Before Independent Hearings Commissioners
At Wellington

Under	the Resource Management Act 1991
In the matter of	Applications for resource consents, and a Notice of Requirement for a Designation by Wellington Water Limited on behalf of Upper Hutt City Council, for the construction, operation and maintenance of the structural flood mitigation works identified as the Pinehaven Stream Improvements Project

Statement of evidence of Helen Anderson for Wellington Water Limited (Planning)

Dated 20 July 2020

大成 DENTONS KENSINGTON SWAN
89 The Terrace
PO Box 10246
Wellington 6143

P +64 4 472 7877
F +64 4 472 2291
DX SP26517

Solicitor: N McIndoe/L D Bullen
E nicky.mcindoe@dentons.com/liam.bullen@dentons.com

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Statement of evidence of Helen Anderson

1 Qualifications and experience

1.1 My full name is Helen Margaret Anderson.

1.2 I am currently a Technical Director – Planning, at GHD. Prior to joining GHD, and at the time I began working on this project, I was a Principal Planner at Jacobs, from June 2016 to December 2019. Prior to joining Jacobs I worked for AECOM New Zealand Limited (formerly URS New Zealand Limited) as a planning consultant for over sixteen years. Before joining AECOM, I worked for Auckland City Council for just over six years as a planner in the Hobson Eastern Bays Area Office and then for City Environments, Auckland City Council's regulatory unit. I held various planning and team management roles in the Council organisation.

1.3 I hold a Bachelor of Planning and Master of Planning (with Honours) from the University of Auckland. I am a full member of the New Zealand Planning Institute and I have more than 26 years' experience in resource management planning, both in local government and as a planning consultant.

1.4 I specialise in providing resource management advice to both public and private sector clients around New Zealand, predominantly under the requirements of the Resource Management Act 1991 ('**RMA**'). Over the last 20 years I have been involved in both leading and co-ordinating teams on a wide variety of projects ranging from transport and roading, coastal works and coastal processes, wastewater and stormwater discharges, erosion control works, flood hazard assessment, contaminated land infrastructure renewals and commercial/industrial development. Across this wide range of project work, I regularly provide RMA advice, statutory assessments, planning risk analysis, consent strategy development and consentability assessments, and preparation of Assessments of Environmental Effects ('**AEE**') to support resource consent applications and Notices of Requirement ('**NOR**').

1.5 My evidence relates to the NOR for designation and associated resource consent applications for the construction, operation and maintenance of the structural flood mitigation works identified as the Pinehaven Stream Improvements Project ('**the Project**'). Wellington Water Limited ('**WWL**') has lodged the resource consent applications and NOR on behalf of Upper Hutt City Council ('**UHCC**').

1.6 I am familiar with the area that the Project covers, having undertaken a site visit to Willow Park, Sunbrae Drive, Blue Mountains Road and Pinehaven Road on 29 November 2018. I have been involved with the Project in a lead planner role

since early 2017, when the Consent Strategy was first developed for the Project, and more recently I have lead the preparation of the resource consent application and NOR.

1.7 In preparing this evidence, I have considered and been informed by;

a Expert evidence of **Mr Ben Fountain** on the need for the Project for Wellington Water Limited, dated 20 July 2020.

b Expert evidence of **Mr Eric Skowron** on an overview of the Project for Wellington Water Limited, dated 20 July 2020.

c Expert evidence of **Mr Peter Kinley** on flood model design for Wellington Water Limited, dated 20 July 2020.

d Expert evidence of **Mr Tim Haylock** on construction methodology for Wellington Water Limited, dated 20 July 2020.

e Expert evidence of **Dr Claire Conwell** on water quality for Wellington Water Limited, dated 20 July 2020.

f Expert evidence of **Dr Adam Forbes** on terrestrial ecology for Wellington Water Limited, dated 20 July 2020.

g Expert evidence of **Dr Alex James** on aquatic ecology for Wellington Water Limited, dated 20 July 2020.

h Expert evidence of **Mr David Compton-Moen** on landscape and visual for Wellington Water Limited, dated 20 July 2020.

1.8 I have also read the evidence of witnesses for the Council and I am familiar with the range of submissions received on the Project. The list of documents I have relied on or referred to is provided in **Appendix A** to my evidence.

1.9 I attended two planning expert conferencing meetings with Council officers held on 3 July 2020 and 14 July 2020 to discuss aspects of the Councils' officer Section 42A Reports prepared on the regional consents and the NOR.

2 Code of conduct

2.1 While these applications are not before the Environment Court, I have read and am familiar with the Code of Conduct for Expert Witnesses in the current Environment Court Practice Note (2014). I have complied with the Code in the

preparation of this evidence, and will follow it when presenting evidence at the hearing.

2.2 The data, information, facts and assumptions I have considered in forming my opinions are set out in my evidence to follow. The reasons for the opinions expressed are also set out in my evidence to follow.

2.3 Unless I state otherwise, my evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

3 Scope of evidence

3.1 The following matters have been discussed and agreed through expert conferencing, as set out in the Joint Witness Statement – Planning[1] and are therefore not addressed further in my evidence.

a Existing environment;

b RMA approvals sought;

c Assessment against relevant planning documents.

3.2 My evidence addresses the following matters:

a Nature of the Proposed Works – design refinement post lodgement;

b Designation considerations – reasonable necessity for achieving the Project Objectives and consideration of alternatives;

c Summary of effects;

d Other matters;

e Part 2 matters;

f Proposed mitigation and conditions;

g Responses to issues in submissions;

h Response to section 42A reports;

[1] This statement has been drafted at the time of preparing my evidence, but not yet provided to the Councils or parties. I expect that it will be dated 20 July 2020.

i Response to Minute 2 of the Hearing Panel.

4 Executive summary

4.1 The purpose of my evidence is to give my assessment of the Project and associated applications using the considerations contained in the applicable planning framework and the relevant sections of the RMA.

4.2 I consider the designation is necessary to achieve the objectives of UHCC in relation to the Project.

4.3 There has, in my opinion, been an extensive process of consideration of alternatives, beyond that required by section 171(1)(b), for undertaking the works that are part of the Project.

4.4 There has in my opinion been an extensive and thorough process of project design evaluation and consultation to optimise the design of the Project so that it best meets the applicant's objectives while avoiding, remedying or mitigating adverse effects.

4.5 I consider that there has been sufficient investigation, identification and assessment of the nature, scale and extent of effects of the Project by suitably qualified and experienced experts, and that the adverse effects that cannot be avoided will be remedied or appropriately mitigated by the measures implemented through the proposed conditions. This includes the discharge permit application matters.

4.6 The effects of the Project have been considered against policy documents, plans, national environmental standards and other regulations. In my view, the Project is consistent with and will promote statutory and non-statutory plans, particularly the Regional Policy Statement and the UHCC Long Term Plan 2018-2028.

4.7 The adverse effects of the Project will be avoided, remedied or adequately mitigated by the comprehensive set of conditions proposed.

4.8 After reviewing all the information, assessments, reports and submissions, I am of the view that the Project will promote the sustainable management of natural and physical resources because:

a the relevant matters of national importance have been recognised and provided for under section 6;

b particular regard has been had to the relevant other matters under section 7;

c the principles of the Treaty of Waitangi have been taken into account under section 8;

d the Project effectively addresses the existing flooding problems along the Lower Pinehaven Stream; and

e adverse effects have been avoided, remedied or appropriately mitigated, particularly by the comprehensive conditions, as agreed in expert witness conferencing set out in the Joint Witness Statement – Planning.

4.9 I acknowledge there will still be some residual adverse effects that are unavoidable when constructing the structural stream improvements, for example sediment discharge. However, in my opinion these residual adverse effects will be acceptable as a result of the construction methodology to be used (over pumping) and active water quality monitoring with appropriate trigger levels before and during the works. These residual effects will be outweighed by the significant positive effects that form the rationale for the Project, including significant reductions in the flood risk to properties.

5 Existing environment

5.1 The existing environment for the purposes of the Project is considered to be the lower reaches of the Pinehaven Stream. A full description of the existing environment is provided in section 5 of the AEE. The existing environment is also described and confirmed in the Joint Witness Statement - Planning and in the Council Officer Section 42A Reports[2].

6 Nature of the Proposed Works

6.1 The nature of the proposed works is described in the Joint Witness Statement – Planning.

Design refinement post lodgement

6.2 In the AEE, a range of key design features were identified[3]. Following lodgement and notification of the resource consent applications and NOR in November 2019, the design of the Project works has continued to be refined. This design refinement has occurred in response to a number of factors, including:

[2] Section 42A Report of Josie Burrows, GWRC Resource Advisor, dated 13 July 2020, section 3 and Section 42A Report of James Beban, UHCC Consultant Planner, dated 13 July 2020, section 4.
[3] AEE, Table 3: Summary of Stream Improvement Works in Reaches 1-3 and Table 13: Description of Key Physical Improvements to the Stream Channel

a engagement with property owners;

b responding to matters raised in submissions;

c Section 92 further information requests made by UHCC and GWRC;

d the desire to minimise impacts to the stream and surrounding environment during construction;

e input from stakeholders including UHCC and GWRC;

f inputs from technical advisors; and

g early contractor engagement with Downer, who are advising on constructability.

6.3 The evidence of **Mr Eric Skowron** provides greater detail on the alternative designs considered and the design refinement that has occurred following lodgement and notification of the NOR and resource consent application.[4] The preferred design solution has also been tested within the hydraulic model. The Project flood modelling is described in the evidence of **Mr Peter Kinley**.

6.4 Following lodgement and notification of the application, additional design of the structural improvement works has been prepared and further detail has been provided to property owners who are directly impacted by the works. For example, the revised access arrangement for the properties at 30 to 36 Blue Mountains Road was finalised in April 2020 and has been provided to the property owners. This additional design detail is shown on the amended General Arrangement Plans, which were provided with the Section 92 response to further information.[5]

6.5 The final design for the proposed works is set out in the updated set of General Arrangement Plans provided to the Councils on 11 June 2020 and referred to in their Section 42A Reports.

