLG choose not to take up the offer, or does not respond to the offer, that does not constitute a non-compliance of this consent condition.

Management Plans

- 11. Unless otherwise agreed in writing by the Council's Compliance Monitoring Officer, the Consent Holder shall undertake all works, monitoring, and reporting in general accordance with the certified Management Plans and conditions of consent.
- 12. The certification of management plans shall follow the process in (a) to (d) below:
 - a) The management plans listed in Table 2 shall be submitted to the Council's Compliance Monitoring Officer for certification at least 20 working days prior to the commencement of any activities associated with or controlled by the specific management plans (unless otherwise specified in Table 2). The certification process shall be confined to confirming that the Management Plan adequately gives effect to the relevant condition(s).

Table 2: Timeframes for providing management plans

Management Plan	Submission timeframe to Council's Compliance Monitoring Officer
Quarry Management Plan (QMP)	No later than 20 working days prior to the commencement of any activity authorised by this consent.
Noise Management Plan (NMP)	No later than 20 working days prior to the commencement of any activity authorised by this consent.
Noise Survey Plan (NSP)	No later than 20 working days prior to the commencement of noise monitoring activities.
Blasting Noise and Vibration Management Plan (BNVMP)	No later than 20 working days prior to the commencement of any blasting activity authorised by this consent.
Traffic Management Plan (TMP)	No later than 20 working days prior to use of the intersection by heavy vehicles, as authorised by this consent.
Biodiversity Offset and Monitoring Plan (BOMP)	At least 20 working days prior to the commencement of any biodiversity offset works.
Lizard Management Plan (LMP)	At least 20 working days prior to site investigation commencing in areas of potential lizard habitat (as identified in Cardno Ecological Impact Assessment).
Quarry Rehabilitation Plan	Five years prior to the decommission of the Quarry.

b) If 20 working days have passed since the management plan has been provided to the Compliance Monitoring Officer under clause (a) above, and the consent holder has not received a response from the Compliance Monitoring Officer, the Management Plan shall be deemed to be certified.

- c) If the Compliance Monitoring Officer (s') response is that they are not able to certify the Management Plan they must provide the consent holder with reasons and recommendations for changes to the Management Plan in writing. The consent holder shall consider any of the reasons and recommendation of the Compliance Monitoring Officer(s) and resubmit an amended Management Plan to be certified.
- d) If the Consent Holder has not received a response from the Compliance Monitoring Officer within 10 working days of the date of resubmission under clause (c) above the Management Plan will be deemed to be certified.
- e) The Consent Holder may request amendments to the certified management plans by submitting the amendments in writing for the certification of the Council's Compliance Monitoring Officer, in accordance with (b) (d) above. Except as provided for in (b) (d), the amendments sought shall not be implemented until the Consent Holder has received notice in writing that the amended management plan has been certified by the Council's Compliance Monitoring Officer.

Advice Note: Council may exercise the need to peer review any management plan by a suitably qualified person, and reasonably cost recover this process.

Quarry Management Plan

- 13. The Consent Holder shall prepare a final **Quarry Management Plan** (QMP) prior to the commencement of activities authorised by this consent. The objective of the QMP is to is to ensure that operations and environmental risks are managed appropriately, and within the conditions of the resource consents issued by Porirua City Council.
 - The QMP shall be prepared in consultation with the contractor undertaking the works and shall be submitted to the Compliance Monitoring Officer for certification in accordance with the process set out in Condition 12.
- 14. The final QMP shall be based on the draft QMP received with the application but shall be updated to incorporate requirements of this consent. The final QMP shall include at a minimum:
 - a) Stages of quarrying activity, fill sites and access and timings for each stage;
 - Information relating to the day to day management of the quarry site including the management of vehicle movements, the discharge of dust to air and sediment and erosion control;
 - c) Information regarding how the management plans required by this consent will be given effect to and who will be responsible for their implementation;
 - d) A description of operational procedures and monitoring that will be implemented to;
 - i. record and monitor truck movements and safety and performance of intersection;
 - ii. record hours of operation and blasting activities;
 - iii. minimise visual effects from night-time truck movements on the access road, including prohibiting the use of high-beams and flashing lights; and
 - iv. minimise dust and sediment and erosion
 - e) Specific design details, construction and certification procedures to ensure long term stability of finished and stabilised slopes, faces and batters;
 - f) Maintenance, monitoring, and inspection procedures;

- g) Site plan indicating the location of quarry equipment, infrastructure and all other relevant information;
- h) Guidelines for vehicle movements;
- i) Complaints procedures;
- j) Dust management and monitoring procedures which are to include:
 - Identification of roles and responsibilities of site personnel including responsibility for ensuring the effective application of dust control measures;
 - Procedures for undertaking a daily inspection of the site when quarrying is occurring and summarising the outcome of the inspection in a daily environment diary – this to include but not be limited to operation of a water cart or other water application methods, wind speed and direction as determined from the climate station, noting any speeds over 5 m/s;
 - Description of air quality monitoring to be implemented at the site, noting Ms Ryan's comment that it should be done in the vicinity of the boundary with 327 and 328 Murphys Road and a suitable instrument would be a light scattering instrument to continuously measure particulate matter as PM10 and PM2.5 as an indicator for dust leaving the site;
 - Requirement for a dust monitor to be installed and maintained on the boundary between Willowbank Farm and 233A Murphys Road;
 - Procedures for using and reporting the results of the air quality monitoring to inform the dust management on the site;
- k) Designated vehicle refuel and maintenance locations;
- I) Earthworks Management Plan including requirement for management of overburden);
- m) Noise Management Plan and Blasting Noise and Vibration Management Plan;
- n) Safety Management Plan;
- o) Site Specific Hazard Management Plan (as relevant to the consents);
- p) Measures to maintain public access to Unformed Legal Roads during operations of Fill Site 2;
- q) Key contact details for staff members responsible for ensuring compliance with this consent.

Advice Note: The Quarry Management Plan shall be the overarching management document relating to the site. It shall incorporate and give effects to the other management plans required by this consent.

- 15. All works (site preparation and operation/maintenance) shall be undertaken in accordance with the final certified QMP which details the procedures that will implemented to operate in accordance with the conditions of this resource consent. The QMP shall be reviewed and updated at least once every five years from the exercise of this consent. Any changes to the QMP shall be submitted to the Council for certification during the period of this consent as appropriate to improve management and contingency procedures.
- 16. Any changes that are proposed to the QMP once works commence, shall be submitted to the Council's Compliance Monitoring Officer, for certification no less than 20 working days prior to their implementation on site. The Plan and any revisions shall include best practicable options for achieving compliance with the conditions of consent.

Construction Noise

17. Any construction activity within the quarry site that is related to the quarry or access road shall be designed and implemented in accordance with the provisions of NZS 6803:1999 Acoustics – Construction Noise, to achieve compliance with the noise levels in **Table 3** when measured at 1 metre from the most exposed façade of an occupied dwelling not occupied or owned by the Consent Holder.

Table 3: Construction Noise Limits

Time of week	Time period	L _{eq}	L _{max}
Weekdays	0630-0730	60	75
	0730-1800	75	90
	1800-2000	70	85
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	75	90
	1800-2000	45	75
	2000-0630	45	75
Sundays and public	0630-0730	45	75
holidays	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

Advice Note: Construction activities shall only be those activities related to establishing noise bunds and fencing adjacent to the access road and any maintenance or repair activities undertaken in relation to this road. Noise from these activities shall managed in accordance with NZS 6803:1999 Acoustics - construction noise and comply with the limits stated therein.

Operational Quarry Noise

- 18. Prior to any removal of aggregate offsite, as authorised by this consent, the Consent Holder shall provide certification to the Council's Compliance Monitoring Officer from a suitably qualified and experienced acoustic consultant that the noise mitigating bund along the access road have been located and constructed in accordance with the certified plans and are constructed to a standard that will achieve their intended noise mitigating purpose. The bund shall be maintained for the duration of the quarry activity to remain effective in reducing noise experienced outdoors at dwellings located in proximity to the access route.
- 19. To minimise noise and vibration from the access route, the Consent Holder shall maintain the access road in good condition, specifically preventing or remediating the road surface to repair or avoid pot holes or surface irregularities.
- 20. The Consent Holder shall take all practicable steps to ensure that heavy vehicles associated with quarrying operations:
 - a) do not use engine brakes within the quarry site, or on the Access Road when approaching or leaving the Quarry Site;
 - b) turn off their engines if they breakdown or are likely to be stopped for longer than 3 minutes, provided that this sub-clause (b) shall not apply to those vehicles waiting to exit the Access Road at the SH58/Access Road intersection; and

- c) do not exceed 50 km/h while on the Access Road.
- 21. All quarry activities, except blasting, shall be undertaken such that the noise limits in **Table 4** are complied with at the notional boundary of any dwelling not occupied or owned by the Consent Holder.

