



1 Resource consent application

This form asks for general information about your resource consent application such as contact details, consents required, and consultation details (including written approval of affected parties). You will also need to fill out an activity form(s) which explains your proposed activity (see page 3).

To help guide you to complete your application, please use our information brochures explaining the consent process, and follow the explanatory notes located in the forms for the specific activity you want to carry out.

The Resource Management Act 1991 (RMA) sets out the information you must provide with your application for a resource consent. If you provide inadequate information, we will not be able to process your application and may return it to you. If you are unsure what information should be provided with your application, or which forms to use, please contact us before lodging your application with us.

Please answer all the questions in this form and any additional forms required to be filled out fully. It is generally quicker and cheaper to process your application if you have discussed it with one of Greater Wellington's resource advisors before you fill in this form. Please supply two copies of your entire application – one bound and one unbound.

Wellington office contact details: 04 384 5708 or at 142 Wakefield Street, PO Box 11646, Wellington 6142

Masterton office contact details: 06 378 2484 or at 34 Chapel Street, PO Box 41, Masterton 5840

Fees

Application fees for consent applications are explained in the Fees Schedule. Your application will not be processed until payment has been received. If you wish to pay by bank deposit please contact our Environment Help Desk for account details. Please note that the actual and reasonable cost to process your application may be more than the application fee. Also, if you withdraw your application you will still need to pay the actual and reasonable processing costs up to the time your application was withdrawn. If your application is granted then you will be required to pay an annual fee to cover the reasonable costs of monitoring and administering your resource consent

Checklist

Have you remembered to:		Yes	No
 Include an appropriate assessment of the effect relevant activity application form? 	ts of the activity, as set out in the	\boxtimes	
 Obtain written approval from all affected parties (for non-notified applications)? Pay the application fee? Include activity application forms for each box ticked on page 3? Sign and date the application form on page 2? Include two copies of your application – one bound and one unbound 			
For office use only			
\$ paid Date:	Consent No:		
Paid by: Cheque 🗌 Eftpos 🗌 Bank deposit 🗌	Replacement application: Yes] No [
Receipt #	Previous Consent No:		
Debtor #			

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

Contact details

Applicant(s) name(s) and address [i.e., 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]

NZ Transport Agency	T: Business:	T: Private:
	Fax:	T: Mobile:
	Email address:	
Signature of applicant(s):	\leq	Date: 2/8/11
Name [block capitals]: Rod James	, State Highway Manager Wellir	igton (

I hereby certify that, to the best of my knowledge and belief, the information given in this application is true and correct and I am authorised to sign this application form. I undertake to pay all actual and reasonable application costs incurred by Greater Wellington, which may be more than the deposit fee.

Service name and address (if different from above) [for contact during the application process]

Greg Lee, NZ Transport Agency	T: Business:	04 931 8906	T: Private:	
PO Box 5084	Fax:	04 894 3305	T: Mobile:	64 21 240 4388
Wellington 6145	Email addres	s: greg.lee@nzta.gov	vt.nz	
Billing name and address [for invoices an	d annual charges]			
N/A	T: Business:		T: Private:	
	Fax:		T: Mobile:	
	Email addres	s:		
Property owner's name (if different fro	m above)			
N/A	T: Business:		T: Private:	
	Fax:		T: Mobile:	
	Email address	s:		
If your proposed activity will take place the property owner is required below.	e on land not ow	vned by the applicar	nt, the writte	n approval of
Signature of property owner		Da	te:	
Where the activity is				
	_	-		

Describe the location of activity and/or property address

Refer to the Plan Set (Volume 4).	Map reference: NZMS 260:
	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]

