greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Form 1: Application for resource consent

(All sections must be completed in full and accompanied by the initial fixed application fee – failure to do so may result in your application not being accepted and/or returned)

Note: All information provided in your application is available to the public.

1. Location of proposed activity

Describe the location of activity and/or property address

Between Te Kowhai Road, Peka Peka and Taylors Road, north Ōtaki	Map reference: NZTM:	
Refer to Part C, Chapter 5 of the AEE Report (Volume 2) and the Land Information Plans within the 'Plan Set' (Volume 5)	Valuation reference [from rates]:	

Include the name of any relevant stream, river or other waterbody to which the application may relate, proximity to any well known landmark, etc. (Note: a location map is required in your activity form.)

Legal description [from rates notice] [eg, Lot 9 DP58809 Block XI]

N/A

Office use only:	
FILE REF:	
Doc. No.	
Referred to	Int

2. Description of proposed activity

Refer to Part D, Chapters 6, 7 and 8 of the AEE Report, Volume 2 for the description of the Project.

Part B, Chapter 3, Section 3.8 of the AEE Report, Volume 2 outlines the Resource Consents Sought and are as follows:

Group A: Bulk earthworks and construction erosion and sediment control

1 Land use consent for bulk earthworks for the construction of roading and tracking for the Peka Peka to North Ōtaki Expressway and the NIMT realignment through North Ōtaki.

2 Land use consent for vegetation clearance and disturbing of soil identified as being erosion prone for the Peka Peka to North Ōtaki Expressway and the NIMT realignment.

3(a) Land use consent for the construction of a bore in the form of earthworks that may encounter groundwater and for the holes for bridge piles, for the construction of the Peka Peka to North Ōtaki Expressway and the NIMT realignment.

4 Water permit to dam and divert surface water as a result of the embankments and containment bunds along the Peka Peka to North Ōtaki Expressway.

5 Water permit to dam and divert groundwater as a result of earthworks and from de-watering during earthworks as part of the construction of the Peka Peka to North Ōtaki Expressway and the NIMT realignment.

6(a) Discharge permit to discharge sediment and chemical flocculant in treated stormwater from erosion and sediment control devices, and for the discharge of sediment from de-watering where earthworks may encounter groundwater, to water for the construction of the Peka Peka to North Ōtaki Expressway and the NIMT realignment.

6(b) Discharge permit to discharge sediment and chemical flocculant in treated stormwater from erosion and sediment control devices, and for the discharge of sediment from de-watering where earthworks may encounter groundwater, to land where it may enter water for the construction of the Peka Peka to North Ōtaki Expressway and the NIMT realignment.

Group B: Crossing, occupation and realignment of streams

Ōtaki River

3(b) Land use consent for the construction of bores in the form of holes for bridges over the Ōtaki River for the Peka Peka to North Ōtaki Expressway, where the earthworks may encounter groundwater.

7 Land use consent to, within the Ōtaki River, use, place and erect structures (bridge and stormwater outlets) the placement of rip rap, and the associated disturbance of, and deposition of material on, the bed of the watercourse in the vicinity of the Peka Peka to North Ōtaki Expressway.

8(a) Land use consent for the reclamation of a section of the bed of the Ōtaki River for the construction of the Peka Peka to North Ōtaki Expressway.

9(a) Land use consent for the removal of vegetation in the bed of watercourses, including associated disturbance of the bed.

10(a) Water permit to temporarily divert the flow of the Ōtaki River during construction of the bridges and associated structures in the bed of the waterway in the vicinity of the Peka Peka to North Ōtaki Expressway.

11(a) Water permit for permanent diversion of the Ōtaki River associated with the area of the bed occupied by the bridge piles for the Peka Peka to North Ōtaki Expressway.

12 Water permit for the damming and diversion of surface water by the Expressway embankment and a new containment bund to the north of the Ōtaki River in the event of flooding.

13(a) Discharge permit to discharge concrete laden water from bridge pile construction to water in association with the construction of the Peka Peka to North Ōtaki Expressway.

14(a) Discharge permit to discharge concrete laden water to land in such a way that it may enter water, in association with the construction of the Peka Peka to North Ōtaki Expressway.

Waitohu Stream

3(c) Land use consent for the construction of bores for bridge piles for the foundations of the bridge over the Waitohu Stream for the Peka Peka to North Ōtaki Expressway, where the earthworks may encounter groundwater.

15 Land use consent to, within the Waitohu Stream, use, place and erect structures (bridge, rip rap, and stormwater outlets) and the associated diversion and reclamation of a section of the bed in this stream, including the associated disturbance of, and deposition of material on, the bed of the watercourse in the vicinity of the Peka Peka to North Ōtaki Expressway.

8(b) Land use consent for the reclamation of a section of the bed in the Waitohu Stream for the construction of the Peka Peka to North Ōtaki Expressway.

9(b) Land use consent for the removal of vegetation in the bed of watercourses, associated with the disturbance of the bed for the construction of the Peka Peka to North Ōtaki Expressway.

10(b) Water permit to temporarily divert the flow of the Waitohu Stream during construction of the bridges and associated structures in the bed of the waterway in the vicinity of the Peka Peka to North Ōtaki Expressway.

11(b) Water permit for permanent diversion of the Stream associated with the area of the bed occupied by the bridge piles for the Peka Peka to North Ōtaki Expressway.

13(b) Discharge permit to discharge cement contaminated water from bridge pile construction to water, in association with construction of the Peka Peka to North Ōtaki Expressway.

14(b) Discharge permit to discharge cement contaminated water from bridge pile construction to land that may enter water, in association with the construction of the Peka Peka to North Ōtaki Expressway.

Mangapouri Stream

16 Land use consent to, within the Mangapouri Stream, use, place and erect structures (culverts, inlet and outlet structures and stormwater outlets) the placement of rip rap, and the associated disturbance of, and deposition of material on, the bed of the watercourse in the vicinity of the Peka Peka to North Ōtaki Project.

8(c) Land use consent for the reclamation of a section of the bed in the Mangapouri Stream for the construction of the Peka Peka to North Ōtaki Project.

9(c) Land use consent for the removal of vegetation in the bed of the stream, associated with the disturbance of the bed in the vicinity of the Peka Peka to North Ōtaki Project.

10(c) Water permit to temporarily divert the flow of the Mangapouri Stream during construction of the culverts and associated structures in the bed of the waterway in the vicinity of the Peka Peka to North Ōtaki Project.

11(c) Water permit to permanently divert the full flow of the Mangapouri Stream through a culvert in the vicinity of the Peka Peka to North Ōtaki Project.

Mangaone Stream

17 Land use consent to, within the Mangaone Stream use, place and erect structures (bridge, culverts, inlet and outlet structures and stormwater outlets), the placement of rip rap, and the associated disturbance of, and deposition of material on, the bed of the watercourse in the vicinity of the Peka Peka to North Ōtaki Expressway.

8(d) Land use consent for the reclamation of a section of the bed in the Mangaone Stream for the construction of the Peka Peka to North Ōtaki Expressway

9(d) Land use consent for the removal of vegetation in the bed of the stream, associated with the disturbance of the bed in the vicinity of the Peka Peka to North Ōtaki Expressway.

10(d) Water permit to temporarily divert the flow of the Mangaone Stream during construction of the culverts and associated structures in the bed of the waterway in the vicinity of the Peka Peka to North Ōtaki Expressway.

11(d) Water permit to permanently divert the full flow of the Mangaone Stream through a culvert in the vicinity of the Peka Peka to North Ōtaki Expressway.

18 Water permit to dam and divert the Mangaone Stream during flood events in proximity to the Peka Peka to North Ōtaki Expressway by way of a bund.

Greenwood, School, Gear, Settlement Heights, Avatar, Jewell, Cavallo, Awatea, Kumototo, Hadfield and Racecourse Catchments

19 Land use consent to, within the watercourses in these catchments, use, place and erect structures (culverts, inlet and outlet structures, the removal of an existing culvert and stormwater outlets), the placement of rip rap, and the associated disturbance of, and deposition of material on, the bed of the watercourse, in the vicinity of the Peka Peka to North Ōtaki Expressway.

8(e) Land use consent for the reclamation of a section of the bed in the streams within these catchments for the construction of the Peka Peka to North Ōtaki Expressway

9(e) Land use consent for the removal of vegetation in the bed of watercourses, associated with the disturbance of the bed in the vicinity of the Peka Peka to North Ōtaki Expressway.

10(e) Water permit to temporarily divert the flow of the watercourses within these catchments during construction of the culverts and associated structures in the bed of the waterway, in the vicinity of the Peka Peka to North Ōtaki Expressway.

11(e) Water permit to permanently divert the full flow of the watercourses within these catchments through culverts in the vicinity of the Peka Peka to North Ōtaki Expressway.

20 Water permit to divert watercourses into newly formed channels in the School, Gear and Settlement Heights catchments, in the vicinity of the Peka Peka to North Ōtaki Expressway.

21 Water permit for the damming and diversion of Racecourse Stream through the installation of an undersized culvert that will dam and divert surface water in times of flood.

Group C: Borehole construction and the taking and diversion of groundwater

22 Land use consent for the construction of bores and the abstraction and diversion of groundwater for the construction of the Peka Peka to North Ōtaki Expressway and the NIMT realignment.

23 Water permit to divert, take and use groundwater for bore testing, dust suppression and construction purposes (including for site office purposes) for the Peka Peka to North Ōtaki Expressway and the NIMT realignment.

Group D: Reclamation and diversion of wetlands

3(d) Land use consent for the construction of a bore in the form of earthworks that may encounter groundwater for the creation of wetland areas at Ōtaki and Mary Crest, in association with the Peka Peka to North Ōtaki Expressway and the NIMT realignment.

24 Land use consent for the disturbance and reclamation of existing wetlands through the construction of the Peka Peka to North Ōtaki Expressway and the NIMT realignment, including the associated disturbance of the beds.

25 Land use consent for the removal of vegetation in the bed of a wetland, associated with the disturbance of the bed.

26 Water permit to dam groundwater and surface water via new wetlands in Ōtaki and Mary Crest adjacent to the Peka Peka to North Ōtaki Expressway.

27 Water permit to divert groundwater and surface water into and from wetlands in Ōtaki and Mary Crest adjacent to the Peka Peka to North Ōtaki Expressway.

3. Consents from Greater Wellington – activity forms you need to fill in

Consent(s) being applied for. You will need to fill in an activity form for each of the following activities: Make sure you attach the forms for your activity

Water:		**Land Use:**	
Dam/Divert (Form 2a)	☒	General river/stream works (Form 6a)	☒
Take and use surface water (Form 2b)	☐	Bore/well construction (Form 6b)	☒
Take and use groundwater (Form 2c)	☒	Bridge/culvert/pipe (Form 6c)	☒
Discharge to Land:		Erosion protection structures (Form 6d)	☒
General discharges (Form 3a)	☒	Land clearing/tracking/logging soil disturbance (Form 6e)	☒
Agricultural discharge (Form 3b)	☐	**Coastal:**	
On-site wastewater (Form 3c)	☐	General coastal (Form 7a)	☐
Discharge to Water:		Boatshed (Form 7b)	☐
General discharges (Form 4a)	☒	Swing mooring (Form 7c)	☐
Discharge to Air:			☐
Air discharge (Form 5a)	☒		

4. Applicant's details

Applicant(s) name(s) and address ie, whose name will be on the consent. Note if a private or family trust is the applicant, all the trustees are required to provide contact details and sign the application form (see 6. below)]

NZ Transport Agency	T: Business		T: Private	
	Fax:		T: Mobile	
	Email address:			

The applicant is the:

Owner ☐ Occupier ☐ Lessee ☐ Prospective Purchaser ☐ The Crown ☐

Network Utility Operator ☒ Other ☐ Please specify: _____

5. Agent's details

Agent's name and address [Please note that all correspondence will be sent to the Agent as the first point of contact during the

application process]

Dean Ingoe	T: Business	**04 931 8918**	T: Private	
PO Box 5084	Fax:		T: Mobile:	**021 226 9279**
Wellington 6145	Email address:	**dean.ingoe@nzta.govt.nz**		

6. Partnership/unincorporated entity details

For partnerships or unincorporated entities (such as private trusts or unincorporated bodies or societies) you **must** provide details of all authorised partners, trustees or members. Any consent granted will then include these names, and all individuals will be legally responsible for the consent and any associated costs. Should these persons change, then you must notify us.

Full name of person:	N/A		
Status (eg, partner, trustee):			
Address:			
Email address:		Phone:	

Full name of person:	N/A		
Status (eg, partner, trustee):			
Address:			
Email address:		Phone:	

Full name of person:	N/A		
Status (eg, partner, trustee):			
Address:			
Email address:		Phone:	

Include details of any further partners/trustees/members on a separate page if necessary

7. Property owner's name (if different from above)

Property owner's name and address

N/A	T: Business		T: Private	
	Fax:		T: Mobile:	
	Email address:			

If your proposed activity will take place on land not owned by the applicant, the written approval of the property owner must be provided on a **completed and signed form 1B**.

8. Consents from local authorities

Territorial authority in which land is situated:

Wellington City Council ☐ Kapiti Coast District Council ☒

Hutt City Council	☐	Masterton District Council	☐
Upper Hutt City Council	☐	South Wairarapa District Council	☐
Porirua City Council	☐	Carterton District Council	☐

Do you require any other resource consents from your local council? Yes ☒ No ☐

If yes, please list:

Notices of requirement to designate the land required for the construction, operation and maintenance of the Peka Peka to North Ōtaki Expressway and the realignment of the Ōtaki section of the NIMT - sought now.

A Restricted Descretionary Activity Resource Consent under Regulation 10 of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations (NES), 2011, and any Regional resource consents required, for the disturbance and/or use of contaminated land during construction of the Expressway - to be sought later.

Have these consents been applied for? Yes ☒ No ☒

9. Other documentation

Please list any documents in addition to your application forms that form part of your application. Note: if multiple other documents exist, please attach a separate sheet of paper.

☐ No other documents

☒ Reports — Title: AEE Report (Volume 2), and Technical Reports and Supporting Documents (Volume 3)

☒ Plans — Title: Management Plans (Volume 4), and Plan Set (Volume 5)

☐ Other documents

10. Consultation and written approval of affected persons

Consultation with all persons potentially affected by your activity prior to lodging your application may result in considerable time and cost savings.

Non-notified applications

Non-notified consents are for activities which have minor effects on the environment. For your activity to be considered on a non-notified basis you must consult and obtain written approval from all persons potentially affected by your activity (eg, neighbours, iwi, Fish and Game Council, Department of Conservation). If you are unsure who may be an affected party, please call us. ***Non-notified consents are significantly cheaper and quicker to process***.

Limited notified and fully notified applications

Notified consents (either limited notified or fully notified consents) are for activities which do not meet requirements in the RMA for processing on a non-notified basis.

Please provide any consultation details and written approvals obtained in the space provided below.

Consultation details

Have you consulted with iwi? Yes ☒ No ☐

If so, who did you consult?

Refer to Part F, Chapter 10 of the AEE Report (Volume 2), and Technical Report 22 (Volume 3).

Who else have you consulted and what was their response?

Refer to Part F, Chapter 10 of the AEE Report (Volume 2), and Technical Report 22 (Volume 3).

How have you addressed any concerns they may have had?

Refer to Part F, Chapter 10 of the AEE Report (Volume 2), and Technical Report 22 (Volume 3).

Written approval of affected parties

If you have obtained the signature of affected persons please give their details below. Please note that for us to accept the approvals **they must each complete and sign form 1B**.

Name	Address	Owner/Occupier	Contact details (phone, email etc)

11. Declaration concerning payment of fees (Billing name and address)

I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application and, if granted, for any subsequent monitoring charges. Subject to my/our rights under sections 357B and 358 of the RMA to object to any costs, I/we undertake to pay all and future processing costs and monitoring costs incurred by the Council. Without limiting the Council's legal rights, if any steps, including the use of debt collectors, are necessary to recover unpaid processing costs, I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Full name:	N/A	Date:	
Address:		Signature:	
Email:		Phone:	

Please note the name and address supplied here will be the billing address used for all invoices and annual monitoring charges (where applicable). The fees and charges are set out in the Greater Wellington "Resource Management Charging Policy".

