

SECTION 42A REPORT FOR:

Hearing Commissioner

IN THE MATTER OF:

Notice of Requirement:

Eastern Hills Reservoir – Summit Road, Fairfield

PREPARED BY:

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REVIEWED BY:

**Nathan Geard
Policy Planning Manager**

Hutt City Council

REPORT DATED:

7 November 2024

DATE OF HEARING:

28 November 2024

EXECUTIVE SUMMARY

On 29 February 2024, Hutt City Council (HCC) lodged a Notice of Requirement (NoR) seeking to establish a new designation that will provide for the construction, operation and maintenance of a 15 million litre concrete reservoir to the south of the existing reservoir at the top of Summit Road, Fairfield. The application states the new reservoir will significantly expand water supply infrastructure and increase water supply resilience.

Hutt City Council is the requiring authority with financial responsibility for the project but Wellington Water Limited (WWL) will carry out the construction, operation and maintenance of the Eastern Hills Reservoir.

In brief, the project involves constructing a circular, reinforced concrete, 15 million litre reservoir approximately 20m to the east of the existing reservoir. Earthworks of 83,000m³ will create a flat building platform up to 20m below existing ground level. A 30m wide construction corridor running downhill to the north is proposed to allow the construction of the delivery and scour pipes although vegetation clearance within this corridor will be approximately 12m in width. The proposal is expected to take 2.5 years to complete with approximately four nights of night works required.

Enabling works will include geotechnical investigations, site establishment activities, construction of a site access road, ecological surveys, vegetation removal and protection works, installation of erosion and sediment control measures and establishment of mitigation measures.

The NoR contains expert assessment on Transportation, Ecology, Geotechnical, Landscape and Visual and Noise and Vibration effects and a Preliminary Site Investigation (for potentially contaminated land), as well as consultation that was undertaken and possible development scenarios should the land be rezoned.

The application requested public notification of the NoR. The NoR was notified on 28 March 2024 with submissions closing on 3 May 2024.

A total of 6 submissions were received which commented on geotechnical matters, construction noise, Waiwhetu Stream, vegetation loss, effects on recreation and potential road safety effects.

I consider the primary issues relate to construction effects, geotechnical related effects, landscape and visual effects, ecological effects and effects on the transport network.

The NoR includes a suite of conditions that the applicant considers will appropriately manage the effects of the proposed works and ongoing maintenance and operation of the reservoir.

Recommendation

On the basis of this report it is my recommendation, prior to hearing from the submitters, that the NoR as lodged by Hutt City Council is confirmed subject to amendments to the proffered conditions as discussed in this report.

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- 1 Proposed and Recommended conditions
- 2 Traffic Engineering Evidence
- 3 Ecological Evidence
- 4 Noise and vibration Evidence
- 5 Landscape and Visual Evidence
- 6 Geotechnical Evidence

1. PURPOSE OF REPORT

- (1) The purpose of this report is to:
 - a) Provide the context and background to the notice of requirement (NoR) and the statutory framework relevant for considering a NoR;
 - b) Summarise the public submission process that has occurred for the NoR;
 - c) Provide an analysis of the NoR against the statutory framework under the Resource Management Act 1991 (RMA), including the submissions; and
 - d) Recommend a decision to the Commissioner.

2. INTRODUCTORY STATEMENT

- (2) My name is Dan Kellow and I am a sole practitioner, trading as Kellow Environmental Planning.
- (3) I have been engaged by Hutt City Council (the Council) to provide planning evidence on the Notice of Requirement. I am familiar with the site and the surrounding area.
- (4) I have 25 years' experience in land use planning, regulatory and policy, spending most of that time within local government.
- (5) I have visited the site and am familiar with the surrounding area. I have been involved in the NoR at the pre-application and post lodgement stages.
- (6) Although not necessary in respect of council hearings, I can confirm I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the hearing panel. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.
- (7) I have specifically relied on the expertise of the following people:
 - Harriet Fraser – Harriet Fraser Traffic Engineering & Transportation Planning.
 - Tessa Roberts - Wildlands Ltd
 - Linda Kerkmeester – Landscape and visual effects
 - Steve Arden – Marshall Day Acoustics
 - Adam Smith – Engeo

3. SUMMARY OF THE APPLICATION AND PROPOSED WORKS

- (8) The NoR is to designate land for the "*construction, operation and maintenance of the Eastern Hills Reservoir including all activities associated with the construction, operation and maintenance of:*
 1. *The Eastern Hills Reservoir structure and delivery and scour pipelines;*
 2. *Access to the reservoir and delivery and scour pipelines;*

3. Associated connections to the bulk water supply, local water supply, and local stormwater networks; and

4. Associated construction activities such as vegetation clearance and geotechnical testing.¹

- (9) A lapse period of seven years has been sought to give effect to the designation. Conditions proposed as part of the NoR are contained in Appendix 1 of this report. The NoR confirms that Outline Plans will be submitted to the Council once the final design of the project is determined.
- (10) The NoR states in section 6 that *“The designation boundary will be pulled back following the completion of construction, completion of site remediation and reinstatement and successful commissioning of the reservoir to the area required for the on-going operation and maintenance of the reservoir.”²*
- (11) Resource consents required from Greater Wellington Regional Council (GWRC) are being sought separately to the NoR process. These include consent for bulk earthworks, earthworks within the vicinity of natural wetlands, disturbance of the bed of a stream and construction of an outfall structure and a water permit to temporarily take groundwater.
- (12) The area of the designation is shown on the following page.

¹ Form 20 – Notice of Territorial Authority’s Requirement for Designation

² NoR page 42

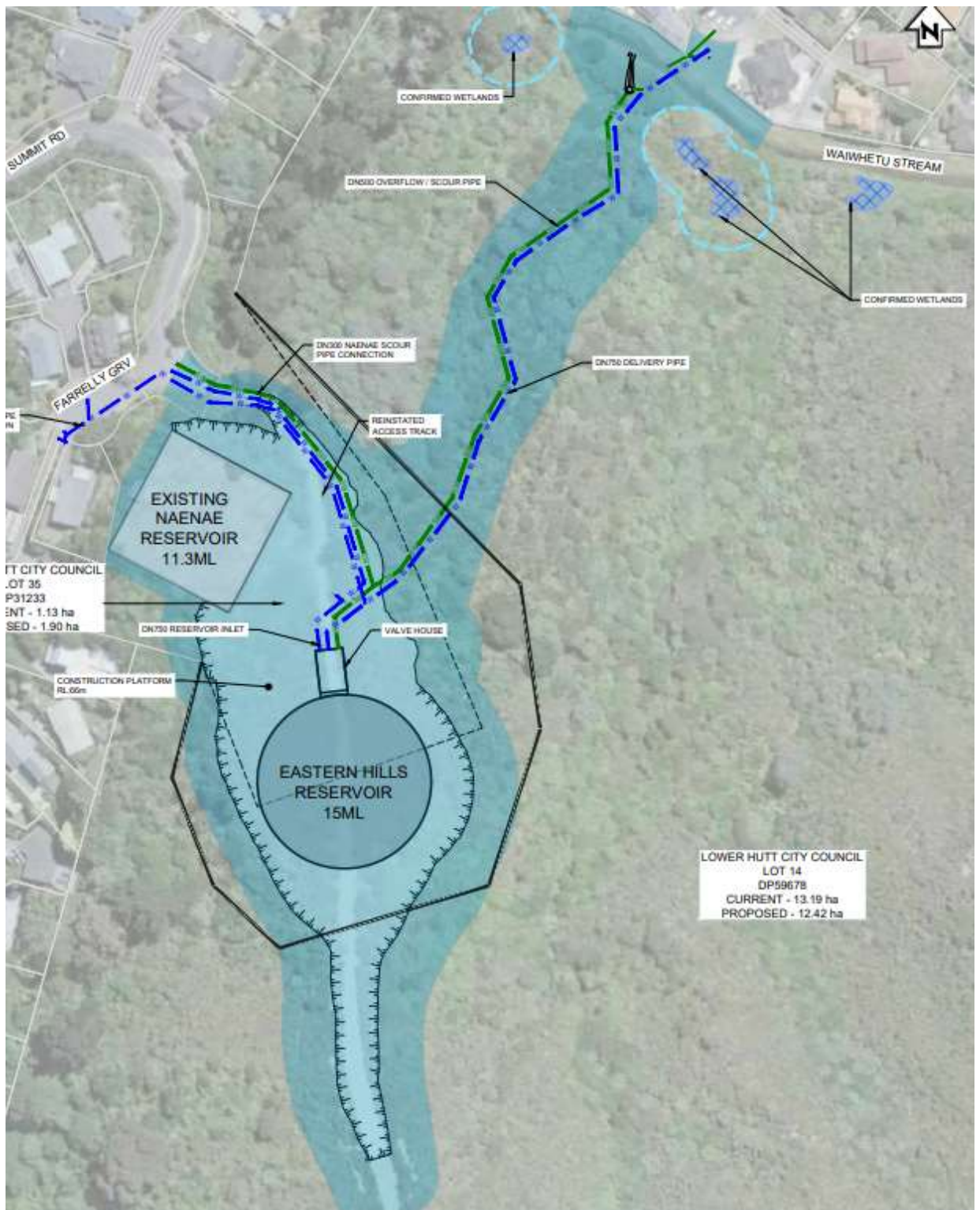


Figure 1: Designation Area – highlighted in blue

- (13) The NoR has a single primary application document and appendices A – Q. The NoR application was updated post lodgement (27 June 2024) following an update to the ecological assessment. There were consequential amendments to the proposed conditions.
- (14) The appendices submitted with the NoR are as follows:

Appendix A: Design Plans and Designation Plans

Appendix B: Proposed Conditions

Appendix C: Preliminary Design Report

Appendix D: Construction Methodology.....

Appendix E: Landscape and Visual Impact Assessment .

Appendix F: Erosion and Sediment Control Plan.....

Appendix G: Ecological Report

Appendix H: Noise and Vibration Assessment

Appendix I: Contaminated Land Study

Appendix J: Archaeological Risk Check.....

Appendix K: Cultural Impact Assessment.....

Appendix L: Social Impact Report.....

Appendix M: Site Selection Report

Appendix N: Construction Transport Assessment.....

Appendix O: Recreation Assessment

Appendix P: Pipe Alignment Report

Appendix Q: Schedule of Relevant Provisions.....

(15) The proposal is described in detail in section 3 of the application and I adopt that description.

(16) In brief, the project involves constructing a circular, reinforced concrete, 15 million litre reservoir approximately 20m to the east of the existing reservoir. The reservoir has been designed to have a design life (strength and durability) of 100 years and has been designed to still be operational after a 1-in-500 year seismic event. Earthworks of 83,000m³ will create a flat building platform up to 20m below existing ground level. The earthworks will cut into the ridgeline with a separation distance of approximately 20m between the new and existing reservoirs. The cut material will be removed from the site. Vegetation will be removed to accommodate the reservoir and pipes. The delivery and scour pipes will be installed via open excavation trenching and then subsequently buried. A 30m wide construction corridor is proposed to allow this work to be undertaken but vegetation removal is anticipated to be 12m wide. A temporary staging bridge will be installed across the Waiwhetū Stream to assist in the construction of the pipes.

(17) Landscaping around the reservoir and pipes is proposed which includes:

- *“Native planting along the delivery pipe corridor;*
- *Riparian planting adjacent to Waiwhetū Stream;*
- *Native planting adjoining the access tracks/firebreak;*
- *Native planting surrounding the proposed reservoir; and*
- *Provision of a grassed area between the proposed and existing reservoir.³”*

(18) The proposal is expected to take 2.5 years to complete and working hours will generally be *“Monday to Saturday 7am – 6pm with noise restricted before 7.30am. Works able to occur between 7:00am and 7:30am shall be limited to preparation works and shall not include the operation of machinery. No work will take place on Sundays or public holidays. Exceptions to this will be night works, crane mobilisation and delivery of oversized materials (i.e. the reservoir panels) which will likely require delivery before 7am due to traffic restrictions and traffic management*

³ Section 3.5 of the application.

requirements. Approximately four days of night works will be required for the concrete pours for the reservoir slab and roof and curing attendance.⁴

- (19) Enabling works will include geotechnical investigations, site establishment activities, construction of a site access road, ecological surveys, vegetation removal and protection works, installation of erosion and sediment control measures and establishment of mitigation measures.
- (20) Reinstatement works include reforming and extending the firebreak track and extensive and progressive planting. Other works associated with the project, such as works to mains within Farrelly Grove and Summit Road are planned but are not part of the NoR.

3.1 The site, locality and background

- (21) The description of the subject site is in Section 5.1 of the application and should be read in conjunction with this assessment.
- (22) The site of the reservoir is 37 Summit Road which is accessed from the top of Summit Road with a gravel track within the site leading up and past the existing Naenae reservoir. The reservoir site is steeply sloping and apart from the reservoir and gravel road is covered in vegetation. 37 Summit Road is elevated above the surrounding residential area to the west of the site. To the immediate north, south and east of the reservoir's location is 5A Balgownie Grove which is a 13.2 ha site owned by HCC and the reservoir's delivery and scour pipes will head north from the reservoir down 5A Balgownie Grove to the Waiwhetū Stream where a pipe will pass beneath the stream. 5A Balgownie Grove can be generally described as a steeply sloping vegetated hillside. There are small wetlands within 5A Balgownie Grove toward the toe of the hill but these are clear of the proposed pipe route.
- (23) The Summit Road Firebreak Track starts on 37 Summit Road and goes up 5A Balgownie Grove where it meets other walking and biking tracks.

⁴ Section 4.2 of the application.



Figure 1: Subject site and existing reservoir

- (24) The development site is legally described as Lot 14 DP 59678 and Lot 35 DP 31233.
- (25) In regard to the City of Lower Hutt District Plan zoning, 37 Summit Road has a split zoning with an approximately 1300m² section at the western side of the site having a Medium Density Residential Activity Area (MDRAA) zoning and the remaining area of the site being zoned Passive Recreation Activity Area (PRAA). There is a Significant Natural Resource (SNR 12) overlay over most of the PRAA. 5A Balgownie Grove also has a split zoning of MDRAA and PRAA although the portion of this site subject to this proposal is MDRAA, and also has the SNR 12 overlay.

4. STATUTORY FRAMEWORK AND OTHER APPROVALS

- (26) WWL on behalf of HCC has submitted the NoR under s168A of the Resource Management Act 1991 (RMA). The NoR requested public notification.

- (27) Section 168A of the RMA states:

...

- (2A) *When considering a requirement and any submissions received, a territorial authority must not have regard to trade competition or the effects of trade competition.*
- (3) *When considering a requirement and any submissions received, a territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to—*

(a) any relevant provisions of—

(i) a national policy statement:

(ii) a New Zealand coastal policy statement:

(iii) a regional policy statement or proposed regional policy statement:

(iv) a plan or proposed plan; and

(b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—

(i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or

(ii) it is likely that the work will have a significant adverse effect on the environment; and

(c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and

(d) any other matter the territorial authority considers reasonably necessary in order to make a decision on the requirement.

(3A) The effects to be considered under subsection (3) may include any positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from the activity enabled by the requirement, as long as those effects result from measures proposed or agreed to by the requiring authority.

(4) The territorial authority may decide to—

(a) confirm the requirement:

(b) modify the requirement:

(c) impose conditions:

(d) withdraw the requirement.

(5) Sections 173, 174, and 175 apply, with all necessary modifications, in respect of a decision made under subsection (4).

(28) Resource consent from GWRC will be required to undertake the proposed works. This will at least include consents relating to bulk earthworks and earthworks within the vicinity of natural wetlands, disturbance of a stream bed, a water permit to temporarily take water and stream works. I understand these consents will be sought when the detailed design is known and I consider that this approach is reasonable.

5. NOTIFICATION

(29) The application requested public notification of the NoR. The NoR was notified on 28 March 2024 with submissions closing on 3 May 2024. Notice of the NoR was served on 124 sites across Fairfield and Naenae as well as the statutory parties. The application was made available online as well as at the HCC Administration Building in Lower Hutt.

(30) A total of 6 submissions were received which commented on effects relating to:

- geotechnical matters;
- construction noise;
- loss of vegetation;
- recreation activity;
- road safety effects; and
- firebreak access during construction.

(31) Two submissions are neutral (1 and 5) and the others are opposed.

6. STATUTORY EVALUATION

(32) This section is a statutory evaluation of the NoR under the Resource Management Act.

(33) Section 168A(2A) of the RMA requires no regard should be had to trade competition or the effects of trade competition. None of the submissions have raised matters relating to trade competition.

(34) Section 168A(3) of the RMA requires the territorial authority, when considering the effects on the environment, to have particular regard to any relevant provisions of planning instruments at the national, regional and district level.

(35) The NoR has identified what it considers to be the relevant statutory documents for assessment in section 12.3 - 12.5. I consider the relevant documents have been identified but note that the Decisions on the Regional Policy Statement Plan Change 1 was released after the NoR was lodged. Appeals on the RPS-PC1 can be lodged until 18 November so at the time of writing this report the extent of any appeals is unknown.

(36) In the following section I:

- Summarise and discuss the key environmental effects associated with the NoR,
- Summarise submissions relevant to the topic area,
- Outline the statutory context, and
- Provide an analysis.

(37) The analysis is based on my review of the NoR, the submissions and expert evidence. Where I recommend changes to conditions or additional conditions these are collated in Appendix 1.

(38) The effects are analysed under the headings:

- Positive effects,
- Traffic and transport,
- Ecology,
- Noise and vibration,
- Landscape and visual effects,

- Geotechnical and erosion and sediment control, and
 - Other issues raised in submissions.
- (39) This section also includes consideration of alternative sites, routes or methods of undertaking the works (section 9) and the necessity of the works (section 10).

7. EFFECTS ASSESSMENT

Positive effects

- (40) The NoR sets out the positive effects in section 9.2. In brief,
- the project will increase water supply resilience following a natural hazard event which is assessed as being a significant regional public benefit.
 - the eastern hills firebreak will be reinstated and seating and signage provided which will enhance the enjoyment of people using the area for recreation.
 - Eco sourced vegetation used for revegetating the site will improve the composition of vegetation in the area.
- (41) I agree the positive benefits as outlined in the NoR will result from the proposal.

Traffic and transport

- (42) The proposal will not have operational effects on the transport network, so the assessment below is in relation to construction traffic. My assessment is informed by the technical assessment by Harriet Fraser who has provided a Statement of Evidence.