6.6 Separate to the RMA process, the Project is also required to obtain property access agreements with all properties impacted by the works, under section 181 of the Local Government Act 2002. Design details form the basis of property access agreements with landowners. These agreements will need to be in place prior to construction commencing.

[4] Skowron EIC, section 6.
[5] Skowron EIC, para 6.20.

6.7 The construction methodology to be used to install the stream improvement works has also been clarified in the section 92 further information response.[6] The construction methodology is to utilise a piped diversion, whereby base flows in the stream will be diverted away from construction activities through a diversion pipe. The original application presented two in-stream construction options; Option 1 –in-stream works sheet piling, and Option 2 - use of piped diversion.[7] It is now proposed to only use the piped diversion construction methodology in order to protect stream flows from adjacent excavations and thereby reduce as much as possible the turbidity and suspended solids in the stream.

6.8 Further detail on the construction methodology is provided in the evidence of **Mr Tim Haylock**[8] and is set out in the Draft Erosion and Sediment Control Plan.[9]

6.9 As the design of the structural works has continued to be refined following lodgement and notification of the NOR and resource consent applications, the designation extent has also been refined. WWL will ask the Commissioners to make these modifications to the designation footprint when issuing its recommendation on the NOR.

6.10 The modifications in designation footprint affect 11 properties, and for 10 properties the designation area has been reduced or removed completely. There is one property, 30 Blue Mountains Road, where the designation area has been increased, due to the need to provide sufficient area for the proposed new driveway access. The landowner of 30 Blue Mountains Road has provided written approval for this increase in designation area extent.[10] These changes are summarised below.

Property address	**Change to designation footprint post-notification (Designation Land Area m^2)**	
	As notified	**Revised**
48-50 Whitemans Rd	458	246
52 Whitemans Rd	70	0
54 Whitemans Rd	101	0

[6] Refer letter to GWRC dated 21 February 2020.
[7] AEE, para 6.2.5.
[8] Haylock EIC, paras 5.1 – 5.4.
[9] Refer letter to GWRC dated 21 February 2020, Appendix B.
[10] The following letters outline the modifications made to the designation area extent: Letter dated 21 February 2020 to UHCC: Response to section 92 request for further information, Item 6, pg.4, Letter dated 25 March 2020 to GWRC: Clarification on proposed works and changes to original application, Item 4, pg.3 and Letter dated 1 May 2020 to UHCC: Amendment to designation areas, Pg 3 and Attachment 3.

Property address	Change to designation footprint post-notification (Designation Land Area m^2)	
56 Whitemans Rd	300	0
4 Blue Mountains Rd	2114	880
15 Clinker Grove	560	453
1 Tapestry Grove	331	87
30 Blue Mountains Rd	292	393
7 Pinehaven Rd	804	595
9 Birch Grove	457	78
11 Birch Grove	695	455

6.11 The response to section 92 request for further information letter dated 21 February 2020 to UHCC stated that the designation footprint over 10A Birch Grove was increasing by $2m^2$ from $492m^2$ to $494m^2$. However, this was an error and no change is proposed to the designation footprint at this location.[11]

6.12 Additionally, the designation area extent over 11 Birch Grove is to be reduced to more accurately reflect the designation area required to enable access and construction of the stream improvement works in the south eastern corner of their property. This change occurred subsequent to the advice provided to UHCC on 1 May 2020 and so is not shown on the designation plans appended to that letter.

6.13 I note that the above table differs to the table presented in the UHCC Section42A Report at section 2.1. The table in the UHCC Section 42A Report is incorrect.

7 RMA approvals sought

7.1 The RMA Approvals sought for the Project is confirmed in the Joint Witness Statement – Planning.

7.2 The GWRC Section 42A Report includes a rules assessment at Appendix 3. I agree with this assessment and agree that overall the Proposal is considered to be a discretionary activity under the RFP and PNRP.

[11] Letter dated 1 May 2020 to UHCC: Amendments to designation areas, pg. 2 and Attachment 1.

7.3 The proposed resource consent conditions and NOR conditions are discussed further at section 13 of my evidence. I have also included a table at **Appendix B** that provides detail on amendments proposed to consent conditions and conditions that are in dispute.

8 Designation considerations

Reasonable necessity

8.1 Section 168A(3)(c) RMA requires that for the territorial authority considering a notice of requirement, particular regard must be given to: *'whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought'.*

8.2 Section 12.5 of the AEE considers the requirements of section 168A(3)(c) RMA.

8.3 The Project Objectives of the Pinehaven Stream Improvement Project are identified in section 1.3 of the AEE and are addressed in the evidence of **Mr Ben Fountain**. The evidence of **Mr Fountain** also addresses the Project history, the need for and benefits of the Pinehaven Stream Improvement Project. His evidence is that:

a The structural works have been designed to generally increase the capacity of the main channel, downstream of Pinehaven Reserve to a 4% AEP (1 in 25 year return period) flood event and in doing so reduce the risk of blockages and increase the number of homes that achieve the regional target of having floor levels above the 1% AEP event (1 in 100 year return period) rainfall event.[12]

b This design has been developed to reduce both the hazard and the frequency of flooding from the watercourse in the most vulnerable areas of the catchment. The design will not eliminate flooding but it will reduce the risk to life and the frequency of damaging flood events.[13]

8.4 In my view, a designation is the most appropriate planning tool to use in order to achieve the Project Objectives. This is because the most effective way to enable the works across multiple private properties is by way of a designation, as it removes the need to apply for land use consents from Upper Hutt City Council,

[12] Fountain EIC, para 3.8.
[13] Fountain EIC, para 5.17.

as s.9(3) of the RMA does not apply to works undertaken by requiring authorities and authorised by a designation included in the district plan.

8.5 Additionally, with the designation in place, this will ensure that the use of private property that is located within the designation area does not affect the structural improvements that will be or have been implemented or impact on the capacity of the stream to contain a 4% AEP / 1 in 25 year return period flood event including interference to secondary and overland flow paths. This is because any works within the designation will require prior written consent from the UHCC as requiring authority pursuant to section 176(1)(b) of the RMA.

8.6 Finally, the designation will be shown in the District Plan, and so provide notice to any interested person of the extent of works proposed and conditions which apply. This would not be the case if the works were authorised by district land use consents.

Consideration of Alternatives

8.7 Section 168A(3)(b) RMA requires that particular regard must be had to: *'whether adequate consideration has been given to alternative sites, routes, or methods for undertaking the work'*.

8.8 In respect of the Project, consideration of alternatives has been undertaken:

a by UHCC and GWRC, in relation to possible:

i alternative structural options assessed as part of the development of the Pinehaven Stream FMP;[14] and

ii design alternatives for the proposed structural options following the FMP process.

8.9 The process undertaken to assess alternative structural options is addressed in the evidence of **Mr Ben Fountain** and the alternative designs considered is addressed in the evidence of **Mr Eric Skowron.**[15] The Assessment of Alternatives is also addressed in detail in Section 8 of the AEE.

[14] The FMP process was facilitated by a Project Steering Group comprised of staff from UHCC and GWRC, supported by Capacity Infrastructure Services (now Wellington Water).
[15] Skowron EIC, paras 6.1 – 6.33.

8.10 As discussed in the evidence of **Mr Fountain**, the structural upgrade options set out in the FMP[16] were selected following a multi-criteria analysis and community consultation process.[17] A range of other alternatives were considered, including stopbanks, detention storage in the upper catchment, managed retreat and alternative bank/channel designs.[18]

8.11 For the reasons discussed in the evidence of **Mr Fountain**, a range of structural management options were discounted. This was for reasons relating to increased flood risk (e.g. through the use of stopbanks), cost (associated with constructing a storage dam in the upper catchment and cost of alternative structural options), significant loss of life if the dam were to fail, and construction disruption, particularly if more naturalised banks were utilised throughout the Project area instead of vertical sided retained banks.[19]

8.12 Figure 19 of the AEE, provides an overview of the alternatives assessment process.

8.13 As discussed in the evidence of **Mr Eric Skowron**, the preferred design solution has evolved through multiple project stages including concept design, hydraulic analysis, preliminary design, property engagement, early contractor involvement ('**ECI**') and detailed design, which in combination have resulted in the design now proposed.[20]

8.14 **Mr Eric Skowron's** evidence identifies the range of alternative designs that have been considered when developing the Project in relation to:

a Stream banks and channel hierarchy (including retaining walls and scour protection);

b Options enabled by the purchase of property;

c Private bridges;

d Avoidance of significant trees;

e Overland flow path at 50 Blue Mountains Road, and

[16] Greater Wellington Regional Council "Pinehaven Stream Floodplain Management Plan" (6 September 2016) < https://www.gw.govt.nz/assets/floodprotection/Waiohine-FMP/Pinehaven-printing-FMP-volume-1-update-6-September-2016.pdf>, Appendix F.
[17] Fountain EIC, para 5.19.
[18] Fountain EIC, para 5.20.
[19] Fountain EIC, paras 5.20 – 5.29.
[20] Skowron EIC, para 6.1.

f Erosion mitigation at 2A Freemans Way and 50 Blue Mountains Road.

8.15 The proposed design of proposed stream improvements has resulted from iterations in the hydraulic model with consideration of physical constraints, constructability, construction access, method of construction, minimisation of impacts to the stream and surrounding environment during construction, inputs from adjacent property owners, inputs from stakeholders including UHCC and GWRC ,and inputs from technical advisors including terrestrial ecologists, aquatic ecologists, landscape architect, geotechnical information and safety.

8.16 I consider that there has been a robust process of considering alternatives, beyond what is required by section 168A(3)(b), for undertaking the works that are part of the Project.