12. Signature of applicant/agent

I/we hereby certify that, to the best of my knowledge and belief, the information given in this application is true and correct.

Full name:	Rod James, State Highway Manager Wellington	Date:	13/5/15
Signature			

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

2a Water permit application to dam water

Use this form for any activity which impounds all or part of the flow of a watercourse.

Please answer all questions fully. You should discuss your application with one of Greater Wellington's resource advisors before completing this form.

Show the location of the activity and adjoining properties on your map on Form 1. Include design plans and details with this application as appropriate.

Part A: general

1. Is the dam: existing ☐ or proposed ☒ ?

   If you are constructing a new dam in a watercourse, a Land Use Consent is also required. Use Application Form No. 10.

2. What is the purpose of the dam (eg, recreation, stock water, irrigation, etc)?

   To dam groundwater as a result of earthworks and from de-watering during earthworks as part of the construction of the Peka Peka to North Ōtaki Expressway and the NIMT realignment. To dam water via new wetlands adjacent to the Peka Peka to North Ōtaki Expressway.

   The requireddiversion of groundwater is provided for in the associated Form 2a: water permit to divert water.

3. What is the name of the watercourse to be dammed?
   (If the stream is unnamed, give the name of the watercourse it is a tributary of.)

   The groundwater system and associated new wetlands adjacent to the Peka Peka to North Ōtaki Expressway.

   Refer to application references in Table 3-2 of the AEE Report, Volume 2: 5 and 26.

   For Questions 4-8 below, the damming of groundwater is associated with the earthworks and de-watering during earthworks as part of the construction of the project and through the new wetlands proposed adjacent to the alignment, as such these are not relevant considerations. For the hydrological and stormwater assessments of effects refer to Technical Reports 9 and 10, Volume 3.

4. What is the approximate volume of water to be stored by the dam? _____ cubic metres

5. What is the height of the dam crest above the lowest original ground level? _____ metres

6. What is the length of the dam across the watercourse? _____ metres

7. What are the spillway dimensions? Width: _____ metres

Depth: _____ metres

8. Does the dam also involve:

Taking water?	Yes ☒	No ☐
Diverting water?	Yes ☒	No ☐
Discharging?	Yes ☐	No ☐

If you answered yes to any of 8 above, a separate consent application may be required.

Part B: assessment of effects on the environment

Where your diversion could have a significant adverse effect on the environment a more detailed environmental assessment is required in accordance with the Fourth Schedule of the Resource Management Act 1991.

1. Does the watercourse feeding the dam flow all year? Yes ☒ No ☒

   If no, what is the approximate length of the dry period? ..... metres

2. Will the damming have an effect on water availability to downstream users? Yes ☐ No ☒

3. Within a reasonable distance up or downstream of the dam are there any:
   - (1) Obvious signs of biota (eg, fish, eels, insect life, aquatic plants)? Yes ☒ No ☐
   - (2) Areas where food is gathered from the stream (eg, watercress, eels, wild fowl, kaimoana)? Yes ☒ No ☐
   - (3) Wetlands (eg, swamp areas)? Yes ☒ No ☐
   - (4) Waste discharges (eg, from rural sources, industries, sewage plants)? Yes ☒ No ☐
   - (5) Recreational activities carried out (eg, swimming, fishing, canoeing)? Yes ☒ No ☐
   - (6) Areas of particular aesthetic or scientific value (eg, scenic waterfall, rapids, archaeological sites)? Yes ☒ No ☐
   - (7) Areas or aspects of significance to iwi that you are aware of? Yes ☒ No ☐

   If you have answered yes to any of 1, 2 and any part of 3 above, describe what effects your damming may have and the steps you propose to take to mitigate these. If the adverse effect is significant, describe alternative locations or methods you have considered for undertaking the damming:

   Refer to Part E, Chapter 9 of the AEE Report, Volume two and Technical Report 3, Volume 3 for the considerations of alternatives.

   An assessment of environmental effects in relation to groundwater can be found in Part G, Chapter14 of the AEE Report or for more detail refer to Technical Report 4, Volume 3 -Geotechnical Report.

   Refer to Part G, of the AEE Report, Volume 2, Chapters on the potential effects of dams and proposed mitigation: Hydrology (Chapter 17), Stormwater (Chapter 18), Aquatic Ecology (Chapter 20) and Tangata Whenua and Cultural Heritage (Chapter 26).

   Refer to Technical Report 5 (Construction Methodology Report), Volume 3, the CEMP (Volume 4 and Appendix C (draft Erosion and Sediment Control Plan) and Appedix E (draft Ecological Management Plan), Volume 4 for the construction methodology associated with the damming of groundwater and the de-watering during earthworks as part of the construction of the Project.

   Refer to Part G and Part H, of the AEE Report, Volume 2 which outline the management plan and condition approaches for managing the environmental effects of the Project.

   For the diversion of groundwater refer to Form 2a - water permit for the diversion of groundwater.

   [Continue on a separate page if necessary]

4. Have you provided any means for fish to bypass the dam (eg, fish ladders, elver tubes, etc)? Yes ☐ No ☐

   Please describe N/A as this diversion consent relates to the diversion of groundwater.

5. Describe the bed of the watercourse immediately above and below the dam site (eg, is it gravelly, muddy or sandy?):

N/A as above

Part B: assessment of effects on the environment (continued)

6. Will the pond formed cause flooding, loss of access or other problems to neighbouring properties? Yes ☐ No ☒

   Please describe

   Refer to Part G, Chapter 14, Volume 2 for the assessment of environmental effects concerning groundwater.

   For informatioin on the consultation and engagement refer to Part F, Chapter 10 of the AEE Report, Volume 2, or for more detail - Technical Report 22, Voume 3.

7. If water is to be taken from the dam, is the dam capable of being filled again each year from the available catchment area? Yes ☐ No ☐

   Do you have calculations to support this? Yes ☐ No ☒

   Please describe or attach calculations

   N/A as this relates to the damming of groundwater

8. Please attach your calculations which show that the dam and spillway design are adequate, including design flood flows, return periods, etc.

9. Who or what might be affected downstream in the event of dam failure (eg, houses, roads, crops, bridges)?

   N/A as this relates to the damming of groundwater

10. Are there any alternative sites or methods for damming the water? If yes, why have you not chosen any of these?

    N/A as this relates to the damming of groundwater

11. What, if any, monitoring do you propose to carry out to ensure that your dam does not have any adverse effect?

    Refer to Part H, Chapters 30, 31 and 32 of the AEE Report, Volume 2 for the proposed management of environmental effects.

    Best practice guidelines will be followed throughout construction as outlined in the CEMP, Volume 4.

Refer to the Management Plans located in Volume 4, in particular the:

- Draft Erosion and Sediment Control Plan (Appendix C, Volume 4);
- Draft Ecological Management Plan (Appendix E, Volume 4); and
- Draft Landscape Plan (Appendix G, Volume 4).

For office use only

Consent No. .....

Renewal: Yes ☐ No ☐

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Use this form for any activity which impounds all or part of the flow of a watercourse.

Please answer all questions fully. You should discuss your application with one of Greater Wellington's resource advisors before completing this form.

Show the location of the activity and adjoining properties on your map on Form 1. Include design plans and details with this application as appropriate.

Part A: general

1. Is the dam: existing ☐ or proposed ☒ ?

   If you are constructing a new dam in a watercourse, a Land Use Consent is also required. Use Application Form No. 10.

2. What is the purpose of the dam (eg, recreation, stock water, irrigation, etc)?

   Consent is required for the damming of surface water as a result of the embankments, containment bunds, placement of 'undersized' culverts and the creation of wetlands along the Peka Peka to North Ōtaki Project alignment.

   For the associated diversion of groundwater refer to Form 2a: Water permit to divert water.

3. What is the name of the watercourse to be dammed?
   (If the stream is unnamed, give the name of the watercourse it is a tributary of.)

   Specific watercources in which damming is proposed are:

   - The Otaki River catchment - damming of surface water by the Expressway embankment and a new containment bund to the north of the Otaki River in the event of flooding.

   - The Mangaone Stream - the installing of a bund that during flood events will dam the Mangaone Stream.

   - Racecourse Stream - damming of the watercourse through the installation of an undersized culvert that will dam and divert surface water in times of flood.

   - Damming of surface water for the creation of new wetlands adjacent to the Peka Peka to North Ōtaki Expressway.

   Refer to application references in Table 3-2 of the AEE Report, Volume 2: 4, 12, 18, 21 and 26.

   For Questions 4-8 below, the damming of watercourses is associated with bisecting the flood plains of several watercourses throughout the Project area or throttling flood flow so as to limit the effect of flood flows on downstream properties, as such these are not relevant considerations. For the hydrological and stormwater assessments of effects refer to Technical Reports 9 and 10, Volume 3.

4. What is the approximate volume of water to be stored by the dam? _____ cubic metres

5. What is the height of the dam crest above the lowest original ground level? _____ metres

6. What is the length of the dam across the watercourse? _____ metres

7. What are the spillway dimensions? Width: _____ metres

   Depth: _____ metres

8. Does the dam also involve:

Taking water?	Yes ☐	No ☒
Diverting water?	Yes ☒	No ☐
Discharging?	Yes ☐	No ☒

If you answered yes to any of 8 above, a separate consent application may be required.

Part B: assessment of effects on the environment

Where your diversion could have a significant adverse effect on the environment a more detailed environmental assessment is required in accordance with the Fourth Schedule of the Resource Management Act 1991.

1. Does the watercourse feeding the dam flow all year? Yes ☒ No ☒

   If no, what is the approximate length of the dry period? ..... metres

2. Will the damming have an effect on water availability to downstream users? Yes ☐ No ☒

3. Within a reasonable distance up or downstream of the dam are there any:
   - (1) Obvious signs of biota (eg, fish, eels, insect life, aquatic plants)? Yes ☒ No ☐
   - (2) Areas where food is gathered from the stream (eg, watercress, eels, wild fowl, kaimoana)? Yes ☒ No ☐
   - (3) Wetlands (eg, swamp areas)? Yes ☒ No ☐
   - (4) Waste discharges (eg, from rural sources, industries, sewage plants)? Yes ☒ No ☐
   - (5) Recreational activities carried out (eg, swimming, fishing, canoeing)? Yes ☒ No ☐
   - (6) Areas of particular aesthetic or scientific value (eg, scenic waterfall, rapids, archaeological sites)? Yes ☒ No ☐
   - (7) Areas or aspects of significance to iwi that you are aware of? Yes ☒ No ☐

   If you have answered yes to any of 1, 2 and any part of 3 above, describe what effects your damming may have and the steps you propose to take to mitigate these. If the adverse effect is significant, describe alternative locations or methods you have considered for undertaking the damming:

   Several of the watercourses flow all year round. Where the Expressway crosses floodplains provision has been made so that natural flow paths are maintained - through the incorporation of culverts into the Expressway embankment.

   Refer to Part E, Chapter 9 of the AEE Report, Volume two and Technical Report 3, Volume 3 for the considerations of alternatives.

   Refer to Part G, of the AEE Report, Volume 2, Chapters on the potential effects of the Project and the proposed mitigation: Hydrology (Chapter 17), Stormwater (Chapter 18), Aquatic Ecology (Chapter 20), Archaeology (Chapter 24), Built Heritage (Chapter 25), Tangata Whenua and Cultural Heritage (Chapter 26), and Social (Chapter 27).

   Refer to Technical Report 5 (Construction Methodology Report), Volume 3, the CEMP (Volume 4 and Appendix C (draft Erosion and Sediment Control Plan) and Appedix E (draft Ecological Management and Monitoring Plan), Volume 4 for the construction methodology associated with the crossing of watercourses and their floodplains.

   Refer to Part G and Part H, of the AEE Report, Volume 2 which outline the management plan and condition approaches for managing the environmental effects of the Project.

   Refer to Technical Reports 9 and 10, Volume 3 for the Hydrology and Stormwater Assessments.

   [Continue on a separate page if necessary]

4. Have you provided any means for fish to bypass the dam (eg, fish ladders, elver tubes, etc)? Yes ☒ No ☐

   Please describe Fish passage is provided in culverts where appropriate and bridges are proposed

over the Waitohu Stream and Otaki River. For the plans of the Expressway refer to the Plan Set in Volume 5, in particular, the Road Layout Plans.

5. Describe the bed of the watercourse immediately above and below the dam site (eg, is it gravelly, muddy or sandy?):

   Refer to the Aquatic Ecology Report, Technical Report 12, Volume 3.

Part B: assessment of effects on the environment (continued)

6. Will the pond formed cause flooding, loss of access or other problems to neighbouring properties? Yes ☐ No ☒

   Please describe Extensive hydrological modeling has been undertaken for all major watercourses. Refer to the Hydrology and Stormwater Reports, Technical Reports 9 and 10, Volume 3. The undersizing of the culvert at the Mangapouri Stream crossing has been designed to lower flood risk of downstream properties. The secondary containment bund proposed for the northern side of the Otaki River will provide further protection for properties from a flooding event.

7. If water is to be taken from the dam, is the dam capable of being filled again each year from the available catchment area? Yes ☐ No ☐

   Do you have calculations to support this? Yes ☐ No ☐

   Please describe or attach calculations No water is proposed to be taken from the watercourses.

   For Question 8 below refer to Technical Reports 9 and 10, Volume 3 which outline the hydrological and stormwater assessments of effects.

8. Please attach your calculations which show that the dam and spillway design are adequate, including design flood flows, return periods, etc.

9. Who or what might be affected downstream in the event of dam failure (eg, houses, roads, crops, bridges)?

   Extensive modelling of the effect that the Expressway will have on flood flows throughout the Project area has been undertaken. There are a range of land uses, roads and bridges downstream of the proposed alignment which are outlined in Part G of the AEE Report, Volume 2. Also refer to the Road Layout Plans in the Plan Set, Volume 5.

10. Are there any alternative sites or methods for damming the water? If yes, why have you not chosen any of these?

    No. Alternative routes for the expressway that were considered are outlined in Chapter 9 of the AEE Report, Volume 2 and Technical Report 3, Volume 3.

11. What, if any, monitoring do you propose to carry out to ensure that your dam does not have any adverse effect?

    Extensive hydrologyical modelling has been undertaken to investigate the effect that the Expressway will have on the water courses and flood plains it crosses. These are outlined in Chapters 17 and 18 of the AEE Report, Volume 2.

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Consent No. .....

Renewal: Yes ☐ No ☐

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

2a Water permit application to divert water

Use this form for any activity which alters the natural flow of a watercourse.

Please answer all questions fully. You should discuss your application with one of Greater Wellington's resource advisors before completing this form.

Show the location of the activity and adjoining properties on your map on Form 1. Include design plans and details with this application as appropriate.

Part A: general

1. Is the diversion: existing ☐ or proposed ☒ ?

   If the diversion relates to a new activity, a Land Use Consent may also be required. Use Application Form No. 10.

   If the diversion is in the coastal marine area, a Coastal Permit to Divert Water is required. You can make the application on this form. A coastal permit to erect any structures and occupy the coastal marine area is required for a new diversion. Use Application Form No. 12.

2. Why are you diverting water (eg, stormwater control, river works, stream realignment, etc)?

   A water permit is required to divert groundwater as a result of earthworks and from de-watering during earthworks as part of the construction of the Peka Peka to North Ōtaki Expressway and the NIMT realignment. The required damming of groundwater is provided for in the associated Form 2a: water permit to dam water.

   Such diversion will be limited to as required during the construction period (approximately 3.5 - 4 years)

   Refer to Part G, Chapter 14 (Geotechnical Engineering and Resilience).

3. What is the name of the watercourse to be diverted?
   (If the stream is unnamed, give the name of the watercourse it is a tributary of.)

   The groundwater system and associated wetlands along the length of the Peka Peka to North Ōtaki Expressway.

   Refer to application references in Table 3-2 of the AEE Report, Volume 2: 5, 23 and 27.

   For question 4, Refer to Technical Report 5, "Construction Methodology Report, " Volume 3.