Effects identified by the applicant

- (43) In summary, the NoR identifies and describes the construction traffic effects and associated mitigation as follows:
- Up to 120 Heavy Commercial Vehicles (HCV) per day⁵ may access the Summit Road reservoir site which may restrict two way traffic along sections of Summit Road and Tilbury Street;
 - HCV movements on Balgownie Grove will number approximately 60 over 1 – 2 months;
 - On-street car parks may be temporarily lost;
 - An increased exposure to HCVs in the local area.
- (44) The summary above is brief and the full assessment in Appendix N of the NoR should be referred to.
- (45) The NoR proposes mitigation via methods to be set out in a Construction Traffic Management Plan (CTMP) that will be informed by the final construction details. Mitigation will include, but not be limited to:
- *Reduced speed limits;*

⁵ Table 4 of the Construction Transport Assessment provides breakdown of trips per stage

- Use of spotters;
- Traffic control during busy stages of project;
- Temporary removal of some on-street parking;
- Monitoring of effects⁶.

(46) The NoR considers the adverse effects, post mitigation, to be minor to negligible.

Submissions

(47) The Ministry of Education (MoE) is concerned with the high volume of HCV movements past the combined school site on Daysh Street. The submission states the proposal will increase the safety risk to students walking and cycling to school. The submission also notes that there could be an increased risk at the SH2 and Fairway Drive intersection as well as outside the intersection outside Belmont School. The submission requests an amendment to the CTMP to include a requirement that HCVs must avoid the schools during peak before and after school periods. The submission confirms it is neutral on the proposal subject to the addition of the following condition:

“Heavy vehicles will avoid travelling past the schools listed in the following table during peak before and after school travel times, during term time only.

Before any construction works begins where there are heavy vehicle movements are traveling along Daysh Street or Fairway Drive, the four schools listed in the table below must be informed at least 10 working days before the works begin.

Advice note: A heavy vehicle is defined as any vehicle larger than a ute or van.

<u>School Name</u>	<u>Address</u>	<u>Associated no travel route</u>	<u>Times heavy vehicles must avoid the schools (based off each school's individual start and finish times)²</u>
<u>Belmont School</u>	<u>709 Western Hutt Road, Belmont, Lower Hutt 5010</u>	<u>Fairway Drive / Kennedy Good Bridge (between SH2 and Harcourt Werry Drive)</u>	<u>8:15 to 9:00am</u> <u>2:45 to 3:15 pm</u>
<u>Naenae Intermediate School</u>	<u>100 Walters Street, Naenae, Lower Hutt 5011</u>	<u>Daysh Street (between High Street and Oxford Terrace)</u>	<u>8:30am – 9:00am</u> <u>2:50pm – 3:30pm</u>
<u>Naenae College</u>	<u>910 High Street, Avalon, Lower Hutt 5011</u>	<u>Daysh Street (between High Street and Oxford Terrace)</u>	<u>8:30am – 9:00am</u> <u>2:50pm – 3:30pm</u>
<u>Kimi Ora School</u>	<u>100 Walters Street, Naenae, Lower Hutt 5011</u>	<u>Daysh Street (between High Street and Oxford Terrace)</u>	<u>8:30am – 9:00am</u> <u>2:50pm – 3:30pm</u>

(48) The MoE also states its support of proposed condition 25 and requests an addition to condition 26 to require the CTMP to include “Details of briefings to heavy vehicle drivers about the

⁶ NoR page 63

importance of slowing down and adhering to established speed limits when driving past any school site.”.

Statutory context

(49) The District Plan objectives and policies that are most relevant are:

Objective 14A 3.4 - Adverse effects on the safety and efficiency of the transport network from land use and development that generate high volumes of traffic are managed.

Policy 14A 4.2 - Land use, subdivision and development should not cause significant adverse effects on the connectivity, accessibility and safety of the transport network, and, where appropriate, should:

- *seek to improve connectivity within and between communities; and*
- *enable walking, cycling and access to public transport*

(50) The above objective and policy provide limited guidance when considering temporary effects on the transport network. Higher order planning documents do not provide any additional specific direction that needs to be highlighted.

Analysis

(51) Ms Fraser provided an initial review of the proposal dated 6 May 2024 and a second review dated 14 June 2024 following the provision of further information. Ms Fraser recommended various changes to the proposed conditions which were provided to the applicant 14 May 2024. Condition 28 was amended and condition 29 was added to original set of conditions proposed.

(52) Ms Fraser’s Statement of Evidence concludes that “with some further refinement of the conditions, there are no obvious transport issues that would preclude the traffic effects associated with the requested NoR from being appropriately managed and mitigated.” The suggested amendments to conditions are discussed below along with a response to the matters raised in submission.

(53) Proposed condition 10 is:

10. *The purpose of the CEMP is to set out the management procedures and construction methods to be undertaken to avoid, remedy or mitigate any adverse effects associated with the Construction Works. To achieve the purpose, the CEMP must include details of:*

- a) *Construction methodologies and construction timeframes, including staging;*
- b) *Working hours, which should generally be 7:30am to 6:00pm Monday to Saturday except as otherwise provided for under condition 18;*
- c)....

(54) Ms Fraser has noted that the work hours, set out in clause b), could be restricted to daylight hours which would require altering clause b). At the time of writing this report the applicant had not responded to this suggestion. Given Ms Fraser’s focus is on effects on the transport network the suggested amendment would only relate to limiting the movement of construction vehicles to daylight hours. I agree with Ms Fraser’s comment that there would only be a short period of time when it would be dark before 6pm. I note that a Construction Traffic Management Plan is required under condition 26, the objective of which is to *avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects of the Project on property access, traffic safety and efficiency*

during construction. I consider that through the development of the CTMP, which must be certified by HCC, that potential adverse effects on the transport network can be appropriately mitigated rather than via amending 10 b).

(55) Proposed condition 16. is:

16. *The Requiring Authority shall ensure that vehicles and machinery leaving the site do not deposit earth or other material in or on road reserve, the road surfaces or surrounds. If such spills occur, the Requiring Authority shall clean the road surfaces to their original condition.*

(56) Ms Fraser has recommended that a timeframe is imposed by which the cleaning must occur. I agree with this recommendation and as such recommend the condition to be amended as follows:

16. *The Requiring Authority shall ensure that vehicles and machinery leaving the site do not deposit earth or other material in or on road reserve, the road surfaces or surrounds. If such spills occur, the Requiring Authority shall clean the road surfaces to their original condition as soon as possible after the spill occurs and within 24 hours.*

(57) Proposed condition 25. is:

25. *The Requiring Authority shall not commence Construction Works until a Construction Traffic Management Plan (CTMP) has been certified by Hutt City Council confirming that the CTMP satisfies the requirements of Condition 26, 27, and 28. Certification shall occur in accordance with the process set out in Condition 8. The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects of the Project on property access, traffic safety and efficiency during construction.*

(58) Ms Fraser has recommended that the objective of the CTMP should include addressing damage to the road pavements and structures as well as ensuring access to kerbside parking for residents. I agree with this recommendation and as such suggest the condition to be amended as follows:

25. *The Requiring Authority shall not commence Construction Works until a Construction Traffic Management Plan (CTMP) has been certified by Hutt City Council confirming that the CTMP satisfies the requirements of Condition 26, 27, and 28. Certification shall occur in accordance with the process set out in Condition 8. The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects of the Project on the availability of kerbside parking, damage to the roading surface, property access, traffic safety and efficiency during construction.*

(59) Proposed condition 26. is:

26. *The CTMP must include, as a minimum:*

- a. *Measures to minimise the disruption to users of local travel routes;*
- b. *Temporary traffic management measures required to manage impacts on road users during the proposed construction works including signage and traffic control;*
- c. *Measures to maintain existing vehicle access to adjacent properties;*
- d. *Any proposed temporary changes in speed limits;*
- e. *Measures to control HCV so that two HCVs are not travelling in opposite directions along Summit Road or Tilbury Street at any one time including detailing appropriate waiting locations;*
- f. *Provision for safe and efficient access of vehicles to and from the construction site;*

- g. *Details of where parking will be temporarily removed; and*
- h. *Details as to where footpaths will be temporarily closed and for how long.*

(60) Ms Fraser has recommended amendments to clauses c) and g) as well as additional points i) – k) as shown below. I agree with these suggested changes as they will further manage potential adverse effects on the transport network. The changes are shown below.

26. *The CTMP must include, as a minimum:*

- a. *Measures to minimise the disruption to users of local travel routes;*
- b. *Temporary traffic management measures required to manage impacts on road users during the proposed construction works including signage and traffic control;*
- c. *Measures to maintain safe existing vehicle access to adjacent properties including safe sight lines where trucks or materials are parked or stored in the carriageway;*
- d. *Any proposed temporary changes in speed limits;*
- e. *Measures to control HCV so that two HCVs are not travelling in opposite directions along Summit Road or Tilbury Street at any one time including detailing appropriate waiting locations;*
- f. *Provision for safe and efficient access of vehicles to and from the construction site;*
- g. *Details of where parking will be temporarily removed; and how reasonable access to on-street parking for residents will be achieved;*
- h. *Details as to where footpaths will be temporarily closed and for how long.*
- i. *Measures to provide for the monitoring and maintaining of the road pavements on Tilbury Street, Summit Road and Balgownie Grove during construction;*
- j. *Measures to manage staff parking so that it is contained within the site;*
- k. *Details of the Temporary Traffic Management needed to ensure the safe movement of trucks, including truck and trailer units through the Summit Road intersection with Tilbury Street;*

(61) Ms Fraser has recommended changing the wording of condition 27. The current wording is:

27. *The Requiring Authority shall carry out a preconstruction survey of Summit Road, Tilbury Street and Balgownie Grove prior to the commencement of Construction Works. Prior to the Construction Works commencing, the preconstruction survey shall be supplied to the Road Asset Manager.*

(62) The proposed wording is:

27. *The Requiring Authority shall carry out a preconstruction survey of the road pavement, footpath pavement on Summit Road, Tilbury Street and Balgownie Grove and the Tilbury Street bridge prior to the commencement of Construction Works. The methodology for the survey is to be agreed with the Road Asset Manager. Prior to the Construction Works commencing, the preconstruction survey shall be supplied to the Road Asset Manager.*

(63) I consider the above changes enhance the proposed condition and potentially avoid disagreement over the survey methodology and extent.

(64) Ms Fraser has recommended changing the wording of condition 28. The current wording is:

28. *Following completion of the Construction Works, the Requiring Authority shall complete a postconstruction survey of Summit Road, Tilbury Street, and Balgownie Grove. The Requiring Authority shall contribute a fair and reasonable cost, as determined by a Suitably Qualified Person, towards repair and maintenance of Summit Road and Tilbury Street should damage to the road be attributable to the Construction Works.*

(65) The proposed wording is:

28. *Following completion of the Construction Works, the Requiring Authority shall complete a postconstruction survey of Summit Road, Tilbury Street, ~~and~~ Balgownie Grove and the Tilbury Street bridge. The Requiring Authority shall contribute a fair and reasonable cost, as determined by a Suitably Qualified Person, towards repair and maintenance of Summit Road ~~and~~, Tilbury Street, Balgownie Grove and the Tilbury Street bridge should damage ~~to the road~~ be attributable to the Construction Works.*

(66) I consider the above wording changes usefully expand the area where trucks will be operating, and potentially damaging the road reserve.

(67) Ms Fraser has recommended changing the wording of condition 29. The current wording is:

29. *All HGV traffic carrying goods (including bulk materials) that will utilise SH2, either travelling north or south, shall use the Kennedy Good Bridge, Fairway Drive, Daysh Street route to avoid HGVs travelling through the Hutt CBD to access either the Melling or Dowse interchanges.*

(68) The proposed wording is:

29. *All HGV construction traffic that will utilise SH2, travelling to or from the north or south, shall use the Kennedy Good Bridge, Fairway Drive, Daysh Street route.*

(69) The change is proposed as Ms Fraser considers it is desirable for empty trucks to also use the recommended route. I agree with this recommendation.

(70) The submission from the Ministry of Education requests that heavy vehicles should have to avoid travelling past four specified schools during before school and after school peak periods. Ms Fraser notes that the roads past the schools in question are arterial routes, that can be anticipated to accommodate heavy vehicles, and are typically congested at peak times which slows vehicle speeds. Ms Fraser does not consider that it is necessary for construction vehicles to avoid school start and finish times. I accept this comment and therefore do not recommend a condition preventing trucks from traveling past schools at peak times as requested by the Ministry of Education.

(71) The submission from the Ministry of Education requests that an amendment to Condition 26 is made to require the CTMP to include “*Details of briefings to heavy vehicle drivers about the importance of slowing down and adhering to established speed limits when driving past any school site.*”. I consider this requirement could be included in Condition 26 clause (f) as requested by the submitter:

26. *The CTMP must include, as a minimum:*

- a. ...;
- b. ...;
- c. ...;
- d. ...;

- e. ...;
- f. *Provision for safe and efficient access of vehicles to and from the construction site;*
 - i. *Details of briefings to heavy vehicle drivers about the importance of slowing down and adhering to established speed limits when driving past any school site.*
- g. ...;
- h. ...

Conclusion

- (72) The Statement of Evidence from Ms Fraser recommends that several conditions are altered and concludes that traffic effects can be appropriately managed and mitigated. I concur with this assessment and consider the proposal is acceptable subject to the amendments to the conditions discussed above.

Ecology

- (73) My assessment is informed by the technical assessment by Tessa Roberts who has provided a Statement of Evidence.

Effects identified by the applicant

- (74) In summary, the NoR identifies and describes the ecology effects and associated mitigation as follows:

- Avifauna – temporary disturbance during construction, short term to permanent loss of nesting and foraging habitats, potential death of birds during vegetation clearance which is likely limited to immobile chicks rather than mobile adult birds, short term loss of foraging habitat and an increase in foraging habitat for species adapted to disturbed areas and human activity, permanent loss of mature vegetation due to the pipeline realignment.
- Herpetofauna – temporary disturbance during construction, short term to permanent loss of habitat and potential death during habitat clearance.
- Invertebrates - Construction activities associated with habitat clearance pose a risk of death to terrestrial invertebrates. The assessment considers there is likely to be only a very slight change from the existing terrestrial baseline condition.
- Flora – up to 1.9ha of vegetation could be removed which is considered to be 0.3% of the 670ha of Significant Natural Resource R12 District Plan overlay. Vegetation lost will be both indigenous and exotic.

- (75) The summary above is brief and the full assessment in Appendix G of the NoR should be referred to.

- (76) The NoR proposes mitigation via methods to be set out in a Bird Management Plan (BMP), Lizard Management Plan (LMP) and Vegetation Management Plan (VMP). The BMP and VMP must be submitted to HCC for certification. The LMP, post certification from the Department of Conservation, must be supplied to HCC 10 days prior to any work on land identified as lizard habitat. Mitigation will include, but not be limited to:

- Avoiding and minimising the removal of, or impacts to, indigenous vegetation where practicable during vegetation clearance activities.

- Staging vegetation removal activities so that vegetation clearance during nesting and fledging seasons is avoided if practicable and effects on other fauna are avoided.
- The BMP will detail methodologies to determine and manage construction activities if active nests are present prior to vegetation removal during nesting and fledging season and define the nest and fledging seasons and zone of influence for identified species.
- The LMP will detail where lizard habitat must be avoided during May – August, an Accidental Discovery Protocol (ADP) for regionally ‘Threatened’ or ‘At Risk’ species that may be encountered on site, and pest control requirements at release sites.
- The VMP must detail the volume of ‘Mānuka and/or Kānuka and Broadleaved Indigenous Hardwoods that will be cleared onsite and whether residual effects need to be addressed, where remediation of vegetation onsite will occur, confirmation that the plant species to be planted will achieve an appropriate degree of canopy closure, that plants are eco-sourced and appropriate for lizard species onsite, details of the progressive planting and site stabilisation proposed as determined by planting seasons and future construction phases, monitoring and maintenance of planting required post-construction.

(77) The assessment considers that post the mitigation described above that the adverse effects on avifauna, herpetofauna, invertebrates and flora will be less than minor.

Submissions

(78) The submission from Christine Burt raises concerns about the loss of native vegetation and wildlife and would like environmental damage resulting from the proposal to be reinstated.

Statutory context

Resource Management Act 1991 (RMA)

- (79) In regard to the management of ecological values, s6 (c) and (e) of the RMA have particular relevance to the assessment of effects of the proposal. Areas of significant indigenous vegetation and significant habitats of indigenous fauna are to be protected (s6(c)). The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (s6(e)) is interconnected with ecological processes and values, including the role flora and fauna have in tikanga, as rongoa, and as kai, but also the responsibility mana whenua have as kaitiaki of the environment.
- (80) Section 7 of the Act includes a number of matters that are relevant to the consideration of ecological matters in relation to this Project. Kaitiakitanga (s7(a)) and the ethic of stewardship (s7(b)) are both relevant in terms of the responsibility for looking after natural and physical resources.
- (81) Section 7(c), the efficient use and development of natural and physical resources is relevant in terms of the use of the ecological resources that are present on the site (including the removal or modification of them to enable the Project to proceed). Ecological values are inherent components of amenity values (s7(c)), particularly amenity values associated with landscapes.
- (82) The intrinsic values of ecosystems (s7(d)) are also an important consideration, recognising that ecosystem values are not limited to human values. S7(f), which relates to maintenance and enhancement of the quality of the environment, and s7(g), which relates to the finite characteristics of natural and physical resources are relevant. This is particularly so when considered alongside s6(c), where there are ecosystems and habitat types that are rare, threatened or at risk and therefore have both a finite aspect to them and require at least

maintenance, but potentially also enhancement, to avoid them being further diminished or potentially lost.

National Policy Statement for Freshwater Management (NPS-FM)

(83) The NPS-FM applies to all freshwater and the implementation of the NPS-FM largely requires actions by regional councils due to their responsibilities for freshwater management. The NPS-FM directs regional councils to change their regional policy statements and regional plans to be consistent with the requirements of the NPS-FM. The NPS-FM provides limited direction to territorial local authorities and district plans such as in Section 3.5 (4). HCC has not yet updated the District Plan to give effect to the changes to the RPS that relate to freshwater management.

(84) The objective of the NPS-FM is as follows:

(1) *The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:*

- *first, the health and well-being of water bodies and freshwater ecosystems*
- *second, the health needs of people (such as drinking water)*
- *third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.*

National Policy Statement for Indigenous Biodiversity (NPS-IB)

(85) The NPS-IB took effect on 4 August 2023 and its objective is:

(a) *to maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity after the commencement date; and*

(b) *to achieve this:*

- (i) *through recognising the mana of tangata whenua as kaitiaki of indigenous biodiversity; and*
- (ii) *by recognising people and communities, including landowners, as stewards of indigenous biodiversity; and*
- (iii) *by protecting and restoring indigenous biodiversity as necessary to achieve the overall maintenance of indigenous biodiversity; and*
- (iv) *while providing for the social, economic, and cultural wellbeing of people and communities now and in the future.*

(86) The NPS-IB requires TLA's to identify Significant Natural Areas (SNAs) using prescribed criteria and include these in District Plans. However, HCC has not worked through this process yet.