9 Summary of actual and potential effects on the environment

Statutory framework

9.1 Consistent with section 168A(3) and 104(1)(a) RMA, this section of my evidence considers the actual and potential effects of Project components in the context of Part 2 of the RMA.

9.2 Section 10 of the AEE outlines the potential environmental effects of the project, broadly separated into temporary effects (i.e. those associated with site preparation and construction) and permanent effects (i.e. those associated with the final built environment).

Positive effects

9.3 The main positive effect resulting from the Project is the overall reduction in flood risk to the Pinehaven and Silverstream communities, particularly to those properties adjacent to the Lower Pinehaven Stream who currently experience flooding and resulting property damage. The works will result in significant positive social effects as a result of the implementation of the stream improvement works through the reduction in flood risk. The anticipated benefits of the Project have been summarised in the evidence of **Mr Ben Fountain**. This reduction in flood effects is summarised in the evidence of **Mr Peter Kinley**. These positive effects form the rationale for the Project.

9.4 The evidence of **Dr Alex James** discusses how the Project will positively contribute to the creation of additional riparian habitat for valued flora and fauna species. The evidence of **Mr David Compton-Moen** discusses how this Project will provide positive amenity to local residents and improve the character of the

Stream, particularly through the landscaping and planting and improved pedestrian connectivity proposed in Willow Park.

9.5 I have identified additional positive effects against each of the subsections below.

Effects Assessment

9.6 The environmental effects of the Project have been assessed by suitably qualified and experienced experts. The assessments are included as Appendices to the AEE.

9.7 Where adverse effects have been identified, measures are proposed (primarily to be given effect to through conditions) to remedy or mitigate the adverse effects to an acceptable level. The proposed conditions contained in Section 11 of the AEE have been updated following conferencing and the Section 42A reports, and are discussed further in my evidence at section 13.

9.8 Based on the AEE, the evidence prepared by other witnesses, and my own overall assessment, I am of the opinion that there has been sufficient identification and assessment of the nature, scale and extent of the effects of the Project.

9.9 My key conclusions in this regard are set out below.

Flood Risk Effects

9.10 The Project will result in a significant reduction of the risk of flooding in the lower Pinehaven catchment area, because following completion of the works, the Pinehaven stream will have capacity for a 1 in 25 year flood event (4% AEP), within the channel in all sections of the stream in which channel works are proposed and will therefore be able to accommodate increased stormwater flow during high flows from extreme rainfall events, with a reduction in flooding on adjacent properties.

9.11 The Project will also have a positive effect on habitable floor flooding from the Stream within the project reach for the 1 in 100 year flood event (1% AEP), reducing the number of habitable floors within the floodplain from 75 currently to 22 (a reduction of 53) once the works are completed and will reduce the number of flooded non-habitable floors from 37 down to 12 (a reduction of by 25)[21]. Four habitable floors will experience increases in flooding of between 0.02m and

[21] Refer Pinehaven Stream Improvements Flood Hazard Assessment, updated 15 June 2020, Section 3: Flood Hazard Assessment – 1%AEP Flood

0.06m as a result of the proposed works (being 54 Whitemans Rd, 15 Clinker Grove/56 Whitemans Rd, 7 Pinehaven Rd and 9 Birch Grove), however the effects of this increase will not have an effect on habitable floor flooding at these locations. This is addressed in the evidence of **Mr Peter Kinley**.[22] This is a significant positive effect on the health, safety and wellbeing of people and communities in this area.

9.12 Recent flood events, for example the flood event on 8 December 2019, highlight the need for these stream improvement works, because, as shown in the comparative assessment report,[23] a number of properties were inundated by flood waters. The evidence of **Mr Ben Fountain**[24] and **Mr Peter Kinley**[25] provides further context to this recent flooding event.

Effects on Water Quality

9.13 As noted in the AEE at section 10.5.1, the construction phase of the Project may have temporary adverse effects on the water quality of the Pinehaven Stream as a result of soil disturbance and associated stormwater runoff from earthworks, stream bed disturbance and the discharge of dewatering water from excavations.

9.14 The evidence of **Dr Claire Conwell**[26] identifies that main contaminant of concern during the construction phase is the potential for sediment to be released, as suspended sediment (as particles in the water column), which in turn may contribute to down stream deposited fine sediment.

9.15 **Dr Claire Conwell** describes why sediment as a contaminant is an issue for urban streams and the adverse effects associated with suspended and deposited sediment and how sediment affects ecosystem health through various modes of impact, quantified by four environment state variables ('**ESVs**'): suspended sediment concentration, visual water clarity, light penetration, and deposited fine sediment.[27]

9.16 The revised draft ESCP reflects the change in construction methodology (to a piped diversion) and also the change to trigger levels based on turbidity

[22] Kinley EIC, para 10.1.d
[23] Refer s.92 further information response to GWRC and UHCC (letters dated 26th February),Appendix B - Memorandum titled ' Response to Jan 23 2020 Section 92 request – Mapping 8 December 2019 Flood Event.
[24] Fountain EIC, paras 5.10 – 5.11.
[25] Kinley EIC, para 11.4.
[26] Conwell EIC, para 4.2.
[27] Conwell EIC, paras 6.5 – 6.10.

measurements after reasonable mixing, correlated with SSC concentrations in the Pinehaven Stream through recent monitoring results.[28]

9.17 An adaptive management approach to managing sediment generation is now proposed, as presented in the s.92 response.[29]

9.18 The evidence of **Dr Claire Conwell** discusses the supporting assessment and monitoring framework which sets out an adaptive management approach to ensure that downstream water quality during the construction phase is managed within trigger levels and how the monitoring of sediment levels and management responses to be taken when sediment triggers are breached will ensure adverse environmental effects on water quality will be mitigated.

9.19 With these measures in place, I consider that this will result in appropriate mitigation and management of soil disturbance and erosion during construction, and sediment discharged to the Pinehaven Stream will be minimised. Proposed consent conditions will appropriately manage effects on water quality during construction activities.

9.20 Based on the evidence and proposed conditions, I am of the view that adverse effects on water quality will be avoided or appropriately mitigated.

Effects on Terrestrial Ecology

9.21 The technical report prepared by **Dr Adam Forbes**[30] provides a detailed description of the vegetation features within the Project area. The assessment undertaken by **Dr Adam Forbes** focusses on the mature or remnant native trees which cannot be avoided by the stream improvement works.

9.22 The stream improvement works will involve significant disturbance of the stream channel and areas of surrounding vegetation. The Project has, as far as practicable, attempted to avoid significant tress. The mature native trees requiring removal are detailed in **Dr Adam Forbes'** technical report[31].

9.23 In summary 9 kowhai trees, 3 black beech and one kahikatea tree require removal.

[28] Refer letter to GWRC dated 21 February 2020, titled 'Response to section 92 requests for further information', Appendix B: Revised Erosion and sediment control plan.
[29] Refer letter to GWRC, dated 21 February 2020, titled 'Response to section 92 requests for further information', B: Revised Erosion and sediment control plan
[30] Refer Appendix S: Assessment of Terrestrial Ecology, Pinehaven Stream Improvements combined NOR and AEE, dated September 2019
[31] Refer Appendix S: Assessment of Terrestrial Ecology, Pinehaven Stream Improvements combined NOR and AEE, dated September 2019, section 3.0.

9.24 The evidence of **Dr Adam Forbes** addresses the potential effect on terrestrial ecology. In summary, the evidence of **Dr Adam Forbes**[32] is that:

a The level of adverse effect resulting from the removal of the 13[33] mature native trees within the project area range from low (black beech) to very low (kowhai and kahikatea).

b The ecological significance of the affected native trees identifies the black beech as scarce in the regional forest context, therefore triggering the rarity criterion of Policy 23 GWRC RPS. Given the Regional Vulnerable status of black beech forest in the Wellington Region and the mature status of the trees to be removed, a replacement planting ratio of 10:1 is recommended.[34]

c Effects on significant trees at 50 Blue Mountains Road can and will be avoided.

d Loss of bird habitat will have a minor level of effect.

e With the mitigation measures the overall effects will be low or very low.

9.25 The potential effects of the Project on avifauna has been assessed by **Ms Alison Davies**[35].

9.26 In summary, **Ms Alison Davies's** technical report and further information provided conclude that:

a Some vegetation that is useful bird habitat will be removed due to the works. Loss of the mature native trees will lead to the loss of feeding, roosting and possibly breeding habitat for native (and exotic) birds. The removal of willow trees, especially at Willow Park, will result in a reduction of a specific seasonal feeding source for several native bird species.

b Gaps created by tree removal in the mostly intact wooded corridor along the Pinehaven Stream are not anticipated to create a barrier to the movement of native birds present in the catchment. There may be some impact on the movement of some native insects and reptiles. To address vegetation

[32] Forbes EIC, para 4.1.
[33] Paragraph 10.16 of the UHCC Section 42A Report states that resource consent has already been granted to allow the removal of Tree 22 (Oak), Tree 23 (Black Beech) and Kowhai 01, 02 and 08. This means that the total number of mature native trees to be removed pursuant to the NOR is reduced to eight.
[34] Forbes EIC, paras 6.2 and 6.11a.
[35] Refer Appendix S: Assessment of Terrestrial Ecology, Pinehaven Stream Improvements combined NOR and AEE, dated September 2019

removal during bird nesting, a condition of consent is proposed that requires inspections to occur prior to vegetation clearance.

c The loss of foraging habitat for kereru and tui, as well as indigenous insectivorous bird population would be temporary and have insignificant effects, as there is adequate habitat in the locality for resident populations of these species to adjust to the temporary disturbance of a relatively small area of habitat.

d In the medium-term the proposed mitigation planting will replace vegetation cleared and provide a greater area and diversity of indigenous vegetation for birds.

e No bats have been recorded from the Hutt Valley or within the Pinehaven catchment, but long-tailed bats could be present in the mature indigenous forest of the nearby Wi Tako Reserve. A condition is proposed requiring deployment of automatic bat monitors during spring and summer months targeting large mature trees, to establish the presence of bat roosts prior to vegetation clearance.

f While shaded riparian habitat, as found in the Project area is not favoured by lizards, a lizard survey prior to commencing works on the site is proposed in accordance with a Lizard Management Plan, in order to ensure any potential adverse effects of the project on lizards is avoided, remedied or mitigated.