4. What is the rate at which water will be diverted? ..... cubic metres or litres per second

5. Will the diversion be: intermittent ☐ or continuous ☐ ?
   temporary ☒ or permanent ☒ ?

   If temporary, what will be the maximum operating period? ..... hours per day

   ..... days per week

.....

..... weeks per year

6. Does the diversion also involve:

Taking water?	Yes ☒	No ☐
Damming water?	Yes ☒	No ☐
Discharging?	Yes ☒	No ☐
Any structures?	Yes ☐	No ☒

If you answered yes to any of 6 above, a separate consent application may be required.

Part B: assessment of effects on the environment

Where your diversion could have a significant adverse effect on the environment a more detailed environmental assessment is required in accordance with the Fourth Schedule of the Resource Management Act 1991.

1. Will the diversion have an effect on water availability to downstream users and/ or affect access to neighbouring properties? Yes ☐ No ☒

2. Within a reasonable distance up or downstream of the diversion are there any:
   - (1) Obvious signs of biota (eg, fish, eels, insect life, aquatic plants)? Yes ☒ No ☐
   - (2) Areas where food is gathered from the stream (eg, watercress, eels, wild fowl, kaimoana)? Yes ☒ No ☐
   - (3) Wetlands (eg, swamp areas)? Yes ☒ No ☐
   - (4) Waste discharges (eg, from rural sources, industries, sewage plants)? Yes ☒ No ☐
   - (5) Recreational activities carried out (eg, swimming, fishing, canoeing)? Yes ☒ No ☐
   - (6) Areas of particular aesthetic or scientific value (eg, scenic waterfall, rapids, archaeological sites)? Yes ☒ No ☐
   - (7) Areas or aspects of significance to iwi that you are aware of? Yes ☒ No ☐

   If you have answered yes to 1 and any part of 2 above, describe what effects your diversion may have and the steps you propose to take to mitigate these. If the adverse effect is significant, describe alternative locations or methods you have considered for undertaking the diversion:

   Refer to Part E, Chapter 9 of the AEE Report, Volume two and Technical Report 3, Volume 3 for the considerations of alternatives.

   An assessment of environmental effects in relation to groundwater can be found in Part G, Chapter14 of the AEE Report or for more detail refer to Technical Report 4, Volume 3 -Geotechnical Report.

   Refer to Part G, of the AEE Report, Volume 2, Chapters on the potential effects of diversions and proposed mitigation: Hydrology (Chapter 17), Stormwater (Chapter 18), Aquatic Ecology (Chapter 20) and Tangata Whenua and Cultural Heritage (Chapter 26).

   Refer to Technical Report 5 (Construction Methodology Report), Volume 3, the CEMP (Volume 4 and Appendix C (draft Erosion and Sediment Control Plan) and Appedix E (draft Ecological Management Plan), Volume 4 for the construction methodology associated with the diversions and temporary de-watering effects.

   Refer to Part G and Part H, of the AEE Report, Volume 2 which outline the management plan and condition approaches for managing the environmental effects of the Project.

   For the damming of groundwater refer to Form 2a - water permit for the damming of groundwater.

   [Continue on a separate page if necessary]

3. Have you provided any means for fish to bypass the diversion (eg, fish ladders, elver tubes, etc)? Yes ☐ No ☒

   Please describe N/A as this diversion consent relates to the diversion of groundwater.

4. Describe the bed of the watercourse immediately above and below the diversion site (eg, is it gravelly, muddy or sandy?):

N/A as above

Part B: assessment of effects on the environment (continued)

5. Will the diversion cause any flooding or other problems to neighbouring properties? Yes ☐ No ☒

   Please describe

   Refer to Part G, Chapter 14, Volume 2 for the assessment of environmental effects concerning groundwater.

   For informatioin on the consultation and engagement refer to Part F, Chapter 10 of the AEE Report, Volume 2, or for more detail - Technical Report 22, Voume 3.

6. Please attach your calculations which show that the diversion design is adequate, including design flood flows, return periods, etc

7. Have you discussed your diversion with any potentially affected parties (eg, neighbours, water users, Fish and Game New Zealand, Department of Conservation? Yes ☒ No ☐

8. Are there any alternative sites or methods for the diversion? If yes, why have you not chosen any of these? Yes ☐ No ☒

   Refer to Part E, Chapter 9 of the AEE Report, Volume 2 or for futher detail Technical Report 3, Volume 3 for the considereation of alternatives.

   Refer to Part D, Chapter 9 of the AEE Report for the construction of the Project.

9. What, if any, monitoring do you propose to carry out to ensure that your diversion does not have any adverse effect?

   Refer to Part H, Chapters 30, 31 and 32 of the AEE Report, Volume 2 for the proposed management of environmental effects.

   Best practice guidelines will be followed throughout construction as outlined in the CEMP, Volume 4.

   Refer to the Management Plans located in Volume 4, in particular the:

   - Draft Erosion and Sediment Control Plan (Appendix C, Volume 4);
   - Draft Ecological Management Plan (Appendix E, Volume 4); and
   - Draft Landscape Plan (Appendix G, Volume 4).

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Consent No. .....

Renewal: Yes ☐ No ☐

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

2a Water permit application to divert water

Use this form for any activity which alters the natural flow of a watercourse.

Please answer all questions fully. You should discuss your application with one of Greater Wellington's resource advisors before completing this form.

Show the location of the activity and adjoining properties on your map on Form 1. Include design plans and details with this application as appropriate.

Part A: general

1. Is the diversion: existing ☒ or proposed ☒ ?

   If the diversion relates to a new activity, a Land Use Consent may also be required. Use Application Form No. 10.

   If the diversion is in the coastal marine area, a Coastal Permit to Divert Water is required. You can make the application on this form. A coastal permit to erect any structures and occupy the coastal marine area is required for a new diversion. Use Application Form No. 12.

2. Why are you diverting water (eg, stormwater control, river works, stream realignment, etc)?

   Water Permit to temporarily and/or permanently divert the flow of watercourses to enable the construction of the Peka Peka to North Ōtaki Expressway.

   For the proposed damming of surface water refer to the associated Form2a: water permit to dam water.

3. What is the name of the watercourse to be diverted?
   (If the stream is unnamed, give the name of the watercourse it is a tributary of.)

   The watercourses to be diverted through the Project that require consent are:

   - Otaki River, Waitohu Stream, Mangapouri Stream, Mangaone Stream, Greenwood Stream, Gear Stream, Settlement Heights Stream, Avatar Stream, Jewell Stream, Cavello Stream, Awatea Stream, Kumototo Strea,. Hadfield Stream and Racecourse Stream.

   For Questions 3 to 6 refer to Part G, Chapters 18 and 19 of the AEE Report, or for more detail - Volume 2; Technical Reports 9 and 10, Volume 3. Respective assessments of Hydology and Stormwater effects. Refer to Part D, Chapter 8, Volume 2 for the Construction of the Project, or for more detail - Technical Report 5, Volume 3 - Construction Methodology Report.

   Refer to application references in Table 3-2 of the AEE Report, Volume 2: 4, 10(a)-(e), 11(a)-(e), 12, 18, 20, 21 and 27.

4. What is the rate at which water will be diverted? _____ cubic metres or litres per second

5. Will the diversion be: intermittent ☐ or continuous ☐ ?
   temporary ☒ or permanent ☒ ?

   If temporary, what will be the maximum operating period? _____ hours per day

..... days per week

..... weeks per year

6. Does the diversion also involve:

Taking water?	Yes ☒	No ☐
Damming water?	Yes ☒	No ☐
Discharging?	Yes ☒	No ☐
Any structures?	Yes ☒	No ☐

If you answered yes to any of 6 above, a separate consent application may be required.

Part B: assessment of effects on the environment

Where your diversion could have a significant adverse effect on the environment a more detailed environmental assessment is required in accordance with the Fourth Schedule of the Resource Management Act 1991.

1. Will the diversion have an effect on water availability to downstream users and/ or affect access to neighbouring properties? Yes ☐ No ☒

2. Within a reasonable distance up or downstream of the diversion are there any:
   - (1) Obvious signs of biota (eg, fish, eels, insect life, aquatic plants)? Yes ☒ No ☐
   - (2) Areas where food is gathered from the stream (eg, watercress, eels, wild fowl, kaimoana)? Yes ☒ No ☐
   - (3) Wetlands (eg, swamp areas)? Yes ☒ No ☐
   - (4) Waste discharges (eg, from rural sources, industries, sewage plants)? Yes ☒ No ☐
   - (5) Recreational activities carried out (eg, swimming, fishing, canoeing)? Yes ☒ No ☐
   - (6) Areas of particular aesthetic or scientific value (eg, scenic waterfall, rapids, archaeological sites)? Yes ☒ No ☐
   - (7) Areas or aspects of significance to iwi that you are aware of? Yes ☒ No ☐

   If you have answered yes to 1 and any part of 2 above, describe what effects your diversion may have and the steps you propose to take to mitigate these. If the adverse effect is significant, describe alternative locations or methods you have considered for undertaking the diversion:

   Refer to Part E, Chapter 9 of the AEE Report, Volume two and Technical Report 3, Volume 3 for the considerations of alternatives.

   Refer to Part G, of the AEE Report, Volume 2, Chapters on the potential effects of diversions and proposed mitigation: Hydrology (Chapter 17), Stormwater (Chapter 18), Aquatic Ecology (Chapter 20) and Tangata Whenua and Cultural Heritage (Chapter 26).

   Refer to Technical Report 5 (Construction Methodology Report), Volume 3, the CEMP (Volume 4 and Appendix C (draft Erosion and Sediment Control Plan) and Appedix E (draft Ecological Management and Monitoring Plan), Volume 4 for the construction methodology associated with the diversions.

   Refer to Part G and Part H, of the AEE Report, Volume 2 which outline the management plan and condition approaches for managing the environmental effects of the Project.

   [Continue on a separate page if necessary]

3. Have you provided any means for fish to bypass the diversion (eg, fish ladders, elver tubes, etc)? Yes ☒ No ☐

   Please describe Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2. For further detail refer to Technical Reports 9, 10 and 12, Volume 3 and also the Draft Ecological Management Plan (Appendix E, Volume 4) - for information regarding the provision of fish passage.

4. Describe the bed of the watercourse immediately above and below the diversion site (eg, is it gravelly, muddy or sandy?):

Refer to Technical Reports 9 (Assessment of Hydrology Effects), 10 (Assessment of Stormwater Effects) and 12 (Aquatic Ecology), Volume 3.

Part B: assessment of effects on the environment (continued)

5. Will the diversion cause any flooding or other problems to neighbouring properties? Yes ☒ No ☐

   Please describe

   Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2 and Technical Reports 9 and 10, Volume 3.

   For information on the consultation and engagement refer to Part F, Chapter 10 of the AEE Report, Volume 2, or for more detail - Technical Report 22, Volume 3.

6. Please attach your calculations which show that the diversion design is adequate, including design flood flows, return periods, etc

7. Have you discussed your diversion with any potentially affected parties (eg, neighbours, water users, Fish and Game New Zealand, Department of Conservation? Yes ☒ No ☐

8. Are there any alternative sites or methods for the diversion? If yes, why have you not chosen any of these? Yes ☐ No ☒

   Refer to Part E, Chapter 9 of the AEE Report, Volume 2 or for futher detail Technical Report 3, Volume 3 for the considereation of alternatives.

   Refer to Technical Report 9, 10 and 12, Volume 3 for the assessment of hydrology, stormwater and aqutic ecology effects.

   Refer to Part D, Chapter 8 of the AEE Report for the construction of the Project .

9. What, if any, monitoring do you propose to carry out to ensure that your diversion does not have any adverse effect?

   Refer to Part H, Chapters 30, 31 and 32 of the AEE Report, Volume 2 for the proposed management of environmental effects.

   Best practice guidelines will be followed throughout construction as outlined in the CEMP, Volume 4.

   Refer to the Management Plans located in Volume 4, in particular the:

   - Draft Erosion and Sediment Control Plan (Appendix C, Volume 4);
   - Draft Ecological Management Plan (Appendix E, Volume 4); and
   - Draft Landscape Plan (Appendix G, Volume 4).

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Consent No. .....

Renewal: Yes ☐ No ☐

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

2c Water permit application to take and use groundwater

Please answer all questions fully. Officers from Greater Wellington's Environmental Regulation department are available to assist with filling out this form or to clarify information to include with your application.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

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Part A: General information on nature and scale of your activity

1. Is this application a renewal of a water permit to take/use groundwater from your bore/well?

Yes ☐ No ☒ If Yes, what is the water permit number? WAR/WGN N/A

2. What is the land use consent (bore permit) number for the bore/well where water will be taken from?

Note: Refer to application references in Table 3-2 of the AEE Report, Volume 2 for the consents sought for groundwater take. Specifically number 23.

Refer to GWRC form 6B within Volume 2 of the AEE.

WGN/WAR

Note: All bores/wells are required to have a land use consent (bore permit). If a permit for your bore/well has not been obtained you will need to apply for a land use consent (bore permit) as well. Use application form 9.

3. Locality map

Show the location of your proposed abstraction point on an appropriately scaled aerial map/plan. Please show the area to be irrigated (if applicable), the location of any buildings, septic tanks, location of any neighbouring bores/wells, other known abstraction points, freshwater springs, streams, rivers, wetlands that you know of and any other relevant features of the surrounding environment.

4. What is the bore/well number for the bore/well where ground water will be taken from?

not yet determined, it will involve the commissioning of new bores (refer to Technical Report 4 Volume 3 - Geotechnical Report) and the use of ex-M2PP project bore (approved under NSP12/01.024). (eg, S26/0727)

5. What will be the maximum rate at which water is taken?

Refer to response to Q7 below. litres per second

.....

..... hours per day

..... m^3 per year

Note: (1) For **water permits for irrigation use**, the annual quantity will be allocated based on the outcome of an irrigation allocation report. Please include this report with your application. Greater Wellington can provide you with a SPASMO-IR allocation assessment report. Please contact us if you would like us to provide you with an allocation assessment report.

(2) If you require more water than the allocation report suggests you will need to provide adequate justification for the amount of groundwater required in question 7 below.

(3) A year is measured from 1 July to 30 June inclusive.

6. What will groundwater be used for? [Tick the appropriate box(es)]

☐ Industry State type of industry and major use of water: .....

☐ Community State no. of households or population: .....

☒ Other State use: For the construction of the Peka Peka to North Ōtaki Expressway. Refer to Technical Report 5, Volume 3 - Construction Methodology Report.

☐ Irrigation State method of irrigation ☐ spray ☐ trickle ☐ border-dyke ☐ other

If spray irrigation, what method of spray irrigation will be used?

☐ centre pivot
☐ travelling irrigator
☐ K line or Bosch sprinklers
☐ other

What is the total area will you be irrigating?

☐ Crop(s) ..... ha Crop type: .....
☐ Pasture ..... ha
☐ Horticulture ..... ha Horticulture type: .....
☐ Other ..... ha Please specify: .....

(Please show clearly the area to be irrigated on a scaled aerial map.)

Please describe the soil type and characteristics for the area to be irrigated below:

.....

.....

.....

.....

7. Please justify the amount of groundwater requested in question 5 above (eg, please provide any usage records/calculations/design relating to the proposed groundwater take). Use a separate sheet if required.

During the drier months and at peak earthworks construction periods it is expected that up to a maximum of 300cum per day. This will be required predominantly for construction purposes, dust supression and include a small amount for office use.

Refer to the Construction Methodology, Technical Report 5, Volume 3 for further information regarding groundwater take.

.....

.....

.....

.....

.....

8. Is there a water meter on the bore/well? Yes ☐ No ☒

If Yes, what is the water meter serial number and brand type? .....