Table 4: Operational noise limits

Time	Noise limit
7am – 7pm	55 dB L _{Aeq} (15min)
7pm – 10pm	50 dB L _{Aeq} (15min)
10pm – 7am	45 dB L _{Aeq} (15 min)
	70 dB LAFmax

Advice Notes:

- Sound levels shall 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.

Noise Management Plan

- 22. The Consent Holder shall prepare a **Noise Management Plan** (NMP) prior to the commencement of activities authorised by this consent.. The objective of the NMP is to develop and document mechanisms and processes to ensure compliance with the noise limits specified in Conditions 17 and 21. The NMP shall identify significant sources of noise to be operated on the site and the means by which these effects will be managed and mitigated to avoid off-site adverse effects as far as practicable.
 - The NMP shall be prepared by a qualified and experienced acoustic specialist, in consultation with the contractor undertaking the works and shall be submitted to the Compliance Monitoring Officer for certification in accordance with the process set out in Condition 12.
- 23. The NMP shall include, but not be limited to the following details:
 - a) Noise monitoring and management objectives, roles and responsibilities.
 - b) Cellphone and email contact details of the Quarry Manager, to whom any complaints or comments should be made in the first instance. (These details will also be shown on the sign at the Quarry entry.)
 - c) Competence training and awareness.
 - d) Durations, hours of operation, and noise limits applying at these times.
 - e) Identify practical methods to be implemented to manage noise received beyond the Property Boundary including, but not limited to:
 - Measures to screen or partially enclose noisy equipment
 - Restrictions on location of noise generating equipment and plant;
 - Maintenance of equipment and vehicles to minimise noise emission;
 - Measures taken to control vehicle speed of any vehicles using the access road and limits on the use of engine/exhaust braking, as required by condition 20 above;

- Limits on the use of engine/exhaust braking;
- Management of reversing alarms and audible warning devices.
- f) Machinery and equipment types and sizes expected to be used on-site and associated noise levels;
- g) Requirement for equipment to be well maintained;
- h) Noise mitigation methods to ensure the transport of material along the haul route results in compliance with the consented noise limit.
- i) Include a protocol for responding to any exceedance of noise limits specified in Conditions 17 and 21 identified within the results of noise monitoring undertaken in accordance with Conditions 24 and 25, including identifying any proposed remedial actions to avoid any further non-compliance and a procedure for notifying the Compliance Monitoring Officer and relevant stakeholders of these remedial actions.
- j) Document review process.

Advice Note: in terms of maintaining updated list of machinery, any updates of the list itself do not require re-certification of the management plan

Noise Monitoring/Noise Survey Plan

- 24. The Consent Holder shall prepare a **Noise Survey Plan** (NSP) prior to noise monitoring commencing. The purpose of the NSP is to confirm where, when, how, and how long operational noise monitoring shall occur to ensure compliance with the noise performance standards in Condition 21.
 - The NSP shall be prepared by a suitably qualified and experienced acoustic specialist and shall be submitted to the Compliance Monitoring Officer for certification in accordance with the process set out in Condition 12.
- 25. The NSP shall, as a minimum, include the following:
 - a) Measurement methods and standards to be followed. This shall include methods used to identify and remove measurement results for time periods affected by sound associated with any temporary events or activities (such as noise from construction activities), and during periods where wind speeds exceed 5 m/s or the rainfall rate exceeds 6 mm/hour;
 - b) The number and location of sites at which monitoring is to take place. This shall include the preferred survey positions and alternative equivalent positions should the preferred positions be inaccessible.
 - c) A description of the exposure to, and proximity of each selected monitoring site to consented activities justifying its selection also stating what agreement (if any) has been obtained from landowners / occupiers regarding access for noise monitoring purposes.
 - d) A protocol for informing the CLG regarding selected monitoring sites and rationale for their selection. The NSP shall include a summary of any feedback received from the CLG, and how this has or has not been taken into consideration in the final version of the NSP.
 - e) Stated methods for determining appropriate monitoring duration at each site having particular regard to quarry activities over the monitoring period, seasonal effects and records of wind speed and direction occurring over the monitoring period.

- f) An overall framework for noise monitoring at various project stages. As a minimum the NSP shall specify at which sites noise monitoring to take place;
 - i. Within 90 days of giving effect to this consent;
 - ii. Within 90 days of commencing works on each of the Stages 2, 3 and 4; and
 - iii. Within 90 days of any significant change in quarry equipment.
- g) A requirement for noise monitoring reports to include summary graphs and tables of measurement results and for monitoring reports to generally conform with NZS 6801:2008
 Acoustics – Measurement of Environmental Sound and NZS 6802:2008 Acoustics – Environmental Noise (Section 9 in both standards);
- h) A protocol to submit any noise monitoring report prepared under (vii) to the CLG at the same time as reports are provided to the Council; and
- A process for identifying when and how the NSP shall be reviewed and updated in response to such factors as changes to quarry processes or in response to noise complaints or other stated factors.

Advice Note: Under this consent any replacement NSP prepared following a review shall be certified by Council under Condition 12 prior to implementation.

Blasting

- 26. The vibration and air-overpressure generated by blasting shall comply with the limitations set out in this condition.
 - a) All blasting vibration shall be measured within 500mm of ground level on the foundations, piles, footings or structural element on the perimeter of buildings not on the subject site. All measurements and assessments shall be conducted in accordance with the requirements of DIN4150-3:1999 Structural vibration Effects of vibration on structures.
 - b) The vibration from all blast events must not exceed a limit of 5mm/s PPV when measured on any building not on the subject site.
 - c) All blasts shall be *designed* to achieve vibration levels no greater than 3mm/s PPV as an operational target when measured at any dwelling that is not occupied or owned by the Consent Holder.
 - d) If vibration monitoring demonstrates that the vibration from blasting exceeded 3mm/s PPV at any dwelling not occupied or owned by the Consent Holder, the Consent Holder shall:
 - Notify the Council of the exceedance in writing within 5 days of the blast event. The
 notification must set out the measured vibration level, the monitoring location, the reasons
 for the exceedance and a clear plan to be adopted for managing and designing future blast
 events to avoid any further exceedances as far as practicable; and
 - ii) Notify the CLG group at the meeting that immediately follows the blast event. The CLG group shall be advised of the same details set out in (i) above as well as any formal response the Consent Holder receives from the Council.
 - e) The air over-pressure from all blast events shall comply with limits of 115dB L_{ZPeak} at any building not on the same site that is occupied during the blast, and 125 dB L_{ZPeak} at any building not on the same site that is not occupied during the blast.
- 27. Production blasting shall not commence until the Consent Holder has carried out trial blasting with low charge weights and monitoring at Manuka Corner and at two dwellings using the roving seismographs to determine

the site-specific vibration attenuation characteristics <u>and likely air over-pressure value,</u> in accordance with the BNVMP.

- 28. Blasting shall be limited to no more than 1 blast every three weeks when averaged over any rolling 12 month period. Blasts may only be fired between the hours of 11am and 3pm on weekdays. No blasting shall occur on weekends or public holidays (including days where a public holiday is observed on a weekday).
- 29. Electronic detonators must be used for all blasting.

Blasting Noise and Vibration Management Plan

- 30. The Consent Holder shall prepare a **Blasting Noise and Vibration Management Plan** (BNVMP) prior to the commencement of blasting activities authorised by this consent The objective of the BNVMP is to:
 - a) develop and document mechanisms and processes to ensure compliance with the noise, <u>air</u> over-pressure, and vibration limitations specified in these conditions,
 - b) set out procedures and methods to further minimize the noise, <u>air over-pressure</u> and vibration levels resulting from blasting events, and
 - c) identify the means by which blasting noise, <u>air over-pressure</u> and vibration effects will be managed and mitigated as far as practicable.

The BNVMP shall be prepared by a qualified and experienced acoustic specialist, in consultation with the contractor undertaking the works and shall be submitted to the Compliance Monitoring Officer for certification in accordance with the process set out in Condition 12.

- 31. The BNVMP shall address, but not be limited to the following matters:
 - a) Contact details and specific responsibilities for all persons responsible for administering this plan.
 - b) Procedures and methods for ensuring that all persons responsible for the management of blasting and monitoring of vibration and air over-pressure are adequately trained and competent and aware of the need to carefully manage vibration.
 - c) The vibration and air over-pressure limits and all associated limits and requirements for blasting as set out in Condition 26.
 - d) Describe the methods and procedures for carrying out trial blasting with low charge weights and vibration and air over-pressure monitoring at Manuka Corner and at two dwellings using the roving seismographs to determine vibration attenuation data to inform the design of production blasting.
 - e) Set out methods and procedures for storing the records of all vibration and air over-pressure monitoring, including details and photos of the monitoring equipment and set ups.
 - f) Procedures for responding to and recording any complaints received from surrounding landowner(s) relating to blasting levels, in accordance with Condition 9.
 - g) Procedures for notifying surrounding residents prior to blasting events.

h) Any other matter that is relevant or appropriate to include to ensure that vibration and air overpressure levels are minimised as far as practicable and comply with the limitations set out in this consent.