(87) The NPS-IB defines a SNA as:

“(a)...

(b)... any area that, on the commencement date, is already identified in a policy statement or plan as an area of significant indigenous vegetation or significant habitat of indigenous fauna (regardless of how it is described); in which case it remains as an SNA unless or until a suitably qualified ecologist engaged by the relevant local authority determines that it is not an area of significant indigenous vegetation or significant habitat of indigenous fauna.”

(88) The definition of SNA is relevant as there is a District Plan 'Significant Natural Resource' (SNR 12) overlay on the site. I agree with the NoR assessment in Table 32 which concludes that SNR 12 falls within the SNA definition in the NPS-IB and must therefore be treated as a SNA.

(89) The most relevant NPS-IB policies are:

- *Policy 2: Tangata Whenua exercise kaitiakitanga for indigenous biodiversity in their rohe, including through:*
 - a) *managing indigenous biodiversity on their land; and*
 - b) *Identifying and protecting indigenous species, populations and ecosystems that are taonga; and*
 - c) *actively participating in other decision making about indigenous biodiversity.*
- *Policy 3: A precautionary approach is adopted when considering adverse effects on indigenous biodiversity.*
- *Policy 4: Indigenous biodiversity is managed to promote resilience to the effects of climate change.*
- *Policy 5: Indigenous biodiversity is managed in an integrated way, within and across administrative boundaries.*
- *Policy 7: SNAs are protected by avoiding or managing adverse effects from new subdivision, use and development.*
- *Policy 8: The importance of maintaining indigenous biodiversity outside SNAs is recognised and provided for.*
- *Policy 10: Activities that contribute to New Zealand's social, economic, cultural, and environmental wellbeing are recognised and provided for as set out in this National Policy Statement.*

(90) Clause 3.10 of the NPS-IB sets out how adverse effects must be managed and under clause 3.10(2) lists five effects that must be avoided. Clause 3.10(3) establishes that other effects, or that occur due to an exception in clause 3.11, must be managed by applying the effects management hierarchy.

(91) The criteria in clause 3.11 that establishes exceptions to 3.10(2) are shown below.

3.11

(1) *Clause 3.10(2) does not apply, and any adverse effects on an SNA of a new subdivision, use or development must be managed in accordance with clause 3.10(3) and (4), if:*

(a) *the new subdivision, use or development is required for the purposes of any of the following:*

(i) *construction or upgrade (if the upgrade does not meet the requirements of clause 3.15(2)) of specified infrastructure that provides significant national or regional public benefit;*

(ii)...

(iii)...

(iv)...; and

(b) there is a functional need or operational need for the new subdivision, use or development to be in that particular location; and

(c) there are no practicable alternative locations for the new subdivision, use or development.

(92) I agree with the NoR assessment on pages 95 and 96 and the RFI response dated 5.11.2024 which considers that clause 3.11 (1)(a)(i) applies to this project due to the works constituting specified infrastructure delivering a significant regional benefit.

(93) In regard to 3.11(b) the RFI response confirms that the reservoir has an operational and/or functional need to be at a certain height (72.53m) to integrate with the water supply network. The other seven potential sites the applicant longlisted were also within SNR's along the eastern hills. I can confirm that SNR's 12, 16, 50 and 53 cover most of the eastern hills. On page 96, the NoR discusses the operational need for the pipeline route to Balgownie Grove which I accept.

(94) In regard to 3.11 (1)(c) the RFI briefly explains the process how the seven longlisted sites were identified from the original 28 potential sites first identified with all seven longlisted sites being located within SNR's. The RFI concludes that there were no practical alternatives sites that would avoid construction within an SNR which I accept and therefore all ecological effects must be managed by applying the effects management hierarchy.

(95) In summary, the NPS-IB is directly relevant with clauses 3.10(3) and 3.10(4). These clauses are as follows:

(3) Any adverse effects on an SNA of a new subdivision, use, or development that are not referred to in subclause (2), or that occur as a result of the exceptions in clause 3.11, must be managed by applying the effects management hierarchy.

(4) Where adverse effects on an SNA are required to be managed pursuant to subclause (3) by applying the effects management hierarchy, an applicant must be required to demonstrate:

(a) how each step of the effects management hierarchy will be applied; and

(b) if biodiversity offsetting or biodiversity compensation is applied, the applicant has complied with principles 1 to 6 in Appendix 3 and 4 and has had regard to the remaining principles in Appendix 3 and 4, as appropriate.

(96) The NPS-IB effects management hierarchy states:

"effects management hierarchy means an approach to managing the adverse effects of an activity on indigenous biodiversity that requires that:

(a) adverse effects are avoided where practicable; then

(b) where adverse effects cannot be avoided, they are minimised where practicable; then

(c) where adverse effects cannot be minimised, they are remedied where practicable; then

(d) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, biodiversity offsetting is provided where possible; then

- (e) *where biodiversity offsetting of more than minor residual adverse effects is not possible, biodiversity compensation is provided; then*
- (f) *if biodiversity compensation is not appropriate, the activity itself is avoided.”*

(97) The NoR addresses the effects management hierarchy in the Ecological Impact Assessment as well as within Section 9 of the NoR.

Regional Policy Statement (RPS)

(98) The NoR, in Table 33 on page 97 and 98, sets out the relevant RPS objectives and policies. In relation to Indigenous Ecosystems Objective 16 and Policies 23, 24 and 47 are identified. RPS objective 16 seeks to ensure that indigenous ecosystems and habitats with significant biodiversity values are maintained and restored to a healthy functioning state. Policy 23 set out criteria for identifying indigenous ecosystems and habitats with significant indigenous biodiversity values. Hutt City Council has not put this Policy into effect. Policy 24 requires policies, rules and methods are put in place to protect the ecosystems identified as significant under Policy 23.

(99) I note that the SNR overlay that is present in the District Plan predates the RPS.

(100) Policy 47 of the RPS is a ‘consideration’ policy which requires a determination whether a NoR may affect significant indigenous biodiversity to assess whether the proposed activity is inappropriate by having regard to several matters set in the policy. Policy 47 only ceases to have effect once policies 23 and 24 are in place so remains relevant given HCC have not implemented Policy 23.

(101) Decisions on RPS-PC1 were released 4 October 2024. The appeal period extends to 18 November 2024. After this date those provisions that have not been appealed will be treated as operative. At the time of writing this report it is speculative to identify which provisions may be appealed. What is certain is that there has been a significant number of amendments to the provisions from when they were notified.

(102) RPS-PC1 has amended provisions that relate to indigenous biodiversity as PC1 has amended provisions in response to the NPS-IB. While reasonable weight ought to be given to the RPS provisions introduced and amended by PC1, due to the last stage in the process, it is my view that assessing the RPS provisions ought to be at a higher level looking at the general policy direction rather than a detailed assessment of the at times quite nuanced amendments that are subject to appeal.

(103) Objectives 16A has been introduced which states: *The region’s indigenous ecosystems are maintained, enhanced, and restored to a healthy functioning state, improving their resilience to increasing environmental pressures, particularly climate change, and giving effect to Te Rito o te Harakeke.*

(104) RPS-PC1 has amended Policy 47 with additional criteria to take into account when assessing whether the effects of a proposal are inappropriate. The additional criteria introduce effects to be avoided, which are directly taken from the NPS-IB. Of particular note is the link in Policy 47 (i) to Policy 24B and 24C. Under Policy 24B there is an exemption from the five effects to be avoided under Policy 47(1) when a land use is for the construction of a specified infrastructure; where it provides significant national or regional public benefit and, there is a functional need or operational need to be in that particular location, and there are no practicable alternative locations for the activity. The reservoir fits within the definition of Regionally Significant Infrastructure under the RPS-PC1.

Operative District Plan

(105) District Plan objective 14E 1.1 seeks to identify and protect significant natural, cultural and archaeological resources from inappropriate use and development with a related policy that states development shall not modify, damage or destroy the intrinsic value of the ecosystems of a significant natural, cultural or archaeological resource. Significant Natural Resource 12 (SNR 12) applies to the site and is described as:

Lowland forest on hill country. Contains a fire-induced regionally representative regenerating vegetation mosaic, including areas of pre-European Podocarps and Hard Beech. Nearly two-thirds of the forest is 90-110 years old. Plants - Arthropodium cirrhatum, Fuchsia excorticata and Podocarpus totara. Large species diversity due to different topography. Many bird species, including NZ pigeon

(106) The proposed works within SNR12 would require resource consent for a Restricted Discretionary Activity under rule 14E 2.2 with Matters of Discretion being:

- *“Extent and effects of the works.
Assessment will be made of the following relevant factors:*
 - *The extent to which the resource is to be modified, damaged or destroyed;*
 - *The extent to which the proposal may compromise natural character, visual amenities and landscape values;*
 - *The impact on the coastal environment; and*
 - *The recognition and protection of cultural significance.”*

Analysis

(107) Ms Roberts provided an initial review of the proposal and then a second review following the update of the Ecological Impact Assessment. Ms Roberts’s Statement of Evidence should be referred to in addition to this report.

(108) In summary, Ms Roberts’s considers that seasonally dependent species such as orchids may have been missed due to the timing of the field assessment and not reviewing the iNaturalist database. Two species of orchids were found by Ms Roberts during her site visit. In addition, a Northern rata was noted by Ms Roberts which is not included in the plant species list for the site.

(109) Ms Robert’s comments on the application of the Ecological Impact Assessment NZ guidelines and considers there is some inaccuracy with their application but concludes in paragraph 22 that this *“may not essentially change the outcome of the project in terms of overall ecological effects...”*

(110) As set out in paragraphs 24 and 24 of Ms Roberts’s Statement of Evidence there is the need for additional mitigation to offset the vegetation and habitat loss and this can be managed through amending the conditions relating to the BMP and VMP as follows.

34. *The BMP must include, as a minimum:*

- a) *The Zone of Influence for all indigenous species possible on site;*
- b) *The nesting and fledging breeding season for all species on site;*
- c) *Methodologies to determine if active nests are present prior to vegetation removal occurring and construction activities commencing that would disturb species on site (if construction were to occur during the breeding season); and*
- d) *The management actions that ~~should~~ will be implemented should active nests of indigenous species be discovered during checks (i.e. exclusion zones).*

- e) *Methodologies to offset the loss of any confirmed nesting habitat for threatened species*
- f) *Confirmation that pre clearance checks of cavities in large trees shall be undertaken during breeding seasons (in case cavity nesters are present).*
- g) *Confirmation that pre clearance checks for karearea shall also be undertaken if vegetation clearance is to occur within the breeding season*

36. *The VMP must, as a minimum:*

- a) *Include methods to protect newly established plants;*
- b) *Detail a suitable annual monitoring and maintenance schedule for 5 years following completion of the Project to ensure canopy closure and plant survivorship occurs;*
- c) *Identify those areas of indigenous vegetation lost during site clearance activities;*
- d) *Identify those areas on site where remediation of indigenous vegetation will occur; and*
- e) *Identify where riparian planting is proposed along the banks of the Waiwhetū stream.*
- f) *Detail how vegetation clearance, salvage, stockpiling and its reuse/spread on site, will be managed under the supervision of an ecologist and/or landscape architect, including the salvage of indigenous plant material and forest duff (topsoil layer) as part of the earthworks stage.*
- g) *Confirm that the fleshy spotted orchid shall be searched for within the manuka/kanuka prior to any clearance works and outline Procedures for the translocation and management (if required) of “At Risk” species of fleshy spotted orchids if discovered on site prior to vegetation clearance occurring.*
- h) *Confirm the extent and method of enhancing surrounding habitat through exotic species removal and enrichment replanting.*

(111) Ms Roberts Statement of Evidence concludes that:

- “39. *The EclA for the Eastern Hills Reservoir, is comprehensive in its field assessment, although some threatened orchid and bird species may have been overlooked in desktop assessments. If orchids, cavity nesters, and karearea are addressed appropriately in the consent conditions, ecological effects on high value species can be managed.*
- 40. *The project will still result in a loss of 0.71 hectares of indigenous vegetation and threatened fauna habitat that is not currently addressed. There is an opportunity for compensation of this loss to be provided in enhancing the surrounding habitat through removal of pest tree species and underplanting enrichment. Should this be implemented at an appropriate scale, then the vegetation and habitat loss will be suitably managed through the effects hierarchy.”*

(112) Given the above conclusion, I consider that subject to amending the conditions as suggested above that the NoR, in regard to ecological matters, is acceptable in regard to the adverse effects and is generally consistent with planning framework.

Noise and vibration

(113) My assessment is informed by the technical assessment by Steve Arden who has provided a Statement of Evidence.

Effects identified by the applicant

(114) Noise effects will be generated from construction on the site and construction vehicles accessing the site. The applicant's assessment identifies Noise Sensitive Receivers (NSR) and has broken down the assessment to Site Establishment, Earthworks for the Reservoir, Pipeline and Reservoir Construction Activities – piling, Pipeline and Reservoir Construction Activities – no piling, Pipeline and Reservoir Construction Activities night dewatering and over pumping and Vehicle Access.

(115) An untypical aspect of the proposal is the necessity to undertake night works. The application states *“Construction works are proposed on four nights during Stage 4 Reservoir Construction, during the concrete pouring and post-tensioning process; two consecutive nights are required for the reservoir slab works, and two consecutive nights for the roof topping slab. Night works are understood to begin at approximately 0300 hours on the nights of construction⁷. “*

(116) The proffered condition of consent was amended throughout the assessment process in response to comments from Mr Arden.

(117) Table 28 on page 80 of the NoR sets out the effects due to the various components of construction activity set out above, the proposed mitigation, and magnitude of adverse effects. Table 28, along with the Construction Noise and Vibration Impact Assessment Appendix H, should be referred to and is not repeated here in full for brevity, but concludes the magnitude of effects post mitigation are as follows:

- Site Establishment – less than minor
- Earthworks for the Reservoir – less than minor
- Pipeline and Reservoir Construction Activities – piling – minor to more than minor
- Pipeline and Reservoir Construction Activities – no piling – minor
- Pipeline and Reservoir Construction Activities night dewatering and over pumping – less than minor
- Vehicles/site access – minor to more than minor during the daytime and more than minor during the nighttime

(118) In regard to vehicle noise during the nightworks the NoR states *“...It is noted that these predicted noise levels will be experienced on two of the four nights which night-works occur over the whole construction programme for the night-time concrete pours (1 night of concrete pour, 1 night of posttensioning the slab, undertaken over two sets of night works) resulting in a temporary effect. Effects will be reasonable to obvious (daytime) and obvious (night time on the limited nights that this occurs).”*

(119) The application includes a condition requiring submission of a Construction Noise and Vibration Management Plan.

Submissions

⁷ Page 4 Construction Noise and Vibration Impact Assessment

- (120) In regard to noise, submitter Richard Parry is opposed to the project due to the noise effects especially in relation to people working from home. Submitters Forde and Pamela Clarke (Balgownie Grove) raised concern in regard to noise effects during construction and suggested rerouting the pipe through to the reserve adjacent to 20 Waddington Grove. No submissions raise vibration as a concern.

Statutory context

- (121) Section 5 of the RMA directs that sustainable management must enable people and communities to provide for their social well-being and their health, and s7(c) requires particular regard to be had to the maintenance and enhancement of amenity values. Section 16 sets out the duty to avoid unreasonable noise. Relevant provisions in the District Plan include objective 14C 1.1 of the District Plan which seeks to manage adverse effects of excessive noise in order to maintain amenity values.

Analysis

- (122) Mr Arden provided an initial review of the proposal and then a second review following the receipt of further information. Mr Arden's Statement of Evidence should be referred to in addition to this report.
- (123) In summary, Mr Arden's Statement of Evidence confirms he agrees with the standards used by the applicant to assess the development against, namely NZS 6803:1999 "*Acoustics – Construction Noise*" and construction vibration in accordance DIN 4150-3:2016 "*Vibrations in buildings – Part 3: Effects on structures*" and BS 5228-2:2009 "*Code of practice for noise and vibration control on construction and open sites - Part 2: Vibration*".
- (124) Mr Arden confirms the applicant has provided information in regard to how the proposed methodologies are the Best Practicable Option (BPO) with respect to noise for the construction of the reservoir and states "*I consider that the noise and vibration effects would be reasonable, subject to adopting the measures identified as BPO in a Construction Noise and Vibration Management Plan (CNVMP). Conditions are proposed to address this⁸.*"
- (125) Mr Arden's Statement of Evidence notes that the address of the submitter who is concerned with noise impacting his ability to work from home is outside of the area where noise limits will be exceeded. In regard to this submitter, given that there is compliance with the relevant standard and that Best Practicable Options will need to be identified in the Construction Noise and Vibration Management Plan, with that plan to be reviewed and certified, the noise effects and the approach to managing noise is considered acceptable.
- (126) The other submitter raises noise effects in a general sense which Mr Arden considers will be managed by the implementation of measures identified as 'Best Practicable Option'.
- (127) Mr Arden concludes that the proposed conditions will appropriately address the potential effects of the noise and vibration from construction activities. I concur with Mr Arden's assessment and given his support for the proposal I consider the proposed conditions relating to noise effects are appropriate and that the noise effects are acceptable.

Landscape and visual effects

- (128) My assessment is informed by the technical assessment by Linda Kerkmeester who has provided a Statement of Evidence.

⁸ Paragraph 17 Steve Arden Statement of Evidence

Effects identified by the applicant

- (129) The NoR included a landscape and visual effects assessment and further landscape and visual information was provided following Ms Kerkmeester's review of the application.
- (130) Table 24 on page 74 of the NoR sets out the landscape and visual effects during construction and once the project is operational. The effects are broken down to Landscape Effects, Natural Character Effects and Visual effects. In general, the effects will arise from:
- the loss of up to 1.9ha of vegetation,
 - bulk earthworks with the proposed platform being up to 20m below existing ground level and involving 83,000m³ of cut,
 - the construction of the 7.5m high (perimeter foundation to roof slab) concrete reservoir, the construction of the two pipes from the reservoir to Balgownie Grove and the associated bubble-up chambre and lined swale.
- (131) Table 24 on page 74 of the NoR also outlines the proposed methods of mitigation and should be referred to and is not repeated here in full for brevity. The proposed mitigation includes:
- Reinstatement of construction areas and shaping to integrate with the surrounding land;
 - Landscape planting including using taller indigenous broadleaved hardwoods to the west, northeast and east of the reservoir;
 - A 5 year maintenance period;
 - Reinstatement of the firebreak.
- (132) The NoR considers all landscape and visual effects will be minor or less than minor post mitigation.

Submissions

- (133) In regard to visual effects, submitters Forde and Pamela Clarke noted the visual impacts of the pipes and associated earthworks and vegetation removal. The submission refers to 30m wide scarring of the hillside.