If No, when do you plan to install a water meter? A water meter will be installed on the bores upon construction

Note: The Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 require most water takes of 5 litres per second or more to install a water meter

9. What is the pump make, type and model? **Yet to be determined.**

What is the maximum capacity of your pump? _____ litres per second

Part B: Assessment of effects on the environment (AEE)

Where your take could have a significant adverse effect on the environment a more detailed environmental assessment is required in accordance with the Fourth Schedule of the Resource Management Act 1991. This will be the case for most new applications. As part of this assessment an aquifer test (pump test) will be required to be done on your bore/well and analysis presented in order to answer the questions detailed below. (Further information on aquifer (pump) tests can be gained from our Environmental Monitoring and Investigations department)

1. Has an aquifer test (pump test) been carried out on your bore/well? Yes ☒ No ☐

(Please provide a copy of your aquifer test or summary details of your aquifer test in the space provided below eg, length of test, pumping rate, drawdown in pumped bore, drawdown in monitored bores, assessment of aquifer transmissivity and storage co-efficient)

Refer to Part G, Chapter 14 of the AEE Report, Volume 2 of the AEE that outlines that the long term effects of groundwater take will be negligible. Measures will be taken to ensure that there are no unexpected water drawdown that will affect water abstraction in the vivinity.

2. Please show any of the following on your scaled aerial map

(1) Other bores/wells

(2) All springs and surface waterbodies (including wetlands)

(3) Any septic tanks and/or other waste disposal areas

3. What are the anticipated effects of your proposed groundwater take on nearby bores/wells?

Refer to Part G, Chapter 14 of the AEE Report, Volume 2. For futher information refer to Technical Report 4, Volume 3 - Geotechnical Report.

4. What are the anticipated effects of your proposed groundwater take on any springs or surface water bodies (including wetlands)?

Refer to Part G, Chapter 14 of the AEE Report, Volume 2. For futher information refer to Technical Report 4, Volume 3 - Geotechnical Report.

5. **What are the anticipated effects of your proposed groundwater take on features within the surrounding environment (eg, stands of native vegetation, waste disposal areas etc.)?**

Refer to Part G, Chapter 14 of the AEE Report, Volume 2. For further detail refer to Technical Reports 4 and 12, Volume 3.

6. **Is your proposed groundwater take within 1 kilometre of any coastline?** ☐ Yes ☒ No

If Yes, what are the anticipated effects of your proposed groundwater take on the risk of saltwater intrusion?

N/A

7. **Are there any alternative water sources available to you?** Yes ☐ No ☒

If yes, please explain why you have chosen this option and not alternative options:

Refer to Part E, Chapter 9 of the AEE Report, Volume 2 for the consideration of alternatives.

Refer to Technical Report 4, Volume 3 - Geotechnical Report for the locations in which water takes may be situated and sourced.

Part C: Monitoring and management of your activity

1. **What monitoring and management do you propose to ensure any potential adverse effects on the environment are avoided, remedied or mitigated?**

(This may include, but is not limited to, what abstraction data you plan to record, when information will be submitted to Greater Wellington, any groundwater levels that may be taken in your or any other bore/well, any monitoring of surface water bodies including wetlands that may be undertaken)

Refer to Part G and Part H of the AEE Report, Volume 2. Also refer to the suite of management plans found in Volume 4.

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Te Pane Matua Taiao

3a Discharge permit application – general discharges to land

Please answer all questions fully. Officers from Greater Wellington's Environmental Regulation department are available to assist with filling out this form or to clarify information to include with your application.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

Part A: General information on nature and scale of your activity

1. **What is the source of the contaminant(s): eg, Industry, solid agrichemical (1080), cleanfill, landfill, winery wastewater, composting animal wastes, breweries, oil etc:**

   Discharge of sediment laden (including chemical flocculent) water to land during the construction of the Peka Peka to North Ōtaki Expressway; and

   Discharge of concrete-laden water from bridge pile construction to land during the construction of the Peka Peka to North Ōtaki Expressway.

   Refer to application references in Table 3-2 of the AEE Report, Volume 2: 6(b) and 14(a)-(b).

2. **Provide a detailed description of contaminant characteristics, physical and chemical composition, and whether it is a classified hazardous substance:**

   Discharge of sediment-laden (including chemically-treated) water to land where it may enter water; and

   Discharge of concrete-laden water from bridge pile construction to land that may enter water.

   Refer to the CEMP and Appendix C (Draft Erosion and Sediment Control Plan), Volume 4; and

   Technical Report 5, Volume 3 - Construction Methodology Report.

3. **Is the waste treated before discharge?**

   Yes ☒ No ☐ If Yes, describe treatment:

   Refer to the CEMP and Appendix C (Draft Erosion and Sediment Control Plan), Volume 4; and

   Technical Report 5, Volume 3 - Construction Methodology Report.

4. **Describe discharge method, period, volume and rate of discharge – include calculations:**

   For Questions 4 and 5 refer to Technical Report 5, Volume 3 - Construction Methodology Report;

   and the Draft Erosion and Sediment Control Plan - Appendix C, Volume 4.

5. Locality map and system design

Show the location of your proposed discharge and a detailed sketch/plan of the treatment/discharge system and discharge area. Please show the discharge area and any treatment system in relation to roads, property boundaries, waterways, bores, and the nearest town. Include an estimate of the size of the area to be irrigated (if applicable), the location of any buildings, septic tanks, location of any neighbouring bores/wells, other known abstraction points, freshwater springs, streams, rivers, wetlands that you know of and any other relevant features of the surrounding environment. Alternatively you may wish to attach a plan/aerial photograph showing the above information.

Note: Remember to show where north is.

Part B: Assessment of effects on the environment (AEE)

If your proposed discharge is likely to have a significant impact on the environment you will need to complete a more detailed environmental assessment in accordance with the Fourth Schedule of the Resource Management Act 1991.

1. **Describe soil type(s) in the discharge area(s) and the source of this information (eg, soil maps, soil tests, local knowledge):**

   Refer to Part G, Chapter 14 of the AEE Report, Volume 2.

   Also refer to Technical Report 4, Volume 3 - Geotechnical Report.

2. **What is the depth to groundwater at the discharge site(s) (and the direction of groundwater flow if known)?**

   Refer to Part G, Chapter 14 of the AEE Report,Volume 2 - Geotechnical Engineering and Resilience which outlines groundwater effects. For further information refer to Technical Report 4, Volume 3 - Geotechnical Report.

3. **What is the land drainage like in the discharge area(s)? Is the soil artificially drained?**

   Refer to Technical Report 4, Volume 3 - Geotechnical Report.

4. **How far is the nearest surface water to the discharge area(s) and in what direction (eg, 50m NE)?**

   The proposed Expressway directly crosses several watercourses and thererfore construction will directly effect surface water - See Technical Report 5, Volume 3: Construction Methodology Report.

   The potential discharge of concrete-laden water is associated with the construction of bridge piles and is therefore located within or near surface water. Refer to Part D, Chapter 8 and Part G, Chapter 17 of the AEE Report, Volume 2.

5. **Are there any bores in vicinity (including neighbouring properties) and what are they used for?**

   Yes ☒ No ☐ If Yes, show them on the locality map and describe their use below:

   Other bores that are located in the area are used for irrigation and domestic use. Refer to Technical Report 4, Volume 3 - Geotechnical Report, and the Geology Maps found in the Plan Set, Volume 5.

6. **Are there any sensitive environments close to the discharge area? eg, wetlands, recreational areas**

   Yes ☒ No ☐ If Yes, show them on the locality map and describe them below:

   There are wetlands, water ways, recreational areas and bush within the Project area. Refer to Part C, Chapter 5 of the AEE Report, Volume 2.

7. What effects will your discharge have on the sensitive environments identified above?

The effects are considered to be negligible given the mitigation measures outlined in Appendix C (Draft Erosion and Sediment Control Plan), Volume 4 and Part H (Management of Environmental Effects) of the AEE Report, Volume 2.

8. Why did you choose the proposed method of treatment and disposal, including the proposed discharge location?

Refer to Appendix C, Volume 4 - Draft Erosion and Sediment Control Plan;
Technical Report 5, Volume 3 - Construction Methodology Report; and
Appendix I, Volume 4 - Draft Site Specific Environmental Management Plans.

9. What alternative methods and locations have you considered?

Refer to Part E, Chapter 9 of the AEE Report, Volume 2 - Consideration of Alternatives. For further information refer to Technical Report 3, Volume 3 - Route Options Review.

Part C: Monitoring and management of your activity

1. What monitoring and management do you propose to ensure any potential adverse effects on the environment are avoided, remedied or mitigated?

(In particular, please provide a description and analysis of contaminant effects on soil and water and any proposed monitoring to ensure that the discharge does not adversely effect soil or water resources. Include details on what is to be monitored, when, how and why.)

Refer to Part G and Part H of the AEE Report, Volume 2 for the management plan and condition approaches to managing the environmental effects of the Project.
Also refer to the suite of management plans found in Volume 4.

2. Operation and management plans

Please include an Operation and Management Plan for the activity. This should include (but not be limited to) how the equipment controlling the treatment and discharge will be operated and maintained to prevent equipment failure (eg, maintenance/servicing schedules), and what measures will be implemented to ensure that the effects of any malfunction are remedied. It should also include contingency plans (eg, effluent storage) in the event of a system malfunction or adverse weather/soil conditions preventing effluent disposal to land (eg, saturated soils).

Refer to Technical Report 5, Volume 3 - Construction Methodology Report; and
CEMP and suite of management plans found in Volume 4.

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4a Discharge permit application – general discharge to water

Please answer all questions fully. Officers from Greater Wellington's Environmental Regulation department are available to assist with filling out this form or to clarify information to include with your application.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

This application form should be used for all discharges to water, including discharge to coastal water below mean high water springs and within the outer limits of the territorial sea.

Part A: General information on nature and scale of your activity

1. What is/are the contaminant(s) of concern in the discharge?

(A contaminant is any substance which is likely to change the water into which it is discharged in any way. Water can also be a contaminant)

Discharge of sediment-laden (including chemical flocculent) water to water, and the discharge of concrete-laden water from bridge pile construction to water during the construction of the Peka Peka to North Ōtaki Expressway.

2. What is the source of the contaminant and/or process that results in the discharge? (eg, municipal wastewater, industry, water treatment, rural activity/agricultural production - cows, pigs, poultry, contaminated stormwater, other) Note: If the source is from bulk earthworks please fill out Form 3b.

Discharge of sediment-laden water (including chemical flocculent) from erosion and sediment control devices to water as a result of the bulk earthworks, and the construction of structures (bridges and culverts) as part of the Peka Peka to North Ōtaki Expressway.

Discharge of concrete-laden water from bridge pile construction to water.

Refer to application references in Table 3-2 of the AEE Report, Volume 2: 6(a) and 13(a)-(b).

3. If from municipal wastewater what is the current and future size of the population the treatment plant will serve, and what is the proposed operational life of the treatment plant and associated pipework?

N/A

4 Is the contaminant treated in any way before being discharged? **Yes** ☒ **No** ☐

5. Name the treatment system and describe the treatment process (include the design specifications such as the capacity of the system):

Refer to the CEMP, Volume 4, Appendix C Draft Erosion and Sediment Control Plan, Volume 4;

and the Construction Methodology Report, Technical Report 5, Volume 3.

6. If sludge/solid waste is generated as part of the treatment process, please state what happens to this sludge. (Note: an additional consent will be required for the discharge of sludge to land).

N/A

7. Describe the contaminant and expected quality of the discharge after treatment but before it enters its receiving environment:

Please provide the results from any water quality testing of the discharge. If you do not have this information, you will need to test your discharge. Indicate which contaminants have been identified in the discharge by ticking the box(es). Explain how the samples were taken (eg, spot sample or composite sample) and attach the sampling results (laboratory analytical certificates) to this application.

☐ Temperature °C	☐ pH
☐ Suspended solids g/m³	☐ BOD_5 g/m³
☐ Faecal coliforms cfu/100 mL	☐ Heavy metals g/m³
☐ Toxic substances (eg, PAHs, phenols) g/m³	☐ Dissolved and total nutrients g/m³
☐ Ammonia g/m³:	☐ Oil/grease g/m³

Date(s) sample taken: Name of sampler:

Location(s) sample taken:

Date(s) of analysis: Analysis conducted by:

Indicate the sampling area(s) on the locality map (question 20).

Where appropriate describe the following:

Physical characteristics of the discharge (such as temperature, suspended solids, turbidity)

For Question 7 refer to Technical Report 12, Volume 3 - Aquatic Ecology Effects, and Appendix C, Volume 4, Draft Erosion and Sediment Control Plan.

Also refer to Technical Report 5 (Construction Methodology Report), Volume 3 of the AEE.

Inorganic chemical characteristics of the discharge (such as pH, free ammonia, organic nitrogen, total kjeldahl nitrogen, nitrites, nitrates, inorganic phosphorus, sulphate, metals)

Organic chemical characteristics of the discharge (such as BOD_5, VOC's)

Biological characteristics of the discharge (such as faecal coliforms, specific micro-organisms, toxicity)

8. **What is the name of the waterbody into which the discharge will be made (eg, name of stream, river, lake, bay, harbour, catchment, etc)?**

Ōtaki River, Waitohu Stream, Mangapouri Stream, Managaone Stream and several other watercourses.

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2 - Hydrology and stormwater effects.

9. **Describe the present state of the waterbody at the proposed location of the discharge.** Parameters to include in your description are flow information, water colour/clarity, width of channel, average depth, land use surrounding the waterbody, bed material (eg, rocky, silty, etc), bank material, streamside vegetation, erosion, fish life, invertebrate life, aquatic plants.

Refer to Part G, Chapter 20 of the AEE Report, Volume 2 - Aquatic Ecology, as listed in Part G, Chapters 17 and 18 of the AEE Report, Volume 2 - relating to hydrological and stormwater effects.

Greater Wellington's Environmental Monitoring and Investigations department may be able to assist you with flow or water quality data if you have no information. Please note some applications may require a professional ecological assessment.

10. **What is the quality of the receiving waterbody before the discharge?** Provide sample results and interpretation of these results (eg, against guideline values).

Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2 - Hydology, Stormwater and Aquatic Ecology assessments of effects.

11. **Provide details of the expected quality of the receiving waters (AFTER the point of discharge, at a point after reasonable mixing).** Provide sample results for existing discharges or provide anticipated results.

Refer to Technical Report 12, Volume 3 - Aquatic Ecology Assessment; the CEMP, Volume 4; and Appendix C (Draft Erosion and Sediment Control Plan) and Appendix E (Draft Ecological Management and Monitoring Plan), Volume 4.

Indicate which contaminants have been identified in the receiving waters by ticking the box(es). Attach the sampling results (laboratory analytical certificates) to this application

- ☐ Temperature ℃
- ☐ pH
- ☐ Suspended solids g/m³
- ☐ BOD_5 g/m³
- ☐ Faecal coliforms cfu/100 mL
- ☐ Heavy metals
- ☐ Toxic substances
- ☐ Nitrates
- ☐ Ammonia and dissolved reactive phosphorus
- ☐ Dissolved Oxygen g/m³

Date(s) sample taken: Name of sampler:

Location(s) sample taken:

Date(s) of analysis: Analysis conducted by:

Please indicate the sampling locations (i.e. upstream, downstream, point of discharge) on the locality map (question 20)

12. Describe the method of discharge. Describe what measures will be put in place to prevent erosion or scour at the point of discharge.

Refer to the CEMP, Volume 4 and Appendix C (Draft Erosion and Sediment Control Plan) Volume 4.

13. Describe the discharge outlet structure (eg, 300mm pipe, multi-port diffuser, gravel trench etc.)

The discharge is as a result of the bulk earthworks and the construction of structures (bridges and culverts) associated with the Project.

For Questions 13 to 17 refer to Technical Report 5, Volume 3 - Construction Methodology Report, and the Draft Erosion and Sediment Control Plan, Appendix C, Volume 4.

14. Is the discharge continuous ☐ or intermittent ☐ ?

15. What will be the maximum discharging period?

hours per day

days per week

weeks per year

16. Describe the expected volume and frequency of the discharge?

Maximum flow rate litres per second

Maximum daily discharge cubic metres per day

Average Dry Weather Flow

Peak Wet Weather Flow

Max. Volume per annum

17. Does the discharge also involve:

Outlet structure?	Yes ☐	No ☐
Diversion?	Yes ☐	No ☐
Discharge to air (odour)?	Yes ☐	No ☐
Discharge to land?	Yes ☐	No ☐

If you answered yes to any of 17 above, a separate consent application may be required. Give details of these other discharges below unless separate consent applications forms have been completed (in order to assess if further consents are required):

18. Is there any odour associated with the discharge?

No

19. Give details of other discharge(s) occuring to the waterbody (eg, wet weather overflows). Describe the location, activity and source of these discharge(s) and any other details you are able to provide:

Refer to Part G, Chapters 17 and 18 of the AEE Report. For further detail refer to Technical Reports 9 and 10, Volume 4 - Hydrology and Stormwater assessments of effects.