Blast monitoring

- 32. The vibration and air over-pressure levels must be monitored for all blasting. The monitoring shall be conducted in accordance with the requirements of Condition 31 and the requirements set out below:
 - a) The vibration from all blasting must be measured using a geophone securely attached to a concrete block weighing no less than 30kg and fully set into the ground to a depth of not less than 500mm at the position known as 'Manuka Corner'. This monitoring location shall be permanent.
 - b) In addition to the Manuka Corner monitoring, there shall be two 'roving' seismographs designed to be moved between the nearest 6 dwellings (identified in the BNMP of Condition 31) to measure the vibration of the first 15 blasts (excluding trial blasts in accordance with Condition 27). The roving seismographs shall be used to measure the vibration levels as required by Condition 26 on the dwellings identified in the BNMP. The roving seismographs shall be used at each individual dwelling for not less than three consecutive blast events. The consent holder shall make all reasonable attempts to request permission to measure at the nearest 6 dwellings (as above) and at least 2 weeks in advance of needing to monitor there. If permission to monitor is refused or there is no response to the request, the consent holder does not need to monitor at that dwelling.
 - c) The number of roving seismographs may be reduced to one after the first 15 blasts where the Consent Holder can demonstrate to the satisfaction of the Council that the relationship between measured vibration levels at Manuka Corner and the various positions of the roving seismographs is consistent enough to demonstrate that the Manuka Corner monitoring results can be relied upon to demonstrate compliance with the limits in Condition 26 for all future blasting at all dwellings with a high degree of confidence.
 - d) There shall always be one roving seismograph for the duration of this consent unless the Consent Holder can demonstrate to the satisfaction of the Council that the Manuka Corner monitoring station can be relied on solely in the absence of any roving seismographs. One or two roving seismographs may be reinstated if the Council determines that they are required after a period of their absence. The air over-pressure shall be measured for every blast where the roving seismographs are used.

Notification of Exceedance

- 33. As soon as practicable and no longer than 5 days after obtaining monitoring results showing an exceedance of any noise or blasting criterion set out in the conditions of this consent, the Consent Holder shall:
 - a. Provide details to any affected landowners and occupiers; and
 - b. Provide details to the Council's Compliance Monitoring Officer.

Design of bunds and Fill Site

34. The Consent Holder shall submit detailed designs of the access road bunds to the Council's Compliance Monitoring Officer for certification, at least **15 working days** prior to the proposed date of commencement of construction of the bunds. These shall be in general accordance with the concept designs provided to PCC and shall identify the area(s) of shelterbelt planting to be retained and/or reinstated and maintained between the bund and the access road. Any fencing erected along the top of

the bund and the access road must by of a rural type and character and is restricted to post and wire or post and rail.

No works to construct the access road bunds shall commence until the Consent Holder has received notice in writing that detailed designs have been certified by the Council's Compliance Monitoring Officer.

- 35. All earth bunds constructed for the purpose of visual/noise mitigation along the access road and Fill Area 2 shall be no less than 3m in height, have gradients of approximately 1:3 and be grassed along their entire length.
- 36. The Consent Holder shall submit a detailed design of the final contours of the fill site to Council's Compliance Monitoring Officer for certification, at least **20 working days** prior to the proposed date of commencement activities at Fill Site 2. Fill Site 2 shall be contoured to fit with the surrounding rolling landform (i.e. avoiding straight, geometric contouring) and generally reflect the existing contours of the site upon completion.

Quarry Design

- 37. Prior to each stage commencing, the Consent Holder shall provide geotechnical design(s), certified by a suitably qualified and experienced engineer, detailing the following:
 - a. Quarry overburden and rock specific geotechnical batter slope design (working face profiles, batter height, slope angle, bench width, safety bunds, setbacks);
 - b. Haul road design (gradient, width and safety bunds); and
 - c. Any proposed sediment retention earth fill dams to be constructed as part of proposed erosion and sediment control measures.
- 38. Prior to works commencing on Stages 2-4 the Consent Holder shall provide to the satisfaction of Porirua City Council a report relevant to the prior stage of quarry expansion works that details the batter slope stability performance, post-excavation processes or protection measures (including but not limited to proposed modifications to the proposed batter slope design and/or setbacks) and any proposed rehabilitation works.
- 39. The Consent Holder shall provide a geotechnical design, certified by a suitably qualified and experienced engineer, for any proposed sediment retention earth fill dams to be constructed as part of proposed erosion and sediment control measures. The design shall specify slope angles and setbacks along with any recommended post excavation processes or protection measures. A copy of the design shall be provided to the Council's Compliance Monitoring Officer prior to any works occurring.
- 40. Prior to works commencing on Fill Site 2, the Consent Holder shall provide a specific geotechnical design for the proposed fill area including;
 - a) Preparation works prior to placement of fill to ensure the foundation and compacted fill are stable in the long term.
 - b) Fill batter slope design (batter height, slope angle, bench width) to achieve long term stability of finished and stabilised slopes, faces and batters.
 - c) Fill batter short and long term slope stability analyses including local geohazards risks and allowance for ground shaking associated with rupture along nearby faults and mitigation of multi bench failure within fill.
 - d) Impact of fill on short and long term stability of natural slopes on which fill is to be placed.

- e) Fill compaction methodology, compaction level required, monitoring and reporting.
- f) Surface water and groundwater management.
- g) Provide progressive and ultimate rehabilitation plan including surface and groundwater management.
- 41. Within 3 months of works concluding on Fill Site 2, the Consent Holder shall provide a fill site completion report including cross sections and stability analysis of the final fill configuration and rehabilitation to the satisfaction of the Council's Compliance Monitoring Officer.

Earthworks

- 42. The Consent Holder shall forward the final Erosion and Sediment Control Plan (ESCP) as certified by the Greater Wellington Regional Council (GWRC) to the Council's Compliance Monitoring Officer prior to the commencement of works.
- 43. The Consent Holder must ensure that, prior to the commencement of any works on the site that may cause silt or sediment generation, all silt and sediment control measures are in place in accordance with the ESCP certified by the GWRC as referred to in Condition 42 of this resource consent.
- 44. Land disturbed by earthworks and or the deposition of overburden or stockpile material shall be wetted as necessary to ensure that dust nuisance is not generated beyond the site.
- 45. The earth bunds and fill area(s) shall be progressively topsoiled and grass hydroseeded or otherwise stabilised to minimise the amount of exposed overburden at any one time.

Dust

- 46. Dust management shall be undertaken in accordance with methods outlined in the certified QMP in accordance with Condition 12.
- 47. The Consent Holder shall ensure that there are no discharges to air resulting from the exercise of this consent that are noxious, dangerous, offensive or objectionable at or beyond the property boundary.

Advice Note: For the purpose of this resource consent, the Compliance Monitoring Officer will consider an effect that is objectionable or offensive to have occurred after having regard to:

- i. The frequency, intensity, duration, amount, effect and location of the suspended or particulate matter; and/or
- ii. receipt of complaints from neighbours or the public: or
- iii. relevant written advice or a report from the GWRC or health authority.
- 48. The Consent Holder shall install a site climate station on site that is able to measure and record wind speed, wind direction, temperature and rainfall.
- 49. The Consent Holder shall undertake dust monitoring in accordance with the dust monitoring procedures provided for in the certified QMP in accordance with Condition 14 j. The results of the monitoring shall be included in the Annual Report. A dust monitor shall be installed and maintained on the boundary between the Site and 233A Murphys Road.
- 50. (condition deleted)

Traffic

Intersection design, construction and audit

- 51. The Consent Holder shall provide the final detailed designs of the SH58 intersection upgrade to Waka Kotahi for approval a minimum of 20 working days prior to submitting the drawings to Council for certification.
 - The final detailed designs shall include a design for lighting the arrival and departure sides of the intersection to ensure adequate visibility for through traffic and vehicles using the intersection during the hours of darkness.
- 52. Prior to the commencement of works to construct the intersection upgrade, the consent holder shall provide to the Council's Compliance Monitoring Officer the following:
 - a) A copy of the final detailed design of the intersection included with the Carriageway Access Request to Waka Kotahi;
 - b) A copy of the Construction Traffic Management Plan (**CTMP**) included as part of the Carriageway Access Request to Waka Kotahi; and
 - c) Written confirmation from Waka Kotahi that both the detailed design for the intersection and the Construction Traffic Management Plan are acceptable.