Statutory context

- (134) I consider that the relevant Part 2 RMA matters are:
- s6(a) natural character of the coastal environment, rivers, wetlands, and their margins;
 - s7(c) the maintenance and enhancement of the amenity values, and
 - s7(f) maintenance and enhancement of the quality of the environment.
- (135) The RPS has objectives and policies relevant to outstanding natural features and landscapes. The District Plan is currently under review and the review includes identifying outstanding natural landscapes based on RPS Policy 25. No Outstanding Natural Landscapes have been identified along the eastern hills of the Hutt Valley. The District Plan currently does not contain any Special Amenity landscapes and under the review is not identifying Special Amenity Landscapes, so policy 28 is not relevant.
- (136) The District Plan contains the following objectives and policies that are relevant to the consideration of the landscape, visual and natural character associated effects.

(137) Objective 7D 1.1.1 states *“To recognise and protect those parts of the City with high conservation and amenity values.”*

(138) The associated policies are:

- *To conserve and protect the Eastern Hills, Stokes Valley and Wainuiomata Hills which have high conservation and amenity values.*
- *To allow recreation and leisure activities which are consistent with the natural and undeveloped character of the area.*

(139) Objective 7D 1.2.1 states *“To ensure buildings and structures have adverse effects which are no more than minor on conservation and amenity values”*

(140) The associated policies are:

- *To restrict the number of buildings and structures.*
- *To control the size, scale, location and external appearance of buildings and structures.*

(141) The Earthworks Chapter Objective 14I 1.1 states *“To ensure that earthworks are designed to maintain the natural features that contribute to the City’s landscape.”*

(142) The associated policies seek to ensure that earthworks are sympathetic to the natural topography and to protect steep hillside areas to retain topography, protect natural features and prevent erosion and slips.

(143) Objective 14I 1.2 is *“To ensure earthworks do not affect adversely the visual amenity values, cultural values or historical significance of an area, natural feature or site.”*

(144) The associated policies seek to protect the visual amenity values of land which provides a visual backdrop to the City, require rehabilitation measures to be undertaken to mitigate adverse effects upon visual amenity values, to recognise sites with historical inappropriate earthworks and to recognise the importance cultural and spiritual values to the mana whenua associated with any cultural material that may be disinterred through earthworks and to ensure that these values are protected from inappropriate earthworks

Analysis

(145) Ms Kerkmeester provided an initial review of the proposal and then a second review following the receipt of further information. Ms Kerkmeester’s Statement of Evidence should be referred to in addition to this report.

(146) Ms Kerkmeester states the mitigation of the cut, through vegetation planting, will need to be highly effective due to the visibility of the cut with the dry compacted faces with little soil requiring specific treatment to obtain coverage. The proffered conditions have been amended to include specific details for the revegetation of the cut face as well as details regarding the use of cleared vegetation to speed up the regeneration process.

(147) In regard to the further visual assessment provided from a viewpoint on Balgownie Grove Ms Kerkmeester is in agreement with the LVA which concluded adverse effects would be ‘high’ until planting and natural regeneration reduced effects to ‘low’ which is likely to take at least 5 years after planting which in addition to the construction period is a timeframe of several years.

(148) In regard to conditions, as amended by the applicant, Ms Kerkmeester generally supports the amended set of conditions with one change requested. This relates to ensuring there is cross referencing across conditions in relation to the vegetation salvage techniques to be adopted on

this site. I consider it is appropriate to have a vegetation clearance/salvage/stockpile clause added to the Landscape Concept Plan to ensure there is consistency between the Landscape Concept Plan and Vegetation Management Plan. This is reflected in the proposed conditions with clause m) being added to the Landscape Management Plan condition (31).

- (149) I acknowledge the long period where adverse effects will be high when viewed from Balgownie Grove but note that mitigation is proposed in the form of burying pipes and replanting. The effects will reduce over time and there appears to be no additional mitigation that could be employed. Overall, I consider the proposal to be generally consistent with the planning framework.

Geotechnical and Erosion and Sediment Control

- (150) My assessment is informed by the technical assessment by Adam Smith who has provided a Statement of Evidence.

Effects identified by the applicant

- (151) The NoR included a Geotechnical Investigation Factual Report and Geotechnical Interpretive Report which were assessed by Engeo along with information supplied following a further information response.
- (152) These reports include the following technical information: a geotechnical hazard assessment, slope stability analysis, and preliminary recommendations on foundations, earthworks, and slope stabilisation measures.
- (153) A draft Erosion and Sediment Control Plan was submitted with the NoR. I note that resource consent is required from Greater Wellington Regional Council for, amongst other matters, the proposed earthworks. A condition has been proposed that requires the submission of an Erosion and Sediment Control Plan (ESCP) to Hutt City Council for information once it has been certified by Greater Wellington Regional Council.

Submissions

- (154) Two submissions are concerned with geotechnical/natural hazard matters – namely site stability and the water supply resilience achieved, or not achieved, by locating the proposed reservoir in close proximity to the existing reservoir which may be subject to the same potential site stability and natural hazards issues.

Statutory context

- (155) Section 6(h) of the Act requires the management of significant risks from natural hazards as a matter of national importance.
- (156) The RPS objectives (19 and 20) seeks to ensure that new development is located and designed to manage the impacts from natural hazards that may be experienced over their lifetime, that hazard mitigation work does not increase the risk and consequence of natural hazard events and that communities are more resilient to, and better prepared for, the consequences of natural hazards.
- (157) RPS-PC1 amends objectives 19 and 20 with objective 19 stating *“The risks to people, communities, business, property, and infrastructure from natural hazards and the effects of climate change are avoided or minimised.”* Objective 20 is amended to focus solely on natural hazard mitigation measures and climate change adaptation activities. Objective 21 states *“The resilience of our communities, infrastructure and the natural environment to natural hazards is improved, including to the short, medium, and long-term effects of climate change, and sea level rise, and people are better prepared for the consequences of natural hazard events.”*

- (158) The District Plan objective 14H 1.1.1 seeks to avoid or reduce the risk to people and their property from natural hazards. The relevant associated policies seek to manage development so that development avoids, reduces or does not increase risks to people, property, and infrastructure.

Analysis

- (159) Mr Smith has reviewed the proposal and further information, and his Statement of Evidence should be read in conjunction with this report.
- (160) Mr Smith considers that further investigations and geomorphological mapping are required and that these investigations should be peer reviewed by an external experienced chartered geotechnical professional engineer. Mr Smith also states that additional analysis should be undertaken to demonstrate that the resulting deformations under seismic conditions are acceptable.
- (161) I consider that it is appropriate to require this information to be provided as part of the Outline Plan and given its highly technical nature that the condition requires peer review of the information. Accordingly, additional conditions are recommended as shown in Appendix 1 of this report.
- (162) Overall, I consider that with the appropriate technical analysis, investigation, and peer review of the ground conditions and applied engineering solutions, under seismic and non-seismic conditions, a reservoir can be appropriately designed for this site.

Other issues raised in submissions

- (163) Two submissions commented on the flooding issues in relation to discharging overflow water to the Waiwhetū Stream and one submission commented on potentially weakening the structure of the stream bank due to the water outlet pipe.
- (164) The concern relates to the combined overflow/scour pipeline with the overflow pipe used for any emergency overflows from the reservoir and the scour pipe is used to empty or “scour” the reservoir to allow routine maintenance. The existing Naenae reservoir overflow/scour pipe will also be connected to this pipe. The overflow will have an outlet via a chamber 15m from Waiwhetū Stream to a rock rip rap lined swale.
- (165) The NoR states the overflow or scour discharge will be infrequent with the overflows only for emergency overflows and the scour pipe is only used for routine maintenance. The impact of this additional but infrequent discharge to the Waiwhetū Stream catchment is not stated in the NoR. Resource consent is required from Greater Wellington Regional Council who will assess the effects of the infrequent overflows.

Recreation Values

- (166) A submitter is concerned with effects on recreation values due to access to the Summit Road Firebreak Track being prevented during construction. Access to the Waiwhetū Stream bank adjacent to the end of Balgownie Grove will also be restricted. The NoR notes⁹ that noise from machinery may impact recreational users of the Waddington Winder track. While the Summit Road Firebreak Track will be closed during construction. I note access to the Waddington Winder Track from Waddington Grove will not be impacted by the proposal.
- (167) A 5m wide access track to bypass the proposed reservoir will be created to a higher standard than the existing track post construction. In addition, a rest area and seating will be provided on the

⁹ Page 66 and 67 NoR

Northeast side of the reservoir and on the northern side of Waiwhetū Stream along with riparian planting.

- (168) Effects during construction have been assessed as minor and changing to positive when the reservoir is operational. I concur with this assessment and consider the effects on recreation values are largely unavoidable during construction but will be positive post construction.

8. OTHER OBJECTIVES AND POLICIES

- (169) The Network Utilities Chapter contain relevant objectives and policies which are set out below.

Objective 13.1.1 To recognise and protect the benefits of regionally significant network utilities.

Policies

- a. To identify regionally significant network utilities within the City on Council planning maps, as practicable.*
- b. To recognise the national, regional and local benefits of regionally significant network utilities.*

Objective 13.1.3 To recognise and provide for the sustainable, secure and efficient use, operation and development of network utilities within the City

Policy d: To encourage the appropriate use of designations for new network utilities and extensions to existing network utilities that are not designated.

- (170) The associated Explanation and Reasons states:

“Policy d. is focussed on encouraging network utility operators, particularly those who operate regionally significant network utilities, to use the notice of requirement for designation process when they seek to develop new or extend existing network utilities. This is particularly encouraged for operators where such new or extended network utilities involve restrictions on the use of privately owned land and may require land acquisition. It is recognised that not all network utility operators use designations, particularly those that do not operate linear infrastructure”

- (171) Objective 13.1.4 is *“To manage any adverse effects on the environment resulting from the design, location, operation, upgrading and maintenance of network utilities.”*

- (172) The relevant policies are:

(a) To ensure that network utilities are designed, located, developed, constructed, upgraded, operated and maintained to avoid, remedy or mitigate any actual or potential adverse effects on the environment.

(b) To manage effects on health and safety by ensuring network utilities are designed, located, upgraded, operated and maintained to comply with relevant national environmental standards and to meet other nationally recognised standards and guidelines

(f) To encourage network utility providers to consult with local communities, landowners and the Regional Council (where relevant) on the appropriate placement, location and design of new network utilities.

- (173) I consider the proposed Designation aligns with the Network Utility objectives and policies. The proposal will have positive effects on the water supply network, comprehensive mitigation is proposed with effects reducing as mitigation becomes more established effective. I agree with the reasons set out in Table 34 of the NoR.
- (174) Section 168A (3)(d) requires regard to be had to any other matter considered reasonably necessary in order to make a decision on a requirement. Section 12.5.2 of the NoR discusses the Civil Defence Emergency Management Act 2002, the HCC 10 Year Plan 2021 – 2031 and the ‘Reserves Strategic Directions 2016 – 2026’ document. I agree with the assessment in relation to these documents and have not identified any other documents that regard should be had to.

9. CONSIDERATION OF ALTERNATIVE SITES, ROUTES OR METHODS OF UNDERTAKING THE WORKS

- (175) Section 168A(3)(b) of the Act RMA requires a consideration of alternatives when the requiring authority does not have an interest in the land sufficient for undertaking the work, or if it is likely that the work will have a significant adverse effect on the environment. In this case Hutt City Council own the land.
- (176) The NoR effects assessment has not concluded any of the adverse effects would be ‘significant’ however the NoR includes an assessment of alternative sites in the Site Selection Report – Appendix M and sections 8.2 to 8.36 of the NoR discuss this process. After reviewing this report I consider that adequate consideration to alternative sites, routes and methods has been given.

10. NECESSITY OF THE WORKS TO ACHIEVE THE OBJECTIVES OF THE REQUIRING AUTHORITY

- (177) The stated objectives in relation to the proposal are set out in Table 30 of the NoR and section 12.2.1 of the NoR discusses the objectives in relation to s168A(3)(c). Particular regard must be had to “*whether the works and designation are reasonably necessary for achieving the objectives of the Requiring Authority for which the designation is sought*”.
- (178) The stated objectives of the project are, in summary, to deliver a secure, safe and reliable water storage solution, to integrate the chosen solution into the Lower Hutt Central (Water Storage Area (WSA) network in a cost-effective manner, address the current storage shortfall and to ensure the Lower Hutt and Taitā water storage areas are operationally resilient.
- (179) The reasons why the proposal is reasonably necessary to achieve the objectives are also set out in Table 30 and are not repeated here for brevity. I have no reason to disagree with the reasoning set out in Table 30.

11. ACHIEVING PART 2 OF THE RMA

(180) On the basis of evidence available to me at the time of writing this report, it is my view that the NoR would meet the purpose of the RMA and the relevant principles. This is because:

- The public utility will provide for the well-being of the Hutt Valley community by increasing water storage capacity and resilience;
- In relation to Section 6 matters the proposal, post construction, will maintain access along the Waiwhetu Stream which will be enhanced by planting;
- Appropriate mitigation is proposed in relation to effects on the SNR;
- Through additional assessment there will be appropriate management of risks from natural hazards;
- Appropriate engagement with Taranaki Whanui has been demonstrated, and
- The management of effects on amenity values has been suitably considered and mitigated through proposed conditions.

12. OVERALL CONCLUSION

(181) It is considered that the Reservoir project is consistent with Section 5 of the Act as the Project will provide enhanced and more resilient water supply to Lower Hutt. The proposal will have some temporary adverse effects during the construction period that can be appropriately managed through conditions. There will be some longer term effects that will diminish over time but these are generally limited in scale, localised and acceptable on balance when the overall benefits of the project are considered.

(182) The Notice of Requirement is consistent with the overall objectives and policies of the relevant planning documents, and the purpose and principles of the RMA.

(183) Suggested amendments to conditions are set out in Appendix 1.

13. RECOMMENDATIONS

(184) It is recommended pursuant to section 168A(4) of the Act that the Hutt City Council's Notice of Requirement be confirmed as long as the proffered conditions are appropriately amended as discussed in this report.

Report prepared by:

Dan Kellow
**Planning Consultant, acting for Hutt
City Council**
7 November 2024

Report reviewed by:

Nathan Geard
Policy Planning Manager, Hutt City Council

Appendix 1

Proposed and Recommended conditions

Definitions, abbreviations, acronyms, and terms

Term	Definition
AEE	Assessment of Environmental Effects for the Eastern Hills Reservoir Project
BMP	Bird Management Plan
CEMP	Construction Environmental Management Plan
CMO	Hutt City Council's Compliance Monitoring Officer
CNVMP	Construction Noise and Vibration Management Plan
CTMP	Construction Traffic Management Plan
Commencement of Construction	The time when the Construction Works start
Completion of Construction	Completion of reservoir earthworks, construction of the reservoir, restoration of the reservoir site and access track, and completion of planting in accordance with the LCP (but not including any further planting that may be required during the maintenance and monitoring period under the VMP)
Construction Works	Activities undertaken to construct the Eastern Hills Reservoir, excluding Enabling Works, up to Completion of Construction
dB	Decibel
Enabling Works	Includes the following and similar activities in relation to the Project: <ul style="list-style-type: none"> • Geotechnical investigations and land investigations • Site establishment activities including site yards, site offices, fencing, and formation of site access points • Construction of site access road • Ecological surveys and any necessary relocations • Vegetation protection • Construction and installation of erosion and sediment control measures • Establishment of mitigation measures (such as screening, bunds, noise walls) • The detailed scope of enabling works specified in Section 4 of the Notice of Requirement for a New Designation in relation to the Project dated 26/02/2024.
ESCP	Erosion and Sediment Control Plan
GWRC	Greater Wellington Regional Council, including any officer of Greater Wellington Regional Council
HCC	Hutt City Council in its capacity as territorial authority or regulator
LCP	Landscape Concept Plan
LMP	Lizard Management Plan
Material Change	Material change will include amendments to any base information informing the management plan which has the potential to materially increase adverse effects on a particular receiver, or on the environment. For clarity, changes to personnel, contact schedules and other administrative changes do not constitute a material change.
Outline Plan	An Outline Plan of Works prepared in accordance with section 176A of the Resource Management Act 1991
Project	The design, construction, maintenance, and operation of the Eastern Hills Reservoir as in the AEE and these designation conditions

Term	Definition
Requiring Authority	Hutt City Council in its capacity as the owner of the Project
Suitably Qualified Person	A person (or persons) who can provide evidence to demonstrate their suitability and competence in the relevant field of expertise and put those skills and knowledge into practice in order to perform a job in an effective and efficient manner to an established standard.
VMP	Vegetation Management Plan
Working day	Has the same meaning as under Section 2 of the Resource Management Act 1991

General Conditions

1. Except as modified by the conditions below, and subject to final design and Outline Plan(s), the Project shall be undertaken in general accordance with the information provided by the Requiring Authority in the Notice of Requirement and supporting documents being:
 - i) The Description of the Project provided in Part B of the AEE Report prepared by Connect Water titled 'Notice of Requirement for a New Designation. Project Name: Eastern Hills Reservoir', dated 26/02/2024; and
 - ii) The Project's Technical Assessment Reports, Appendix A – Appendix Q, of the Notice of Requirement for a New Designation; and
 - iii) The following Notice of Requirement Plans prepared by Connect Water (Drawing Set 3-WW021.02_C000).

NOTE: Where there may be contradiction or inconsistencies between the application and any further information provided by the applicant, the most recent information applies. Where there is conflict between the documents listed above and these designation conditions, these conditions shall prevail.

2. The Project must be undertaken in accordance with any management plans required to be prepared under these conditions.
3. Other than as specified in, and required by, Conditions 1 & 39 (ongoing monitoring and management), all other conditions relate to the Construction Works of the Project only apply to construction activities. After the Completion of Construction, these conditions will no longer apply and can be removed as part of any subsequent District Plan review or change. For the avoidance of doubt, none of these conditions, Conditions 2 to 39 inclusive, prevent or apply to works required for the ongoing operation or maintenance of the Reservoir.
4. As soon as reasonably practicable following the Completion of Construction of the Project, the Requiring Authority shall:
 - a) Review the area designated for the Project
 - b) Identify any areas of designated land that are no longer necessary for the on-going operation or maintenance of the Project or for ongoing mitigation measures
 - c) Give notice to HCC in accordance with section 182 of the RMA seeking the removal of those parts of the designation identified under (b) above
5. The Requiring Authority shall submit to the CMO at least 2 months prior to Commencement of Construction, a detailed programme outlining:
 - a) The proposed staging of the Construction Works
 - b) The anticipated submission dates of the management plans and outline plans required by these conditions
6. The Requiring Authority shall arrange and conduct an on-site meeting including the Project representative and appropriate contractor representative(s) and the CMO at least 10 working days prior to the Commencement of Construction. The following information shall be made available at the meeting:
 - a) Timeframes for key stages of the Construction Works;
 - b) Details of the Project representative(s), including their contact details (phone and email address); and

- c) Contact details of the site contractor and other key contractors.