For Question 20 below refer to the Plan Set, Volume 5, and Technical Reports 9 and 10, Volume 3 - Assessments of Hydology and Stormwater Effects; and also the Plan Set, Volume 5.

20. Locality map and system design

Show the location of your proposed discharge. The sketch or plan should include, but not be limited to discharge point(s), sampling locations, location of neighbouring properties, roads, waterbodies (including streams, wetlands and drains), and other significant landmarks. Alternatively you may wish to attach a plan/aerial photograph showing the above information.

Note: Remember to indicate where north is and relevant location information eg, distance and direction to nearest town/city. Name the waterbody(ies) shown on the map.

Part B: Assessment of effects on the environment (AEE)

If your proposed discharge is likely to have a significant impact on the environment you will need to complete a more detailed environmental assessment in accordance with the Fourth Schedule of the Resource Management Act 1991.

1. Within a reasonable distance downstream or in the vicinity of the discharge are there any:

(1)	Obvious indications of the presence of biota (eg, birds/nests, fish, eels, insect life, aquatic plants)?	Yes ☒	No ☐
(2)	Areas where food is gathered (eg, watercress, fish, kaimoana, blackberries)?	Yes ☒	No ☐
(3)	Water abstractions?	Yes ☒	No ☐
(4)	Wetlands (eg, swamp areas)?	Yes ☒	No ☐
(5)	Recreational activities carried out (eg, swimming, fishing, canoeing)?	Yes ☒	No ☐
(6)	Areas of particular aesthetic or scientific value (eg, archaeological sites)?	Yes ☒	No ☐
(7)	Areas or aspects of significance to iwi that you are aware of?	Yes ☒	No ☐

2. If you have answered yes to any of the above, please provide further information, including the distance of these activities from your proposed discharge point(s) and a description of what effects the discharge may have on them.

Refer to Part E, Chapter 9 of the AEE Report, Volume to and Technical Report 3, Volume 3 for the considerations of alternatives.

Refer to Part G, of the AEE Report, Volume 2, Chapters on the potential effects of diversions and proposed mitigation: Hydrology (Chapter 17), Stormwater (Chapter 18), Aquatic Ecology (Chapter 20), Archaeology (Chapter 24), Built Heritage (Chapter 25), Tangata Whenua and Cultural Heritage (Chapter 26), and Social (Chapter 27).

Refer to Technical Report 5 (Construction Methodology Report), Volume 3, and Appendix C (Draft Erosion and Sediment Control Plan) and Appedix E (Draft Ecological Management Plan) of the CEMP, Volume 4 for the construction methodology associated with the discharges.

3. What steps do you propose to take to mitigate these effects?

Refer to Part G and Part H, of the AEE Report, Volume 2 which outline the management plan and condition approaches for managing the environmental effects of the Project.

Refer to the CEMP and the suite of management plans found in Volume 4, in particular the Draft Erosion and Sediment Control Plan (Appendix C) and the Draft Ecological Management Plan (Appendix E).

[Continue on a separate page if necessary]

4. What is the management purpose of the receiving waters as described in the Regional Freshwater Plan or Regional Coastal Plan?

Appendix 3 of the RFP outlines that the Otaki River Catchment has nationally threatened idigenous fish. The upper reaches of the Otaki River are to be managed in their natural state under the RFP.

The assessment of the project in relation to the RFP can be found in Part I, Chapter 37 of the AEE Report - Statutory Assessment.

5. **What do you consider are the likely effects of the discharge upon the receiving waters, particularly in relation to the management purpose in question 4 above?**

Refer to Technical Report 12 "Aquatic Ecology Assessment", Volume 3.

Also refer to the management plans found in Volume 4, in particular, the Ecological Management Plan (Appendix E, Volume 4).

6. **If there any other discharges within the same catchment, what is the combined effect of these discharges (including the proposed discharge) on the receiving environment?**

Refer to Technical Report 12, Volume 3 - Aquatic Ecology Assessment; Technical Reports 9 and 10, Volume 3 - Hydrology and Stormwater assessments of effects; and the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

7. **What is the length and width of the proposed zone of non-compliance (if any) to allow for reasonable mixing of the discharge in the receiving waters? How were the dimensions of this zone determined and what degree of dilution (eg, 100:1) is provided by the end of the zone?**
Note: In some waterbodies it may not be reasonable to have a non-compliance zone.

Refer to the Draft Erosion and Sediment Control Plan, Appendix C of the CEMP, Volume 4 and the Site Specific Environmental Management Plans, (Appendix I, Volume 4).

8. **Describe any noticeable change in the colour/clarity of the receiving waters that may result from the discharge:**

Refer to Technical Report 12, Volume 3 - Aquatic Ecology Assessment; and the CEMP, Volume 4 - in particular; the Draft Erosion and SedimentControl Plan (Appendix C, Volume 4) and the Draft. Ecological Management Plan (Appendix E, Volume 4).

9. **What environmental effects were considered when choosing the proposed method of disposal and location (eg, water table, dilution rates/mixing potential, proximity to waterbody)?**

Refer toPart G, Chapters 17, 18 and 20 of the AEE Report, Volume 2 and Technical Reports 9, 10 and 12, Volume 3 relating to assessments of effects relating to hydology, stormwater and aquatic ecology. Also refer to the suite of management plans found in Volume 4.

10. **What alternative methods of treatment and disposal/discharge locations were considered?**

Refer to Technical Reports 9 and 10, Volume 3 - hydrology and stormwater assessments of effects; the CEMP, Volume 4; and the suite of management plans found in Volume 4, in particular - the Draft Erosion and Sediment Control Plan, (Appendix C, Volume 4).

11. Were these alternatives discounted?

Refer to Technical Reports 9 and 10, Volume 3 - hydrology and stormwater assessments of effects and the CEMP and the management plans found in Volume 4, in particular - the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

Part C: Monitoring and management of your activity

1. **What monitoring and management do you propose to ensure any potential adverse effects on the environment are avoided, remedied or mitigated?** (eg, discharge monitoring, receiving water monitoring, ecological surveys, toxicity tests). Include details on what is to be monitored, when, how, and why.

   Refer to Part G and Part H, of the AEE Report, Volume 2 which outline the management plan and condition approaches for managing the environmental effects of the Project.

   Also refer to the CEMP along with the suite of management plans found in Volume 4.

2. **What contingency measures are proposed to deal with any system malfunction or failures so as to prevent unauthorised, uncontrolled, or only partially treated discharge to the environment?**

   Refer to Part G and Part H, of the AEE Report, Volume 2 which outline the management plan and condition approaches for managing the environmental effects of the Project.

   Also refer to the CEMP along with the suite of management plans found in Volume 4, in particular, the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

3. **Describe how the equipment controlling the discharge to prevent equipment failure will be maintained and operated** (eg, measures to exclude stormwater from the system, desludging, equipment maintenance).

   Refer to Part H, Chapters 30, 31 and 32 of the AEE Report, Volume 2 and the CEMP along with the suite of management plans found in Volume 4, in particular, the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

4. **What will be done to minimise and remediate any effects in the event of equipment failure?**

   Refer to Part H, Chapters 30, 31 and 32 of the AEE Report, Volume 2 and the CEMP along with the appended management plans located in Volume 4.

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6a Land use consent application – general works in the bed of a watercourse or lake

Please answer all questions fully. Officers from the Greater Wellington's Environmental Regulation Department are available to assist with filling out this form or to clarify information to include with your application.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

This application form should be used for any general works in the bed of a watercourse or lake. Please note if you are constructing a bridge, culvert or pipe please fill in application form 6c, or if you are constructing erosion protection structures please fill in application form 6d.

Part A: General information on nature and scale of your activity

1. Is this application for a renewal of an existing resource consent?

☐ Yes ☒ No If Yes, what is the consent number? WAR/WGN N/A

2. What do you propose to do and why?

Refer to Part D, Chapters 6 and 8 of the AEE Report, Volume 2 for the description of the proposed activity.

Refer to Part A, Chapters 1 and 2 of the AEE Report, Volume 2 for the reasons why the activity is proposed.

Land-use consent is required to place structures (including bridges, culverts, stormwater outlets and erosion protection measures) and to remove structures, and any associated diversion, disturbance, deposition of material and reclamation of sections of beds of watercourses and wetlands.

This consent application relates to any associated removal of vegetation in the bed of watercourses and wetlands and any associated disturbance of the beds, in the vicinity of and through the construction of the Peka Peka to Ōtaki Expressway.

Refer to application references in Table 3-2 of the AEE Report, Volume 2: 7, 8(a)-(e), 9(a)-(e), 15, 16, 17, 19, 24 and 25.

[Continue on a separate page if necessary]

3. Are you:

(1)	Erecting, reconstructing, placing, altering, extending, removing or demolishing any structure?	Yes ☒	No ☐
(2)	Excavating, drilling, tunnelling or disturbing the bed (including gravel extraction)?	Yes ☒	No ☐
(3)	Depositing any substance?	Yes ☒	No ☐
(4)	Reclaiming or draining the bed?	Yes ☒	No ☐

(5) Introducing or planting any plants? Yes ☒ No ☐

(6) Disturbing, removing, damaging or destroying any plants, or the habitats or any plants or animals? Yes ☒ No ☐

(7) Crossing a watercourse? Yes ☒ No ☐

Part A: general (continued)

4. Name the watercourse where the works will occur?

(If the watercourse is an unnamed tributary then what is the name of the stream/river it flows into?)

Refer to Part G, Chapter 17 and 18 of the AEE Report, Volume 2 - Hydrology and Stormwater assessments of effects. For further detail refer to Technical Reports 9 and 10, Volume 3 and the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

5. Describe the current nature of the watercourse at the proposed site for the works?

Nature of channel i.e. meandering or straight:

Water colour/clarity:

Average flow (m^3/sec):

Bed material (e.g. rocky, silty):

Bank material:

Vegetation:

Fish and invertebrate life:

Other:

For Question 5 refer to Part G, Chapters 17 - 21 of the AEE Report, Volume 2.

6. Construction methodology

Please provide a step by step construction methodology for the works, including any temporary diversion of water required to undertake the works.

Refer to Part D, Chapter 8 of the AEE Report, Volume 2; Technical Report 5, Construction Methodology Report, Volume 3; and the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

In regard to Question 7 below refer to the hydrology and stormwater chapters - Part G, Chapters 17 and 18 Volume 2. For further detail see Technical Reports - 9 and 10, Volume 3.

Also refer to the Draft Erosion and Sediment Control Plan, (Appendix C, Volume 4); and the Plan Sets, Volume 5 which hold the various plans associated with the proposed activity.

[Continue on a separate page if necessary]

Part A: general (continued)

7. Locality map

Show the location and a detailed sketch/plan of your proposed activity. Please show the proposed activity in relation to roads, property boundaries, neighbouring properties, watercourses, wetlands and other wildlife habitats, existing surrounding structures, historic or wāhi tapu sites, key landmarks, and any other relevant features of the surrounding environment. Alternatively you may wish to attach a plan/aerial photograph showing the above information.

Note: Remember to show where north is.

Part A: general (continued)

8. Site photographs

Please attach labelled photographs of the site in its present form which include:

- any existing structures at the site
- any eroded areas of bank in the vicinity of the proposed works
- the view of the watercourse downstream of the site
- the view of the watercourse upstream of the site

- the view of the watercourse and its banks where it will be affected by the works

Please describe the location from which the photographs were taken and indicate whether the proposed site is typical of the watercourse e.g. 10m downstream, from the proposed site, vegetation type typical of the watercourse. Please also provide a scale e.g. have a person in the photograph.

Refer to Part G, Chapter 17 and 18 of the AEE Report, Volume 2. For further detal refer to Technical Reports 9 and 10, Volume 3; and the Draft Erosion and Sediment Control Plan, Appendix C, Volume 4).

9. Who will be undertaking the work?

Yet to be determined

10. What are the proposed hours of operation/construction?

Refer to: Part D, Chapter 8 of the AEE Report, Volume 2.

This will be confirmed in the SSEMP, which will be submitted in accordance with the conditions of consent.

11. What is the proposed commencement date of the work?

Proposed to commence in the 2016/2017 financial year (dependent on all required land and approvals being secured). Refer to Part D, Chapter 8 of the AEE Report, Volume 2.

12. What is the duration of the works?

3.5 - 4 years. Refer to Part D, Chapter 8 of the AEE Report, Volume 2.

13. What is the duration of the works to be undertaken within the watercourse?

Works will be undertaken in the various watercourses throughout staged construction of the Peka Peka to North Ōtaki Expressway. Refer to Part D, Chapter 8 of the AEE Report, Volume 2 and Technical Report 5, Volume 3 - Construction Methodology Report.

14. Have any alternatives been considered when planning the proposal? ☒ **Yes** ☐ **No**

Please explain:

Refer to Part E, Chapter 9 of the AEE Report, Volume 2 - Consideration of Alternatives; and Technical Report 3, Volume 3 - Route Options Reivew.

15. As part of your proposal will you be undertaking any of the following activities?

☒ Diversion of water

☒ Bulk earthworks adjacent to any watercourse

Note: If you have ticked any of the above boxes you may be required to fill out an additional form to be submitted as part of your application. Please contact the Environment Helpdesk at Greater Wellington if you are unsure which forms you may require.

Part B: Assessment of effects on the environment (AEE)

If your proposed activity is likely to have a significant impact on the environment you will need to complete a more detailed environmental assessment in accordance with the Fourth Schedule of the Resource Management Act 1991.

Water quality

1. What are the actual and potential effects of your proposed activity in terms of water quality and loss of habitat and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Sediment runoff:

Refer to Part G, Chapters 18, 19, and 21, Volume 2; the CEMP, Volume 4 and management plans, specifically the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4)

Refer to Technical Report 5, Volume 3 - Construction Methodology Report.

Also refer to the Draft Site Specific Environmental Management Plans - (Appendix F, Volume 4).

Refer to Part G and Part H of the AEE Report, Volume 2 which outline the management plan and condition approaches to managing the environmental effects of the Project.

Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Draft Ecological Management Plan (Appendix E, Volume 4).

Building debris:

as above

Machinery fuels:

as above

Concrete:

as above

Other objects or chemicals entering the watercourse:

as above

[Continue on a separate page if necessary]

Note: For guidance on erosion and sediment control measures please refer to the Erosion and Sediment Control for Small sites our web site http://www.gw.govt.nz/council-publications/pdfs/Small%20sites%20guidelines1.pdf or the booklet available form Greater Wellington. To get a booklet sent out to you please call the Environment Helpdesk on 04 830 4255.

Part B: Assessment of effects on the environment (AEE) (continued)

Machinery

2. Describe the extent to which machinery is required to undertake your activity and whether machinery is required to enter the watercourse. How do you propose to minimise the effects of machinery in or near the watercourse? How long will any machinery remain in or near the watercourse?

Note: If the works are significant in terms of the machinery required then a management plan for the use of machinery during the works may be required as part of the application.

In consideration of this question, please provide detailed comment on each of the points listed below:

Machinery on the banks of a watercourse:

Refer to the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4) and the Site Specific Environmental Management Plans (Appendix I, Volume 4).

Refer to Technical Report 5, Volume 3 - the Construction Methodology Report which outlines the extent of works that are required through the project.

Refer to Part H, Chapters 31 - 33 for the proposed management of environmental effects.

Machinery in the bed of a watercourse:

as above

Machinery fuels and/or chemicals:

as above

[Continue on a separate page if necessary]

3. Fish passage and spawning/migration

What are the actual and potential effects of your proposed activity in terms of fish passage and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Placement of structures in the watercourse:

Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2;

for more detail - Technical Reports 9, 10 and 12, Volume 3; and

the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

Refer to Part G and Part H of the AEE Report, Volume 2 which outlines the management plan and condition approaches to managing the environmental effects of the Project.

Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Ecological Management Plan (Appendix E, Volume 4).