Advice Note: It is a requirement of the Government Roading Powers Act 1989 that any person wanting to carry out works on a state highway first gain the approval of Waka Kotahi for the works and that a Carriageway Access Request (**CAR**) is applied for and approved before any works commence. Waka Kotahi will then oversee the works in accordance with the CAR approval.

- 53. Construction of the intersection design shall be carried out in accordance with the plans and CTMP submitted to Porirua City Council.
- 54. As part of the intersection construction, and for the duration of the consent, the consent holder shall cut back and maintain all vegetation within the site, along site boundaries, and within the legal road so that all signs associated with the intersection, and signs associated with the quarry and Judgeford Kennels and Cattery, are unobstructed to motorists on the state highway.
- 55. Use of the intersection by heavy vehicles shall not commence until the intersection access upgrade with SH58 has been completed in accordance with Conditions 56-59, and written confirmation from Waka Kotahi (or their representative) has been provided to the Council's Compliance Monitoring Officer of the acceptance of the works, unless otherwise agreed with Waka Kotahi as the road controlling authority.
- 56. The Consent Holder shall arrange for an independent post-construction road safety audit of the quarry intersection to be undertaken in accordance with the 'Road Safety Audit Procedures for Projects Guidelines, May 2013'. The post-construction audit shall be undertaken within 1 month of completion of the intersection upgrade. A copy of the road safety audit shall be provided to Waka Kotahi and the Council's Compliance Monitoring Officer. Unless otherwise agreed with Waka Kotahi, all identified operational safety concerns shall be addressed by the Consent Holder before heavy vehicles start using the intersection. Any audit recommendations and design changes arising from the road safety audit shall be agreed with Waka Kotahi and the Council's Compliance Monitoring Officer prior to construction of these works being undertaken.

Video camera surveillance

56A. The Consent Holder shall install and maintain for the duration of the consent video camera surveillance at the entry to the Access Road (i.e. SH58 intersection), at the corner of the Access Road opposite 233A

Murphys Road, and at the Murphys Road entry to Willowbank Farm. Recordings from these cameras will be retained for a period of 12 months.

Heavy Vehicle Limits

57. Heavy vehicle movements to and from the quarry shall not exceed 500 trucks per day (i.e. 250 entry movements and 250 exit movements). This shall be monitored, and the data shall be summarised on a monthly basis and provided to the Council's Compliance Monitoring Officer. The monitoring shall include a breakdown of hourly truck arrivals and departures to ascertain compliance with Conditions 58 and 59.

Pre-stage 2B State Highway 58 safety upgrades

- 58. Prior to completion of the Stage 2B State Highway 58 upgrade, heavy vehicle movements shall not exceed the limits set out in **Table 5**, in conjunction with the following additional operating limits:
 - a. The maximum number of right turn entry movements from the RTB and/or left turn exit movements will subsequently be reduced to 20 per hour during those periods/hours in which any of the following exceedances have been observed:
 - i. Once the westbound State Highway volumes typically exceed an average of 1,300 vehicles per hour (Monday to Thursday) for any calendar month; or
 - ii. a recorded average truck turning delay of 120 seconds or more for the 85th percentile peak hour of westbound traffic activity on SH58 during the monitoring period.
 - b) Subject to agreement with both Waka Kotahi and Council, the monitoring proposed (under Conditions 67-69) will enable these thresholds to be reviewed based on observations of truck gap-acceptance behaviour and any effects upon through westbound vehicle movements
 - c) Queues waiting in the right turn bay to enter the quarry shall be no more than the 50m storage length of the right turn bay.
 - d) The average delay of turning vehicles waiting in the right turn bay to enter the quarry and turning left exiting the site shall be no greater than 120 seconds.

Table 5: Heavy Vehicle Limits prior to completion of the Stage 2B State Highway 58 upgrade

Time	Right turn entries	Left-turn out exits
Weekday peak times: 7:00am – 9:00am and 4:00pm – 6:00pm Other times (in accordance with operating hours in Table 1)	30 entries per hour Reducing to 20 per hour for those times of the day when the parameters within Condition 58(a)(i) and (ii) are exceeded.	30 exits per hour Reducing to 20 per hour for periods when the parameters within Condition 58(a)(i) and (ii) are exceeded.
Monday to Friday Evening: 6:00pm — 10:00pm	24 movements per hour This applies up to 60 evenings per 12 month rolling period of which no more than 10 evenings are permissible during the months that daylight saving hours apply to. There shall be no quarry activity at all on public holidays and the period from 20 December to 5 January Inclusive.	

Advice Note 1: for the purposes of this condition, 'typical' conditions exclude periods during which traffic conditions are not representative of usual weekday conditions (for example, road closures elsewhere resulting in diversions to SH58, clearance periods after incidents, etc.)

Advice Note 2: These limits are subject to ongoing monitoring of the performance of the intersection and changing traffic volumes on SH58 and shall be adjusted, as required under the TMP.

Post stage 2B State Highway 58 safety upgrades

- 59. Following the completion of the Stage 2B State Highway 58 safety upgrades, the maximum number of heavy vehicles exiting the quarry shall not exceed the limits set in Table 6, in conjunction with the following additional operating limits:
 - a. The maximum number of truck movements exiting the quarry will subsequently be reduced to 20 per hour during those periods/hours in which any of the following exceedances have been observed:
 - i. Once the westbound State Highway volumes typically exceed an average of 1,300 vehicles per hour (Monday to Thursday) for any calendar month; or
 - ii. a recorded average truck turning delay of 120 seconds or more for the 85th percentile peak hour of westbound traffic activity on SH58 during the monitoring period.
 - b) Subject to agreement with both Waka Kotahi and Council, the monitoring proposed (under Conditions 67-69) will enable these thresholds to be reviewed based on observations of truck gap-acceptance **behaviour** and any effects upon through westbound vehicle movements

Advice Note 1: for the purposes of this condition, 'typical' conditions exclude periods during which traffic conditions are not representative of usual weekday conditions (for example, road closures elsewhere resulting in diversions to SH58, clearance periods after incidents, etc.)

Advice Note 2: These limits are subject to ongoing monitoring of the performance of the intersection and changing traffic volumes on SH58 and shall be adjusted, as required under the TMP.

Table 6: Heavy Vehicle Limits post completion of the Stage 2B State Highway 58 upgrade

Time	Left-turn out exits
Other times (in accordance with operating hours in Table 1)	Up to 30 exits per hour Reducing to 20 per hour for those times of the day when the parameters within Condition 59(a)(i) and (ii) are exceeded.
Monday to Friday 6:00pm – 10:00pm	24 movements per hour This applies up to 60 evenings per 12 month rolling period of which no more than 10 evenings are permissible during the months that daylight saving hours apply to. There shall be no quarry activity at all on public holidays and the period from 20 December to 5 January Inclusive.

- 60. Vehicles associated with quarrying activities, including light vehicles, leaving or accessing the quarry must use the site intersection with SH58 and must not travel on Murphys Road or Harris Road.
- 61. Prior to completion of the Stage 2B SH58 Safety Improvements project and closure of the RTB), exiting heavy vehicles are limited to left turn movements out of the intersection only, with right-turn exit movements being prohibited. Light vehicles may turn right until such time as the intersection is reconfigured after which this turn will be prevented by the median barrier.
- 62. Prior to installation of the roundabout at the intersection of Moonshine Road and State Highway 58, there shall be no use of this intersection by heavy vehicles to undertake a 'u-turn' manoeuvre-for the purposes of accessing the quarry.