Note: In the case that any of the invited parties, other than the representative of the Requiring Authority and the contractor, do not attend this meeting, the Requiring Authority will have complied with this condition, provided the CMO is invited 5 days in advance of the on-site meeting occurring.

7. An Outline Plan(s) shall be submitted to HCC, unless a waiver for this requirement is provided in writing by the HCC.

Certification of Management Plans

8. The Construction Works management plans listed in clause (a) shall be submitted to HCC for certification. The certification process shall be confined to confirming that the Management Plan meets the requirements of the relevant management plan conditions(s). The preparation of all management plans required by these conditions shall be undertaken by a Suitably Qualified Person.
 - a) The following plans shall be submitted for certification:
 - I. Construction Environmental Management Plan (**CEMP**);
 - II. Construction Noise and Vibration Management Plan (**CNVMP**);
 - III. Construction Traffic Management Plan (**CTMP**);
 - IV. Landscape Concept Plan (**LCP**);
 - V. Bird Management Plan (**BMP**);
 - VI. Vegetation Management Plan (**VMP**); and
 - b) If twenty (20) working days have passed since the management plan has been provided to HCC under clause (a) above, and the Requiring Authority has not received a response from HCC, the Management Plan shall be deemed to be certified.
 - c) If the HCC's response is that they are not able to certify the Management Plan, the they shall provide reasons and recommendations for changes to the management plan in writing. The Requiring Authority shall consider any of the reasons and recommendation of HCC and resubmit an amended Management Plan to be certified.
 - d) If the Requiring Authority has not received a response from HCC within ten (10) working days of the date of resubmission under clause (c) above, the amended Management Plan will be deemed to be certified.
 - e) Any certified management plan may be updated or revised to reflect any changes in design, construction methods or management of effects:
 - I. Any material changes are to be submitted to HCC for certification as soon as practicable following identification of the need for an update or revision. If the Requiring Authority has not received a response from HCC within ten (10) working days of submitting the revised information, the management plan will be deemed to be certified. Any material changes may not be implemented until certified by HCC.
 - II. Except for material changes, management plans may be amended to reflect any changes in design, construction methods or management of effects and submitted to Hutt City Council for information, without the need for recertification.

- f) No Construction Works may commence until all management plans that relate to those Construction Works or relevant stage(s) of works have been certified by the HCC or are deemed certified in the absence of a response from HCC.

Construction Environmental Management

- 9. The Requiring Authority shall not commence Construction Works (or relevant stage of Construction Works, if the works are carried out in stages) until a Construction Environmental Management Plan (**CEMP**) has been certified by HCC, in accordance with condition 8, confirming that the CEMP satisfies the requirements of Condition 10.
- 10. The purpose of the CEMP is to set out the management procedures and construction methods to be undertaken to avoid, remedy or mitigate any adverse effects associated with the Construction Works. To achieve the purpose, the CEMP must include details of:
 - a) Construction methodologies and construction timeframes, including staging;
 - b) Working hours, which should generally be 7:30am to 6:00pm Monday to Saturday except as otherwise provided for under condition 18;
 - c) The roles and responsibilities of staff and contractors;
 - d) Details of the project manager and the Project representative(s), including their contact details (phone and email address);
 - e) The proposed site layouts (including construction yards), locations of refuelling activities and construction lighting;
 - f) Methods for providing for the health and safety of the general public;
 - g) Procedures for incident and complaint management and reporting including details of who can be contacted to report complaints throughout the duration of the Construction Works;
 - h) The complaints register that shall be maintained for the duration of the works detailing complaints received alleging adverse effects from, or related to, the works;
 - i) Procedures for how complaints are to be addressed;
 - j) Details of where machinery operations must be excluded, to ensure minimal disturbance of these areas; and
 - k) Details of where temporary signage shall be installed during construction of the Project, which informs the general public of the works, including alternative access points for accessing the Eastern Hills recreational area.
- 11. The Requiring Authority must implement the certified CEMP (with any amendments) for the duration of the Construction Works.
- 12. The Requiring Authority must ensure that a copy of the certified CEMP, including any amendments made in accordance with the process specified in Condition 8, is kept onsite and this copy is updated within 10 working days of any amendments being certified by, or provided to, the HCC.

Earthworks

- 13. The Requiring Authority must submit an Erosion and Sediment Control Plan (ESCP) to the Hutt City Council for information once it has been certified by the Greater Wellington Regional Council.

14. The Requiring Authority shall stabilise all areas exposed by earthworks, trenching or building work as soon as possible after excavation or, at the latest, within one month of completing earthworks.
15. The Requiring Authority shall ensure all Construction Works, including any earthworks, are carried out in a manner that controls dust travelling beyond site boundaries to the extent that it does not cause a nuisance or hazard.
16. The Requiring Authority shall ensure that vehicles and machinery leaving the site do not deposit earth or other material in or on road reserve, the road surfaces or surrounds. If such spills occur, the Requiring Authority shall clean the road surfaces to their original condition.
17. Prior to the Commencement of Construction Works, a stabilised vehicle crossing shall be installed at the site entrance(s) for the Construction Works and/or suitable wheel wash facilities on site so that earth material from the site is not tracked onto the road.

Construction Noise and Vibration

18. The Requiring Authority shall not commence Construction Works until a Construction Noise and Vibration Management Plan (**CNVMP**) has been certified by HCC, confirming that the CNVMP satisfies the objective established in this condition (condition 18) and the requirements of conditions 19 to 24. Certification shall occur in accordance with the process set out in Condition 8. The objective of the CNVMP is to provide a framework for the development and implementation of the Best Practicable Option for the management of Construction Works noise and vibration effects, and to set out how compliance with the construction noise and vibration standards set out in Conditions 23 and 24 below will be achieved as far as practicable.
19. The purpose of the CNVMP is to provide methods to manage noise and vibration appropriately for a variety of circumstances within the project site by outlining the measures, procedures and standards for mitigating the effects of noise and vibration during construction of the Project. The CNVMP must include, as a minimum:
 - a) A description of the likely construction noise and vibration emissions anticipated as a result of construction activities;
 - b) A description of the construction work, anticipated equipment and processes and their scheduled durations;
 - c) A description of noise or vibration suppression devices to be used on equipment or processes;
 - d) The normal hours of operation being 7:00 am till 6:00pm Monday to Saturday, with noisy activities restricted prior to 7.30am;
 - e) The construction noise and vibration criteria that apply for the Project, which must be consistent with those standards specified in NZS 6803:1999 'Acoustics – Construction Noise' (Condition 23) and BS 5228-2:2009 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration (Condition 24);

- f) Identification of affected houses and other Noise Sensitive Receptors where noise and vibration criteria apply, including a list of Noise Sensitive Receivers (as defined in NZS 6803:1999 'Acoustics – Construction Noise');
- g) Requirements for monitoring road surface condition to minimise noise and vibration from trucks travelling over potholes and uneven surfaces;
- h) Methods and frequency for monitoring and reporting on construction noise and vibration to HCC;
- i) Procedures for maintaining contact with stakeholders, notifying of proposed construction activities, and handling of noise and vibration complaints (consistent with the complaints procedures and complaints register within the CEMP);
- j) Where compliance with the criteria in Conditions 23 and 24 may not be achieved, a description of alternative mitigation strategies that will be used;
- k) The requirement for pre-construction building inspections at locations close to activities generating significant vibration, prior to and after completion of construction and processes for repair of any damage caused by the Work;
- l) Construction equipment operator training procedures and expected construction site behaviours; and
- m) Contact numbers for key construction staff, and staff responsible for noise assessment and the CMO(s).
- n) Procedures for community liaison,
- o) Where practicable, based on the phasing of works, a 3 metre high site hoarding shall be constructed around the boundary of the construction site. The site hoarding shall be designed and constructed to act as a noise barrier and be maintained for the duration of the project.

20. Where Construction Works require night-time works, the CNVMP must address the following matters:

- a) The arrangement for night works, including:
 - I. Enhanced communication procedures with residents on Summit Road identified as PPFs in the Noise and Vibration Assessment submitted with the application;
 - II. Scheduling in respite periods (e.g., a maximum of 3 consecutive nights of works).
- b) Controls to minimise the occurrence of events generating intermittent sounds such as reverse beepers, shouting, or whistling.

21. The Requiring Authority must implement the certified CNVMP (with any amendments) for the duration of the Construction Works.

22. The Requiring Authority must ensure that a copy of the certified CNVMP, including any amendments, is kept onsite and this copy is updated within 10 working days of any amendments being made.

23. Construction noise shall be measured and assessed in accordance with NZS 6803:1999 'Acoustics – Construction Noise'. The construction noise shall comply with the following criteria as far as practicable:

Day of week	Time	dB L _{Aeq} (15min)	dB L _{AFmax}
Noise Criteria at Residential Neighbours			
Weekdays	0630 – 0730	55	75
	0730 – 1800	70	85
	1800 – 2000	65	80
	2000 – 0630	45	75
Saturdays	0630 – 0730	45	75
	0730 – 1800	70	85
	1800 – 2000	45	75
	2000 – 0630	45	75
Sundays and public holidays	0630 – 0730	45	75
	0730 – 1800	55	85
	1800 – 2000	45	75
	2000 – 0630	45	75

24. Vibration from the Construction Works must comply with the following criteria as far as practicable:

Receiver	Details	Category A	Category B
Noise Criteria at Residential Neighbours			
Occupied Activities sensitive to vibration	Night-time 2000h – 0630h	0.3mm/s ppv	1mm/s ppv
	Daytime 0630h – 2000h	1mm/s ppv	5mm/s ppv
Other occupied buildings	Daytime 0630h – 2000h	2mm/s ppv	5mm/s ppv
All other buildings	At all other times Vibration – transient	5mm/s ppv	BS 5228-2* Table B2
	At all other times Vibration – continuous	5mm/s ppv	BS 5228-2* 50% of Table B2 values

BS 5228-2:2009 *Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration*

Advice Note: For vibration measurements, reference should be made to BS 5228-2 and DIN 4150-3. For additional guidance on measurement techniques, reference can be made to BS 6472-1 in relation to human annoyance and ISO 4866:2010 for building damage.

Construction Traffic

25. The Requiring Authority shall not commence Construction Works until a Construction Traffic Management Plan (**CTMP**) has been certified by Hutt City Council confirming that the CTMP satisfies the requirements of Condition 26, 27, and 28. Certification shall occur in accordance with the process set out in Condition 8. The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic effects of the Project on property access, traffic safety and efficiency during construction.
26. The CTMP must include, as a minimum:
- Measures to minimise the disruption to users of local travel routes;
 - Temporary traffic management measures required to manage impacts on road users during the proposed construction works including signage and traffic control;
 - Measures to maintain existing vehicle access to adjacent properties;

- d) Any proposed temporary changes in speed limits;
 - e) Measures to control HCV so that two HCVs are not travelling in opposite directions along Summit Road or Tilbury Street at any one time including detailing appropriate waiting locations;
 - f) Provision for safe and efficient access of vehicles to and from the construction site;
 - g) Details of where parking will be temporarily removed; and
 - h) Details as to where footpaths will be temporarily closed and for how long.
27. The Requiring Authority shall carry out a preconstruction survey of Summit Road, Tilbury Street and Balgownie Grove prior to the commencement of Construction Works. Prior to the Construction Works commencing, the preconstruction survey shall be supplied to the Road Asset Manager.
28. Following completion of the Construction Works, the Requiring Authority shall complete a postconstruction survey of Summit Road, Tilbury Street, and Balgownie Grove. The Requiring Authority shall contribute a fair and reasonable cost, as determined by a Suitably Qualified Person, towards repair and maintenance of Summit Road and Tilbury Street should damage to the road be attributable to the Construction Works.
29. All HGV traffic carrying goods (including bulk materials) that will utilise SH2, either travelling north or north, shall use the Kennedy Good Bridge, Fairway Drive, Daysh Street route to avoid HGVs travelling through the Hutt CBD to access either the Melling or Dowse interchanges.

Landscape, Visual Amenity and Natural Character

30. The Requiring Authority shall not commence Construction Works until a Landscape Concept Plan (**LCP**) developed in partnership with Taranaki Whānui ki Te Upoko o Te Ika has been certified by HCC, confirming that the LCP satisfies the requirements of Condition 31. Certification shall occur in accordance with the process set out in Condition 8. The objective of the LCP is to avoid, remedy or mitigate adverse landscape visual effects associated with the construction and operation of the Project on nearby receivers.
31. The LCP must, as a minimum, include:
- a) Ensure that the Project's landscape treatments are context-sensitive in terms of acknowledging Taranaki Whānui ki Te Upoko o Te Ika values, land use, sense of place and the viewing audience;
 - b) Details of the final earthworks levels, including confirming that they will integrate with adjacent topography, and provide appropriate revegetation conditions and include specific details for the revegetation of the cut face;
 - c) Details of the replaced pathways through the site including the location of replacement signage;
 - d) Appropriate design treatment(s) to support safety and wayfinding;
 - e) Consideration of CPTED (Crime Prevention Through Environmental Design) principles in relation to the project;
 - f) Identification of vegetation to be retained, including retention of as many as practicable significant trees and areas of regenerating indigenous vegetation;
 - g) Protection measures for vegetation to be retained;

- h) Identification of proposed planting including plant species, plant/grass mixes, spacing/densities, sites (at time of planting) and layout and planting methods;
- i) Details of the proposed planting that is to occur within the riparian margin of the Waiwhetū Stream;
- j) Planting programme detailing the staging of planting in relation to the construction programme which shall, as far as practicable, require planting to occur within the first planting seasons following completion of the Construction Works;
- k) Details of how the input of a suitably qualified ecologist has provided input so that ecological benefits are attained via the proposed planting; and
- l) The proposed maintenance of plantings, including the replacement of unsuccessful plantings.

Ecological Management Plans

32. At least 10 days prior to any works on land identified as lizard habitat, the Requiring Authority shall provide a copy of the Lizard Management Plan and a copy of the permit obtained under Wildlife Act 1953, as certified by the Department of Conservation, to the CMO for their records.

The Requiring Authority shall undertake the works in accordance with the Lizard Management Plan and any conditions of the permit obtained under the Wildlife Act 1953.

33. The Requiring Authority shall not commence Construction Works until a Bird Management Plan (**BMP**) has been certified by Hutt City Council confirming that the **BMP** satisfies the requirement of Condition 34. The objective of the **BMP** is to avoid, remedy or mitigate the potential adverse effects of the Project on birds.

34. The **BMP** must include, as a minimum:

- a) The Zone of Influence for all species possible on site;
- b) The nesting and fledging season for all species on site;
- c) Methodologies to determine if active nests are present prior to vegetation removal occurring and construction activities commencing that would disturb species on site; and
- d) The management actions that should be implemented should active nests be discovered during checks (i.e. exclusion zones).
- e) Methodologies to offset the loss of any confirmed nesting habitat for threatened species

35. The Requiring Authority shall not commence Construction Works until a Vegetation Management Plan (**VMP**) has been certified by Hutt City Council confirming that the **VMP** satisfies the requirements of Condition 36. The objective of the **VMP** is to avoid, remedy or mitigate the potential adverse effects of the Project on indigenous vegetation.

36. The **VMP** must, as a minimum:

- a) Include methods to protect newly established plants;
- b) Detail a suitable annual monitoring and maintenance schedule for 5 years following completion of the Project to ensure canopy closure and plant survivorship occurs;
- c) Identify those areas of indigenous vegetation lost during site clearance activities;

- d) Identify those areas on site where remediation of indigenous vegetation will occur; and
- e) Identify where riparian planting is proposed along the banks of the Waiwhetū stream.
- f) Detail how vegetation clearance, salvage, stockpiling and its reuse/spread on site, will be managed under the supervision of an ecologist and/or landscape architect, including the salvage of indigenous plant material and forest duff (topsoil layer) as part of the earthworks stage.
- g) Procedures for the translocation and management (if required) of “At Risk” species of orchids if discovered on site prior to vegetation clearance occurring,

37. An outline plan(s) must be prepared and submitted to Hutt City Council in accordance with section 176A of the RMA for enabling works that are not otherwise a permitted activity pursuant to the Hutt City District Plan (unless the requirement is waived by Hutt City Council).

In addition to the matters required by section 176A(3) of the RMA, the outline plan(s) (Enabling Works) must:

- a) Detail the purpose for undertaking the Enabling Works activity prior to the Construction Works;
- b) Detail the mitigation required, and an appropriate timescale for implementing that mitigation, if an enabling work occurs and the project does not commence; and
- c) Address the requirements of ecological management plans if ecological surveys and relocations are required.

The outline plan(s) (Enabling Works) is not required to include:

- d) The management plans required by Condition 8(a).

Accidental Discovery

38. At least 15 Working Days prior to Construction Works commencing, the Requiring Authority shall prepare an accidental discovery protocol and provide a copy to HCC for information. The protocol shall be implemented in the event of the accidental discovery of cultural or archaeological artefacts or features during construction of the Project. The protocol shall include, but not be limited to:

- a) Identification of parties to be notified in the event of an accidental discovery, who shall include, but need not be limited to, Taranaki Whānui ki Te Upoko o Te Ika, Te Rūnanga o Toa Rangatira, Heritage New Zealand Pouhere Taonga, HCC, and if koiwi are discovered, the New Zealand Police.
- b) Setting out procedures to be undertaken in the event of an accidental discovery, which shall include the cessation of Construction Works in the vicinity of the discovery until authorised to proceed.
- c) Training procedures for all contractors regarding the possible presence of cultural or archaeological sites or material, what these sites or material may look like, and the relevant procedures if any sites or material are discovered.

Ongoing Monitoring and Management

39. Notwithstanding Condition 8, monitoring and management measures required by the following management plans must remain in place for 5 years once Construction Works are complete:

- a) Condition 30, **LCP**;
- b) Condition 32, **LMP**;
- c) Condition 35, **VMP**.