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:				
Dam/Divert (Form 2a) Take and use groundwater (Form 2c)	\square	Take surface water (Form 2b)		
Discharge to Land:				
General discharges (Form 3a) On-site wastewater (Form 3c)	\square	Agricultural discharge (Form 3b)		
Discharge to Water:				
General discharges (Form 4a)	\boxtimes	Earthworks (Form 4b)		
Discharge to Air:				
Air discharge (Form 5a)	\boxtimes			
Land Use:				
General river/stream works (Form 6a) Bridge construction (Form 6c)	\boxtimes	Bore/well construction (Form 6b) Culvert construction (Form 6d)		\square
Land clearing/tracking/logging/ soil disturbance (Form 6e)	\boxtimes			
Coastal:				
General coastal Form 7a)		Boatshed (Form 7b)		
Swing mooring (Form 7c)		Occupation (Form 7d)		
Consents from local authoritie	es			
Territorial authority in which land is situat	ted:			
Wellington City Council Hutt City Council	\square	Kapiti Coast District Council Masterton District Council		\square
Upper Hutt City Council	\square	South Wairarapa District Council		
Porirua City Council	\square	Carterton District Council		
Do you require any other resource conse	ents from yo	ur local council? Yes	No No	
If yes, please list: Six notices for the desi	ignation of l	and required for the construction, oper-	ation and	
	e · · · ·			

maintenance of the Transmission Gully Main Alignment and the Kenepuru Lin	k Road.			
Have these consents been applied for?	Yes	\bowtie	No	

Other documentation

Please list any other 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 1), Technical Reports (Volume 3),
🛛 Plans	Plan Set (Volume 4), Draft management plans (Volume 5).
Other documents	

Consultation and written approval of affected parties

Consultation with all parties 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 parties 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	\boxtimes	No	
If so, who did you consult? <u>Refer to Part F of the AEE report (Volume 1)</u> , and T	Technic	al Repo	rt 22,	
Who else have you consulted and what was their response?		(Volum	ne 3).	
Refer to Part F of the AEE report (Volume 1)				
How have you addressed any concerns they may have had?				
Refer to Part F of the AEE report (Volume 1)				

Written approval of affected parties

I/we have read this consent application and supporting documents, and have no objection to the applicant's proposal. (Please note: Greater Wellington cannot consider effects on affected parties once written approval is provided. Please make sure you incorporate into your application any modifications the affected parties have requested in signing your application).

(1)	Name:	Owner	Occupier 🗌
	Address:		
	T/fax/email:		
	Signature:	Date:	
(2)	Name:	Owner	Occupier 🗌
	Address:		
	T/fax/email:		
	Signature:	Date:	
(3)	Name:	Owner	Occupier 🗌
	Address:		
	T/fax/email:		
	Signature:	Date:	



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 \Box or proposed \boxtimes ?
	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)?
	To enable the construction of the Transmission Gully Main Alignment and the Kenepuru Link Road.
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.) Refer to Section 7.14 of the AEE report (Volume 1) and plans DR01-21 (Volume 4).
	Telef to been in 7.11 of the fills report (volume 1) and plans bitor 21 (volume 1).
4.	What is the rate at which water will be diverted? $\underline{N/A}$ cubic metres or litres per second
5.	Will the diversion be:intermittent \Box orcontinuous \boxtimes ?temporary \Box orpermanent \boxtimes ?
	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 \Box No \boxtimes
	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.		he diversion have an effect on water availability to downstream users or affect access to neighbouring properties?	Yes 🗌	No 🖂
2.	Withi	n 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 Chapter 9 of the AEE report (Volume 1) for the assessment of alternatives.

Refer to Chapter 6 of Technical Report 14 (Volume 3) for options assessment.

Refer to AEE report (Volume 1) chapters on the following potential effects: Hydrology (19); Water

Quality (20); Freshwater Ecology (22); Marine Ecology (23); Tangata Whenua (24).

[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 🖂

Please describe Refer to draft Ecological Management and Monitoring Plan (Volume 5).

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

Refer to Chapter 3 of Technical Report 14 (Volume 3).