Traffic Management Plan

- 63. The Consent Holder shall prepare a **Traffic Management Plan** (TMP) prior to use of the intersection by heavy vehicles authorised by this consent. The objective of the TMP is to develop and document mechanisms and procedures to ensure the ongoing safety and performance of the intersection with SH58 and the broader road network. The TMP shall identify safe operational parameters and the means by which traffic safety and efficiency effects will be managed and mitigated to avoid off-site adverse effects as far as practicable.
- 64. The TMP shall be prepared by a qualified and experienced transportation consultant in consultation with Waka Kotahi (or their representatives) (as per Condition 66) and the contractor undertaking the works and shall be submitted to the Compliance Monitoring Officer for certification in accordance with the process set out in Condition 12.
- 65. The TMP shall include, but not be limited to, the following details:
 - a) Description of operational procedures and monitoring that will be implemented to record and monitor truck movements and safety and performance of intersection consistent with Conditions 67-69 of the resource consent;
 - b) The details for how compliance with the limitations of hours of operation, maximum heavy vehicle entry/exit movements will be monitored and reported on, and how any complaints will be recorded and responded to;
 - c) Method for determining how the operational performance from monitoring compares with the safety threshold of an average delay of no more than 120 seconds in any one hour for vehicles entering the quarry via the right turn bay and trucks exiting the quarry.
 - d) How it will be determined whether additional mitigation is required (including but not limited to triggers to review heavy vehicle numbers entering via the right turn in movement or exiting via the left turn out movement) and the methods required to address the assessed safety risk arising from the quarrying operations;
 - e) The procedures and timeframes for the installation of any additional mitigation and/or monitoring measures (if any);
 - f) How any required mitigation will be monitored for effectiveness and any ongoing review requirements for the TMP;
 - g) A formal induction process and written code of conduct for drivers of vehicles and visitors to the site, including ensuring all heavy vehicle operators are aware of the operating limits of the intersection and the prohibition on using Moonshine Road to turn around;

- h) A formal complaints process, which requires that all complaints are recorded, including time, date, reason and source and how the complaint has been resolved;
- Methods for communicating with drivers of heavy vehicles visiting the quarry. At a minimum this should include a phone call and text message to a named contact person responsible for heavy vehicles entering and exiting the quarry;
- j) Methods to manage the arrival of trucks, including encouraging operators to communicate with each other to ensure that no more than two trucks are needing to turn right into the access road, using the RTB, at any one time;
- Ensuring that quarry trucks do not queue within the SH58 road reserve ahead of the opening
 of the quarry in the mornings or when the queuing space in the right turn bay is full (prior to
 completion of the SH58 safety upgrade);
- I) Procedures that will be followed in the event of an incident or accident on SH58 that may impact on the safe movement of vehicles to and from the quarry operation;
- m) Details of measures to be used to deter drivers from using engine brakes on the access road or when approaching or leaving the quarry site;
- n) Appropriate onsite signage;
- Management measures to ensure that exiting trucks travelling towards the Hutt Valley, travel
 to the Transmission Gully Interchange to turn and do not use any of the intervening driveways
 or intersections to turn;
- Management methods to ensure quarry trucks avoid using Pāuatahanui Village, Paekakariki Hill Road and Grays Road as a through route and avoid Pāuatahanui Village during school drop off and pick-up times;
- q) Location of a monitoring cameras at the intersection on the Access Road adjacent to 233A Murphys Road, and at the Murphys Road entry to Willowbank Farm;; and
- r) Reporting requirements.

The consent holder must consult with Waka Kotahi in preparing and finalising the TMP and must ensure that all written feedback received from Waka Kotahi is provided to the Council's Compliance Monitoring Officer when the TMP is submitted for certification, along with a clear explanation of where any comment has or has not been incorporated into the TMP and the reasons why.

66. The TMP is to be an adaptive document. It may be updated by the consent holder at any time provided that prior to doing so further consultation and collaboration occurs with Waka Kotahi. Any changes made to the TMP must be consistent with achieving the objective set out within Condition 63. Any updated provisions must not be implemented until the updated TMP has been re-certified by the Council's Compliance Monitoring Officer.

Monitoring and reporting

- 67. The Consent Holder shall monitor the intersection of Willowbank Road and State Highway 58 for the purpose of identifying, and addressing, any adverse effects on road safety arising from the operation of the activity. The monitoring include the following:
 - a) The Consent Holder shall install, operate and maintain cameras to continuously record vehicle movements at the Willowbank Quarry Intersection, with the retention of recordings for a minimum period of twelve months (the positioning of this camera will not only allow the

- number of truck movements to be recorded, but shall also enable truck delays to be recorded together with the effects upon westbound and eastbound vehicle movements on SH58);
- b) The consent holder shall maintain a record of any official or unofficial incidents or complaints reported to Waka Kotahi, the Porirua City Council or Willowbank Quarry, regarding the functioning of the intersection serving the activity on State Highway 58. For each incident or complaint, camera footage will be reviewed (if relevant) and within two weeks a brief report will be submitted to Porirua City Council and Waka Kotahi summarising the detail of the incident and any recommended remedial action(s).
- 68. The consent holder shall provide a monitoring report approved by a suitably qualified traffic engineer to Waka Kotahi and Porirua City Council at the following times:
 - a) Six months after quarrying operations authorised under this consent commence and thereafter on a six monthly basis until completion of the Stage 2B of SH58 safety upgrade and closure of the right turn access to the quarry; and
 - b) Once annually thereafter for the duration of the consent or until Waka Kotahi agrees no further monitoring and mitigation is needed.
- 69. Each monitoring report required under Condition 68 must contain the following:
 - a) A description of the monitoring undertaken during the reporting period and analysis of the results;
 - b) Clear recommendations of how the intersection is operating, any safety risks identified and any measures to be implemented by the consent holder to reduce the identified safety risks;
 - c) A review of NZTA Crash Analysis System records for the area within 400m of the intersection, with an evaluation to assess whether each crash could have been influenced by the location, design and/or level of use (i.e. number of truck movements) of the intersection serving the activity (note after the safety improvements are completed, this will be limited to the westbound lane of SH58);
 - d) Available traffic count information for weekday traffic data based on Monday to Thursday and excluding weekday public holidays average hourly vehicle flows within each calendar month being taken from the SH58 counter site (Pauatahanui East Site #73) compared against the thresholds used to determine appropriate levels of truck activity) and compares this against the forecasts and draws conclusions regarding the acceptable level of truck activity (Note: Sundays and public holidays are to be excluded);
 - e) Reporting of the average delays for trucks turning right into (pre SH58 Upgrade) and left out (both pre and post SH58 Upgrade) of the quarry for the 85th percentile busiest hour of westbound traffic flows for the period between reports. This is to identify periods in which an average delay of more than 120 seconds in any one hour for heavy vehicles entering or exiting the intersection is exceeded;
 - f) The number and timing of entry and exit movements from the quarry intersection;
 - g) Recommended changes to the intersection or the timing / number of truck movements to address any issues identified above;
 - h) A description of any mitigation measures to be implemented (with agreement from Waka Kotahi) and timings; and
 - i) Any amendments identified as being necessary to the TMP for the following reporting period.

Unformed legal roads

- 70. Prior to operations at Fill Site 2 commencing, all sections of Unformed Legal Road (ULR) within the footprint of quarry activities, and temporary detours discussed below as identified on *Willowbank Quarry Unformed Legal Road Alternative Access (dated July 2022)*, shall be surveyed and copies of the survey(s) provided to PCC.
- 71. The Consent Holder shall maintain the alternative temporary access as identified on *Willowbank Quarry Unformed Legal Road Alternative Access (dated July 2022)* to provide for any member of the public for the duration of time that Fill Site 2 is in operation.
 - Advice Note: The width of all alternative access routes will be suitable for 4WD and sufficient width for recreational users.
- 72. Prior to any section of ULR being unavailable to public access, the Consent Holder shall notify PCC of the section of URL that will be closed and the alternative temporary access will be required and PCC shall publish any such notification.
- 73. No section of ULR shall remain unavailable to the public for longer than 2 years from the date of the commencement of operations at Fill Site 2. Provided that, at its sole discretion, the Council may grant an extension no greater than 1 year to this time period.
- 74. For the duration of its use, the alternative temporary access shall be clearly marked out with permanent materials by the Consent Holder. These markers shall be approved by PCC prior to the temporary detoured section being temporarily closed to public access.
- 75. The public use of the alternative temporary access between the quarry and Fill Site 2 as identified on Willowbank Quarry Unformed Legal Road Alternative Access (dated July 2022) cannot be restricted by any impediment.
- 76. For the duration of quarry related use of the Unformed Legal Roads for access between the quarry and Fill Site 2 the following measures shall also be put in place:
 - a) Crossing point(s) shall be clearly identified with appropriate signage.
 - Signage shall be established on each side of the crossing/s warning users of the alternative temporary access route and that vehicles, including trucks, may be using the Unformed Legal Road.
 - ii. Signage shall be established in advance of the crossing/s warning users of the Unformed Legal Road (i.e truck drivers) that users of the alternative temporary access route may be crossing the Unformed Legal Road and they are required to stop and give way.
 - iii. The Consent Holder may not destroy or damage any part of any ULR to an extent that renders that ULR impassable or unusable for the public in the future.
 - iv. the PCC shall publish the surveys (in Condition 70) prior to the ULR being made unavailable and shall also publish alternative access routes.
 - v. the Consent Holder shall ensure that all signs and notices identifying the alternative access remain visible and legible throughout the period of operations and shall replace the signs and notices as required.
 - b) Posted speed restrictions of 30kph shall be in place.
- 77. The Consent Holder shall ensure that the condition of any section of ULR used for vehicle access is left in no worse condition following the completion of works at Fill Site 2.

78. The Consent Holder shall notify the PCC 15 days prior to the ULR not being required for quarry use.

Advice Notes for conditions 70-78:

- the obligation above is limited only to the sections of Unformed Legal Roads included within the area subject to this consent.
- Nothing in the above obviates either the Consent Holder or landowner from complying with the legal provisions of Unformed Legal Roads between the Willowbank Farm property and a public road.