Alterations to water flow:

as above

Part B: Assessment of effects on the environment (AEE) (continued)

Physical barriers to fish passage:

as above

Timing of works that may affect fish spawning/migration:

as above

[Continue on a separate page if necessary]

4. Erosion

What are the actual and potential effects of your proposed activity in terms of erosion and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Placement of structures in the bed or banks of the watercourse:

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2; for more detail - Technical Reports 5, 9 and 10 in Volume 3.

Refer to Part H of the AEE Report for the proposed mitigation measures.

Refer to the CEMP, Volume 4; the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4) and the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Ecological Management Plan (Appendix E, Volume 4).

Change in water flow velocities and water flow paths:

as above

Removal of vegetation associated with the works:

As above and also refer to Part G, Chapter 20 of the AEE Report, Volume 2 - which outlines the effects on aquatic ecology including vegetation.

[Continue on a separate page if necessary]

Part B: Assessment of effects on the environment (AEE) (continued)

5. Neighbours and other people

What are the actual and potential effects of your proposed activity in terms of effects on neighbours and/or other people and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Other people who may be affected by the works:

Refer to Part F, Chapter 10 of the AEE Report, Volume 2 for the consultation and engagement that has been undertaken through the development of the project.

Refer to Part G and Part H of the AEE Report, Volume 2 which outline the management plan and condition approaches to managing the environmental effects of the Project.

Upstream ponding or flooding:

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2; or for more detail - Technical Reports 9 and 10, Volume 3.

Cultural, heritage and archaeological values:

Refer to Part G, Chapters 25, 26 and 27 of the AEE Report, Volume 2.

Recreational users of the water course

Refer to Part G, Chapter 28 of the AEE Report, Volume 2; or for more detail - Technical Report 20, Volume 3 - Assessment of Social Effects.

[Continue on a separate page if necessary]

6. Other effects

Are there any other actual or potential effects of your proposed activity and how do you propose to avoid or minimise these effects (for example, visual effects, other physical effects)?

In consideration of this question, please provide detailed comment on each of the points listed below:

Downstream effects:

Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2.

Refer to Part H of the AEE Report, Volume 2 for the proposed management of environmental effects.

Part B: Assessment of effects on the environment (AEE) (continued)

Other effects:

For the full range of effects on the environment refer to Part G of the AEE Report, Volume 2 in its entirety in addition to the associated Technical Reports found in Volume 3.

Refer to Part H of the AEE Report, Volume 2 for the proposed management of environmental effects.

[Continue on a separate page if necessary]

Part C: Monitoring and management of your activity

1. **What monitoring and management do you propose to ensure any potential adverse effects on the environment are avoided, remedied or mitigated?** (This may include, but is not limited to, monitoring of water quality and sediment discharges, monitoring of equipment to be used, briefing of contractors/operators undertaking the works, contingency measures etc). Include details on what is to be monitored, when, how, and why.

   Refer to Part G and Part H, Volume 2 which outline the management plan and condition approaches to managing the environmental effects of the Project.

   Refer to the CEMP, Volume 4; the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4); the Draft Ecological Management and Monitoring Management Plan (Appendix E, Volume 4); and the Draft Landscape Plan (Appendix G, Volume 4).

   Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Ecological Management Plan (Appendix E, Volume 4).

   [Continue on a separate page if necessary]

2. **How will you ensure all the contractors/operators undertaking the works are aware of all the consent requirements?**

   Refer to the CEMP, Volume 4.

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6b Land use consent application to construct or alter a bore[1]

Please answer all questions fully. Officers from Greater Wellington's Environmental Regulation department are available to assist with filling out this form or to clarify information to include with your application.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

Part A: General information on nature and scale of activity

1. Please indicate the type of activity to be carried out:

Construct a new ☒ bore ☐ well ☐ sand trap/spear ☐ Other, specify .....

Alter an existing ☐ bore ☐ well ☐ sand trap/spear ☐ Other, specify .....

Is this a replacement bore? No ☒ Yes ☐ - what is happening to the old bore? Explain below

This relates to land use consent for four bore holes for groundwater extraction required for construction activities, and for the formation of holes for bridge piles where this may intercept groundwater, including for the formation of wetlands and for the undertaking of earthworks where this may intercept groundwater (as required for the construction of the Peka Peka to North Ōtaki Expressway).

Refer to application references in Table 3-2 of the AEE Report, Volume 2: 3(a)-(d) and 22.

2. Proposed method of construction: ☐ Cable tool drilling ☐ Rotary/Percussion ☐ Jetting

☒ Other, specify For answers to 2, 4 and 5 these are yet to be determined. Please refer to Technical Report 5, Volume 3 - the Construction Methodology Report.

3. What is your proposed date to start work? _____/_____/_____

Proposed to commence in the 2016/2017 financial year (dependent on all required land and approvals being secured). Refer to Part D, Chapter 8 of the AEE Report, Volume 2

Name and address of driller/company:

Phone number of driller/company:

4. Please provide the following information about the proposed bore or existing bore to be altered:

Diameter: ..... mm

Depth: ..... m

Screen length: ..... m

5. Will the bore be constructed in a confined aquifer? Yes ☐ No ☐

If Yes A) Is the confined aquifer artesian (i.e. groundwater that will flow upwards out of a well without the need for pumping) Yes ☐ No ☐

B) Will you install a double casing on the bore Yes ☐ No ☐

[1] A bore is defined in the Regional Freshwater Plan for the Wellington Region as "… any hole regardless of the method of formation that has been constructed to provide access to groundwater, or which intercepts groundwater in an aquifer, excluding geotechnical bores other than in the Lower Hutt Groundwater Zone …".

Depth of casing: ..... m Diameter of casing: ..... mm

6. Are you the owner of the land on which the bore is to be constructed? Yes ☒ No ☐

If No, complete the written approval section on Form 1.

7. What is the proposed use of the bore?

☐ Domestic ☐ Stock ☐ Irrigation ☐ Public supply ☐ Water quality monitoring

☐ Industrial ☐ Geotechnical investigation (Lower Hutt aquifer only)

☒ Other, specify .....

8. If you intend to take water from the bore, what is the quantity of water required?

Note: It is important you be as specific as possible

Water take for the Project is proposed at 300cum per day litres per second

..... hours per day

..... days per year

Rule 7 of the Regional Freshwater Plan for the Wellington Region allows for up to 20,000 litres per day to be taken without a water permit subject to four conditions. If you wish to take more than 20,000 litres per day from your bore (other than for an individual's reasonable domestic needs, stock watering or fire fighting) you will need to apply for a water permit to take groundwater.

The granting of this consent to construct or alter a bore does not guarantee the granting of a Water Permit to take water from the bore.

9. What is your proposed method of pumping water from the bore?

☐ Surface pump (suction lift) ☐ Submersible pump set at a depth of ..... m

10. Is this the only abstraction point (eg, bore or surface water take) on this property title?

Yes ☐ No ☐ - Identify other points of abstraction on the map in Question 12 below.

11. Please describe land use within 50 metres of the proposed bore site, eg, dairy shed, grazing, lawn, noting distances to any septic tanks, waste disposal sites, other bores, wetlands and springs/streams/rivers.

For the answers to 9, 10 and 11 refer to Part G, Chapter 14 of the AEE Report, Volume 2; and the Plan Set, Volume 5.

In relation to Question 12 below, the potential positions of bores for water take are outlined in Technical Report 5, Volume 3 - Construction Methodology Report, and Technical Report 4, Volume

3 - Geotechnical Report and also the Geology Maps found in the Plan Set, Volume 5.

12. Locality map

Please show the location of you proposed bore. Also show the location of any buildings, roads, septic tanks, other bores, freshwater springs, streams, rivers, wetlands and waste disposal sites that you know of.

Alternatively you may wish to attach a plan/aerial photograph showing the above information.

Note: Remember to show where north is.

Part B: Assessment of environmental effects (AEE)

Where your activity could have a significant adverse effect on the environment a more detailed environmental assessment is required in accordance with the Fourth Schedule of the Resource Management Act 1991.

1. **Comment on any possible environmental effects that may occur and any other information you consider may assist the Council in dealing with your application.**

   Refer to Part G, Chapter 14 of the AEE Report - Geotechnical Engineering and Resilience,

   Technical Report 4 - Geotechnical Report and Technical Report 5, Volume 3 - Construction Methodology Report.

Part C: Monitoring and management of your activity

1. **What monitoring do you propose to carry out to ensure that the construction/or alteration of your bore does not have any adverse effects on the environment?**

   Note: On completion of the construction of your bore you will be required to provide:
   a bore log completed by your driller or contractor; the results of any pump test; and/or results of any water quality tests.

   Refer to Part G and Part H of the AEE Report, Volume 2 which outline the management plan and condition approaches to managing the environmental effects of the Project.

   Also refer to the CEMP and the suite of management plans found in Volume 4.

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6c Land use consent application – to construct a bridge, culvert or pipe in the bed of a watercourse or lake

Please answer all questions fully. Officers from the Greater Wellington's Environmental Regulation Department are available to assist with filling out this form or to clarify information to include with your application.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

This application form is for the construction of a bridge, culvert or pipe. If you are constructing erosion protection structures please fill in application form 6d. If you are undertaking general works in the bed of a watercourse or lake please fill in form 6a.

Part A: General information on nature and scale of your activity

1. Type of structure proposed

What type of consent are you applying for (please indicate below by ticking the appropriate box)

☒ **River Crossing – Culvert** (any structure which encloses a watercourse and is the width necessary for the crossing. Excludes any river crossing that dams a watercourse)

☒ **River Crossing – Bridge** (any structure over a watercourse which is the width necessary for the crossing. Excludes any river crossing that dams a watercourse)

☒ **Pipe** (any structure which encloses a watercourse and is of a width greater than is necessary for a crossing. Excludes any structure that dams a watercourse)

2. What is the purpose of the proposed structure?

Refer to Part D, Chapters 6 and 8 of the AEE Report, Volume 2 for the Description of the Project;

Refer to Technical Report 5, Volume 3 - Construction Methodology Report.

Refer to Part A, Chapter 1 and 2 of the AEE Report, Volume 2 for the reasons why the project is proposed.

Refer to Technical Reports 9 and 10, Volume 3 and Part G, Chapters 18 and 19, Volume 2 for the assessment of environmental effects.

Refer to application references in Table 3-2 of the AEE Report, Volume 2: 7, 15, 16, 17 and 19.

[Continue on a separate page if necessary]

3. Name the watercourse where the works will occur?

(if the watercourse is an unnamed tributary than what is the name of the stream/river it flows into?

For questions 3 and 4 refer to Part D, Chapter 8 of the AEE Report, Volume 2 for the construction of the Project. Technical Reports 9 and 10, Volume 3 outline the hydrology and stormwater assessments of effects. The description of the environment can be found in Part C, Chapter 5 of the AEE Report, Volume 2.

Also refer to Technical Report 5, Volume 3 - Construction Methodology Report.

Part A: general (continued)

4. Describe the current nature of the watercourse at the proposed site for the works?

Nature of channel i.e. meandering or straight:

Water colour/clarity:

Average flow (m^3/sec):

Bed material (e.g. rocky, silty):

Bank material:

Vegetation:

Fish and invertebrate life:

Other:

As above for Question 3.

5. Construction methodology

Please provide a step by step construction methodology for the works, including any temporary diversion of water required to undertake the works.

Refer to Part D, Chapter 8 of the AEE Report, Volume 2 for the Construction of the Project.

For further detail refer to Technical Report 5, Volume 3 - Construction Methodology Report.

In regards to Question 6 below please refer to the Plan Set, Volume 5.

Hydrology and stormwater drawings can be found in Technical Report 9 and 10, Volume 3 and in their appendices.

[Continue on a separate page if necessary]

Part A: general (continued)

6. Locality map

Show the location and a detailed sketch/plan of your proposed activity. Please show the proposed activity in relation to roads, property boundaries, neighbouring properties, watercourses, wetlands and other wildlife habitats, existing surrounding structures, historic or wāhi tapu sites, key landmarks, and any other relevant features of the surrounding environment. Alternatively you may wish to attach a plan/aerial photograph showing the above information.

Note: Remember to show where north is.

Part A: general (continued)

7. Site photographs

Please attach labelled photographs of the site in its present form which include:

- any existing structures at the site
- any eroded areas of bank in the vicinity of the proposed works
- the view of the watercourse downstream of the site

- the view of the watercourse upstream of the site
- the view of the watercourse and its banks where it will be affected by the works

Please describe the location from which the photographs were taken and indicate whether the proposed site is typical of the watercourse e.g. 10m downstream, from the proposed site, vegetation type typical of the watercourse. Please also provide a scale e.g. have a person in the photograph.

Refer to Part G, Chapter 17 and 18 of the AEE Report, Volume 2; Technical Reports 9 and 10, Volume 3; and the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

8. Who will be undertaking the work?

Yet to be determined.

9. What are the proposed hours of operation/construction?

Refer to: Part D, Chapter 8 of the AEE Report, Volume 2;

the Draft Construction Noise and Vibration Management Plan (Appendix A, Volume 4); and

Technical Report 5, Volume 3 - Construction Methodology Report.

10. What is the proposed commencement date of the work?

Proposed to commence in the 2016/2017 financial year (dependent on all required land and approvals being secured). Refer to Part D, Chapter 8 of the AEE Report, Volume 2.

11. What is the duration of the works?

3.5 - 4 years. Refer to Part D, Chapter 8 of the AEE Report, Volume 2.

12. What is the duration of the works to be undertaken within the watercourse?

Works will be undertaken in the various watercourses throughout staged construction of the Peka Peka to North Ōtaki Expressway. Refer to Technical Report 5, Volume 3 - Construction Methodology Report.

13. Have any alternatives been considered when planning the proposal? ☒ **Yes** ☐ **No**

Please explain:

Refer to Part E, Chapter 9 of the AEE Report, Volume 2 - Consideration of alternatives; and

Technical Report 3, Volume 3 - Route Options Reivew.

14. As part of your proposal will you be undertaking any of the following activities?

☒ Diversion of water

☒ Bulk earthworks adjacent to any watercourse

Note: If you have ticked any of the above boxes you may be required to fill out an additional form to be submitted as part of your application. Please contact the Environment Helpdesk at Greater Wellington if you are unsure which forms you may require.

Part B: Design data

Please fill in the following section as fully as possible. Professional assistance may be required in filling in this section adequately.

1. Design analysis

Please complete (and tick the identified box) at least one of the following methods of analysis and attach the calculations. Results of flow frequency analysis should be used if available.

☐ **Tech Memo 61 –** use modified TM61 formula for catchments less than 25km^2

☐ **Rational method –** give estimated run-off coefficient "C"

☐ **Regional flood estimation** of Hydrology Centre Publication No. 20 Flood Frequency in New Zealand

2. What is the time of concentration? (flow time from the furthest point of the catchment to the site)

For Part B, Questions 1-9 refer to Technical Reports 9 and 10, Volume 3.

3. What is the design rainfall? _____ mm/hour [not required for Publication No. 20.]

4. What is the design discharge? _____ m^3/sec

5. What is the design discharge frequency? (return period of annual exceedance probability) _____

6. Do you have any measured flows? Yes ☐ No ☐

If Yes, please attach showing date, discharge (m^3/sec), estimated frequency, and method of measurement

7. What is the highest known flood level at the site? _____ metres

8. What was the estimated frequency for this flood event? _____ years

9. What was the method for obtaining this flood level? _____

10. Are there any other bridges, culverts, or pipes nearby on the same channel? Yes ☐ No ☐

If Yes, give details:

For Part B, Questions 10-12 refer to Technical Reports 9 and 10, Volume 3.

11. What is the velocity of the design flood for the proposed structure? _____ m/sec

12. Are the flood levels affected by backwater effects? Yes ☐ No ☐

If Yes, give details:

Part C: Construction of a bridge

Please fill in the following section as fully as possible if your application is for constructing a bridge. If you application is for constructing a culvert or pipe, please proceed to Part D. Professional assistance may be required to fill in this section adequately.