9.27 A comprehensive set of conditions is proposed to ensure adverse effects on avifauna, bats and lizards during construction are avoided, remedied or appropriately mitigated.

9.28 Based on the technical report and further advice provided in response to s.92 further information matters, I am of the view that adverse effects on terrestrial ecology will be avoided or appropriately mitigated.

Freshwater Ecology effects

9.29 The technical report[36] and evidence of **Dr Alex James** provides a detailed description of the existing freshwater ecology environment.

[36] Refer Appendix S: Assessment of Freshwater Ecology Effects, Pinehaven Stream Improvements combined NOR and AEE, dated September 2019

9.30 This freshwater ecological information has been used to inform the Project and assist with the proposed design of the structural works, and to identify proposed conditions of consent to mitigate adverse effects appropriately.

9.31 In summary, the evidence of **Dr Alex James**[37] is that:

a Pinehaven Stream in the Project area is assessed as being of "moderate" ecological value.

b The overall adverse effect of the construction phase will be "moderate". However, recommended avoidance, remedy, and mitigation measures proposed in conditions will result in a "minor adverse effects" level of impact to aquatic ecology.

c Through the implementation of recommended mitigation measures the adverse operational effects can be reduced to a "less than minor adverse effects" or "nil effects" level of impact to aquatic ecology.

d Streambed compaction and increased rates of fine sediment entering the water column are the greatest risks to the macroinvertebrate community from the Project. The proposed construction methodology, being use of piped diversion for all construction sections and appropriate control measures will minimise sediment discharge by ensuring the physical works areas are separated from flowing water.[38]

e The proposed works will result in an unavoidable disturbance to aquatic ecology, however the aquatic fauna will recover relatively quickly (months for macroinvertebrates, up to a few years for fish). After construction there will be some improvements in the ecological condition of Pinehaven Stream over time resulting from:

i The stream having more physical space for natural processes to occur within;

ii The establishment of a more natural riparian zone dominated by native plants;

iii A potentially increased fish diversity and/or densities resulting from remediation of the fish barrier at the confluence with Hulls Creek.

[37] James EIC, para 14.
[38] James EIC, para 6.12.

9.32 Based on the technical report, evidence and the proposed conditions, I consider that the adverse effects on aquatic ecology will be avoided or appropriately mitigated.

Visual and Landscape Effects

9.33 A landscape and visual assessment report has been prepared by **Mr David Compton-Moen**[39]. This report identifies the methodology used for assessing the landscape and visual effects of the Project.

9.34 The report assesses the landscape and visual effects of the Project, and the significance of these effects. Effects on natural character are also assessed.

9.35 The report finds that no identified outstanding natural features and no identified outstanding landscapes or landscape protected areas are directly affected by the Project.

9.36 Appendix F (Landscape Plans) to the AEE contains draft landscape plans that have been prepared to indicate the nature, scale and extent of hard and soft landscaping that is proposed. Following lodgement of the application, the proposed L2 riparian planting (partially wet)[40] is no longer proposed for the constructed stream bed due to advice from the Hydrological engineer because any planting (L2) within the stream bed would have been physically removed during the first major flood event and cause issues downstream.

9.37 The evidence of **Mr David Compton-Moen**[41] is that in terms of landscape elements and character, residual effects will be less than minor. The quality of the receiving environment is mixed, with areas of well-established native vegetation but also areas where there is a high level of modification and infestation of weeds species. There will be some loss of vegetation and modification of stream banks during construction, but the proposed landscape works combined with the engineering works will improve the amenity of the corridor over time. There will be short term adverse effects (up to 5 years) when vegetation is initially removed during construction, and before new plantings become established

9.38 Proposed conditions of consent require the preparation of a Landscape Plan that requires amongst other things, details of proposed mitigation planting, protection

[39] Refer Appendix V: Landscape and Visual Assessment, Pinehaven Stream Improvements combined NOR and AEE, dated September 2019.
[40] Refer the 'Plant Palette' at page 15 of Appendix F.
[41] Compton-Moen EIC, para 4.1.

measures, planting methods, weed and pest management. A specific Reserve Reinstatement Management Plan for Willow Park is also required.

9.39 On this basis, I consider that good landscape design principles will be promoted and any adverse landscape and visual amenity effects will be appropriately mitigated by the proposed conditions.

Traffic and Transport Effects

9.40 The effects on traffic and transport are addressed at section 5.9 of the AEE and in the evidence of **Mr Tim Haylock**.

9.41 The evidence of **Mr Tim Haylock** is that the project will involve a range of typical construction activities including demolition, earthworks, piling, placement of structures, and heavy vehicle movements.[42] Bridge structures are to be built off-site to reduce construction time and minimise materials that would need to be transported in to the construction zone, which reduces the number of construction vehicles.[43] His evidence also notes that the relatively small scale of individual parts of the work, spread out along the stream, will ensure that the works are not particularly large at any one point in the Project area.[44] Each construction stage will cause different traffic effects due to different access points, and types of construction and therefore equipment required.

9.42 Pedestrian access will be maintained to all properties, however vehicle access to private property may be restricted at times for certain stages of construction, and some roads within the Project area may require temporary lane closure.[45]

9.43 The proposed NOR conditions require the preparation of a Construction Traffic Management Plan to manage construction traffic and identify methods for avoiding, remedying or mitigating the local and network wide transportation effects resulting from the Project works. With these measures in place, I consider that this will result in appropriate mitigation and management of construction traffic on the local road network.

Cultural values

9.44 The Project has consulted with Te Ati Awa Taranaki Whānui who have provided a position statement on the proposed works. This was included as Appendix I of the AEE. The position statement acknowledges that the Pinehaven Stream

[42] Haylock EIC, para 5.1.
[43] Haylock EIC, para 5.3.
[44] Haylock EIC, para 7.4.
[45] Haylock EIC, para 7.5 and 7.7.

Improvements Project is making a significant effort to return the Pinehaven Stream back to its more natural state.

9.45 The Project will continue to engage with iwi via the Pinehaven Kaitiaki Monitoring Strategy, which will be prepared to ensure that the potential effects of construction to the mana and mauri of the stream within and downstream of the construction area are appropriately managed and mitigated.

9.46 On this basis I consider that the adverse effects on tangata whenua and cultural values will be avoided, remedied or appropriately mitigated by the conditions proposed and by ongoing engagement.

Other potential effects – social and heritage

9.47 Other potential effects also include social effects and historic heritage.

9.48 Section 10.6 of the AEE considers the social effects of the Project. Social effects include impacts on a people's way of life, community, health and wellbeing, personal and property rights. There are three main stages of the Project where social impacts may be experienced, planning (consultation and consenting), construction and operation.[46] The potential adverse social effects will mainly occur during construction.[47] Due to the construction staging and methodology, direct impacts to properties will be sought to be minimised as much as possible through the separation of the Project into individual sections, potentially enabling multiple sections to be constructed at once, thereby reducing the duration of the construction period.

9.49 The evidence of **Mr Ben Fountain** provides detail of the property owner and community consultation that has been undertaken since 2009, when the Pinehaven Stream flood modelling work was initiated. **Mr Ben Fountain's** evidence describes the consultation undertaken during the development of the Pinehaven Stream Flood Management Plan (FMP), and the key principles identified which were used to develop the proposed structural works[48].

9.50 An Engagement Report is included at Appendix H of the AEE, and section 9 of the AEE summarised the consultation completed prior to lodgement of the application. Ongoing engagement with property owners will continue until the physical works and reinstatement are complete.

[46] AEE, para 10.6.1.
[47] AEE, para 10.6.2.
[48] Fountain EIC, para 8.2.

9.51 I consider that potential adverse social effects have been minimised by the extensive consultation undertaken with directly affected landowners, both through the Flood Management Plan process and through the consenting process. I consider that there will be positive social effects that will be significant and that any adverse social effects will be adequately mitigated by the proposed designation and consent conditions, particularly those relating to the management of adverse construction effects.

9.52 Effects on historic heritage have been assessed at section 10.13 of the AEE. An archaeological assessment has been completed[49], that concludes that there are no potential archaeological sites within the project area.

9.53 I consider that any effects on historic heritage will be adequately mitigated by the proposed designation and consent conditions, particularly those relating to the management of adverse construction effects.

Offsetting or compensating for adverse effects

9.54 When considering an application for a resource consent, s104(1)(ab) sets out that the consent authority must have regard to any measure proposed or agreed to by the applicant for the purpose ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity.

9.55 The Pinehaven Stream Improvements Project does not propose to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity, under s.104(1)(ab) of the RMA.

Discharge permit matters

9.56 A discharge permit is sought for the discharge of sediment-laden water associated with the construction of the Pinehaven Stream Improvement works to the Pinehaven Stream.

9.57 Section 105 of the RMA requires the following additional matters to which regard must be given when considering a resource consent application for a discharge permit to land and water. These are:

a the nature of the discharge;

b the sensitivity of the receiving environment;

[49] Refer Appendix T of AEE.

c the reasons for the discharge; and

d any possible alternatives.

9.58 Section 107 of the RMA sets out additional matters to consider. These matters relate to construction effects and, in particular, the effects of sedimentation on the Pinehaven Stream. These effects have been assessed in detail in the AEE (specifically section 10.5 Water Quality), and in the evidence of the respective construction, freshwater ecology and water quality experts. Extensive conditions are proposed to avoid, remedy or appropriately mitigate the temporary adverse effects of construction, including implementation of a Construction Management Plan ('**CMP**'), ESCP, Site specific Environmental Management Plans ('**SEMP**') and Ecological Monitoring Plan.