No 🗌

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

Are there any alternative sites or methods for the diversion? If yes, why have you not chosen any of these? Yes No [Refer to Chapter 9 of the AEE report (Volume 1) for assessment of alternatives, and Chapter 6 of Technical Report 14 (Volume 3).	Will the diversion cause any flooding or other problems to neighbouring properties?Yes \Box No \triangleright
Please attach your calculations which show that the diversion design is adequate, including design flood flows, return periods, etc Have you discussed your diversion with any potentially affected parties (eg, neighbours, water users, Fish and Game New Zealand, Department of Conservation? Yes No [Are there any alternative sites or methods for the diversion? If yes, why have you not chosen any of these? Yes □ No [Refer to Chapter 9 of the AEE report (Volume 1) for assessment of alternatives, and Chapter 6 of Technical Report 14 (Volume 3). What, if any, monitoring do you propose to carry out to ensure that your diversion does not have an adverse effect? Refer to Part H of the AEE report (Volume 1) and the draft Ecological Management and Monitoring	Please describe <u>Refer to Chapter 19 of the AEE report (Volume 1) and Technical Report 14</u>
flood flows, return periods, etc Have you discussed your diversion with any potentially affected parties (eg, neighbours, water users, Fish and Game New Zealand, Department of Conservation? Yes No [Are there any alternative sites or methods for the diversion? If yes, why have you not chosen any of these? Yes No [Refer to Chapter 9 of the AEE report (Volume 1) for assessment of alternatives, and Chapter 6 of Technical Report 14 (Volume 3). What, if any, monitoring do you propose to carry out to ensure that your diversion does not have an adverse effect? Refer to Part H of the AEE report (Volume 1) and the draft Ecological Management and Monitoring	(Volume 3).
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(eg, neighbours, water users, Fish and Game New Zealand, Department of Conservation? Yes ⊠ No [Are there any alternative sites or methods for the diversion? If yes, why have you not chosen any of these? Yes □ No [Refer to Chapter 9 of the AEE report (Volume 1) for assessment of alternatives, and Chapter 6 of Technical Report 14 (Volume 3).	Have you discussed your diversion with any potentially affected parties
If yes, why have you not chosen any of these? Yes No [2] Refer to Chapter 9 of the AEE report (Volume 1) for assessment of alternatives, and Chapter 6 of Technical Report 14 (Volume 3). What, if any, monitoring do you propose to carry out to ensure that your diversion does not have an adverse effect? Refer to Part H of the AEE report (Volume 1) and the draft Ecological Management and Monitoring	(eg, neighbours, water users, Fish and Game New Zealand,
Technical Report 14 (Volume 3).	
What, if any, monitoring do you propose to carry out to ensure that your diversion does not have an adverse effect? Refer to Part H of the AEE report (Volume 1) and the draft Ecological Management and Monitoring	Refer to Chapter 9 of the AEE report (Volume 1) for assessment of alternatives, and Chapter 6 of
What, if any, monitoring do you propose to carry out to ensure that your diversion does not have an adverse effect? Refer to Part H of the AEE report (Volume 1) and the draft Ecological Management and Monitoring	Technical Report 14 (Volume 3).
adverse effect? <u>Refer to Part H of the AEE report (Volume 1) and the draft Ecological Management and Monitoring</u>	
adverse effect? <u>Refer to Part H of the AEE report (Volume 1) and the draft Ecological Management and Monitoring</u>	
	What, if any, monitoring do you propose to carry out to ensure that your diversion does not have any adverse effect?
Plan (Volume 5).	Refer to Part H of the AEE report (Volume 1) and the draft Ecological Management and Monitoring
	Plan (Volume 5).

For office use only

Consent No.

Renewal: Yes No



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 chemically treated sediment-laden water from erosion and sediment control devices

(for the Transmission Gully Main Alignment and Kenepuru Link Road) to land.

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

Refer to Chapter 9 of Technical Report 15 (Volume 3).

3. Is the waste treated before discharge?

Yes \boxtimes No \square If Yes, describe treatment:

Refer to Chapter 9 of Technical Report 15 (Volume 3).

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

Refer to Chapter 9 of Technical Report 15 (Volume 3).

For question 5 below, refer to plans DR01-21, S8EMP/C1-6, S8EMP/D1-6 and S8EMP/F6-12 of the AEE Report (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 Chapter 3 of Technical Report 14 (Volume 3).

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

Refer to Chapter 5 of Technical Report 3 (Volume 3).