1. **Will the abutments of the bridge be outside the banks of the watercourse, in the banks of the watercourse or in the bed of the watercourse?** Please explain:

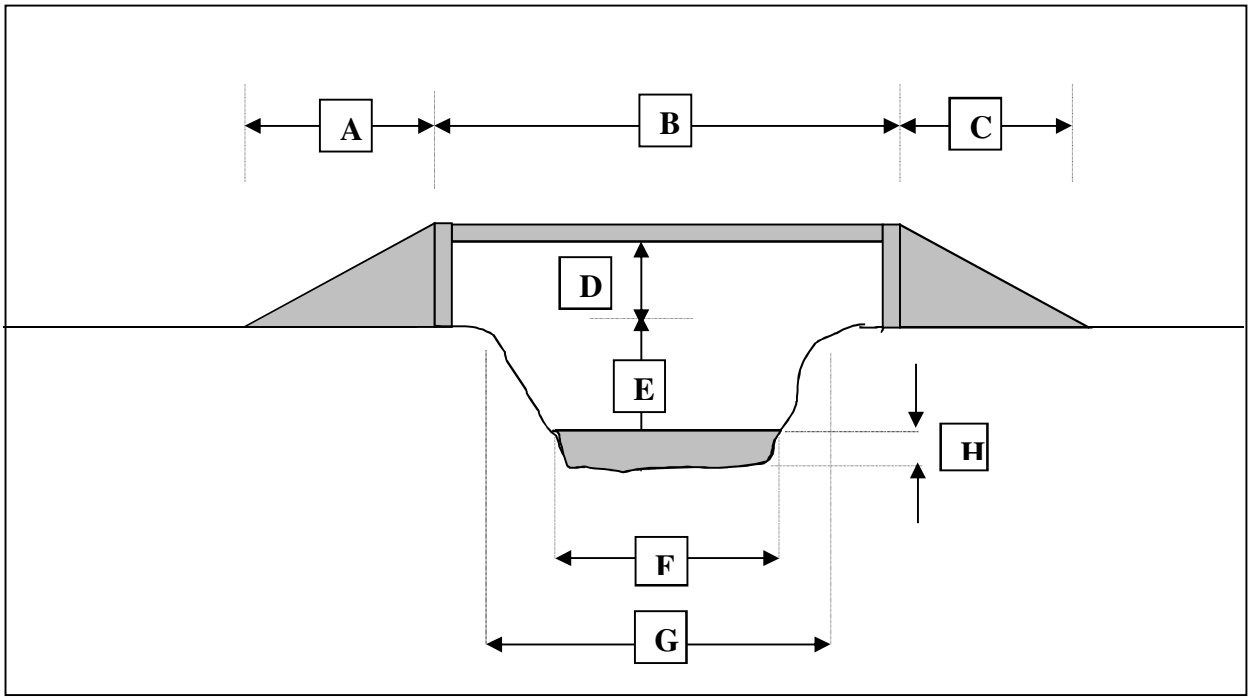
   For the answers to Part C, Questions 1-5 inclusive, refer to the following reports:

   Structure Plans found in the Plan Set, Volume 5;

   Technical Reports 9 and 10, Volume 3 - Hydrology and Stormwater Effects; and

   Technical Report 5, Volume 3 - Construction Methodology Report.

2. **Please fill in the dimensions shown on the diagram in the list below** (If the bridge design is different from that below please include a diagram showing all dimensions).



2A Length of bridge approach (metres) .....

2B Length of bridge (metres) .....

2C Length of bridge approach (metres) .....

2D Height of bridge underside above natural ground level (metres) .....

2E Height of natural ground level above river/stream bed (metres) .....

2F Bed width of river/stream channel (metres) .....

2G Top width of river/stream channel (metres) .....

2H Average depth of water in the river/stream (metres) .....

3. **What is the distance from channel edge to abutment edge?** (metres) .....

4. **What is the width of any secondary overflow path?** (metres) .....

5. What is the depth of any secondary overflow path? (metres) .....

Please proceed to Part E

Part D: Construction of a culvert or pipe

Please fill in the following section as fully as possible if your application is for constructing a culvert or pipe. If you application is for constructing a bridge, please go back to Part C. Professional assistance may be required to fill in this section adequately.

1. What material is the proposed culvert or pipe to be constructed of?

For the answers to Part D, Questions 1-5H inclusive, refer to the following reports:

Structure Plans found in the Plan Set, Volume 5;

Technical Reports 9 and 10, Volume 3 - Hydrology and Stormwater Effects; and

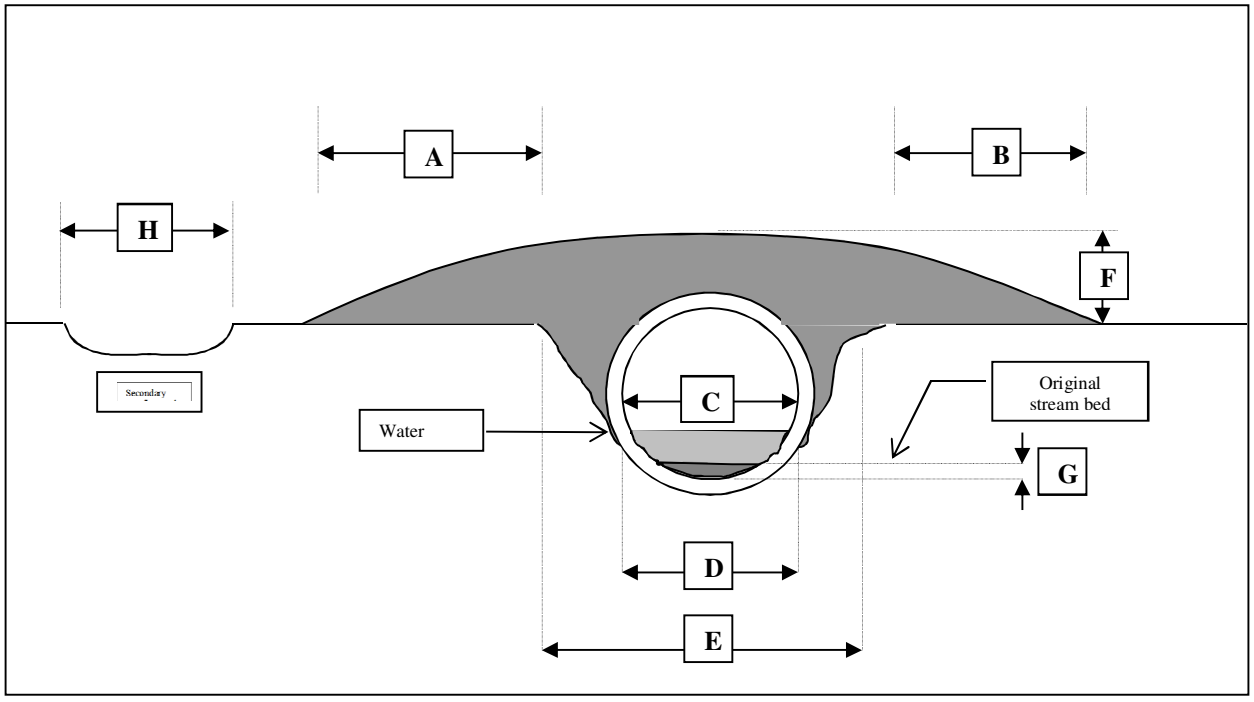
Technical Report 5, Volume 3 - Construction Methodology Report.

2. What is the length of the culvert/pipe you intend to place in the stream? .....

3. At what gradient will the culvert/pipe be laid in the stream? .....

4 What is the gradient of the stream bed? .....

5. Please fill in the dimensions shown on the diagram in the list below (If the bridge design is different from that below please include a diagram showing all dimensions).



5A Length of culvert/pipe approach (metres) .....

5B Length of culvert/pipe approach (metres) .....

5C Dimensions of circular culvert/pipe (metres) .....

5C Dimensions of box culvert/pipe ..... (metres – width) ..... (metres – height)

5D Bed width of river/stream channel (metres) .....

5E Top width of river/stream channel (metres)

5F Depth of fill over culvert/pipe (metres)

5G Depth of culvert/pipe base below original stream level (metres)

5H Secondary overflow path (metres – width) (metres – depth)

Please proceed to Part E

Part E: Assessment of effects on the environment (AEE)

If your proposed activity is likely to have a significant impact on the environment you will need to complete a more detailed environmental assessment in accordance with the Fourth Schedule of the Resource Management Act 1991.

Water quality

1. What are the actual and potential effects of your proposed activity in terms of water quality and loss of habitat and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Sediment runoff:

Refer to Part G, Chapters 18, 19 and 21, Volume 2; the CEMP, Volume 4 and management plans, specifically the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

Refer to Technical Report 5, Volume 3 - Construction Methodology Report

Also refer to the Draft Site Specific Environmental Management Plans - (Appendix F, Volume 4).

Refer to Part G and Part H of the AEE Report, Volume 2 which outline the management plan and condition approaches to managing the environmental effects of the Project.

Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Draft Ecological Management Plan (Appendix E, Volume 4).

Building debris:

as above

Machinery fuels:

as above

Concrete:

as above

Other objects or chemicals entering the watercourse:

as above

[Continue on a separate page if necessary]

Note: For guidance on erosion and sediment control measures please refer to the Erosion and Sediment Control for Small sites our web site http://www.gw.govt.nz/council-publications/pdfs/Small%20sites%20guidelines1.pdf or the booklet available form Greater Wellington. To get a booklet sent out to you please call the Environment Helpdesk on 04 830 4255.

Part E: Assessment of effects on the environment (AEE) (continued)

Machinery

2. Describe the extent to which machinery is required to undertake your activity and whether machinery is required to enter the watercourse. How do you propose to minimise the effects of machinery in or near the watercourse? How long will any machinery remain in or near the watercourse?

Note: If the works are significant in terms of the machinery required then a management plan for the use of machinery during the works may be required as part of the application.

In consideration of this question, please provide detailed comment on each of the points listed below:

Machinery on the banks of a watercourse:

Refer to the Draft Erosion and Sediment Control Plan - Appendix C of the CEMP, Volume 4.

Refer to Technical Report 5, Volume 3 - the Construction Methodology Report which outlines the extent of works that are required through the project.

Refer to Technical Report 12, Volume 3 - Aquatic Ecology for the effect that the proposed activity might have on aquatic life on the various water courses throughout the project area.

Refer to Part H, Chapters 32 - 34, Volume 2 for the proposed management of environmental effects.

Machinery in the bed of a watercourse:

as above

Machinery fuels and/or chemicals:

as above

[Continue on a separate page if necessary]

3. Fish passage and spawning/migration

What are the actual and potential effects of your proposed activity in terms of fish passage and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Placement of structures in the watercourse:

Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2;

for more detail - Technical Reports 9, 10 and 12, Volume 3; and

the Draft Erosion and Sediment Control Plan - Appendix C of the CEMP, Volume 4.

Refer to Part H of the AEE Report, Volume 2 for the proposed mitigation and management of environmental effects.

Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Draft Ecological Management Plan (Appendix E, Volume 4).

Alterations to water flow:

as above

Part E: Assessment of effects on the environment (AEE) (continued)

Physical barriers to fish passage:

as above

Timing of works that may affect fish spawning/migration:

as above

[Continue on a separate page if necessary]

4. Erosion

What are the actual and potential effects of your proposed activity in terms of erosion and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Placement of structures in the bed or banks of the watercourse:

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2; for more detail - Technical Reports 5, 9 and 10 in Volume 3.

Refer to Part H of the AEE Report for the proposed managemnt of environmental effects. Refer to the CEMP, Volume 4 and the appended management plans to be followed during construction, in particular, the Draft Erosion and Sediment Control Plan (Appendix C of the CEMP, Volume 4).

Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Draft Ecological Management Plan (Appendix E, Volume 4).

Change in water flow velocities and water flow paths:

As above

Removal of vegetation associated with the works:

As above and also refer to Part G, Chapter 21 of the AEE Report, Volume 2 - which outlines the effects on aquatic ecology including vegetation

[Continue on a separate page if necessary]

Part E: Assessment of effects on the environment (AEE) (continued)

5. Neighbours and other people

What are the actual and potential effects of your proposed activity in terms of effects on neighbours and/or other people and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Other people who may be affected by the works:

Refer to Part F, Chapter 10 of the AEE Report, Volume 2 for the consultation and engagement that has been undertaken through the development of the Project or for more detail refer to Technical Report 22, Volume 3 - Consultation Summary Reports.

Refer to Part H, Chapters 31, 32 and 33 for the management of the associated environmental effects.

Upstream ponding or flooding:

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2; or for more detail - Technical Reports 9 and 10, Volume 3.

Cultural, heritage and archaeological values:

Refer to Part G, Chapters 24, 25 and 26 of the AEE Report, Volume 2.

Recreational users of the water course

Refer to Part G, Chapter 27 of the AEE Report, Volume 2; or for more detail - Technical Report 20, Volume 3 - Assessment of Social Effects.

[Continue on a separate page if necessary]

6. Other effects

Are there any other actual or potential effects of your proposed activity and how do you propose to avoid or minimise these effects (for example, visual effects, other physical effects)?

In consideration of this question, please provide detailed comment on each of the points listed below:

Downstream effects:

Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2.

Refer to Part H of the AEE Report, Volume 2 for the proposed management of environmental effects.

Part E: Assessment of effects on the environment (AEE) (continued)

Other effects:

For the full range of effects on the environment refer to Part G of the AEE Report, Volume 2 in its entirety in addition to the associated Technical Reports found in Volume 3.

Refer to Part H of the AEE Report, Volume 2 for the proposed management of environmental effects.

[Continue on a separate page if necessary]

Part F: Monitoring and management of your activity

1. **What monitoring and management do you propose to ensure any potential adverse effects on the environment are avoided, remedied or mitigated?** (This may include, but is not limited to, monitoring of water quality and sediment discharges, monitoring of equipment to be used, briefing of contractors/operators undertaking the works, contingency measures etc). Include details on what is to be monitored, when, how, and why.

   Refer to Part H, Chapters 31, 32 and 33 of the AEE Report, Volume 2 for the proposed management of environmental effects.

   The Draft Erosion and Sediment Control Plan found in Appendix C of the CEMP, Volume 4 outlines the mitigation measures proposed to manage sediment discharges.

   Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Draft Ecological Management Plan (Appendix E, Volume 4).

   [Continue on a separate page if necessary]

2. **How will you ensure all the contractors/operators undertaking the works are aware of all the consent requirements?**

   Refer to the CEMP, Volume 4.

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6d Land use consent application – to construct an erosion protection structure in the bed of a watercourse or lake

Please answer all questions fully. Officers from the Greater Wellington's Environmental Regulation Department are available to assist with filling out this form or to clarify information to include with your application.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

This application form is for the construction of erosion protection structures. If you are constructing a bridge, culvert or pipe please fill in application form 6c. If you are undertaking general works in the bed of a watercourse or lake please fill in form 6a.

Part A: General information on nature and scale of your activity

1. Is this application for a renewal of an existing resource consent?

☐ Yes ☒ No If Yes, what is the consent number? WAR/WGN N/A

2. Type of structure proposed

What type of consent are you applying for (please indicate below by ticking the appropriate box)

☒ **Rock groyne** (any erosion mitigation structure that extends perpendicular to the river and is designed to deflect the direction of flow)

☒ **Rock rip-rap** (any erosion mitigation structure built from rocks extending parallel to the river bank)

☒ **Gabion** (any erosion mitigation structure that is a wire mesh basked filled with rocks)

☒ **Other** (any erosion mitigation structure not listed above)

If you have selected 'Other', please provide a description of the type of erosion mitigation structure that is proposed:

Land use consent is sought for the construction of erosion protection structures in the bed of watercourses as part of the construction and operation of the Peka Peka to North Ōtaki Expressway.

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2, or for more detail refer to Technical Reports 9 and 10 relating to hydrology and stormwater effects.

Refer to the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4) and the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

Refer to application references in Table 3-2 of the AEE Report, Volume 2: 7, 15, 16, 17 and 19.

[Continue on a separate page if necessary]

3. What is the purpose of the proposed structure?

Refer to Part D, Chapters 6 and 8 of the AEE Report, Volume 2 for a description of the project.

Refer to Part A, Chapters 1 and 2 of the AEE Report, Volume 2 for the reasons why the project is considered necessary.