9.59 An assessment against s.105 and s.107 is also discussed in the GWRC Section 42A Report[50]. I agree with this analysis.

9.60 In my opinion, the AEE and associated technical reports and evidence demonstrate that appropriate regard has been given to the assessment of temporary effects of the discharge of contaminants to water and land during the construction of the Project, and to how these temporary effects should be managed.

10 Assessment against relevant policy and planning documents

Planning policy/ framework

10.1 The relevant planning documents were discussed and agreed in expert conferencing and as set out in the Joint Witness Statement – Planning.

10.2 The relevant objectives and policies were discussed and agreed in expert conferencing and as set out in the Joint Witness Statement – Planning, and I specifically note the following:

a *RPS Policy 39* -At section 11.2.1 of the GWRC Section 42A Report it is considered that the Pinehaven Stream Improvement works do not meet the definition of regionally significant infrastructure, and hence Policy 39 is not relevant to the application.

i I have reviewed the definition of 'Regionally Significant Infrastructure' and 'Stormwater' under the RPS. I consider that while the proposed works within Pinehaven Stream are required to increase the capacity of

[50] Section 42A Report of Josie Burrows, GWRC Resource Advisor, dated 13 July 2020, sections 9.2 and 9.3.

the stream channel to meet the levels of service for the stormwater infrastructure, the Pinehaven stream is not local authority stormwater network infrastructure, but is a receiving environment for stormwater discharges. Therefore I agree that the proposed works for which consent is sought does not meet the definition of regionally significant infrastructure, and consideration against Policy 39 is not relevant to this application.

b *GWRC RFP Policy 5.2.8* - At section 11.2.2 of the GWRC Section 42A Report it is considered that the proposal is inconsistent with Policy 5.2.8 (Appendix 8 Water Quality Guidelines), but that inconsistencies with this policy are provided for by Policy 5.2.10. I agree with this assessment.

c *GWRC PNRP Objective O29, Policies P31(f) and P34* – At section 11.2.3 of the GWRC Section 42A Report it is considered that the Project is inconsistent with Objective O29, and Policies P31(f) and P34 due to the construction works temporarily blocking fish passage. I agree with this assessment to the degree that the installation of the dams to establish the piped diversion will temporarily block fish passage. I also acknowledge that during construction, with the piped diversion in place, fish passage may be blocked. However, **Dr Alex James** considers that the dam and diversion construction methodology allows fish passage to be maintained to some extent as there will always be a continuity of flow through the work sites free of any temporary barriers[51]. Proposed conditions requiring fish relocation during construction will also address fish passage within the stream.

11 Other matters

Upper Hutt City Council Long Term Plan 2018-2028 and Infrastructure Strategy

11.1 The Pinehaven Stream Improvement Project is identified within the UHCC Long Term Plan ('**LTP**') as a key 'business as usual' infrastructure initiative[52]. The Project is associated with the stormwater activity area under the LTP. The LTP[53] recognises that the ability of stormwater infrastructure to cope with flood events is an important issue for the city. Stormwater upgrades, such as Pinehaven Stream Improvement works, will help reduce the impacts of flooding on communities. The

[51] James EIC, para 9.2.
[52] UHCC "Long Term Plan 2018-2028" <https://www.upperhuttcity.com/Your-Council/Plans-policies-bylaws-and-reports/Long-Term-Plan> pg 19. Total cost at preliminary design stage of $18.22 million.
[53] UHCC "Long Term Plan 2018-2028" <https://www.upperhuttcity.com/Your-Council/Plans-policies-bylaws-and-reports/Long-Term-Plan> pg 37 & 50-54.

overall level of service for the stormwater activity area for UHCC is, *"We will effectively manage stormwater to minimise the risk of property damage and preserve public safety and health"*[54].

11.2 The UHCC Infrastructure Strategy which forms part of Council's LTP[55], identifies that Council's policy is to provide flood protection to a design standard of meeting a 1:25 year flood event if there is a secondary flow path and for a 1:100 year event if there is no secondary flow path. The Pinehaven Stream is identified as the most at risk area. [56]

11.3 I consider that the Project is consistent with and will contribute to achieving the desired level of service for stormwater activity identified in the LTP and the Infrastructure Strategy.

12 Part 2 Assessment – Purpose and Principles

12.1 Section 12.6 of the AEE contains an assessment against Part 2 RMA. Section 168A(3)(a) and 104 of the RMA are 'subject to part 2'. Having regard to recent caselaw in relation to the meaning of 'subject to Part 2'[57], and the current state of flux of the regional planning framework, given the decisions of the PNRP are subject to appeal, I consider that a first principles Part 2 analysis is appropriate when considering the resource consent applications as well as the NOR.

Section 5 RMA - Purpose

12.2 The assessment required under section 5 is whether approving the Project would promote the sustainable management of natural and physical resources. I am of the view that it will because:

a the Project appropriately recognises and provides for the relevant matters of national importance under section 6;

b the Project has had particular regard to the relevant other matters under section 7;

[54] UHCC "Long Term Plan 2018-2028" <https://www.upperhuttcity.com/Your-Council/Plans-policies-bylaws-and-reports/Long-Term-Plan> pg 99.
[55] UHCC "Long Term Plan 2018-2028": Infrastructure Strategy, pgs.104-149 https://www.upperhuttcity.com/Your-Council/Plans-policies-bylaws-and-reports/Long-Term-Plan.
[56] UHCC "Long Term Plan 2018-2028": Infrastructure Strategy, pg.119 https://www.upperhuttcity.com/Your-Council/Plans-policies-bylaws-and-reports/Long-Term-Plan.
[57] *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316.

c the Project has taken into account the principles of the Treaty of Waitangi under section 8;

d the Project will promote the sustainable management of natural and physical resources principally by effectively addressing the existing serious problem of flooding along the lower reach of the Pinehaven Stream; and

e adverse effects have been avoided, remedied or appropriately mitigated, particularly by the comprehensive and stringent suite of conditions appended to my evidence.

12.3 I acknowledge that there may still be some residual adverse effects, in particular sediment discharge to water during construction, that are unavoidable when constructing the stream improvement works. However, in my opinion these residual adverse effects will not exceed acceptable standards, will be appropriately managed and will be outweighed by the significant positive effects that form the rationale for the Project.

Section 6 RMA – Matters of National Importance

12.4 Section 6 covers matters of national importance that shall be recognised and provided for. I consider that during the course of the Project section 6 matters of national importance have been recognised and provided for through consultation undertaken through the FMP process and in preparing the AEE and conditions proposed. In particular:

a The Project is well separated from the coastal environment (section 6(a)) by distance. It has however been recognised that sedimentation from construction activities has the potential to reach the coastal marine area via rivers and streams. This effect will be addressed through proposed erosion and sediment control measures and associated conditions that will ensure that any adverse effects on the coastal environment are avoided or will be negligible.

b No natural features or landscapes (section 6(b)) affected by the Project are identified by any statutory policy or plan documents as being outstanding.[58]

c It has been recognised that the Project will adversely affect the natural character of a stream and also adversely affect indigenous vegetation and habitats of indigenous fauna (sections 6(a) and 6(c)). This effect will be managed by the careful approach to the works proposed in order to

[58] Compton-Moen EIC, para 6.7.

minimise the impact on indigenous vegetation, ecological mitigation and associated conditions that are proposed.

d The Project will not decrease public access to the Stream any more than is necessary for health and safety reasons, or as a direct result of the physical works (section 6(d)).

e The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga (section 6(e)), and customary activities (section 6(g)) have been recognised and provided for principally through effective consultation, and through an accidental discovery protocol condition and the Pinehaven Kaitiaki Monitoring Strategy.

f The Project will not impact on any heritage resources (section 6(f)).

g The Project provides for the management of significant risks from natural hazards, specifically flood hazard (section 6(h)).

Section 7 RMA – Other Matters

12.5 Likewise, I consider that during the course of the Project, particular regard has been given to section 7 matters through consultation undertaken through the FMP process and in preparing this application, the environmental effects assessment, preparation of the application, and conditions proposed. In particular:

a Kaitiakitanga (section 7(a)) is reflected in the Te Atiawa Taranaki Whānui position statement, contained in Appendix I of the AEE, which acknowledges Te Atiawa's role as tangata tiaki to develop a renewed collective responsibility for our human impacts on our Awa and respond to the impacts we can foresee, and acknowledges that the Project is making a significant effort to return the Pinehaven Stream back to its more natural state. A Pinehaven Kaitiaki Monitoring Strategy will also be prepared for this project.

b The ethic of stewardship (section 7(aa)) is appropriately reflected in the extensive community consultation that has taken place (as described in Engagement Report at Appendix H of the AEE), the care with which effects assessments have been approached, and the comprehensive conditions proposed for Project construction and implementation which include the requirement to appoint a Community Liaison Person for the duration of the construction phase and preparation of a community communication strategy.

c The Project will effectively address the existing serious problem of flooding along the Lower reaches of the Pinehaven Stream corridor. The outcome will be the more efficient use and development of natural and physical resources (section 7(b)).

d The Project will enhance the amenity values and quality of the environment (sections 7(c) and (f)) by addressing the existing serious flooding problems along the Pinehaven Stream corridor. Reducing flood risk to land and buildings will enhance the amenity of properties and residents adjacent to the stream by removing a significant natural hazard.

e Despite the careful design of the Project and the comprehensive conditions proposed to avoid, remedy or mitigate adverse effects, there will still be unavoidable residual adverse effects on amenity values and the quality of the environment (sections 7(c) and (f)), particularly during construction. However, the amenity and quality of the environment will still be within levels that have been assessed as being acceptable. They are also necessary for the positive effects of the Project to be realised.

f The habitats and passage of fish (which are present in the Pinehaven Stream, as described by **Dr Alex James** has been given particular regard to in the proposed design of bank stabilisation works and stream re-alignment works, management of construction and associated monitoring (section 7(h)).

g The effects of climate change (section 7(i)) have been carefully considered in the hydraulic modelling and design of the Project. This is so that the effects of climate change are adequately factored into the hydraulic design, in particular of stream improvement works, including new bridge structures and sizing of culverts.