- **3.** What is the land drainage like in the discharge area(s)? Is the soil artificially drained? Refer to Chapter 3 of Technical Report 14 (Volume 3).
- 4. How far is the nearest surface water to the discharge area(s) and in what direction (eg, 50m NE)?

Refer to plans GA01-08 (Volume 4).

- 5. Are there any bores in vicinity (including neighbouring properties) and what are they used for?
 - Yes \boxtimes No \square If Yes, show them on the locality map and describe their use below:

Paekakariki Bore, which provides water supply for the township (refer to Chapter 15 of the AEE

report (Volume 1) for map location).

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

Yes \square No \square If Yes, show them on the locality map and describe them below:

Refer to Chapter 6 of the AEE Report (Volume 1).

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

Refer to Chapters 21 (Territorial Ecology), 22 (Freshwater Ecology) and 23 (Marine Ecology) of the AEE report (Volume 1).

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

Refer to Chapter 9 and Appendix 15.11 of Technical Report 15 (V	Volume 3)
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9. What alternative methods and locations have you considered?

Refer to Chapter 9 of the AEE report (Volume 1).

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 H of the AEE report (Volume 1), the draft Construction Environmental Management

Plan (Volume 5) and the draft Ecological Management and Monitoring Plan (Volume 5).

Also refer to Appendix 15L of Technical Report 15 (Volume 3).

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 Part H of the AEE report (Volume 1) and the draft CEMP (Volume 5).



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 water from an industrial and trade premise (concrete batching plant).

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

Refer to Chapter 8 of the AEE report (Volume 1).

- cement dust

- dust and sediment from aggregate and other raw materials used for manufacturing concrete

3. Is the waste treated before discharge?

Yes \boxtimes No \square If Yes, describe treatment:

Refer to Chapter 8 and Part G (air quality and water quality) of the AEE report (Volume 1) and

proposed draft conditions.

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

Refer to Chapter 8 and Part G (water quality) of the AEE report (Volume 1).

For question 5 below, plan in Chapter 8 of the AEE (Volume 1).

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):

- cement

- aggregate and other raw materials used for manufacturing concrete

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

Not applicable.

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

Facility to be located on a constructed/filled area.

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

Refer to plans GA01-08 (Volume 4) and plan in Chapter 8 of the AEE report (Volume 1).

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:

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:

Refer to Chapter 6 of the AEE Report (Volume 1).

What effects will your discharge have on the sensitive environments identified above? 7. Refer to Chapter 20 (Water Quality) of the AEE report (Volume 1).

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

Refer to Chapter 8 of the AEE report (Volume 1). Location is close to road construction activities

and haul routes, and there are few sensitive receptors within close proximity.

9. What alternative methods and locations have you considered?

Off-site options including existing established facilities which could be used.

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 H of the AEE report (Volume 1), the draft Construction Environmental Management

Plan (Volume 5) and the draft Ecological Management and Monitoring Plan (Volume 5).

Also refer to Appendix 15L of Technical Report 15 (Volume 3).

Also refer to the draft proposed consent conditions.

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 Chapter 8 of the AEE report (Volume 1) and the proposed CBMP (Volume 5) - as specified

in the draft proposed consent conditions.





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 chemically treated sediment laden water from erosion and sediment control devices

(for the Transmission Gully Main Alignment and the Kenepuru Link Road) to water.

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.

Bulk earthworks required for construction of the aforementioned.

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?

Not applicable.

Name the treatment system and describe the specifications such as the capacity of the sys	
Refer to Chapter 9 of Technical Report 15 (Volur	,
If sludge/solid waste is generated as part of the happens to this sludge. (Note: an additional contand).	
Describe the contaminant and expected quali- enters its receiving environment:	ty of the discharge after treatment but befor
Please provide the results from any water quality information, you will need to test your discharge. in the discharge by ticking the box(es). Explain he composite sample) and attach the sampling result application.	Indicate which contaminants have been identified on the samples were taken (eg, spot sample or
Temperature °C	рН
 Suspended solids g/m³ Faecal coliforms cfu/100 mL 	$\square BOD_5 g/m^3$
Toxic substances (eg, PAHs, phenols) g/m ³	Heavy metals g/m ³ Dissolved and total nutrients g/m ³
Ammonia g/m ³ :	\Box Oil/grease g/m ³
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	s temperature, suspended solids, turbidity)
For question 7, refer to Chapters 9 and 10 of Tech	nnical Report 15 (Volume 3).
Inorganic chemical characteristics of the discharge total kjeldahl nitrogen, nitrites, nitrates, inorganic	
Organic chemical characteristics of the discharge	e (such as BOD ₅ , VOC's)
Biological characteristics of the discharge (such a	

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)?