[Continue on a separate page if necessary]

Part A: general (continued)

4. Name the watercourse where the works will occur?

(if the watercourse is an unnamed tributary than what is the name of the stream/river it flows into?

Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2; and Technical Reports 9 and 10, Volume 3.

5. Describe the current nature of the watercourse at the proposed site for the works?

Nature of channel i.e. meandering or straight:

Water colour/clarity:

Average flow (m^3/sec):

Bed material (e.g. rocky, silty):

Bank material:

Vegetation:

Fish and invertebrate life:

Other:

For Question 5 above refer to Part G, Chapters 18, 19 and 21 of the AEE Report, Volume 2.

6. Construction methodology

Please provide a step by step construction methodology for the works, including any temporary diversion of water required to undertake the works.

Refer to Part D, Chapter 8 of the AEE Report, Volume 2 or for more detail refer to and Technical Report 5, Volume 3 - Construction Methodology Report.

For methodology in relation to Erosion and Sediment Control also refer to the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4).

Refer to the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

In regard to Question 7 below, please refer to Technical Report 9 - Assessment of Hydrology Effects Volume 4 and the attached set of appendices. Also Refer to the Plan Set, Volume 5 for the associated plans that have been developed for the project.

[Continue on a separate page if necessary]

Part A: general (continued)

7. Locality map

Show the location and a detailed sketch/plan of your proposed activity. Please show the proposed activity in relation to roads, property boundaries, neighbouring properties, watercourses, wetlands and other wildlife habitats, existing surrounding structures, historic or wāhi tapu sites, key landmarks, and any other relevant features of the surrounding environment. Alternatively you may wish to attach a plan/aerial photograph showing the above information.

Note: Remember to show where north is.

Part A: general (continued)

8. Site photographs

Please attach labelled photographs of the site in its present form which include:

- any existing structures at the site
- any eroded areas of bank in the vicinity of the proposed works
- the view of the watercourse downstream of the site

- the view of the watercourse upstream of the site
- the view of the watercourse and its banks where it will be affected by the works

Please describe the location from which the photographs were taken and indicate whether the proposed site is typical of the watercourse e.g. 10m downstream, from the proposed site, vegetation type typical of the watercourse. Please also provide a scale e.g. have a person in the photograph.

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2; and Technical Reports 9 and 10, Volume 3.

9. What material is the proposed erosion protection structure to be constructed of? (i.e. rock size, type, density etc.)?

Refer to the Erosion and Sediment Control Plan (Appendix C, Volume 4) and the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

For Question 10 below refer to the Plan Set, Volume 5 and the drawings found in Technical Reports 9 and 10, Volume 3 - Hydrology and Stormwater assessments of effects, and also the draft Erosion and Sediment Control Plan, Appendix C of the CEMP, Volume 4.

10. Design plans

Please provide detailed design plans on the exact location of any structure, height of structure, depth of structure below normal bed level, length of structure parallel to channel edge, length of structure perpendicular to channel edge, and any other information that will assist with demonstrating the structural integrity of your proposed activity.

(In most cases, scaled engineering drawings prepared by an appropriately qualified engineer will be required to be submitted with your application.)

11. Has consideration been given to scour depth at the proposed site and/or predicted scour depth in a flood event? ☒ **Yes** ☐ **No**

If yes, please explain. Please include the planned bedded depth of the structure.

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2; for more detail Technical Reports 9 and 10, Volume 3; the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4); and the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

Part A: general (continued)

12. If there are any other erosion structures nearby in the same channel, please provide details:

Refer to Part G, Chapter 17 and 18 of the AEE Report, Volume 2; Technical Reports 9 and 10, Volume 3; the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4); and the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

13. Who will be undertaking the work?

Yet to be determined.

14. What are the proposed hours of operation/construction?

Refer to: Part D, Chapter 8 of the AEE Report, Volume 2.

This will be confirmed in the SSEMP, which will be submitted in accordance with the conditions of consent.

15. What is the proposed commencement date of the work?

Proposed to commence in the 2016/2017 financial year (dependent on all required land and approvals being secured). Refer to Part D, Chapter 8 of the AEE Report, Volume 2

16. What is the duration of the works?

3.5 - 4 years. Refer to Part D, Chapter 8 of the AEE Report, Volume 2.

17. What is the duration of the works to be undertaken within the watercourse?

Works will be undertaken in the various watercourses throughout staged construction of the Peka Peka to North Ōtaki Expressway. Refer to Technical Report 5, Volume 3 - Construction Methodology Report.

18. Have any alternatives been considered when planning the proposal? ☒ **Yes** ☐ **No**

Please explain:

Refer to Part E, Chapter 9 of the AEE Report, Volume 2 - Consideration of Alternatives; and for more detail refer to Technical Report 3, Volume 3 - Route Options Reivew.

19. As part of your proposal will you be undertaking any of the following activities?

☒ Diversion of water

☒ Bulk earthworks adjacent to any watercourse

Note: If you have ticked any of the above boxes you may be required to fill out an additional form to be submitted as part of your application. Please contact the Environment Helpdesk at Greater Wellington if you are unsure which forms you may require.

Part B: Assessment of effects on the environment (AEE)

If your proposed activity is likely to have a significant impact on the environment you will need to complete a more detailed environmental assessment in accordance with the Fourth Schedule of the Resource Management Act 1991.

Water quality

1. What are the actual and potential effects of your proposed activity in terms of water quality and loss of habitat and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Sediment runoff:

Refer to Part G, Chapters 18, 19, 20 and 21, Volume 2; and the associated technical reports found in

Volume 3.

Refer to Technical Report 5, Volume 3 - Construction Methodology Report.

Also refer to the CEMP, Volume 4 and the suite of management plans in Volume 4, specifically the Draft Erosion Sediment Control Plan (Appendix C); the Draft Ecological Management Plan (Appendix E); the Draft Landscape Plan (Appendix G); and the Draft Site Specific Environmental Management Plans (Appendix I).

Part G and Part H of the AEE Report, Volume 2 outline the management plan and condition approaches to managing the environmental effects of the Project.

Building debris:

as above

Machinery fuels:

as above

Concrete:

as above

Other objects or chemicals entering the watercourse:

as above

[Continue on a separate page if necessary]

Note: For guidance on erosion and sediment control measures please refer to the Erosion and Sediment Control for Small sites our web site http://www.gw.govt.nz/council-publications/pdfs/Small%20sites%20guidelines1.pdf or the booklet available form Greater Wellington. To get a booklet sent out to you please call the Environment Helpdesk on 04 830 4255.

Part B: Assessment of effects on the environment (AEE) (continued)

Machinery

2. Describe the extent to which machinery is required to undertake your activity and whether machinery is required to enter the watercourse. How do you propose to minimise the effects of machinery in or near the watercourse? How long will any machinery remain in or near the watercourse?

Note: If the works are significant in terms of the machinery required then a management plan for the use of machinery during the works may be required as part of the application.

In consideration of this question, please provide detailed comment on each of the points listed below:

Machinery on the banks of a watercourse:

Refer to the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4) and the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

Refer to Technical Report 5, Volume 3 - Construction Methodology Report.

Part G and Part H of the AEE Report, Volume 2 outline the management plan and condition approaches to managing the environmental effects of the Project.

Machinery in the bed of a watercourse:

as above

Machinery fuels and/or chemicals:

as above

[Continue on a separate page if necessary]

3. Fish passage and spawning/migration

What are the actual and potential effects of your proposed activity in terms of fish passage and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Placement of structures in the watercourse:

Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2; Technical Reports 9, 10 and 12, Volume 3; the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4); and the Draft. Site Specific Environmental Management Plan (Appendix I, Volume 4).

Part G and Part H of the AEE Report, Volume 2 outline the management plan and condition approaches to managing the environmental effects of the Project.

Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Draft Ecological Management Plan (Appendix E, Volume 4).

Alterations to water flow:

as above

Part B: Assessment of effects on the environment (AEE) (continued)

Physical barriers to fish passage:

as above

Timing of works that may affect fish spawning/migration:

as above

[Continue on a separate page if necessary]

4. Erosion

What are the actual and potential effects of your proposed activity in terms of erosion and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Placement of structures in the bed or banks of the watercourse:

Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2; and Technical Reports 9 and 10, Volume 3. Part G and Part H of the AEE Report, Volume 2 outline the management plan and condition approaches to managing the environmental effects of the Project.

Refer to the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4) and the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Draft Ecological Management Plan (Appendix E, Volume 4).

Change in water flow velocities and water flow paths:

as above

Removal of vegetation associated with the works:

as above

[Continue on a separate page if necessary]

Part B: Assessment of effects on the environment (AEE) (continued)

5. Neighbours and other people

What are the actual and potential effects of your proposed activity in terms of effects on neighbours and/or other people and how do you propose to avoid or minimise these effects?

In consideration of this question, please provide detailed comment on each of the points listed below:

Other people who may be affected by the works:

Refer to Part F, Chapter 10 of the AEE Report, Volume 2 for the consultation and engagement that has been undertaken through the development of the Project, or for more detail refer to Technical Report 3, Volume 3 - Route Options Review.

Part G and Part H of the AEE Report, Volume 2 outline the management plan and condition approaches to managing the environmental effects of the Project.

Upstream ponding or flooding:

As above and refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2; Technical Reports 9 and 10, Volume 3.

Cultural, heritage and archaeological values:

Refer to Part G, Chapters 25, 26 and 27 of the AEE Report, Volume 2.

Recreational users of the water source

Refer to Part G, Chapter 28 of the AEE Report, Volume 2; and Technical Report 20, Volume 3 - Assessment of Social Effects.

[Continue on a separate page if necessary]

6. Other effects

Are there any other actual or potential effects of your proposed activity and how do you propose to avoid or minimise these effects (for example, visual effects, other physical effects)?

In consideration of this question, please provide detailed comment on each of the points listed below:

Downstream effects:

Refer to Part G, Chapters 17, 18 and 20 of the AEE Report, Volume 2.

Refer to Part H of the AEE Report, Volume 2 for the proposed mitigation measures and management of environmental effects.

Part B: Assessment of effects on the environment (AEE) (continued)

Other effects:

For the full range of effects on the environment refer to Part G of the AEE Report, Volume 2 in its entirety. For more detail refer to the Technical Reports found in Volume 3.

[Continue on a separate page if necessary]

Part C: Monitoring and management of your activity

1. **What monitoring and management do you propose to ensure any potential adverse effects on the environment are avoided, remedied or mitigated?** (This may include, but is not limited to, monitoring of water quality and sediment discharges, monitoring of equipment to be used, briefing of contractors/operators undertaking the works, contingency measures etc). Include details on what is to be monitored, when, how, and why.

   Part G and Part H of the AEE Report, Volume 2 outline the management plan and condition approaches to managing the environmental effects of the Project.

   Also refer to the CEMP and the suite of management plans found in Volume 4, in particular the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4) for the mitigation measures proposed to manage sediment discharges.

   Also refer to Part G, Chapter 20 of the AEE Report, Volume 2 and the Draft Ecological Management Plan (Appendix E, Volume 4).

   [Continue on a separate page if necessary]

2. **How will you ensure all the contractors/operators undertaking the works are aware of all the consent requirements?**

   Refer to the CEMP and the suite of management plans found in Volume 4 and the Techical Report 5 - Construction Methodology Report, Volume 3.

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

6e Land use consent application for tracking/logging/land clearing

Please answer all questions fully. You should discuss your application with one of Greater Wellington's resource advisors before completing this form.

Show the location of the activity and adjoining properties on your map on Form 1. Include design plans and details with this application as appropriate.

Part A: general

1. Please indicate the type of work to be carried out:

   Tracking ☒ Logging ☐ Land clearing ☒

   What do you propose to do and why?

   Land use consent for bulk earthworks for the formation of the Project and vegetation clearance and disturbing of soil identified as being erosion prone.

   Refer to application references in Table 3-2 of the AEE Report, Volume 2: 1 and 2).

2. What is the land use capability unit of the area at the proposed works?

   Dominant geology present in the project alignment consists of:

   - dune sand with weak/sand layer;
   - dune sand & terrace alluvium; and
   - terrace alluvium.

   For Question 3 below refer to Part D, Chapter 8 of the AEE Report, Volume 2 and the Land Information Plans found in the Plan Set, Volume 5.

3. What is the area involved? as above hectares

4. Is any native vegetation to be removed? Yes ☒ No ☐

   If yes, is the height:

   Up to 2 metres? ☐ 2 metres to 10 metres? ☐ 10 metres plus? ☒

5. Is there a watercourse, dry or flowing, passing through the operation? Yes ☒ No ☐

   If yes, please name: Refer to Part G, Chapters 17 and 18 of the AEE Report, Volume 2.

6. Are there any permanent or temporary river crossings proposed? Yes ☒ No ☐

If yes, how many locations? Refer to Technical Report 5, Volume 3 - Construction Methodology Report

7. What is the proposed commencement date of the work? Proposed to commence in the 2016/2017 financial year (dependent on all required land and approvals being secured). Refer to Part D, Chapter 8 of the AEE Report, Volume 2.

8. What is the proposed completion date? Dependent on commencement - estimated construction period is 3.5 - 4 years.

Part A: general (continued)

9. Describe how the work will be carried out:

Refer to Part D, Chapters 6 and 8 of the AEE Report, Volume 2; and

Technical Report 5, Volume 3 - Construction Methodology Report

10. Who will be undertaking the work? Yet to be determined.

11. What are the proposed hours of operation/construction? As above Question 9, and the Draft Construction Noise and Vibration Management Plan (Appendix A, Volume 4).

Part B: assessment of effects on the environment

Where your activity could have a significant adverse effect on the environment a more detailed environmental assessment is required in accordance with the Fourth Schedule of the Resource Management Act 1991. A resource advisor can discuss this with you.

1. Are there any alternative locations or methods for carrying out the work? Yes ☒ No ☐

   (1) If yes, where or how?

   The consideration of alternatives are outlined in Part E, Chapter 9 of the AEE Report, Volume 2, or for further information refer to Technical Report 3, Volume 3 - Route Options Review.

   (2) Why have you chosen this location or method over the others?

   as above

2. Within a reasonable distance of the activity are there any:

(1)	Obvious signs of biota (eg, fish, eels, insect life, aquatic plants)?	Yes ☒	No ☐
(2)	Areas where food is gathered (eg, fish, kaimoana)?	Yes ☒	No ☐
(3)	Wetlands (eg, swamp areas)?	Yes ☒	No ☐
(4)	Recreational activities carried out (eg, swimming, fishing, canoeing, boating)?	Yes ☒	No ☐
(5)	Areas of particular aesthetic or scientific value (eg, scenic waterfalls, rapids, archaeological sites)?	Yes ☒	No ☐
(6)	Will any land instability result from the removal of vegetation?	Yes ☐	No ☒
(7)	Will any water be channelled as a result of soil disturbance?	Yes ☒	No ☐
(8)	Will hazardous or toxic chemicals be used or stored on site (eg, fuel)?	Yes ☒	No ☐

(9) Will the water quality be affected? Yes ☒ No ☐

(10) Will access to the lake or river be affected? Yes ☒ No ☐

Part B: assessment of effects on the environment (continued)

Describe the plants, animals and habitat of the surrounding area:

Refer to Part G, Chapters 17 - 20 of the AEE Report, Volume 2; and Technical Reports 9 - 12, Volume 3.

If you have answered yes to any of the above, describe what effects your proposed land use consent may have and the steps you propose to take to mitigate these:

The full assessment of environmental effects can be found in Part G, Chapters 11- 29 of the AEE Report, Volume 2.

Refer to Part G and Part H of the AEE Report, Volume 2 which outlines the management plan and condition approaches to managing the environmental effects of the Project.

Also refer to the CEMP and the suite of management plans found in Volume 4, in particular, the Draft Erosion and Sediment Control Plan (Appendix C, Volume 4) and the Draft Site Specific Environmental Management Plan (Appendix I, Volume 4).

[Continue on a separate page if necessary]

3. Do you propose to undertake any type of monitoring? Yes ☒ No ☐

If yes, what?

As above.

For office use only

Consent No.

Renewal: Yes ☐ No ☐