Section 8 RMA – Treaty of Waitangi

12.6 I consider that, during the course of the Project, the principles of the Treaty of Waitangi (section 8) have been taken into account through consultation undertaken through the FMP process and in preparing this application, the environmental effects assessment, and development of the proposed conditions. Te Atiawa Taranaki Whānui have provided a position statement, contained in Appendix I of the AEE, reflecting that they take a neutral position with regard to the Project.

13 Proposed mitigation and conditions

13.1 The RMA allows for conditions to be imposed on designations (section 168A(4)) and resource consents (section 108).

13.2 Recognising the importance of a robust framework of conditions in managing potential adverse effects, the applicant has proposed detailed suites of conditions, comprising a set of conditions to attach to the resource consents, and conditions to attach to the UHCC designation.

13.3 The Applicant is seeking a waiver of the 'outline plan of works' process provided by section 176A of the RMA, on the basis that extensive details have been incorporated into the designation itself. The proposed designation conditions therefore do not require that an outline plan be submitted for the Project works by UHCC. The Section 42A Report for UHCC[59] indicates that a waiver should be sought once the designation is confirmed. In my experience outline plan waivers are commonly given at the same time as a notice of requirement recommendation. However, I do not oppose the approach suggested by Mr Beban.

13.4 Section 11 of the AEE provided a draft set of designation and resource consent conditions. The draft conditions reflect the assessment of the Project's environmental effects and the relevant consent requirements. The conditions were developed and included in the AEE report to assist potential submitters to understand how the actual and potential adverse effects of the Project were proposed to be managed and mitigated.

13.5 The development of the conditions was informed by:

a The technical assessments undertaken in respect of the Project, and experts' recommendations for mitigation; and

b Discussion between the Applicants' planning staff and staff from the relevant regulatory authorities, namely GWRC and UHCC.

Management Plans

13.6 In addition to requiring the Project to be built in general accordance with the plans, the proposed conditions set out various standards and controls and requirements for the management of effects. A suite of management plans and associated measures will be central to this process. The management plans are

[59] Section 21.

intended to provide a robust framework for the applicant to demonstrate that the relevant adverse effects will be appropriately avoided, remedied or mitigated.

13.7 Three tiers of management plan are proposed for the Project as follows:

a an overarching CMP;

b a series of topic-specific management plans, which are proposed to be appendices to the CMP (for example, plans which address construction noise, dust, construction traffic, and erosion and sediment control); and

c site-specific environmental management plans ('**SEMPs**'), which will incorporate detailed information about the suite of environmental management measures applied to a specific site, and will incorporate relevant aspects of the management plans in the first two tiers into one document.

13.8 A draft ESCP was included with the application at Appendix W of the AEE. This was subsequently updated to address issues raised and comments received in the technical review undertaken by GWRC[60]. Conditions of consent require that prior to commencement of construction the final ESCP be submitted to GWRC for certification. All SEMPs are also required to be certified by GWRC prior to works commencing at each construction zone.

13.9 In my view it is important that the management plans are sufficiently flexible to adapt to new or changing information or circumstances during the construction process, while incorporating sufficient certainty as to the level of adverse effects and measures to address them.

13.10 This flexibility is reflected by the proposed designation and resource consent conditions that allow for certified management plans to be amended if necessary to reflect any changes in design, construction methods, or management of effects.

Changes to conditions

13.11 A number of changes have been made to the proposed conditions that were lodged with the Project applications[61], in response to technical reviews and to address matters raised in the s.92 further information requests[62]. Many of the

[60] Refer letter to GWRC, dated 21 February 2020, titled 'Response to section 92 requests for further information', Appendix B Revised Erosion and Sediment Control Plan.
[61] Refer Section 11, Pinehaven Stream Improvements combined NOR and AEE, dated September 2019.
[62] Refer letter to GWRC, dated 21 February 2020, titled 'Response to section 92 requests for further information', Appendix D Amendments to proposed conditions.

changes have been recommended by the relevant technical experts, both by the Council experts and the Project technical team.

13.12 The proposed conditions contained in the Council Officer Section 42A Reports[63] for the most part reflect the conditions proposed in the AEE and subsequent proposed amendments. However there are some conditions proposed that are not agreed or require amendment. The Joint Witness Statement – Planning identifies some of the conditions that remain in dispute. There are also other conditions that have been identified subsequent to the Planning expert conferencing taking place that have either been raised by technical experts in their Joint Witness Statements, or are conditions that the Applicant either does not agree to or seeks to amend.

13.13 **Appendix B** contains a table which outlines the Conditions that are not agreed or where amendments are proposed the reasons why, and where appropriate, alternative wording is proposed.

13.14 The evidence of **Dr Adam Forbes** also recommends that a new condition be inserted in to the Designation conditions, to avoid adverse effects on all significant trees located in proximity of the works at 50 Blue Mountains Road. The proposed condition is as follows:

a *Prior to undertaking construction works within 50 Blue Mountains Road, the consent holder shall engage a suitably qualified ecologist to clearly demarcate setbacks from the ecologically significant trees identified for Site A, B and C described in Appendix 2 of Adam Forbes evidence in chief, dated 31/3/2020. The ecologist shall also direct any necessary tree pruning and remediation measures relating to reusing rough tree fern segments, as described in relation to Site B and C of the described in Appendix 2 of Adam Forbes evidence in chief, dated 31/3/2020, listed as item e below. All construction works occurring on 50 Blue Mountains Road must adopt the following management measures:*

a. Avoid works within the demarcated setback from the trees, both the above-ground components and the respective root zones;

b. Clean all machinery of plant pest propagules prior to entry to 50 Blue Mountains Road, to prevent the importation of plant pests to the present ecosystem;

[63] Refer Appendix 5 of James Beban s.42A/Statement of Evidence, dated 13 July 2020, and Appendix 2 of Josie Burrows s.42A report dated 13 July 2020.

c. An arborist shall supervise any excavation works within the root zone of three kahikatea trees located in close proximity to the existing foot bridge at Site B as described in Appendix 2 of Adam Forbes evidence in chief, dated 31/3/2020. If pruning of the root system is required, this shall be executed by an arborist in a manner (e.g. hand pruning) that maintains the integrity of the kahikatea tree root systems.

d. An arborist shall supervise any excavation works within the root zone of one mature matai tree is located immediately downstream of the existing foot bridge at Site C as described in Appendix 2 of Adam Forbes evidence in chief, dated 31/3/2020. If pruning of the root system is required, this shall be executed by an arborist in a manner (e.g., hand pruning) that maintains the integrity of the matai tree's root system.

e.. Following the completion of works at Site B and C, reinstate the disturbed areas with rough tree fern seedlings and stem segments salvaged from the work area pre-works, as outlined the report titled 'Supplementary Assessment of Terrestrial Ecology Effects – 50 Blue Mountains Road', dated 31 March 2020, prepared by Adam Forbes.

13.15 The evidence of **Dr Adam Forbes** also recommends that a condition should be imposed that protects plantings on an ongoing basis[64]. In my opinion no condition is required. Replacement planting which is offered as compensation will be undertaken within the designation and will therefore be protected by the designation, and if trees are not protected then the Requiring Authority will be in breach of the designation conditions which require replacement planting to be provided.

Overall

13.16 In my opinion, the suite of proposed conditions, except for those in dispute or requiring amendment as identified in **Appendix B**, serves to ensure that the actual and potential adverse environment effects of the Project will be appropriately managed. The conditions reflect:

a the environmental conditions that are specific to this Project, as assessed by experts advising the applicant; and

b the effects that are specific to this Project, as assessed, and the measures required to address them appropriately.

[64] Forbes EIC, para 9.6.

13.17 More recent changes to the conditions, in my view, further strengthen the mitigation measures proposed.

Lapse period

13.18 A lapse period of 5 years is sought for the designation from the date the designation is included in the Upper Hutt City Council District Plan under section 175 RMA. I consider a 5 year lapse period for the designation to be reasonable for the scale of the Project.

13.19 The proposed lapse period of 5 years for the regional consents is set out the GWRC Section 42A Report at Section 15. I consider it appropriate that these lapse periods are consistent.

Duration/expiry periods

13.20 Section 15 of the GWRC Section42A Report also describes the recommended consent durations. I agree with the consent durations proposed for consents [36459] – structures (35 years), [36829] – reclamation (in perpetuity) and [36830] – diversion (35 years), and the five year duration of the construction related consents [36460] - earthworks, [36461] - diversion and [36825] - discharge. While the construction is expected to take 2 years, a 5 year duration will provide flexibility to explore ways to reduce effects (through the adaptive management approach proposed), address contractor procurement and uncertainty, and obtain any outstanding land access rights.

14 Responses to issues in submissions

14.1 I have reviewed the submissions and note that there are a number that express support for the Project. I consider that these submissions generally reflect the concern of the community regarding the adverse effects flood events are having on properties adjacent to this section of the Pinehaven Stream.

14.2 The matters raised in submissions have been responded to by the relevant technical experts in regard to flood modelling, extent and design of proposed works, terrestrial and aquatic ecology. The evidence of **Mr Ben Fountain**[65] also addresses matters raised in submissions received. I consider that the issues raised have been appropriately addressed.

14.3 The Council Section 42A Report of Josie Burrows (GWRC Resource Advisor) dated 13 July 2020 and the report of James Beban (UHCC Consultant Planner),

[65] Fountain EIC, paras 9.1 – 9.13.

dated 13 July 2020 provide summaries of submissions received and matters raised. I agree with the summaries contained in Section 8.2 to 8.4 of the GWRC Section 42A Report, and Appendix 3 of the UHCC Section 42A Report, and so have not repeated an assessment of submissions here.