Ecological Mitigation/Offset and Monitoring

- 79. Removal of trees and shrubs shall be undertaken outside of the peak bird breeding season (September to February). If this is not possible, a suitably qualified and experienced ecologist/ornithologist shall carry out an inspection of all trees to be felled immediately prior to commencement of tree removal. The purpose of this inspection is to determine whether any indigenous birds are nesting in the trees, including checking for the presence of cavities and hollows for nesting birds (e.g., morepork and kingfisher). Should any nesting be observed, tree felling shall be postponed until an experienced ecologist has confirmed that the nest has failed or the chicks have hatched and left the natal site.
- 80. The Consent Holder shall prepare a **Biodiversity Offset and Monitoring Plan** (BOMP) prior to the commencement of any biodiversity offset works. The purpose of the BOMP is to detail objectives and actions to achieve, as a minimum, the quantum and quality of biodiversity offset and ecological regeneration in Pig Gully as shown in Figure 6-2 of the EIA and **Table 7** below.

Table 7: Biodiversity of	offset targets for	Pig Gully restora	tion after 10 years
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Biodiversity Attribute	Measurement Unit	Target value after 10-years		
		Grassland (6.0ha)	Kohekohe-tawa forest (1.46ha)	
Native emergent trees	No. of species	0	2	
Native tree/shrub	No. of species	4	23	
Native Vines/lianes	No. of species	3	8	
Native fern allies and ferns	No. of species	4	25	
Native other species	No. of species	10	5	
Native cover (canopy)	Cover (%)	50.0	90.0	
Height (canopy)	Height (m)	2.0	8.0	
Native cover (understorey)	Cover (%)	1.0	35.0	
Height (understorey)	Height (m)	0.5	1.0	
Native cover (ground)	Cover (%)	6.0	10.0	

The BOMP shall be prepared by a suitably qualified and experienced ecologist in consultation with the contractor undertaking the works and shall be submitted to the Manger Compliance Monitoring Officer for certification in accordance with the process set out in Condition 12.

- 81. The BOMP shall include detailed design and actions for the following:
 - a) A programme for implementation of all ecological regeneration (including pioneer and enrichment planting);
 - b) A plan demonstrating the location and area where regeneration planting and lizard habitat creation is to be implemented;
 - c) Details of the plant species, the relevant composition of plant species and planting densities;
 - d) Details of and a programme for maintenance, monitoring and measuring success of the natural revegetation, regeneration planting and lizard habitat;

- e) Process if success targets are not met;
- f) Process for reporting to the Compliance Monitoring Officer on all monitoring, measuring for success and measures proposed in the event that targets are not met; and
- g) Measures outlining how the legal and physical protection of the regeneration planting will be achieved in perpetuity.

Advice Note: the BOMP will also include requirements for riparian revegetation planting, however, this will be detailed in the Regional Consent Conditions and certified by Greater Wellington Regional Council.

82. Within the 7.3ha of grassland being retired within Pig Gully (as shown in Figure 6-2 of the EIA), the Consent Holder shall undertake 1.32ha of biodiversity offset planting in the location set out in the BOMP. All pioneer biodiversity offset planting shall be undertaken within 2 years of the consent being given effect to. All enrichment planting shall be undertaken between 3 and 5 years of the pioneer planting being undertaken.

Biodiversity offset success measurements

- 83. The Consent Holder shall ensure all biodiversity offset planting required by Condition 82 of this consent be subject to a 10-year maintenance period, which shall commence from the time pioneer planting is undertaken. The Consent Holder shall undertake and maintain biodiversity offset planting to achieve the following standards upon the conclusion of the 10-year maintenance period:
 - a) 80% canopy cover of planted species;
 - b) The replacement of dead or diseased plants to achieve 80% survival of planted species; and
 - c) The control of pest animals (and pest plants) to achieve (a) and (b) above.

Maintenance of the ecological mitigation works shall be to the satisfaction of the Council's Compliance Monitoring Officer.

84. The Consent Holder shall undertake maintenance of the retired grassland area within Pig Gully to support natural revegetation and achieve 'measures after offset' set out in **Table 7** upon the conclusion of the 10-year maintenance period.

Advice Note: this condition relates to the area of retired grassland which is not subject to deliberate biodiversity offset planting set out in Condition 82).

- 85. To ensure biodiversity offset planting and natural revegetation achieves the predicted restoration targets, the Consent Holder shall engage an appropriately qualified and experienced ecologist to assess the restoration trajectory in the retired grassland area within Pig Gully five years after works commence. If the ecologist concludes that some or all of the grassland will not achieve the 'measures after offset' set out in **Table 7** upon the conclusion of the 10-year maintenance period, the Consent Holder shall provide details of additional measures/works, a proposed timeframe for implementing those measures/works and any additional monitoring required to achieve the prescribed 'measures after offset' target.
- 86. At the completion of the 10-year maintenance period for the ecological mitigation works identified in Condition 81 the Consent Holder shall engage an appropriately qualified and experienced ecologist to carry out a review of the success of the revegetation measures in any areas subject to biodiversity offset planting and natural revegetation as required by this consent. The review shall include:
 - a) Survival and growth rates of planted species;
 - b) Whether biodiversity offset planting has successfully achieved 80% canopy cover;
 - c) Whether natural revegetation has achieved the 'measures after offset' set out in **Table 7**;

- d) Success of pest control (animal and plant); and
- e) Identification of any remedial actions that need to be carried out (if any).

Within 1 month of the end of the minimum maintenance period the Consent Holder shall provide a report recording the findings of the review, to the Council's Compliance Monitoring Officer for certification.

87. If any of the maintenance, canopy cover requirements or success measures are not achieved at the end of the minimum 10-year maintenance period, the Consent Holder shall also include in the report, for certification, details of additional measures/works, a proposed timeframe for implementing those measures/works and any additional monitoring required to achieve the prescribed maintenance requirements. The Consent Holder shall implement the measures/works and undertake additional monitoring in accordance with the report.

Any additional mitigation monitoring shall only be terminated when the Council's Compliance Monitoring Officer provides written confirmation that the mitigation requirements have been met.

- 88. To achieve ongoing physical protection of Pig Gully, the mechanisms to achieve protection of the above shall be set out in the BOMP and shall manage:
 - a) The felling, removal, burning or taking of any native trees, shrubs, plants or native fauna;
 - b) The planting of any trees, shrubs, or plants be undertaken with a preference for specimens sourced from the ecological district in which the land is situated;
 - c) The introduction of any noxious substance or substance otherwise injurious to plant life except as required for the control of pests;
 - d) Access by stock by providing and maintaining fences and gates, except where the Provisions of the Fencing Act 1978 apply;
 - e) The control of deer, goats, pigs to achieve the conditions of this consent, and to prevent significant loss of existing natural values;
 - f) All weeds and pests to the extent required by any statute and in particular comply with the provisions of, and any notices given under the Biosecurity Act 1993 and the Wild Animal Control Act 1977.
- 89. The Consent Holder shall ensure that the legal and physical mechanisms to achieve ongoing protection of the ecological mitigation planting are approved by the Council's Compliance Monitoring Officer, prior to giving legal effect to those mechanisms.

Lizard Management Plan

- 90. The Consent Holder shall prepare a **Lizard Management Plan** (LMP) prior to site investigation commencing in areas of potential lizard habitat (as identified in Cardno Ecological Impact Assessment). The site investigation will consist of a lizard survey conducted during the summer period (November March) prior to intended disturbance of the area. The LMP shall be designed so as to achieve the following two objectives:
 - The population of each species of native lizard present on the site at which vegetation clearance is to occur must be maintained or enhanced, either on the same site or at an appropriate alternative site; and
 - The habitat(s) that lizards are transferred to (either on site or at an alternative site, as the case may be) has the potential to support viable native lizard populations for all species present pre-development.

LMP shall be prepared by a qualified and experienced ecologist/herpetologist, in consultation with the contractor undertaking the works and shall be submitted to the Compliance Monitoring Officer for certification in accordance with the process set out in Condition 12. All works in the areas identified as providing potential lizard habitat shall comply with the certified Lizard Management Plan.

- 91. The LMP shall address the following (as appropriate):
 - a) Credentials and contact details of the ecologist(s)/herpetologist(s) who will implement the plan and conduct the investigations;
 - b) Timing of the implementation of the LMP;
 - c) The extent of the areas that should be investigated prior to disturbance;
 - d) A description of methodology for survey, trapping and relocation of lizards rescued including but not limited to:
 - i. a plan outlining the actions required if lizards are observed in areas that are intended to be disturbed;
 - ii. salvage and relocation protocols,
 - iii. an incidental discovery protocol; and
 - iv. vegetation removal protocol.
 - e) Copy of the Wildlife act permit; and
 - f) A post-vegetation clearance search for remaining lizards.