Appendix 2

Transport Statement of Evidence

**BEFORE THE INDEPENDENT HEARING COMMISSIONER APPOINTED TO
MAKE RECOMMENDATIONS ON THE NOTICE OF REQUIREMENT FOR
THE EASTERN HILLS RESERVOIR – CITY OF LOWER HUTT DISTRICT
PLAN**

IN THE MATTER

of the Resource
Management Act
1991 (the Act)

AND

IN THE MATTER

of a hearing by the
Hutt City Council on
the Notice of
Requirement for the
Eastern Hills
Reservoir – City of
Lower Hutt District
Plan

**STATEMENT OF EVIDENCE OF HARRIET FRASER FOR THE HUTT CITY
COUNCIL**

28 November 2024

Qualifications and Experience

1. My full name is Harriet Barbara Fraser. I am a sole practitioner transportation planning and traffic engineering specialist working throughout New Zealand. My business operates under the name Harriet Fraser Traffic Engineering and Transportation Planning.
2. I hold the qualification of Chartered Professional Engineer and Chartered Member of Engineering NZ. I hold a Bachelor of Civil Engineering degree from Imperial College, University of London and a Master's degree of Science in Transportation Planning and Engineering awarded with distinction by the University of Leeds.
3. My background of experience includes over 30 years consultancy experience in traffic and transportation matters, initially in the UK and Hong Kong. From August 1998 to August 2012, I worked as a Transportation Planner in Lower Hutt in the firm of Traffic Design Group Limited (now Stantec) practicing as a transportation planning and traffic engineering specialist throughout New Zealand. Since September 2012 I have been working as a sole practitioner in the field of transportation planning and traffic engineering.
4. I have lived and worked in the Hutt Valley since 1998 and am currently based in Upper Hutt.
5. I am a certified Hearing Commissioner, having completed the MfE Making Good Decisions training.

Code of Conduct

6. I confirm that I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023 and confirm that I have complied with it in preparing this evidence. I confirm also that the issues addressed in this evidence are within my area of expertise, except where I have indicated that I am relying on the opinions of others. I have not omitted material facts known to me that might alter or detract from my evidence.

Scope of Evidence

7. I have read the Notice of Requirement (NoR) that was notified by the Hutt City Council (HCC) on 28 March 2024. I have also read the submissions that relate to my area of expertise.
8. This evidence is prepared to assist the section 42A report writers and support the decision-makers on the hearings panel for the Eastern Hutt Reservoir Notice of Requirement.
9. I have read the section of the updated AEE relevant to my evidence.
10. I have been asked to provide evidence in relation to submissions related to transport.

Summary of Evidence

11. This statement of evidence is in regard to transport matters associated with the construction and operation of the reservoir. This evidence concludes that with some further refinement of the conditions, there are no obvious transport issues that would preclude the traffic effects associated with the requested NoR from being appropriately managed and mitigated.

Involvement in the Notice of Requirement

12. I prepared an independent transportation review of the Eastern Hutt Reservoir NoR dated 6 May 2024, and recommended that some additional mitigation should be provided as follows:
 - (a) Identify stacking/passing locations for trucks along the Tilbury Street/ Summit Road route;
 - (b) Demonstrate truck and trailer swept paths through the Tilbury Street/ Summit Road intersection and develop traffic management to ensure safe interaction with private vehicles moving through the intersection;
 - (c) Ensure that properties on Summit Road that rely on on-street parking have street parking available within a reasonable distance of their property;
 - (d) Pre- and post-construction road pavement surveys to be undertaken on Tilbury Street, Summit Road and Balgownie Grove. Method of surveys to be agreed with Council. Pavements to be maintained during construction and

reinstated to pre-construction standard or better on completion of the Project;

- (e) Pre- and post-construction inspections of the Tilbury Street bridge to be made to ensure that it remains fit for purpose;
- (f) Safe sight lines to be available from all driveways in the vicinity of any material layover areas within the carriageway on Balgownie Grove; and
- (g) Identify construction staff parking demands and methods for how these will be accommodated within the proposed on-site parking.

13. The further information response from Connect Water dated 10 June 2024 addressed a number of these recommendations which I commented on in a letter dated 14 June 2024. I recommended, that with the following amendments to the draft conditions, that the traffic effects associated with the proposed construction activity can be appropriately avoided, remedied or mitigated:

Draft Condition	Comment
<p>10.b) Working hours, which should generally be 7.30am to 6.00pm Monday to Saturday except as otherwise provided for under Condition 18;</p>	<p>Might want to consider daylight hours, so 6pm or dusk whichever is earlier.</p>
<p>16. The Requiring Authority shall ensure that vehicles and machinery leaving the site do not deposit earth or other material in or on road reserve, the road surfaces or surrounds. If such spills occur, the Requiring Authority shall clean the road surfaces to their original condition.</p>	<p>I recommend establishing a timeframe, such as soon as possible and no longer than 24 hours.</p>
<p>25. The Requiring Authority shall not commence Construction Works until a Construction Traffic Management Plan (CTMP) has been certified by Hutt City Council confirming that the CTMP satisfies the requirements of Condition 26, 27, and 28. Certification shall occur in accordance with the process set out in Condition 8. The objective of the CTMP is to avoid, remedy or mitigate, as far as practicable, adverse construction traffic</p>	<p>I recommend that the CTMP could usefully also have an objective of addressing damage to road pavements and structures and ensuring access to kerbside parking for residents.</p>

Draft Condition	Comment
effects of the Project on property access, traffic safety and efficiency during construction.	
<p>26. The CTMP must include, as a minimum:</p> <p>a) Measures to minimise the disruption to users of local travel routes;</p> <p>b) Temporary traffic management measures required to manage impacts on road users during the proposed construction works including signage and traffic control;</p> <p>c) Measures to maintain existing vehicle access to adjacent properties;</p> <p>d) Any proposed temporary changes in speed limits;</p> <p>e) Measures to control HCV so that two HCVs are not travelling in opposite directions along Summit Road or Tilbury Street at any one time including detailing appropriate waiting locations;</p> <p>f) Provision for safe and efficient access of vehicles to and from the construction site;</p> <p>g) Details of where parking will be temporarily removed; and</p> <p>h) Details as to where footpaths will be temporarily closed and for how long.</p>	<p>Suggest following rewording:</p> <p>c) Measures to maintain existing vehicle access to adjacent properties including safe sight lines where trucks or materials are parked or stored in the carriageway;</p> <p>g) Details of where parking will be temporarily removed and how reasonable access to on-street parking for residents will be achieved;</p> <p>Recommended additional points:</p> <p>i) Measures to provide for the monitoring and maintaining of the road pavements on Tilbury Street, Summit Road and Balgownie Grove during construction;</p> <p>j) Measures to manage staff parking so that it is contained within the site;</p> <p>k) Details of the Temporary Traffic Management needed to ensure the safe movement of trucks, including truck and trailer units through the Summit Road intersection with Tilbury Street;</p>
<p>27. The Requiring Authority shall carry out a preconstruction survey of Summit Road, Tilbury Street and Balgownie Grove prior to the commencement of Construction Works. Prior to the Construction Works commencing, the preconstruction survey shall be supplied to the Road Asset Manager.</p>	<p>Recommend that this condition is reworded as follows:</p> <p><i>The Requiring Authority shall carry out a preconstruction survey of the road pavement, footpath pavement on Summit Road, Tilbury Street and Balgownie Grove and the Tilbury Street bridge prior to the commencement of Construction Works. The methodology for the survey is to be agreed with the Road Asset Manager. Prior to the</i></p>

Draft Condition	Comment
	<i>Construction Works commencing, the preconstruction survey shall be supplied to the Road Asset Manager.</i>
<p>28. Following completion of the Construction Works, the Requiring Authority shall complete a postconstruction survey of Summit Road and Tilbury Street. The Requiring Authority shall contribute a fair and reasonable cost, as determined by a Suitably Qualified Person, towards repair and maintenance of Summit Road and Tilbury Street should damage to the road be attributable to the Construction Works.</p>	<p>Recommend that this condition is reworded as follows:</p> <p><i>Following completion of the Construction Works, the Requiring Authority shall complete a postconstruction survey of Summit Road, Tilbury Street, Balgownie Grove and the Tilbury Street bridge. The Requiring Authority shall contribute a fair and reasonable cost, as determined by a Suitably Qualified Person, towards repair and maintenance of Summit Road, Tilbury Street, Balgownie Grove and the Tilbury Street bridge should damage be attributable to the Construction Works.</i></p>
<p>The Requestor has volunteered the following additional condition:</p> <p><i>All HGV traffic carrying goods (including bulk materials) that will utilise SH2, either travelling north or south, shall use the Kennedy Good Bridge, Fairway Drive, Daysh Street route to avoid HGVs travelling through the Hutt CBD to access either the Melling or Dowse interchanges.</i></p>	<p>Recommend that this condition is reworded as follows as it is also desirable for any empty trucks to use the recommended route:</p> <p><i>All HGV construction traffic that will utilise SH2, travelling to or from the north or south, shall use the Kennedy Good Bridge, Fairway Drive, Daysh Street route.</i></p>

Table 1: Draft Conditions

- 14.** I comment on the most recent set of draft conditions later in this statement.

Response to Submissions

- 15.** I have read the submissions and comment on each of the transport concerns raised in turn below.

Forde and Pamela Clarke

- 16.** In their submission, the Clarkes raise concerns regarding traffic disruption on Balgownie Grove during construction and suggest that the pipe is routed through the reserve adjacent to 20 Waddington Drive.

17. I consider that the draft conditions for construction traffic and in particular the purpose of the CTMP in Condition 25 and Condition 26 a)-d) and f)-h) will ensure safe and efficient movement of vehicles along Balgownie Grove.
18. I agree with the submitters that it would be useful to understand from Connect Water the rationale for the pipe route being via Balgownie Grove rather than through the reserve adjacent to 20 Waddington Drive.

Jeremy Foster

19. Mr Foster is concerned that the location of the reservoir would necessitate the rerouting of a possible future connection from Upper Fitzherbert Road in Wainuiomata and Summit Road.
20. I understand that there is not a designation or any current plans for a road connection between Upper Fitzherbert Road and Summit Road.

Christine Burt

21. Ms Burt is concerned about access for firefighting and staff during construction.
22. I consider that the draft conditions provide for safe access for all vehicles. However, consideration could be given to including a specific point with regard to firefighting access in Condition 26.

Colin Holt

23. Mr Holt is concerned about traffic disruption on Balgownie Grove during construction.
24. As per my earlier response to the submission from the Clarkes, I consider that the draft conditions for construction traffic and in particular the purpose of the CTMP in Condition 25 and Condition 26 a)-d) and f)-h) will ensure safe and efficient movement of vehicles along Balgownie Grove.

Ministry of Education

25. The submission from the Ministry of Education relates to the potential road safety effects on students in Naenae from heavy construction traffic effects.
26. The Ministry requests that a condition be added so that heavy vehicles avoid passing local schools at busy times of school-related travel. I note that each of Naenae Road, Daysh Street, and Fairway Drive are arterial roads and, as such, are anticipated to accommodate heavy vehicle movements. I also note that there is an existing signalised

pedestrian crossing on Daysh Street to assist with safe access to the combined school site. Traffic conditions in this part of the road network are also typically congested at school start and finish times with slow vehicle speeds.

27. Accordingly, I do not consider it necessary for construction traffic movements to avoid school start and finish times.
28. The Ministry requests adding a point to Condition 26 that would require truck drivers to be briefed on the need for safe driving practices in the vicinity of local schools. I agree that this matter could be included in Condition 26.

Draft Conditions (27 September 2024 version)

29. The table below summarises my comments on the 27 September 2024 set of draft conditions.

Earlier Comment	Updated Comment
<p>10.b) Might want to consider daylight hours, so 6pm or dusk whichever is earlier.</p>	<p>This condition has remained unchanged. In practice there will only be a short period of the year when it would be dark before 6pm.</p>
<p>16. I recommended establishing a timeframe, such as soon as possible and no longer than 24 hours.</p>	<p>This condition has remained unchanged.</p>
<p>25.. I recommended that the CTMP could usefully also have an objective of addressing damage to road pavements and structures and ensuring access to kerbside parking for residents.</p>	<p>This condition has remained unchanged. I note that pre- and post-construction surveys of the local roads are provided for in Conditions 27 and 28.</p>
<p>26. Suggested following rewording:</p> <p>c) Measures to maintain existing vehicle access to adjacent properties including safe sight lines where trucks or materials are parked or stored in the carriageway;</p> <p>g) Details of where parking will be temporarily removed and how reasonable access to on-street parking for residents will be achieved;</p>	<p>c) has been left unchanged. I suggest that as a minimum the point is worded <i>‘Measures to maintain <u>safe</u> existing vehicle access to adjacent properties.’</i></p> <p>g) has been left unchanged. My earlier comment stands.</p> <p>i) not included. Conditions 27 and 28 provide for maintenance to the road infrastructure at the end of construction but not during construction. My earlier comment stands.</p>

Earlier Comment	Updated Comment
<p>Recommended additional points:</p> <p>i) Measures to provide for the monitoring and maintaining of the road pavements on Tilbury Street, Summit Road and Balgownie Grove during construction;</p> <p>j) Measures to manage staff parking so that it is contained within the site;</p> <p>k) Details of the Temporary Traffic Management needed to ensure the safe movement of trucks, including truck and trailer units through the Summit Road intersection with Tilbury Street;</p>	<p>j) not included. My earlier comment stands.</p> <p>k) not included. My earlier comment stands.</p>
<p>27. Recommended that this condition is reworded as follows:</p> <p><i>The Requiring Authority shall carry out a preconstruction survey of the road pavement, footpath pavement on Summit Road, Tilbury Street and Balgownie Grove and the Tilbury Street bridge prior to the commencement of Construction Works. The methodology for the survey is to be agreed with the Road Asset Manager. Prior to the Construction Works commencing, the preconstruction survey shall be supplied to the Road Asset Manager.</i></p>	<p>This condition has remained unchanged. My earlier comment stands.</p>
<p>28. Recommended that this condition is reworded as follows:</p> <p><i>Following completion of the Construction Works, the Requiring Authority shall complete a postconstruction survey of Summit Road, Tilbury Street, Balgownie Grove and the Tilbury Street bridge. The Requiring Authority shall contribute a fair and reasonable cost, as determined by a Suitably Qualified Person, towards repair and maintenance of Summit Road, Tilbury Street, Balgownie Grove and the Tilbury Street</i></p>	<p>The condition has been amended and 'Balgownie Grove' has been added to the first sentence. It also needs to be included in the second sentence. My recommendation to include the Tilbury Street bridge has not been included.</p>

Earlier Comment	Updated Comment
<p><i>bridge should damage be attributable to the Construction Works</i></p>	
<p>The Requestor volunteered the following additional condition:</p> <p><i>All HGV traffic carrying goods (including bulk materials) that will utilise SH2, either travelling north or south, shall use the Kennedy Good Bridge, Fairway Drive, Daysh Street route to avoid HGVs travelling through the Hutt CBD to access either the Melling or Dowse interchanges.</i></p> <p>I recommended that this condition is reworded as follows as it is also desirable for any empty trucks to use the recommended route:</p> <p><i>All HGV construction traffic that will utilise SH2, travelling to or from the north or south, shall use the Kennedy Good Bridge, Fairway Drive, Daysh Street route.</i></p>	<p>This condition has been added as Condition 28A. My recommendation regarding the wording still stands.</p>

Table 2: Updated Draft Conditions

Conclusion

- 30.** In summary, with some further refinement of the conditions, there are no obvious transport issues that would preclude the traffic effects associated with the requested NoR from being appropriately managed and mitigated.

Date: 28 November 2024

Harriet Fraser

Appendix 3

Ecology Statement of Evidence

**BEFORE THE INDEPENDENT HEARING PANEL APPOINTED TO
MAKE RECOMMENDATIONS ON EASTERN HILLS RESERVOIR TO THE HUTT CITY
DISTRICT PLAN AT WELLINGTON**

IN THE MATTER

of the Resource Management
Act 1991 (the Act)

AND

IN THE MATTER

of a hearing by the Hutt City
Council on Proposed Plan
Change 58 to the Hutt City
District Plan

**STATEMENT OF EVIDENCE OF TESSA ROBERTS (ECOLOGY)
FOR THE HUTT CITY COUNCIL**

October 2024

QUALIFICATIONS AND EXPERIENCE

1. My full name is Tessa Louise Roberts.
2. I have a Master of Science (with Distinction) in Ecology from Massey University, Palmerston North.
3. I am a Senior Ecologist with Wildland Consultants Ltd based in Wellington where I have worked since July 2023. Prior to this (2019-2023), I was a Senior Advisor (Science and Good Practice) for the New Zealand Wilding Pine Programme with the Ministry of Primary Industries. Prior to this (2014-2019), I was a consultant ecologist for Boffa Miskell. Prior to this (2011-2012), I worked as a Restoration Advisor in the Biodiversity Department for Greater Wellington Regional Council. From 2007 to 2009 I worked as a Conservation Ranger with Auckland Regional Council.
4. My core work within these previous roles centred around freshwater and vegetation ecology and management. I have considerable experience in Assessments of Ecological Effects and constraints assessments, relating to development effects on ecology.
5. I am familiar with the Wellington Region and the Hutt District through my professional experience and involvement in ecological projects undertaken in the area since 2011.
6. In relation to the Eastern Hills Reservoir, I was engaged by Hutt City Council (HCC) in May 2024 to provide a technical peer review of the ecological impact assessment for the consent application.
7. I undertook a site visit in October, when I spent two hours familiarising myself with the site ecology.

CODE OF CONDUCT

8. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and confirm that I have complied with it in preparing this evidence. I confirm also that the issues addressed in this evidence are within my area of expertise, except where I have indicated that I am relying on the opinions of others. I have not omitted material facts known to me that might alter or detract from my evidence.

SCOPE OF EVIDENCE

9. I have read the Updated Eastern Hills Reservoir Ecological Impact Assessment (19 June 2024)¹. I note that this version was updated following the notification of Requirement by HCC. Correspondence further to this review has resulted in a Request for Information (RFI)² on 27 June 2024 and an email response by Mark Hansen³.
10. I provided a review of the associated proposed general conditions of consent for the Eastern Hills Reservoir.
11. I also provided comments on submissions related to ecology.
12. This evidence has been prepared to assist with preparation of the Section 42A report and to support the decision-making process of the hearings panel.

ECOLOGICAL IMPACT ASSESSMENT

13. The Ecological Impact Assessment (EclA) for the reservoir works follows the Environmental Institute of Ecology for Australia and New Zealand (EIANZ) guidelines for use in New Zealand: terrestrial and freshwater ecosystems (Roper-Lindsay *et al.* 2018)⁴.
14. The field assessment undertaken for the assessment of effects is very comprehensive, assessing all ecological components by utilising a variety of field surveys; acoustic monitoring, trail cameras, eDNA, and on-site incidental surveys all included.
15. However, there is a gap in the literature search as the iNaturalist database⁵ was not checked. iNaturalist is important for identifying seasonally-dependent species such as orchids, or highly mobile species such as some bird species. As such there is a gap in the vegetation assessment, where orchid species likely to be

¹ WSP, 2024. Eastern Hills Reservoir – Ecological Impact assessment. Project Number: 3-WW021.02 Prepared for Wellington Water pp.109

² Connect Water, 2024. Request for more information – Eastern Hill Notice of Requirement (Ecology). Letter to Dan Kellow on 27 June 2024

³ Hansen, M. 2024 Eastern Hills Reservoir Peer Review Response. Email to Dan Kellow on 5 July 2024.