14.4 I note however that the Applicant was advised on the 17 July 2020 by GWRC that Graham & Debbie Griffiths now oppose the application (previously supported). No reasons for opposition to the project have been provided at the time of finalising my evidence.

14.5 There are also two other submissions that I wish to highlight. The first is the submission received from Peter and Rosalyn Ross – 11 Birch Grove and the second is a submission received from David Kyle – 13 Clinker Ave.

Peter and Rosalyn Ross – 11 Birch Grove

14.6 Peter and Rosalyn Ross consider that the event on 8 December 2019 indicates the flood maps are exaggerated and too conservative and that the size of the flood relief requirements are 'over engineered' for a 25 year flood. The submitter opposes the Project in respect of the securing of the overland flow path and channel walls within their property.

14.7 The issues raised in relation to the extent and design of the works required to contain a 25 year flood event are addressed in the evidence of **Mr Eric Skowron** (Project overview) and **Mr Peter Kinley** (flood model design). Having read the evidence of these experts, I consider that the issues raised by the submitter have been appropriately addressed.

14.8 Further engagement with this property owner has resulted in the Project confirming that no physical works to secure the overland flow path will be undertaken within their property. Additionally, as noted at paragraph 6.10 of my evidence, the designation area extent over 11 Birch Grove is to be reduced, to more accurately reflect the designation area required to enable access and construction of the stream improvement works in the south eastern corner of their property. Therefore, I consider that the issues raised in relation to works within their property have also been addressed.

David Kyle – 13 Clinker Ave

14.9 Mr Kyle is concerned about the potential offsite effects of cleanfill activities on the Silverstream Reformed Church site, including stormwater management, topographical changes, and consultation.

14.10 As noted in the response to the section 92 request for further information[66], the fill proposed to be deposited on the Silverstream Reformed Church and associated Christian School site is no longer proposed to be included in the Project works. Therefore, I consider that the issues raised in this submission have also been addressed. Mr Kyle, upon being advised that the cleanfill activity is not proceeding, has advised that he does not wish to be heard.

15 Response to section 42A reports

15.1 I have read the Section 42A Reports of Josie Burrows, GWRC Resource Advisor, dated 13 July 2020 and of James Beban, UHCC Consultant Planner, dated 13 July 2020, and comment on specifically on the following matters.

15.2 I agree that:

a Post construction maintenance works (such as clearing of the stream channel of vegetation and litter) is permitted under the RFM and PNRP.

b The management plan framework (Figure 4) at paragraph 5.1.1 of the GWRC section 42A report is accurate with respect to the construction management framework under the regional consents and designation, except that it does not include the Flocculation Management Plan, which is also a sub plan of the CMP.

c The District Plan analysis undertaken at paragraph 6.2 of the UHCC Section 42A Report is correct, and that the overall activity status would be non-complying if the proposal was assessed as a resource consent application.

d The applicant's proposed condition relating to deemed conditional approval of submitted management plans is inappropriate and should not be imposed as a condition of the designation.

e The Guilford Development referred to at paragraph 10.35 of the UHCC Section 42A Report does not form part of the RMA existing environment.

f The Part 2 analysis presented at section 20 of the UHCC Section 42A Report is appropriate, noting however that para 20.4 states that no prosed works are occurring through 50 Blue Mountains Road. This is incorrect.

[66] Refer letters dated 21 February 2020 to GWRC and UHCC, titled Response to Section 92 requests for further information', Appendix A Table Table 3 pg.11 and Appendix A Table 1 pg 2, and letters dated and 26th February 2020 to GWRC and UHCC, titled 'Response to Section 92 requests for further information – submissions', Table 1 pg.3 and pg.6 respectively, and letter dated 25th March 2020, titled 'WGN200083 Pinehaven Stream Improvements, request for clarification on proposed works and changes to original application', Appendix 2, pg.25.

g It is appropriate for an outline plan waiver to be considered once the designation is included in the District Plan.

15.3 I do not agree that:

a A winter works condition is required, as discussed at section 10.3[67] of the GWRC Section 42A Report. The requirement to prepare SEMP's for each stage of work will, in my opinion, address the Winter Works requirements, without requiring the applicant to seek additional approval for GWRC to undertake works in winter. To provide additional clarity with regard to SEMP requirements, I recommend that the SEMP condition 21(i) be amended to include a specific reference to winter works. This amendment is outlined in **Appendix B**.

All SEMP's are required to be certified by GWRC prior to works commencing at each construction zone. As currently proposed by GWRC, the Applicant would be required to obtain an additional approval for winter works. An additional step for approval is unnecessary, as all the same best practice controls and mitigation steps, as well as the Adaptive Management Plan are already set out in the CMP and SEMP's. The applicant wishes to complete the works as quickly as possible and thereby minimise the effects on riparian and aquatic ecology. Requiring additional approval will add delays to construction if approval was not provided, and also add time and cost through demobilisation and remobilisation.

16 Response to 2nd Minute of Independent Hearing panel

16.1 The 2nd Minute issued by the Hearing panel (dated 10 July 2020) [68] requests that '*planning and / or legal experts to set out their positions on whether the commissioners can, should, or to what degree may have regard to potential future development when considering the resource consent application and notice of requirement. We require that advice in two respects:*

- *With regard to the development applications that have not been received (and potential effects are therefore unknown); and*
- *With regard to the general nature of the framework established via plan change 42*

[67] Refer GWRC Section 42A Report, section 10.3, pages 50-51
[68] Refer 2nd Minute of Independent hearing Panel, dated 10 July 2020, paras 17 & 18

16.2 With regard to the first point, it is my opinion that consideration of future developments that have not been received are not able to be considered when considering the resource consent application or notice of requirement. This is because future development for which there is no resource consent and which not permitted by district and regional plan rules, does not form part of the existing environment.

16.3 The commissioners can only consider the existing environment which comprises of the environment plus any permitted activity works and existing consents that have been granted are likely to be given effect to, and have not lapsed. The Joint Witness Statement – Planning, confirms this view, as does the response to Minute 2 on behalf of GWRC and UHCC[69].

16.4 With regard to the general nature of the framework established via Plan Change 42, Mr Beban in his Section 42A Report at Section 5 provides a comprehensive description of the background to the Pinehaven FMP, including Plan Change 42, which was a regulatory measure introduced to address flood risk within the Operative District Plan.

16.5 Plan Change 42 introduced a range of objectives, policies and rules that control development within areas identified as being within the Pinehaven Flood Hazard Overlay. Specifically Objective 14.3.3 requires control over buildings and activities within the upper areas of the Pinehaven Catchment Overlay to ensure that peak stormwater runoff during both a 1 in 10-year and 1 in 100-year event does not exceed the existing run off and therefore minimise the flood risk to people and property within the Flood Hazard Extent.

16.6 New buildings within the Pinehaven Catchment Overlay have a restricted discretionary activity status, and new buildings are required to achieve hydraulic neutrality (Standard 33.9) to ensure that development in the Pinehaven Stream catchment does not increase downstream flood hazards or reduce effectiveness of structural works.

17 Conclusions

17.1 As noted in the AEE, the associated technical assessments, evidence and the Section 42A Reports, the Project will provide significant benefits to the Pinehaven Stream catchment. The Project will significantly improve the capacity of the lower Pinehaven Stream to contain a 4% AEP (1 in 25 year return period) flood level

[69] Refer Response to Minute 2 of Hearing Panel on Future Land Development and Hydrological Modelling on behalf of GWRC and UHCC, Josie Burrows and James Beban, dated 16 July 2020.

event and to manage flood risk to habitable floors up to the 25% AEP (1 in 100 year return period).

17.2 Detailed consideration has been given during the development of the Project to measures to avoid, remedy, or mitigate adverse effects on the environment appropriately.

17.3 The designation and resource consent conditions are proposed to apply to the construction and operation of the Project. The proposed conditions have been updated since lodgement to respond to further feedback received as a result of technical review.

17.4 In my view, the proposal, subject to the proposed conditions, with amendments suggested in **Appendix B**, meets the sustainable management purpose of the Act, and the proposed management plans and other controls set out in the conditions form a robust suite of measures that will ensure the adverse effects on the environment of the Project's construction are appropriately managed.

17.5 In conclusion, I am of the opinion that resource consents for the Project are able to be granted and the NoR confirmed.

Helen Anderson

20 July 2020

Appendix A Documents relied on or referred to in Evidence

Section 42A Report/Statement of Evidence prepared by James Beban, Upper Hutt City Council Planning Consultant, dated 13 July 2020

Section 42A Report prepared by Josie Burrows, Resource Advisor GWRC, dated 13 July 2020

Expert evidence of **Mr Ben Fountain** on the need for the Project for Wellington Water Limited, dated 20 July 2020.

Expert evidence of **Mr Eric Skowron** on an overview of the Project for Wellington Water Limited, dated 20 July 2020.

Expert evidence of **Mr Peter Kinley** on flood model design for Wellington Water Limited, dated 20 July 2020.

Expert evidence of **Mr Tm Haylock** on construction methodology for Wellington Water Limited, dated 20 July 2020.

Expert evidence of **Dr Claire Conwell** on water quality for Wellington Water Limited, dated 20 July 2020.

Expert evidence of **Dr Adam Forbes** on terrestrial ecology for Wellington Water Limited, dated 20 July 2020.

Expert evidence of **Dr Alex James** on aquatic ecology for Wellington Water Limited, dated 20 July 2020.

Expert evidence of **Mr David Compton-Moen** on landscape and visual for Wellington Water Limited, dated 20 July 2020.