Advice Note 1: It is recommended that the LMP is undertaken in conjunction with the vegetation clearance operations (and contractor) in an integrated approach (on the same day), to enable the physical search for gecko's following felling of trees and shrubs and to rescue any skinks from ground cover vegetation and terrestrial retreats.

Advice Note 2: The Consent Holder may be required to obtain appropriate permits under the New Zealand Wildlife Act 1953 for handling and translocation of lizards.

- 92. A suitably qualified and experienced ecologist/herpetologist approved to oversee the implementation of the Lizard Management Plan (LMP) shall certify that the lizard related works have been carried out according to the certified LMP within two weeks of completion of the vegetation clearance works.
- 93. Upon completion of works, all findings resulting from the implementation of the Lizard Management Plan shall be recorded by a suitably qualified and experienced ecologist/herpetologist approved by the Council on an Amphibian/Reptile Distribution Scheme (ARDS) Card (or similar form that provides the same information) which must be sent to Council.

Quarry Rehabilitation Plan

- 94. The Consent Holder shall prepare a **Quarry Rehabilitation Plan** (QRP) five years prior to the decommissioning of the quarry. The purpose of the QRP is to detail by way of report and illustrative plans, the longer-term re-establishment and rehabilitation of the site addressing matters.
 - The QRP shall be prepared by a suitably qualified and experienced Landscape Architect in consultation with the contractor undertaking the works and shall be submitted to the Compliance Monitoring Officer Manger for certification in accordance with the process set out in Condition 12. No decommissioning works shall commence until the Plan has been certified by the Council's Compliance Monitoring Officer.
- 95. The QRP shall include, as at a minimum

- a) The final location, physical appearance and treatment of stockpiles/fill sites and bunds in a manner that reflects the character of the immediately surrounding landscape.
- b) The rehabilitation of areas used for carparks, site offices and laydown areas.
- c) Decommissioning of sediment erosion controls and integration of sediment ponds (should it be required).
- d) A phasing plan to illustrate order of rehabilitation works and timeframes, including details of the proposed plant species, plant sourcing, plant sizes at time of planting, plant locations, density of planting, and timing of planting.
- e) Treatment of quarry faces, including details of terraces and their landscape and soil treatments.
- f) Details of any complementary measures to ensure success of rehabilitation, such as stockproof fencing to protect the planting and/or planted setbacks from the top of steep quarry faces within safety fences to enable revegetation on steep faces.
- g) A programme of establishment and post establishment protection and maintenance (fertilising, weed removal/spraying, replacement of dead/poorly performing plants, watering to maintain soil moisture, maintenance programme).
- h) Documented outcomes to determine adequacy of rehabilitation against targets and an explanation of what happens if rehabilitation is not achieved as stated.
- i) Itemised details of the post closure landscape costs and details of the funding mechanism for provision of the post closure ongoing rehabilitation of the quarry.
- j) Details of the post closure health and safety risks and mitigations.
- k) Details of engagement with mana whenua including agreement to the proposed long-term rehabilitation and identification of opportunities for ongoing mana whenua involvement in the implementation of the rehabilitation.

Advice Note: The purpose of the QRP is to ensure the quarry site is left in an improved state in the long term. It is expected that this will be prepared in conjunction with ecological remediation/mitigation initiatives and seek an integrated solution to landscape and ecological rehabilitation. The QRP shall also include a suitable landscape and maintenance monitoring framework.

Record Keeping and Annual Report

- 96. The Consent Holder shall provide to the Council's Compliance Monitoring Officer an annual report, by 31 March, for each year that this consent is exercised. The annual report shall include but not be limited to;
 - a) An assessment of the Consent Holder's compliance with the conditions of resource consents RC8436 & LU0125/21 and any recommendations to address any identified non-compliances;
 - b) A plan showing the areas which has been worked during the applicable period;
 - c) Work programme outlining general work in each area to be undertaken in the next annual period (including extraction areas, vegetation removal and overburden activities);
 - d) An assessment of the results of all noise and vibration monitoring undertaken as required by the conditions of this consent for the previous 12 month period;
 - e) Daily (and hourly where required by conditions) numbers of truck movements for the previous 12 month period;

- f) Record of evening work exemptions (see Condition 7);
- g) An assessment of the results of all transport monitoring undertaken as required by the conditions of this consent for the previous 12 month period;
- h) Record of any incidents occurring at the intersection with SH58, and any remedial action undertaken; and
- A description including photographs of planting works undertaken in previous 12 months (where relevant) and ongoing maintenance of the plants and the location and areas of land to be revegetated over the next 12 months.
- 97. On a quarterly basis the Consent Holder shall compile and submit to the Council's Compliance Monitoring Officer the results of records and monitoring undertaken during the quarterly period in regard to the following:
 - Summary of any complaints received and where relevant remedial action(s) taken;
 - Summary of the results of noise and vibration monitoring undertaken in accordance with the respective management plans;
 - Summary of any breaches to noise, vibration, or air over blast pressure standards and remedial action taken as a result; and
 - Record of any evening activities.

97A. The reports referred to in conditions 96 and 97 shall be uploaded to the Quarry Website immediately after lodgement with the Council.

Closure of the Quarry

98. The Consent Holder shall notify PCC within 10 working days following decommissioning of the quarry, and the Consent Holder shall arrange for an inspection of the decommissioned quarry by a PCC enforcement officer.

Review

- 99. Pursuant to Sections 128 of the Resource Management Act 1991, Porirua City Council may, during the months August to October after the first year of the exercise of this consent, and during the same months every year thereafter (for the duration of the consent), serve notice on the Consent Holder to review any or all of the conditions of this consent for any of the following reasons. Notwithstanding this, Porirua City Council may, on a six monthly basis following exercise of this consent, review traffic effects described in part (a)(iv) of this condition until Stage 2B of the SH58 safety upgrades are complete:
 - a) To review the effectiveness of the conditions of this consent in avoiding, remedying or mitigating any adverse effect on the environment that may arise from the exercise of this consent and, if necessary, avoid, remedy or mitigate such effects by way of further or amended conditions. In particular, adverse effects may relate to:
 - v. Noise arising from aggregate extraction activities and associated processing and transportation;
 - vi. Vibration and air overblast pressure arising from blasting events;
 - vii. Dust arising from aggregate extraction, overburden stockpiles and/ or vehicle movements;
 - viii. Traffic effects on the road network and Judgeford Kennels and Cattery; and

- ix. Success of ecological restoration and rehabilitation works.
- To address any adverse effects on the environment which have arisen as a result of the exercise of this consent that were not anticipated at the time of granting this consent, including any issues arising out of complaints;
- c) To review the adequacy of any plan and/or monitoring requirements, and if necessary, amend these requirements outlined in this consent;
- d) To require the Consent Holder, if necessary and where appropriate, to adopt the best practicable option(s) to avoid, remedy or mitigate any adverse effects on the surrounding environment.
- e) To take account of any changes to relevant District Plans or Polices.

The Council will undertake the review in consultation with the Consent Holder and the Consent Holder shall pay the actual and reasonable costs of the review pursuant to Section 36 of the Resource Management Act 1991.

Notes for the Consent Holder

- a. Pursuant to section 125 of the Resource Management Act 1991 this consent will lapse five years after the date of this consent unless either the consent is given effect to, or the Council has granted an extension pursuant to section125(1)(b) of the Act.
- b. The conditions of this resource consent shall be met to the satisfaction of the Council's Compliance Officer. The Compliance Officer will visit the site to monitor the conditions where necessary. The Consent Holder shall pay to the Council the actual and reasonable costs associated with the monitoring of conditions (or review of consent conditions), or supervision of the resource consent as set in accordance with section 36 of the Act. These costs may include site visits, correspondence and other activities, the actual costs of materials or services, including the costs of consultants or other reports, peer reviews, or investigations which may have to be obtained.

Porirua City Council Conditions (Short Term)

NOTES:

- The majority of conditions applying to the long term consent have been carried over to the short term consent also. There are some exceptions where it is not relevant to do so (e.g. in relation to Fill Site 2 and the Bund)
- A table is provided below, noting where conditions will differ from those in the long term consent.
- For ease of review numbering has been kept consistent with the long term consent conditions.
 Although every endeavour has benn made to update conditions numbers to account for conditions removed., there may be situations whereby this has not been achieved.

Short term condition set - based on long term conditions with amendments noted

General conditions

Updated to reflect documents relevant to short term consent:

1.—The consent_shall_be_exercised_in_general_accordance_with_the_information_and_plans_submitted_with_the_application_and_held_on_Council_file_LU0055/20—RC7695_and_stamped_'Approved_Plans_for_Resource_Consent_LU0055/20—RC7695.