Porirua Stream, Kenepuru Stream, Pauatahanui Stream, Ration Stream, Collins Stream and Horokiri

Stream, Duck Creek, Wainui/Te Paka Stream and Whareroa Stream.

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 Chapter 5 of Technical Report 15 (Volume 3).

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 Chapter 6 of Technical Report 15 (Volume 3).

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 Chapter 11 of Technical Report 15 (Volu	me 3).
Indicate which contaminants have been identified Attach the sampling results (laboratory analytical	
Temperature °C	🗌 pH
Suspended solids g/m ³	BOD ₅ g/m ³
Faecal coliforms cfu/100 mL	Heavy metals
Toxic substances	☐ Nitrates
Ammonia and dissolved reactive phosphorus	Dissolved Oxygen g/m ³
Date(s) sample taken:	Name of sampler:
Location(s) sample taken:	
Date(s) of analysis:	Analysis conducted by:
Diagona indiante the compling locations (i.e. unstra	om downatroom point of discharge) on the

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

12.	2. 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 Chapter 9 of Technical Report	15 (Volume 3) for general	l desc	ription, an	d draft Site Specific
	Environmental Management Plans (Volu	ume 5) for examples of m	ore si	te specific	descriptions.
13.	Describe the discharge outlet structuet.)	re (eg, 300mm pipe, mu	ulti-po	ort diffuse	r, gravel trench
	Refer to draft SSEMPs 1 - 6 (Volume 5)				
	For questions 15 and 16 below, refer to	Chapter 6 of Technical Re	eport	14 (Volum	ne 3).
14.	Is the discharge continuous	or intermittent $ extsf{N}$?			
15.	What will be the maximum discharging	ng period?			
	hours	per day			
	days p	er week			
	weeks	per year			
16.	Describe the expected volume and free	equency of the discharg	ge?		
	Maximum flow rate	litr	es pe	r second	
	Maximum daily discharge	cu	bic m	etres per c	lay
	Max. Volume per annum				
17.	Does the discharge also involve:	Outlet structure?		Yes 🖂	No 🗌
		Diversion?		Yes 🖂	No 🗌
		Discharge to air (odour	r)?	Yes 🗌	No 🖂
		Discharge to land?		Yes 🖂	No 🗌
	If you answered yes to any of 17 above, details of these other discharges below completed (in order to assess if further of	unless separate consent			
18.	Is there any odour associated with th	e discharge?			
	No.				
19.	Give details of other discharge(s) occ	uring to the waterbody	(ea.	wet weath	er overflows).
	Describe the location, activity and source provide:				

Refer to plans GA01-08 (Volume 4).
For question 20, refer to plans DA01-21 (Volume 4) for locations of proposed sediment ponds.

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 G of the AEE report (Volume 1).

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

Refer to Part H of the AEE report (Volume 1)

[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?

Refer to Chapter 6 of Technical Report 15 (Volume 3).

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 15 (Volume 3).

If there any other discharges within the same catchment, what is the combined effect of 6. these discharges (including the proposed discharge) on the receiving environment? Refer to Technical Report 15 (Volume 3). What is the length and width of the proposed zone of non-compliance (if any) to allow for 7. 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 Technical Report 15 (Volume 3). Describe any noticeable change in the colour/clarity of the receiving waters that may result 8. from the discharge: Refer to Technical Report 15 (Volume 3). 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 to Technical Report 15 (Volume 3). 10. What alternative methods of treatment and disposal/discharge locations were considered? Refer to Technical Report 15 (Volume 3). 11. Were these alternatives discounted? Refer to Technical Report 15 (Volume 3).