Joint Witness Statement – Aquatic Ecology, dated 16 July 2020

Joint Witness Statement – Erosion and Sediment Control, dated 17 July 2020

Appendix B Conditions not agreed or amendments proposed

UHCC Designation Conditions

Condition No.	Description of Condition not agreed or amendment proposed	Reason
23b(i)	The condition requires: *i. Planting of species that grow taller than 15 metres in height are not to be planted within 30 metres of any residential buildings The applicant does not support imposing a restriction on tree planting location* The applicant **does not support** imposing a restriction on tree planting locations.	This condition restricts the ability for larger tree species to be planted near to the stream, which is required to ensure stream health is maintained. Tree planting near residential buildings should be seen as a positive rather than a negative. The evidence of **Dr Forbes** does not support this condition.
32	The condition requires: *All other vegetation types to be removed require compensation planting ratio of 3:1.* UHCC are now proposing ratio of 2:1 for replacement of 0.25ha indigenous vegetation (as per Terrestrial Ecology expert conferencing[70]) The applicant **does not support** the condition requiring replacement planting for the 0.25 ha of native riparian vegetation loss.	The removal of other indigenous vegetation is considered to have a low level of effect and therefore this does not need to be addressed through provision of positive effects, according to best practice guidance (EIANZ 2018). The replacement of the affected indigenous vegetation is not necessary. The evidence of **Dr Forbes** does not support this condition.
40	The condition requires the preparation of a Site Office Management plan. The applicant seeks to incorporate the requirements of the Site Office Management Plan under the	Condition duplicates requirements of the CMP.

[70] Refer Joint Witness Statement – Terrestrial Ecology, dated 14 July 2020, para 2.1(a)

Condition No.	Description of Condition not agreed or amendment proposed	Reason
	Construction Management Plan requirements (GWRC Condition 16) in order to reduce duplication. It is proposed that this condition be deleted and GWRC Condition 16 be amended.	
36	The condition requires: *Prior to the commencement of any vegetation clearance within each construction stage, a suitably qualified ecologist with avifauna experience must inspect the Project site for the presence of any indigenous bird species nesting. No vegetation clearance may occur within 4 metres of any identified nest, until the ecologist confirms the nesting is complete.* It is proposed that Condition 36 be replaced with the following: At least 15 Working Days prior to Commencement of Construction an avifauna management procedure shall be prepared by suitably qualified ecologist with avifauna experience. The procedure must: a. Describe the methodology for indigenous bird nesting inspection b. The management or relocation of any native birds found nesting within the construction areas during the construction period. c. The management of vegetation clearance within 4 metres of any identified nest. The procedure shall be submitted to the CMO for certification that it meets the requirements of this condition.	The preparation of a procedure for the management or relocation of any native birds found nesting within the construction areas during the construction period is recommended (Forbes EIC, para 7.8). A procedure will allow for more flexibility during construction in terms of enabling works to continue if native birds are found to be nesting in the construction area, in accordance with the procedure.
New Condition	**50 Blue Mountains Rd – proposed new condition** Prior to undertaking construction works within 50 Blue Mountains Road, the consent holder shall engage a suitably qualified ecologist to clearly demarcate setbacks from the ecologically significant trees identified for Site A, B and C described in Appendix 2 of Adam Forbes evidence in chief, dated 31/3/2020. The ecologist shall also direct any	This condition is proposed in order to ensure ecologically significant trees located in proximity to the construction areas in 50 Blue Mountains Road are adequately protected.

Condition No.	Description of Condition not agreed or amendment proposed	Reason
	necessary tree pruning and remediation measures relating to reusing rough tree fern segments, as described in relation to Site B and C in Appendix 2 of Adam Forbes Evidence in Chief, dated 31/3/2020, listed as item e below. All construction works occurring on 50 Blue Mountains Road must adopt the following management measures: a. Avoid works within the demarcated setback from the trees, both the above-ground components and the respective root zones; b. Clean all machinery of plant pest propagules prior to entry to 50 Blue Mountains Road, to prevent the importation of plant pests to the present ecosystem; c. An arborist shall supervise any excavation works within the root zone of three kahikatea trees located in close proximity to the existing foot bridge at Site B as described in Appendix 2 of Adam Forbes evidence in chief, dated 31/3/2020. If pruning of the root system is required, this shall be executed by an arborist in a manner (e.g., hand pruning) that maintains the integrity of the kahikatea tree root systems. d. An arborist shall supervise any excavation works within the root zone of one mature mataī tree is located immediately downstream of the existing foot bridge at Site C as described in Appendix 2 of Adam Forbes evidence in chief, dated 31/3/2020. If pruning of the root system is required, this shall be executed by an arborist in a manner (e.g., hand pruning) that maintains the integrity of the mataī tree's root system. e. Following the completion of works at Site B and C, reinstate the disturbed areas with rough tree fern seedlings and stem segments salvaged from the work area pre-works, as outlined the report titled 'Supplementary Assessment of Terrestrial Ecology Effects – 50 Blue Mountains Road', dated 31 March 2020, prepared by Adam Forbes.	This condition is recommended in the evidence of **Dr Forbes.**

GWRC Resource Consent Conditions

Condition No.	Description of Condition not agreed or amendment proposed	Reason
1	**General Conditions** Reference is made in Condition 1 to: *b) 27 November 2019 (Flood Hazard Assessment addendum);* Delete reference to the FHA Addendum report dated 27 November 2019.	Reference to the FHA Addendum report dated 27 November 2019 should be deleted as this report has been superseded by the updated Flood Hazard Assessment Report dated 15 June 2020, which is listed in Condition 1.
10	**Detailed Hydraulic Design Memorandum** The applicant proposes the following amendments to Condition 10 (suggested amendments in underlined and ~~strikethrough)~~: The consent holder shall submit a final Detailed Hydraulic Design Memorandum (DHDM) to the Manager, at least 20 working days prior to ~~works commencing~~ commencement of construction. The purpose of the DHDM is to confirm compliance with or improvement on ~~and consistency~~ ~~with~~ the information provided in the application. The DHDM shall be prepared by a suitably qualified and experienced hydrologist or hydraulic modelling specialist, and shall confirm that the peak flood water levels for the 4% Annual Exceedance Probability flood event and the 1% Annual Exceedance Probability flood event ~~25-year and 100-year return period flood event~~ ~~level~~ as specified in the information provided in the application ~~project objectives~~ are achieved in the final design. The consent holder shall not commence ~~works~~ construction until the DHDM has been confirmed in writing by the Manager as complying with this condition~~, in writing~~.	The amendments proposed seek to clarify the requirements of the DHDM and to ensure consistency with the Flood Hazard Assessment. These amendments are recommended in the evidence of **Mr Kinley.**

Condition No.	Description of Condition not agreed or amendment proposed	Reason
12	Minor amendments are proposed to this condition as follows[71]: Condition 12 b) – Remove the text reference to the electric fishing machine model, *"(EFM400)"* Condition 12 e) – Replace *"immediately downstream"* with *"upstream or downstream"* Condition 12 f) – Change wording to *"Fish transfer in closed, cool containers that are kept in the shade at all times, and consider aeration during particularly warm weather"*	Reference to EFM400 as it is overly restrictive to require a particular machine to be used for fish relocation work. The proposed change to 12 e) will give the ecologist(s) doing the fish relocation work more discretion as to the best location for releasing fish in the context of the overall Project area and stage of the Project at the time.
16	Include a new requirement to the CMP condition relating to Site Office management as follows: j) Site office establishment and management including location, proposed working hours, traffic movements to and from the site, on and off site parking for staff, location and nature of any security fencing, light spill from security lighting, laydown areas.	Incorporate the requirements of the Site Office Management Plan under the Construction Management Plan requirements (GWRC Condition 16) in order to reduce duplication.
21	<u>SEMP requirements</u> Amend matter i) of the condition to require the SEMP to include specific reference to winter works and procedures taken to manage works in winter (during the period of 1 June to 30 September inclusive each year) i) Details relating to the management and stabilisation of exposed areas<u>, and where works are to be undertaken in winter months (during the period of 1 June to 30 September inclusive each year), provide the following additional detail:</u> • <u>Detail of winter works proposed and timeline;</u> • <u>Plans showing erosion and sediment control devices and maintenance schedule;</u>	The SEMP will be of sufficient detail to enable works to occur in winter.

[71] Refer Expert Witness Statement – Aquatic Ecology, dated, para 4.1(f)

Condition No.	Description of Condition not agreed or amendment proposed	Reason
	• contingency actions and learnings from previous stages to address increased risk;	
40 & 41	Winter Works The applicant **does not** agree to imposition of a winter works condition.	The applicant has applied for works to occur over winter (ie. during the 'winter period' of 1 June to 30 September), and therefore does not consider a winter works condition is required. The SEMPs will consider contingencies for the winter conditions, where works occur over the winter period, and incorporate learnings from the monitoring of the previous stages to address the increased risks (as set out in the SEMP condition 21.i). All SEMPs are also required to be certified by GWRC prior to works commencing at each construction zone. An additional step for approval is unnecessary, as all the same best practice controls and mitigation steps, as well as the Adaptive Management Plan are already set out in the CMP and SEMPs.
44	Condition 43 requires that weekly audits of the erosion and sediment control methods Condition 44 requires that the results of the audits as required by condition 43 be provided to the Manager within five working days of being undertaken. This is considered to be too frequent. It is therefore proposed to amend the condition as follows: The results of the audits as required by condition 43 of this consent shall be provided to the Manager on a monthly basis.	The applicant considers that provision of the audit information to Council on a monthly basis is appropriate.

Condition No.	Description of Condition not agreed or amendment proposed	Reason
56	Minor amendment to condition 56, para 2 – Replace *"a fish movement barrier" with "the stages' piped diversion dam"*	No fish movement barriers will be installed with the piped diversion method. This terminology is a remnant from the now abandoned construction method that involved tracking in the flowing stream bed.
79	Managing effects on network utilities - delete the condition	The condition is not necessary and effects on network utilities are addressed directly between the Applicant and the network utility operators.