⁴ Roper-Lindsay, J., Fuller S.A., Hooson, S., Sanders, M.D., Ussher, G.T. 2018. Ecological impact assessment. EIANZ guidelines for use in New Zealand: terrestrial and freshwater ecosystems. 2nd edition.

⁵ iNaturalist.org web application at <http://www.inaturalist.org>.

present have been missed due to the field assessment taking place outside of the orchid flowering season. This has potentially left some Threatened or At-Risk Species out of the assessment of effects.

16. On my site visit in mid-October 2024, which is within the orchid flowering season for some species, two species of sun orchids (*Thelymitra* sp.) were found within the area of vegetation to be cleared (Plates 1 and 2).



Plates 1 and 2: Two species of sun orchids are present within the area to be cleared for reservoir development. Note, due to lack of intact flower, the exact species cannot be determined.

17. Subsequent to the technical review of the assessment of effects, it was agreed that spotted fleshy orchid, which has been recorded within contiguous vegetation nearby, is to be included in the Vegetation Management Plan (VMP) in the form of preclearance search and attempted translocation.
18. It has also been agreed that kārearea/New Zealand falcon (*Falco novaeseelandiae*) will be addressed within the BMP for pre-start surveys if vegetation clearance occurs within the nesting season.
19. I further noted on my site visit the presence of moderately sized northern rātā (*Metrosideros robusta*) on the lower eastern slopes of the site (Plate 3). This species is not listed in the plant species list for the site. At least one of these specimens is potentially impacted by vegetation clearance surrounding the pipeline and overflow scour path. Any reduction in northern rātā habitat needs

additional impact assessment and potentially remediation if the resulting impacts are more than minor.



Plate 3: One of the mature northern rata trees present on the eastern bank of the site.

20. In the EclA, I note some inaccuracy with the application of EIANZ guidelines where high value threatened fauna values have been incorrectly assessed as a group using attributes (within Table 4 of the guidelines), which are specifically for assigning ecological value at the vegetation, habitat, or community level. This is not consistent with the EIANZ guidelines (Section 5.1.4), which state: “The values and effects on individual species should not be overlooked or amalgamated or averaged”. Averaging the value of groups of fauna tends to dilute any high value fauna with common species (which are almost always found alongside threatened species).
21. Any identified Threatened or At-Risk species likely to utilise the site need to be assessed separate to a total fauna community. It is important to be accurate in the values assessment as this is fundamental to the assessments of magnitude of effect that follow and when assessing appropriate mitigation to reduce these effects.
22. I note that, in this instance, assessing threatened species as being of high value, separate to the value of ecological systems, may not essentially change the outcome of the project in terms of overall ecological effects (as effects can be

mitigated). However, it does help to clarify the appropriate means needed to mitigate impacts. In terms of threatened species, they are highly valued as they are particularly vulnerable to extinction and mitigation efforts are likely to be specific to each species.

23. Likewise, as for the value assessment, many effects that differ in their magnitude of effect have also been grouped together in the impact assessments. This may be elevating the levels of impact in some circumstances (such as applying permanent losses of value to a wider area of habitat, instead of the one tributary, wetland, or vegetation type to be affected).
24. Table 13 of the EclA shows an outstanding impact of 0.71 hectares of indigenous vegetation and habitat which is to be permanently lost (0.09 hectares of mānuka/kānuka and 0.62 of broadleaved indigenous hardwood) that is not currently being managed within the effects hierarchy, is avoided, remedied, offset or compensated.
25. Therefore, for the works to achieve the desired net ecological benefits stated in the EclA, there is a need for further mitigation to be carried out in order to address the vegetation and habitat loss proposed. One opportunity for remediation would be to enhance the surrounding vegetation by removing exotic trees (wattles, pines and wild cherry), within the contiguous vegetation surrounding the site.
26. There is also an opportunity to introduce enrichment species within the forest canopy openings created by exotic tree removal.
27. On my site visit, it was apparent that wilding pine control is already underway on the western slopes of the site. Where dead and dying pine trees are present (Plate 4), indigenous broadleaved forest species are regenerating unassisted in these canopy gaps.



Plate 4: Dead standing trees of controlled wilding pine on the western slope of the site.

28. Overall, despite the inconsistencies in applying the effects assessment guidelines, I agree that all mitigation/consent directives can be managed as certified Ecological Management Plans (EMPs).
29. The requirements to be addressed in each of the EMPs need to be clearly outlined in the conditions of consent, as addressed in the paragraphs below.

PROPOSED CONDITIONS OF CONSENT

30. The Proposed conditions related to ecology are associated with requirements to be addressed in the development of ecological management plans (EMPs). The purpose of the EMPs is to outline the measures to be taken to avoid, remedy, offset, and/or compensate for ecological effects.
31. Three EMPs are proposed for this development: a Bird Management Plan (BMP), a Vegetation Management Plan (VMP) and a Lizard Management Plan (LMP).
32. Following on from my concerns with the effects assessment set out above, I propose some additional requirements to be addressed in the EMPs, to ensure that all potential effects are fully managed as far as practicable.

Bird Management Plan

33. Firstly, given the potential for kākāriki/yellow-crowned parakeet (*Cyanoramphus novaezelandiae novaezelandiae*) and ruru/morepork (*Ninox novaeseelandiae*) to

be present on-site, the BMP needs to include an additional condition of consent to actively check cavities as part of the pre-clearance checks of large trees during the nesting season.

34. As stated in paragraph 18, pre-clearance checks for kārearea/New Zealand falcon (*Falco novaeseelandiae*) are to be specifically addressed in the BMP, if vegetation clearance occurs within the nesting season.

Vegetation Management Plan

35. As stated in paragraph 17, fleshy spotted orchid (*Drymoanthus flavus*) an At Risk - Declining orchid species, needs to be actively searched for within the mānuka/kānuka vegetation prior to any clearance works. A translocation plan specific to this species needs to be approved prior to vegetation clearance which must include translocation site selection, methods of translocation and success monitoring.
36. Further to my suggestion in Paragraph 25 above, to fully mitigate the effects of vegetation and habitat loss, the VMP should include methods of enhancing surrounding habitat through exotic tree species removal and enrichment planting.

COMMENTS ON SUBMISSIONS

37. Christine Burt's submission raises concerns about the loss of native bush and wildlife within the development area, and wishes to see any environmental damage resulting from construction to be reinstated. As it stands, there will be a loss of vegetation and fauna habitat as a result of the reservoir construction with a deficit of indigenous vegetation lost compared to the amount to be reinstated through remediation.
38. However, should exotic tree removal and enrichment underplanting be implemented at an adequate scale, then the ecological effects of the project can be addressed.

CONCLUSION

39. The EclA for the Eastern Hills Reservoir, is comprehensive in its field assessment, although some threatened orchid and bird species may have been overlooked in desktop assessments. If orchids, cavity nesters, and kārearea are addressed

appropriately in the consent conditions, ecological effects on high value species can be managed.

40. The project will still result in a loss of 0.71 hectares of indigenous vegetation and threatened fauna habitat that is not currently addressed. There is an opportunity for compensation of this loss to be provided in enhancing the surrounding habitat through removal of pest tree species and underplanting enrichment. Should this be implemented at an appropriate scale, then the vegetation and habitat loss will be suitably managed through the effects hierarchy.

Tessa Louise Roberts

Dated 21 October 2024

Appendix 4

Noise and Vibration Statement of Evidence

**BEFORE THE INDEPENDENT HEARING COMMISSIONER APPOINTED TO
MAKE RECOMMENDATIONS ON THE NOTICE OF REQUIREMENT FOR
THE EASTERN HILLS RESERVOIR – CITY OF LOWER HUTT DISTRICT
PLAN**

IN THE MATTER

of the Resource
Management Act
1991 (the Act)

AND

IN THE MATTER

of a hearing by the
Hutt City Council on
the Notice of
Requirement for the
Eastern Hills
Reservoir – City of
Lower Hutt District
Plan

**STATEMENT OF EVIDENCE OF STEPHEN CHARLES ARDEN FOR THE
HUTT CITY COUNCIL**

November 2024

Qualifications and Experience

1. My full name is Stephen Charles Arden.
2. I am an Associate at the acoustical consulting practice of Marshall Day Acoustics Limited. I have the following academic qualifications:
 - (a) I am a member of the New Zealand Acoustical Society, the Institute of Acoustics (UK) and the Resource Management Law Association; and
 - (b) I hold a Post Graduate Diploma in Acoustics and Noise Control, obtained from Institute of Acoustics in St Albans, UK. I also hold a Master's degree and a Bachelor's degree in Mathematics based disciplines obtained from the University of Reading, UK.
3. I have worked as an Acoustic Consultant for over 17 years, 14 years of these have been in Wellington, New Zealand.

Code of Conduct

4. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and confirm that I have complied with it in preparing this evidence. I confirm also that the issues addressed in this evidence are within my area of expertise, except where I have indicated that I am relying on the opinions of others. I have not omitted material facts known to me that might alter or detract from my evidence.

Scope of Evidence

5. I have read the Notice of Requirement (NoR) that was notified by the Hutt City Council (HCC) on 28 March 2024. I have also read the submissions that relate to my area of expertise.
6. This evidence is prepared to assist the section 42A report writers and support the decision-makers in the hearings panel for the NoR.
7. I have read the section of the AEE relevant to my evidence.
8. I have been asked to provide evidence in relation to submissions related to noise and vibration

Summary of Evidence

9. This statement of evidence is in regard to the areas of noise and vibration. This evidence states that, while at times, noise levels may be elevated during certain phases of construction. I am of the view that the conditions proposed are adequate for the control of noise and vibration, and there are no items that have been raised which would preclude this NoR from progressing.

Involvement in the Notice of Requirement

10. I have been engaged by Hutt City Council (HCC) to undertake an independent professional review of the noise and vibration assessment as these relate to the NoR for the Eastern Hills Reservoir.
11. In my role providing noise and vibration expertise to the HCC, I have reviewed the following documentation provided to me as part of the Eastern Hills NoR application:
- (i) Relevant sections of 'Notice of Requirement for a New Designation. Project Name: Eastern Hills Reservoir'
 - (ii) 'Appendix H - Noise and Vibration Assessment'
 - (iii) Response to request for more information (file name '3-WW021.02_RFI_Noise_June24 FINAL')
 - (iv) Relevant conditions within 'Appendix B – Proposed Conditions'
12. I also provided feedback on the consent conditions which relate to noise and vibration for this NoR. This feedback has been incorporated to the current set of conditions.

Summary of my review to date

13. In considering the noise and vibration effects on the environment, the only topic requiring consideration is noise and vibration during the construction phase.
14. The Applicant has assessed construction noise in accordance with NZS 6803:1999 "*Acoustics – Construction Noise*" and construction vibration in accordance DIN 4150-3:2016 "*Vibrations in buildings – Part 3: Effects on structures*" and BS 5228-2:2009 "*Code of practice for*

noise and vibration control on construction and open sites - Part 2: Vibration". I am in agreement that these standards are correct for informing the assessment.

15. The Applicant has identified that at times, exceedances of the noise limits outlined in NZS 6803:1999 would occur. However, exceedances are common for construction projects. The foreword of New Zealand Standard NZS 6803:1999 "*Acoustics – Construction Noise*" states: "*Construction noise is an inherent part of the progress of society. As noise from construction is generally of limited duration, people and communities will usually tolerate a higher noise level provided it is no louder than necessary, and occurs with appropriate hours of the day. The Resource Management Act 1991 requires the adoption of the best practicable option to ensure the emission of noise from premises does not exceed a reasonable level. The Act also imposes a duty on every person to avoid, remedy, or mitigate any adverse effect on the environment arising from an activity carried on by, or on behalf of, that person.*"
16. The applicant has provided further information in respect of how the proposed methodologies are the Best Practicable Option (BPO) with respect to noise for the construction of the reservoir.
17. In respect of the above, I consider that the noise and vibration effects would be reasonable, subject to adopting the measures identified as BPO in a Construction Noise and Vibration Management Plan (CNVMP). Conditions are proposed to address this.

Response to Submissions

18. I have reviewed the submissions provided to me that relate to noise and vibration. I will allow the Applicant to respond in full to these submissions, but I offer the following comments.
19. In respect of noise, two submissions relate to noise from construction activities. There are no submissions which mention vibration.
20. Submission #4¹ has raised construction noise as an item. This address has not been identified as one where the project noise limits are

¹ Submission by Richard Parry

predicted to be exceeded. As such, construction noise levels are predicted to comply with the project limits and have been addressed via the applicants' technical assessment.

21. Submission #6² has raised construction noise in a general sense. Exceedances over the NZS 6803:1999 noise limits are predicted for one stage of the project (during piling activities). Mitigation of noise effects would be addressed by the CNVMP and the BPO adopted. Therefore, I consider the potential noise effects at this property have been addressed in the technical assessment.
22. In summary, the noise and vibration effects assessment has adequately considered the potential noise effects at these properties and there are conditions to support the implementation of the BPO for the project by way of a CNVMP.

Conditions relating to noise and vibration

23. I have reviewed the conditions proposed by the applicant. The current set of conditions include amendments I proposed during the review process.
24. I consider that the proposed conditions which relate to noise and vibration will appropriately address the potential effects of the noise and vibration from construction activities.

Conclusion

25. In summary, there are no obvious noise or vibration matters which would preclude the approval of the NoR.
26. In my view, the matters raised by the submitters have been addressed in the applicants' noise and vibration assessment and the conditions proposed are adequate to limit the noise and vibration effects.



Dated 1 November 2024

Stephen Charles Arden

² Submission by Pam and Forder Clarke

Appendix 5

Landscape and Visual Statement of Evidence

IN THE MATTER OF

the Resource Management Act 1991

AND IN THE MATTER OF

**A NOTICE OF REQUIREMENT FOR A
DESIGNATION**

Eastern Hills Reservoir

Summit Road, Fairfield

LOWER HUTT

BETWEEN

WELLINGTON WATER

ON BEHALF OF

HUTT CITY COUNCIL

AND

HUTT CITY COUNCIL

STATEMENT OF EVIDENCE OF LINDA ANITA KERKMEESTER

FOR HUTT CITY COUNCIL

(LANDSCAPE AND VISUAL EFFECTS)

31 October 2024

Introduction

Qualifications

1. My full name is Linda Anita Kerkmeester.
2. I am a Landscape Architect working as a consultant based in Wellington.
3. I have a Diploma of Horticulture and Diploma in Landscape Technology from Lincoln College and a Bachelor of Landscape Architecture with Honours from the Royal Melbourne Institute of Technology (RMIT) University, Melbourne, Australia.
4. I am a member of the New Zealand Institute of Landscape Architects (NZILA) and hold current professional registration. I have over 30 years' experience in the industry.

Experience

5. In my professional capacity, I have been involved in a number of landscape assessments, site planning and landscape management reports.
6. As part of my professional experience, I have prepared landscape and visual assessments and have prepared specifications for landscape planting contracts for large scale infrastructure projects including subdivision developments and highway projects.
7. Examples of the projects I have recently been involved with include:
 - 7.1 Kapiti Expressway project for NZTA (Waka Kotahi, 2014-2017) which included planting of 500,000 plants along the 21km route between McKays Crossing and Peka Peka.
 - 7.2 Transmission Gully Motorway project for Waka Kotahi/CPBH Joint Venture (2017-2022) for which I prepared landscape design, planting specifications and landscape assessments for earthworks (2017-2022).

- 7.3 An 8-lot rural subdivision at 1275 Paekakariki Hill Road, Porirua on the slopes above the Paekakariki escarpment (2019 - current) for which I prepared landscape design, landscape and visual assessment – consented by PCC in 2020.
- 7.4 A 28-lot rural subdivision at Te Horo (2021) for which I prepared a Landscape and Visual Effects Assessment with recommendations for mitigation through planting and lot design – consented by KCDC in 2023.
8. In my professional capacity I have previously given evidence at Council hearings on Landscape and Visual effects for various subdivision proposals, mainly around the Porirua area including a proposed landfill at Haywards, Porirua.

Appearance

9. I have been asked to provide this evidence on behalf of the Hutt City Council in relation to the application by Hutt City Council (the Applicant) through Wellington Water for Notice of Requirement for a designation to construct a new reservoir on the eastern hills at Summit Road, Fairfield, Lower Hutt.
10. In preparing this evidence I have reviewed
- 10.1 the landscape and visual effects assessment as prepared by the landscape architect from WSP with visual simulations for the applicant, ; and
- 10.2 the proposed conditions for the designation as outlined in the application, and the statutory context relevant to the application.

Code of Conduct

11. I have read the Code of Conduct for Expert Witnesses outlined in the Environment Court Practice Note 2014. I have complied with this and will follow the Code when presenting evidence.
12. I confirm that the statements made in this evidence are within my area of expertise (unless I state otherwise) and I also confirm that I have not omitted to consider material facts which might alter the opinions stated in this evidence.

Scope of evidence

13. My evidence addresses my review findings with respect to;

- My peer review of the applicant's landscape and visual effects assessment (LVA)
- the proposed conditions relevant to landscape matters as outlined in the NoR.
- further information provided in response to request on landscape matters and its effectiveness in addressing the matters raised in my peer review.
- Consideration of matters raised in submission as relevant to landscape and visual effects.

14. I visited the site and its environs on the 16th of October 2024 to view the proposal including visiting Balgownie Ave and Waiwhetu Stream relating to potential visual effects and the further information provided.

Comments on Applicants Landscape and Visual Effects Assessment (LVA)

15. I generally agree with the methods adopted by the LVA in assessing the magnitude of landscape and visual effects, site values and potential visibility of the proposal. ZTV mapping was adopted to assess the zone of theoretical visibility where 4 public viewpoints were selected at distances ranging from 225m 1,100m to the Site. The photographic material in Appendix B of the LVA illustrated that the proposed reservoir would be less visible from the closer views due to the lower angle of view below the site. In this case the landscape effects from the more distant Naenae Park where direct views of the Site are possible (at 1,100m distance) were assessed as Moderate-High adverse during construction reducing to Low-Moderate once mitigation planting becomes established (after 5 to 10 years). I concur with these findings.

16. In this proposal, the earthworks are likely to be the biggest contributor to landscape effects given that the reservoir requires the creation of a flat platform, resulting in a cut face into a spur of up to 20m vertical height at 45 degrees rising above the 8.35m reservoir. As such any mitigating vegetation treatment will need to be effective given the high visibility of the cut. I consider this needs to be clearly reflected in the conditions.