Supporting information and technical reports:

- i. The application for resource consent and assessment of environmental effects, dated 30 June 2020, prepared by Beca
- ii. The response to the Council s92 request for information, dated 9 October 2017, prepared by Beca
- iii. Willowbank Quarry Landscape and Visual Effects Assessment Report, dated 9 October 2018, prepared by Beca and Align Ltd
- iv. Willowbank Quarry Access Transportation Impact Assessment, dated February 2018, prepared by Tim Kelly Transportation Planning Ltd
- v. Addendum to Transportation Assessment, dated 19 June 2020, prepared by Tim Kelly Transportation Planning Ltd
- vi. Willowbank Quarry Assessment of Noise and Vibration Effects, Ref 60436069, dated 07 August 2018, prepared by Aecom Consulting Services (NZ) Ltd
- vii. Rapid Ecological Assessment titled "Willowbank Quarry Terrestrial Assessment", dated 02 October 2018, prepared by Boffa Miskell
- viii. The responses to the Council s92 request for information LU0055/20- RC7695, dated 26 February 2021, 26 March 2021 and 13 August 2021.

The following plans:

- Location Plan, TG-CPBH-DRG-STH-EN-0177, Rev A, 27/06/17
- Erosion and Sediment Control, TG-CPBH-DRG-STH-EN-0170, Rev C, 28/09/18
- Erosion and Sediment Control, TG-CPBH-DRG-STH-EN-0172, Rev C, 28/09/18
- Erosion and Sediment Control, TG-CPBH-DRG-STH-EN-0173, Rev C, 28/09/18
- Erosion and Sediment Control, TG-CPBH-DRG-STH-EN-0174, Rev C, 28/09/18
- Erosion and Sediment Control, TG-CPBH-DRG-STH-EN-0175, Rev C, 28/09/18
- Erosion and Sediment Control, TG-CPBH-DRG-STH-EN-0176, Rev A, 27/06/17

Advice Notes:

For the avoidance of doubt, where information contained in the application is inconsistent with conditions of this consent, the conditions shall prevail.

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

Minor alterations may be approved upon request providing the development is not materially different, the scale and intensity of adverse effects will be no greater, and no approval from affected persons is needed.

Duration of consent

Duration of consent updated -

2. This consent will expire on 31 December 2025.

Advice Note: The cessation of quarry activities is not a matter for which a variation of conditions (under s127) could be applied for. Rather this is a matter of substance inherent in the proposal.

Surrendering the short term consent

Not relevant to this consent, will sit on the long term only.

Pre-construction requirements and discovery of artefacts

Conditions 4, 5 and 6 - retained as drafted in the long-term consent condition set.

Hours of operation and truck movements

Updated to seek a continuation of the currently consented hours of operation:

- 7. The quarry operations shall be restricted to:
 - 6.30am and 7.30pm in the summer months; and
 - 7am to 5pm in the winter months.

Advice note - hours for truck movements set out under Condition 8

- 8. Truck movements shall be undertaken in accordance with the following:
 - (a) Truck movements to and from the SH58 access are limited to a maximum of 64 return movements on weekdays only, between the hours of 10am and 3pm.
 - (b) No truck movements are to occur at weekends or on public holidays.
 - (c) All truck movements shall be left hand turn out.

Complaints

Condition 9 – retained as drafted in the long-term consent condition set.

Community liaison group

Condition 10 – retained as drafted in the long-term consent condition set.

Management plans

Conditions 11 - retained as drafted in the long-term consent condition set.

Changes to 12 below:

- 12. The certification of management plans shall follow the process in (a) to (d) below:
 - a) The Consent Holder shall submit copies of the following management plans to Council's Compliance Monitoring Officer for certification:
 - Quarry Management Plan (QMP) submitted no later than 20 working days prior to the commencement of any activity authorised by this consent.
 - Noise Management Plan (NMP) submitted no later than 20 working days prior to the commencement of any activity authorised by this consent.
 - Noise Survey Plan (NSP) submitted no later than 20 working days prior to the commencement of noise monitoring activities.
 - Blasting Noise and Vibration Management Plan (BNVMP) submitted no later than 20 working days prior to the commencement of any blasting activity authorised by this consent.
 - Traffic Management Plan (TMP) submitted no later than 20 working days prior to the commencement of heavy vehicles operating, as authorised by this consent.
 - (b) (d) retained as drafted in the long term condition set.

Advice Note: Council may exercise the need to peer review any management plan by a suitably qualified person, and reasonably cost recover this process.

Quarry Management Plan

Conditions 13, 14, 15 and 16 - retained as drafted in the long term consent condition set.

Noise and Vibration

Conditions 17, 19 to 33 – retained as drafted in the long-term consent condition set.

Condition 18 - not relevant to short term consent, as this relates to certification of the access road bund

Design of Bunds and Fill Site

Conditions 34 – 36 **not relevant** to short term consent

Quarry designs

Conditions 37 and 39 – retained as drafted in the long-term consent condition set.

38, 40 and 41 - not relevant to short term consent as these relate to Fill Site 2

Earthworks and dust

No changes required to Conditions 42 – 44 and 46 – 50 – retained as drafted in the long-term consent condition set Condition 45 not relevant to short term consent as it relates to Fill Sites.

Traffic

Conditions 51 - 56 and 60 - 62 - retained as drafted in the long term consent condition set

Conditions 57 - 59 and 67 - 69 not relevant to short term consent as they relate to long term monitoring

Traffic management plan -

Conditions 63 - 66 - to be retained, may need to be amended as relevant for short term operations.

As per the current consent, the following is proposed:

A register shall be maintained of any reported incidents relating to the movement of quarry trucks and how these have been addressed. The register shall be kept up-to-date and be available for inspection at the request of both Waka Kotahi, NZ Transport Agency and Porirua City Council.

Unformed legal roads

Conditions 70 - 78 not relevant for short term consent, as no URLs are impacted by the proposal.

Ecological Mitigation/Offset and Monitoring

Conditions 79 – 89 **not relevant** for short term consent, these conditions relate to mitigation/offsetting for the long term consent.

Lizard Management Plan

90 - 93 not directly relevant for short term consent. Amended condition proposed as follows:

In the event that New Zealand lizard species are located the consent holder shall prepare a Lizard Relocation Plan prepared by a qualified and experienced herpetologist and as approved by the appropriate permits under the New Zealand Wildlife Act 1953 for handling and translocation of lizards (as required under the existing LMP). This Lizard Relocation Plan shall be provided to the Manager, Resource Consents.

Quarry rehabilitation plan

Amended condition wording to conditions 94 and 95

12 months prior to the decommission of the Quarry the Consent Holder shall submit a Quarry Rehabilitation Plan (QRP) to the Council's Compliance Monitoring Officer for certification. The QRP shall be prepared by a suitably qualified and experienced Landscape Architect in consultation with the contractor undertaking the works and contain the following:

- (a) the final location, physical appearance and treatment of stockpiles in a manner that reflects the character of the immediately surrounding landscape.
- (b) the rehabilitation of areas used for carparks, site offices and laydown areas.
- (c) Post-extraction landform alteration (e.g. softening and reshaping)
- (d) Integration of sediment ponds
- (e) Treatment of cut faces
- (f) Redistribution of overburden and topsoil
- (g) Introduction of revegetation across the quarry site

No decommissioning works shall commence until the Plan has been certified by the Council's Compliance Monitoring Officer.

Record Keeping and Annual Report

- 96. The Consent Holder shall provide to the Council's Compliance Monitoring Officer an annual report, by 31 March, for each year that this consent is exercised. The annual report shall include but not be limited to;
 - a) An assessment of the Consent Holder's compliance with the conditions of resource consents LU0055/20—RC7695 and any recommendations to address any identified non-compliances;
 - b) A plan showing the areas which has been worked during the applicable period;
 - c) Work programme outlining general work in each area to be undertaken in the next annual period (including extraction areas, vegetation removal and overburden activities);
 - d) An assessment of the results of all noise and vibration monitoring undertaken as required by the conditions of this consent for the previous 12 month period;
 - e) Record of any incidents occurring at the intersection with SH58, and any remedial action undertaken.
- 97. On a quarterly basis the Consent Holder shall compile and submit to the Council's Compliance Monitoring Officer the results of records and monitoring undertaken during the quarterly period in regard to the following:
 - Summary of any complaints received and where relevant remedial action(s) taken;
 - Summary of the results of noise and vibration monitoring undertaken in accordance with the respective management plans;
 - Summary of any breaches to noise, vibration, or air over blast pressure standards and remedial action taken as a result; and
 - Record of any evening activities.

Closure of the Quarry

Condition 98 - retained as drafted in the long-term consent condition set.

Review

Condition 99 - retained as drafted in the long-term consent condition set.