17. In my experience revegetation of such dry, compacted faces with little soil requires specific treatments to obtain coverage. Planting of nursery stock plants cannot be solely relied upon in this instance.
18. This was raised in the further information request and has resulted in an amendment in the conditions for the final Landscape Concept Plan to include specific details for the revegetation of the cut face (Condition 30). Revegetation methods included in the LVA suggest the retention of suitable slash from native stems/branches to be used on planted areas.
19. There would need to be clear collaboration between disciplines at the construction stage to ensure the timing and methods are well co-ordinated and managed for this method to be effective.
20. A condition to this effect has been included to ensure vegetation clearance, salvage, stockpiling and its reuse/spread on site is managed under the supervision of an ecologist and/or landscape architect, including the salvage of indigenous plant material and forest duff as part of the earthworks stage (Condition 29). This will help speed up the regeneration process to reduce visual effects over time.
21. My review considered that the LVA did not sufficiently address the visual effects of the construction of an underground pipeline running downhill to the north and crossing Waiwhetu Stream as seen from Balgownie Grove. This was subsequently addressed in further information which included a visual simulation of this viewpoint and an assessment which included use of the vacant lot on the edge of Waiwhetu Stream as a laydown area for construction vehicles and stockpiling of materials.
22. The LVA concluded that the adverse effects would be high at Balgownie Grove until mitigation with eco-sourced native plants and natural regeneration would reduce the effects to low after 5 to 10 years. This was due to removal of a wide band of vegetation (14 m wide, reduced from 20m in the initial assessment) and partial visibility of the new reservoir. Given that construction is estimated to take 2.5 years to complete, these effects will likely be high for at least 5 years until revegetation

starts to reduce the effect. I do however concur with the high effect rating from this viewpoint and consider it has been sufficiently covered in the further information provided.

23. Overall, I consider that the visual simulations for the five viewpoints and the overall assessment in terms of the level of effects (based on a 7-point scale ranging from very low to very high) accurately portray the potential landscape and visual effects, and that these effects will reduce once mitigation takes effect as follows.

- Very-Low adverse (Viewpoint 1)
- Low-Adverse (Viewpoints 2, 3 and 5 Balgownie Grove) and;
- Low-moderate adverse (Viewpoint 4 from Naenae Park)

This is providing that mitigation treatments, as proposed, are successfully implemented, as set out in the proposed conditions.

Comments on Submissions as relevant to Landscape and Visual Effects

24. I have reviewed the submissions relating to landscape and visual effects. There is one submission from Forde and Pamela Clarke who reside at 10 Balgownie Grove which refers to *“the visual impact of a 30 metre wide scarring of the hillside (required for construction) at the end of Balgownie Grove for several years until the re-planting is established.”* (Paragraph 6a of Submission 6).

25. The LVA supplementary information provided for a (new) Viewpoint 5, acknowledges that this effect will be High-Adverse until revegetation takes effect which the assessor estimates to take 5 to 10 years. It is noted in the Design Report which accompanies the NoR that a 30 metre wide designation corridor would be required for the construction of the scour/overflow pipeline (4.6.8, p. 27). It further states that vegetation will be removed for a 12m width plus 1 metre either side as a working area – thus 14 metres width. It is not clear then why a 30m designation width is required, as mentioned in the NoR and quoted by the submitters. It would

be useful to have this matter clarified to minimise the designation closer to the width required.

26. The supplementary information provided for Viewpoint 5 of the LVA indicates vegetation will be removed for the corridor width of 14m. Fig. 3 of the supplementary LVA indicates the vegetation clearance prior to mitigation taking effect.
27. It is noted that the area at the end of Balgownie Grove next-door to the submitters will be used as a working area for construction vehicles and material stockpiling. Construction is estimated to take 7 months before any revegetation or mitigation can take place. This is not shown in the simulated view at Figures 3 and 4 in the LVA Supplementary Information provided. It is expected that this has been taken into account in the High Adverse effects finding, in considering the close proximity of 10 Balgownie Grove to the site.
28. I consider that the LVA has taken these effects into account and made clear recommendations to mitigate these effects through revegetation techniques which are reflected in the conditions, though consider the effects will be greater during the construction phase of the project, as noted in the submission. Some temporary mitigation in the form of noise (and visual) barriers could be adopted on this boundary.

Comments on proposed Conditions

29. The NoR proposes new site-specific conditions to address potential adverse landscape and visual effects arising from earthworks and vegetation clearance as noted with the amendments to Conditions 29 and 30. The latter condition details minimum requirements for the Landscape Concept Plan to '*include specific details for the revegetation of the cut face*'. This is supported as it will require specialised revegetation treatment, more than standard planting of nursery species, to manage the effective revegetation of this slope.

30. A Vegetation Management Plan (VMP) is also required at Condition 36 with Condition 37 requiring an outline plan to be prepared for enabling works. Condition 36 includes the salvage of indigenous material at the vegetation clearance stage, rather than in the landscape specifications and Landscape Concept Plan.
31. In my peer review I noted the need for collaboration across project disciplines given the good opportunity, and reliance upon, salvage techniques to be adopted on this site. This will need to be managed with supervision by the ecologist and landscape architect.
32. In my view, it is not sufficient to only refer to the salvage of vegetation in one management plan such as landscape, ecology, vegetation or earthworks. It is my experience that it is necessary to include it, or cross-reference across all management plans including the outline plan to ensure it gets considered at each stage of the pre-construction planning process
33. Provided the matter of indigenous salvage is cross referenced across all disciplines, these Conditions are considered sufficient to address the matters raised in the further information requested.



Linda Kerkmeester
NZILA Registered Landscape Architect



Signed:

Date: 31 October 2024

Appendix 6

Geotechnical Statement of Evidence

**BEFORE THE INDEPENDENT HEARING COMMISSIONER APPOINTED TO
MAKE RECOMMENDATIONS ON THE NOTICE OF REQUIREMENT FOR
THE EASTERN HILLS RESERVOIR – CITY OF LOWER HUTT DISTRICT
PLAN**

IN THE MATTER

of the Resource
Management Act
1991 (the Act)

AND

IN THE MATTER

of a hearing by the
Hutt City Council on
the Notice of
Requirement for the
Eastern Hills
Reservoir – City of
Lower Hutt District
Plan

**STATEMENT OF EVIDENCE OF ADAM ROSS SMITH FOR THE HUTT CITY
COUNCIL**

November 2024

Qualifications and Experience

1. My full name is Adam Ross Smith. I am an Associate Engineering Geologist with ENGEО. I have the following qualifications:
 - (a) I am an Engineering NZ Chartered Member (PEngGeol) number 211093 and a branch committee member of the New Zealand Geotechnical Society (Wellington).
 - (b) I have the following education:
 - (c) Bachelor of Science, University of Canterbury.
 - Postgraduate Diploma, University of Canterbury.
 - Masters of Civil Engineering, University of New South Wales.
2. I have worked in the geotechnical/geohazard industry in both the public and private sectors for approximately 16 years.

Code of Conduct

3. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and confirm that I have complied with it in preparing this evidence. I confirm also that the issues addressed in this evidence are within my area of expertise, except where I have indicated that I am relying on the opinions of others. I have not omitted material facts known to me that might alter or detract from my evidence.

Scope of Evidence

4. I have read the Notice of Requirement (NoR) that was notified by the Hutt City Council (HCC) on 27 June 2024. I have also read the submissions that relate to my area of expertise.
5. This evidence is prepared to assist the section 42A report writers and support the decision-makers in the hearings panel for the notice of requirement.
6. I have read the proposed conditions dated 27.06.24.

7. I have been asked to provide evidence in relation to the geotechnical assessment undertaken by Wellington Water, Ref: OPC00003197, dated 8.04.24 titled Geotechnical investigation factual report and the conditions proposed to be attached to the proposed Designation.

Response to Submissions

Submissions related to the geotechnical aspect of the site are attached to this document.

8. The two submissions indicate that the residents have concerns around the geotechnical / geo-hazards that relate to the seismic hazard of placing a large piece of water infrastructure above residential properties and the instability of the surrounding land.

Response to Conditions

Earthworks

9. The Requiring Authority shall stabilise all areas exposed by earthworks, trenching, or building work as soon as possible after excavation or, at the latest, within one month of completing earthworks.

I recommend that an Earthworks management plan is provided stating all required temporary and permanent fill and batter angles for each material at the site along with all testing and hold points required is provided by an experienced Chartered Geo-Professional.

10. The Requiring Authority shall ensure all Construction Works, including any earthworks, are carried out in a manner that controls dust travelling beyond site boundaries to the extent that it does not cause a nuisance or hazard.

I recommend that an Earthworks management plan is provided stating all required measures to control dust and noise during the planned earthworks. The Earthworks management plan should comply with the relevant standards, guidelines, and consent conditions.

Design & Investigation

11. It is my opinion that none of the risks outlined within Wellington Water's geotechnical report have been captured within the proposed conditions; I recommend the following conditions placed on the parcel of land at the outline plan stage are:

Further investigations and geomorphological mapping are required at the outline plan stage, these investigations are to be peer reviewed by an external experienced chartered geo-professional.

I note that in the deformation analysis undertaken to date, there are inconsistencies between the commentary on shear stains and the displacements calculated. In my opinion, additional analyses should be undertaken to demonstrate that the resulting deformations under seismic conditions are acceptable. Further calibration of soil models, and especially the selection of small-strain stiffness and damping parameters, should be undertaken, and more appropriate constitutive models (i.e. the HSsmall model) should be utilised in future analyses.

I recommend that at the outline plan stage, conditions state that "A fully-dynamic deformation analysis shall be undertaken showing that a seismic resilient engineered solution can be constructed at the site. The analysis shall be undertaken prior to any works commencing and shall be submitted to Hutt City Council for certification. The analysis shall be peer reviewed by an external experienced chartered geo-professional on behalf of Hutt City Council (regulatory).

Conclusion

- 12.** In summary, while the application has provided some details in regards to the geohazards at the proposed site, much of the details are stated as being confirmed at the detailed design stage. I believe that a requirement to undertake further analysis at the Outline Plan stage, in order to confirm that the appropriate analysis has been undertaken and a solution is practical, is required. I believe that the analysis should be peer reviewed by an external experienced chartered geo-professional on behalf of Hutt City Council (regulatory)
- 13.** From a geotechnical perspective, I believe this site can be developed, provided good engineering industry standard practices are followed.

Dated 7 November 2024

Adam Ross Smith

Privacy Statement

This submission form is prescribed by the Resource Management (Forms, Fees, and Procedure) Regulations 2003.

Your submission must include your name, an address for service (either electronic or postal) and a phone number. The information you provide in this submission, including your name and contact details will be provided to other submitters and published on Hutt City Council's website. Paper copies may also be made available. Hutt City Council is required to collect and publish this information in order to carry out its functions under the Resource Management Act 1991 and to enable others to take part in the designation process.

If your submission does not include this information, your submission may be rejected.

While the Council will retain all information provided in your submission in secure council systems, all contact details will be removed from any documents published on Council's website once the designation process is complete. However, your name will still appear in these documents.

You have the right to ask for a copy of any personal information we hold about you, and to ask for it to be corrected if you think it is wrong. If you'd like to ask for a copy of your information, or to have it corrected, please contact us at contact@huttcity.govt.nz, 0800 488 824, or Private Bag 31-912, Lower Hutt 5040.

RMA FORM 21

Submission on requirement for designation or alteration to a designation



Sections 168A, 169, 181, 189A, 190 and 195A, Resource Management Act 1991

To: Hutt City Council

1. This is a submission from:

Full name	<i>Last</i>		<i>First</i>	
	Company/organisation			
Contact <i>if different</i>				
Address	<i>Unit</i>	<i>Number</i>	<i>Street</i>	
	<i>Suburb</i>			
	<i>City</i>		<i>Postcode</i>	
Address for Service <i>if different</i>	<i>Postal Address</i>		<i>Courier Address</i>	
	Phone		Phone	
Email	<i>Day</i>		<i>Evening</i>	
	<i>Mobile</i>			
Email				

2. This is a submission on the following requirement for a designation/alteration:

Description/Name of proposal:

(This information will be available in the public notice and on Council's website)

3. I **could** **could not** gain an advantage in trade competition through this submission.
(Please tick one)

4. If you could gain an advantage in trade competition through this submission:

I **am** **am not** directly affected by an effect of the subject matter of that submission that—

- (a) adversely affects the environment; and
- (b) does not relate to trade competition or the effects of trade competition:

(Please tick one)

Note: If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited.

5. The specific provisions of the proposal that my submission relates to are:

Give details:

(Please use additional pages if you wish)

6. My submission is:

Include whether you support or oppose the specific provisions or wish to have them amended; and reasons for your views:

(Please use additional pages if you wish)

7. I seek the following recommendation/decision from Hutt City Council:

Give precise details:

(Please use additional pages if you wish)

8. I **wish** **do not wish** to be heard in support of my submission.
(Please tick one)

9. If others make a similar submission,

I **will** **will not** consider presenting a joint case with them at the hearing.
(Please tick one)

Signature of submitter:
(or person authorised to sign on behalf of submitter)

	<i>Date</i>
--	-------------

(a signature is not required if you make your submission by electronic means)

Where to send your submission

- **By email (preferred):** district.plan@huttcity.govt.nz
- **By post:** Hutt City Council, Private Bag 31912, Lower Hutt 5040
- **In person:** At the Hutt City Council Customer Service Centre, 30 Laings Road, Lower Hutt

Privacy Statement

This submission form is prescribed by the Resource Management (Forms, Fees, and Procedure) Regulations 2003.

Your submission must include your name, an address for service (either electronic or postal) and a phone number. The information you provide in this submission, including your name and contact details will be provided to other submitters and published on Hutt City Council's website. Paper copies may also be made available. Hutt City Council is required to collect and publish this information in order to carry out its functions under the Resource Management Act 1991 and to enable others to take part in the designation process.

If your submission does not include this information, your submission may be rejected.

While the Council will retain all information provided in your submission in secure council systems, all contact details will be removed from any documents published on Council's website once the designation process is complete. However, your name will still appear in these documents.

You have the right to ask for a copy of any personal information we hold about you, and to ask for it to be corrected if you think it is wrong. If you'd like to ask for a copy of your information, or to have it corrected, please contact us at contact@huttcity.govt.nz, 0800 488 824, or Private Bag 31-912, Lower Hutt 5040.

RMA FORM 21



Submission on requirement for designation or alteration to a designation

Sections 168A, 169, 181, 189A, 190 and 195A, Resource Management Act 1991

To: Hutt City Council

1. This is a submission from:

Full name	Last Parry First Richard	
	Company/organisation	
Contact <i>if different</i>		
Address	Unit	Number 35 Street Woodvale Grove
	Suburb	Fairfield
	City	Lower Hutt Postcode 5011
Address for Service <i>if different</i>	Postal Address	Courier Address
Phone	Day	Evening
	Mobile	0210327005
Email	richard@rage.net.nz	

2. This is a submission on the following requirement for a designation/alteration:

Description/Name of proposal:

Eastern Hills Reservoir Project

(This information will be available in the public notice and on Council's website)

3. I could **could not** gain an advantage in trade competition through this submission.
(Please tick one)

4. If you could gain an advantage in trade competition through this submission:

I **am** **am not** directly affected by an effect of the subject matter of that submission that–

- (a) adversely affects the environment; and
- (b) does not relate to trade competition or the effects of trade competition:

(Please tick one)

Note: If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited.

5. The specific provisions of the proposal that my submission relates to are:

Give details:

1. Construction of new facilities while pipework in Lower Hutt is of a poor standard is not good prioritisation of spend;
2. Building a reservoir to handle earthquakes or severe weather right next to the existing reservoir will not meet these requirements;
3. The proposed noise levels of construction for 2-3 YEARS is out of touch with life + working from home needs; and
4. The proposed run-off into Waiwhetu Stream is not sensible because the Waiwhetu Stream already frequently floods.

(Please use additional pages if you wish)

6. My submission is:

Include whether you support or oppose the specific provisions or wish to have them amended; and reasons for your views:

1. At time of writing Hutt City is in water restriction level 2. According to the HCC website, the primary cause is, "This problem is being caused by a combination of leaks in our aging water network...". While the proposal aims to improve network resiliency, it highlights a prioritisation issue. Spending money on new infrastructure while old is in trouble is like pouring water into a bathtub without a plug. The priority must be on fixing the aging water network.
2. The stated aim of the Eastern Hills Reservoir Project is to improve the resilience of supply in case of a significant earthquake or weather event. The proposed new reservoir is right next to the old one; it would have to be a remarkable earthquake or weather event to remove the old reservoir while leaving the new one unscathed. This location is fundamentally unsuitable if the aim is to create fault tolerance in the network.
3. Many people now work from home. The NZS 6803:1999 'Acoustics - Construction Noise' standard allows for astonishing levels of sound; between 75 and 90dB(A) during peak work hours. This means noise will be between that of a vacuum cleaner to that of a busy train station or shouted conversation for the working day, which would be truly delirious for any resident trying to work (let alone think straight). The proposed project lifespan is 2-3 YEARS. Sounds above 85dB(A) are harmful to people, not to mention the impact on wildlife and pets. Your proposed construction site is 250m from my property, which means this noise will be dramatically felt. As a person who runs a recording business from home, you will put me out of work. You simply cannot do this to people, regardless of how convenient the site might be. As a side note I've experienced construction before and I've yet to see the construction site that adheres to standards. If their digger is louder than 90dB(A) (many are), will they simply down tools?
4. The Whawhetu Stream frequently floods. While the proposal suggests overflow would be infrequent, infrequent doesn't mean zero. Without fixing issues relating to flow of the stream, you risk significant environmental and property damage for residence esp. in areas like Parnell Street. The Norton Park Ave / Riverside Dr bridge has been uncrossable recently, and some properties on Woodvale have their backyards submerged during flooding. Your proposal will directly impact those property owners and put access for Eastern Hills residents at risk.

(Please use additional pages if you wish)

7. I seek the following recommendation/decision from Hutt City Council:

Give precise details:

1. Reprioritise funding to address aged infrastructure.
2. Relocate the project to better meet the goals of the project.
3. Provide restricted hours of operation for noise-producing machinery so residents can plan activities around noise emissions; for residents within 750m, provide noise insulation.
4. Relocate the overflow outside of the Waiwhetu Stream.

All in, the location is poorly considered. The primary reasons for choosing this site (elevation, existing infrastructure, cost...) are silent on resident impact and meeting the stated goals of the project (infrastructure resilience). The duration of the project is deleterious for impacted residents.

I suspect none of the project decision-makers live close to the proposed site.

(Please use additional pages if you wish)

8. I **wish** **do not wish** to be heard in support of my submission.
(Please tick one)

9. If others make a similar submission,
I **will** **will not** consider presenting a joint case with them at the hearing.
(Please tick one)

Signature of submitter:
(or person authorised to sign on behalf of submitter)

	15 April 2024 <i>Date</i>
--	------------------------------

(a signature is not required if you make your submission by electronic means)

Where to send your submission

- **By email (preferred):** district.plan@huttcity.govt.nz
- **By post:** Hutt City Council, Private Bag 31912, Lower Hutt 5040
- **In person:** At the Hutt City Council Customer Service Centre, 30 Laings Road, Lower Hutt