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 H of the AEE report (Volume 1). Further detail is also provided in Appendix 15L of

Technical Report 15 (Volume 3).

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 the draft CEMP (Volume 5).

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 the draft CEMP (Volume 5).

4. What will be done to minimise and remediate any effects in the event of equipment failure? Refer to the draft CEMP (Volume 5).



5a Discharge permit application to discharge contaminants to air

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

Please provide an accurate plan showing the location of the site, existing works or works to be constructed, property boundaries and neighbouring properties.

Part A: general

1. Process details

- (1) Please supply a detailed flow chart and description of the process that either results in a discharge to the atmosphere or could potentially result in a discharge to air.
- (2) Please state number, height, diameter, location, etc, of any discharge points. (If a chimney is proposed, give height and dimensions of surrounding buildings.)

The site plan showing the location of the proposed plant can be found in Plan SSEMP/C6

(Volume 4). Details around height and exact dimensions will be provided following detailed

design.

(3) Please state the usual duration of the discharge (or discharges) and any variation, where appropriate:

(4) Has any equipment been placed on the discharge points to remove/alter the contaminants from the waste flows?

Yes 🛛 No 🗌

If yes, please give details:

Refer to Section 11.3 of Technical Report 13 (Volume 3).

Part A: general (continued)

2. Discharge details

 Please supply (as far as possible) air discharge details for all contaminants, including NOx, CO2, SO2, CFCs, halons, methane, particulates, etc (refer to Clean Air Act 1972 – First Schedule for Air Pollutants) under the following headings:

Name of contaminant/gas		
Concentration (ppm, mg/Nm ³)		
Mass emission rate (kg/hr)		
Frequency of discharge		
Flow rate (m ³ /hr)		
Efflux velocity (m/s)		
Particle size distribution		

Name of contaminant/gas		
Concentration (ppm, mg/Nm ³)		
Mass emission rate (kg/hr)		
Frequency of discharge		
Flow rate (m ³ /hr)		
Efflux velocity (m/s)		
Particle size distribution		

[Concentrations and volumetric flow rates should be calculated at 0°C, 1 atm pressure and a dry gas basis.]

(2)	Has there been carried out, or do you have access to, any background		
	monitoring, monitoring of the discharges, impacts of the discharges?	Yes 🖂	No 🗌

[If yes, please supply a copy/summary of the information obtained.]

(3) Has any meteorological data relevant to the site been obtained?

Yes	\square	No	

[If yes, please give details and, if possible, a copy/summary of the information obtained.]

(4) Describe the type of land use surrounding the site (eg, north, residential – closest 500m; south, industrial, etc):

For questions 2(1-4) above, refer to Technical Report 13 (Volume 3).

Part B: assessment of effects on the environment

Where your discharge 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 the possible effect the discharge may have on the quality of the receiving air, persons living or working in the area and local biota (plant and animal life):

Refer to Technical Report 13 (Volume 3).

[Continue on a separate page if necessary]

2. Within a reasonable radius or in the vicinity of the discharge are there any:

(1)	Residential developments?	Yes 🗌	No 🖂
(2)	Production land (eg, crops, dairy farming)?	Yes 🖂	No 🗌
(3)	Recreational activities carried out (eg, sports grounds, parks, etc)?	Yes 🗌	No 🖂
(4)	Sources of similar or other discharges to air?	Yes 🗌	No 🖂
(5)	Areas of particular aesthetic or scientific value (eg, scenic views, etc)?	Yes 🗌	No 🗌
(6)	Areas or aspects of significance to iwi that you are aware of?	Yes 🗌	No 🖂
(7)	Commercial activities (eg, office blocks)?	Yes 🗌	No 🖂

If you have answered yes to any of the above, describe what effects your discharge may have and the steps you propose to take to mitigate these:

Refer to Technical Report 13 (Volume 3).

[Continue on a separate page if necessary]

3. What alternative methods of disposal or discharge locations have you considered? Refer to Chapter 9 of the AEE report (Volume 1).

4. Why did you choose the proposed location?

Refer to Chapter 9 of the AEE report (Volume 1).

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

5. How will the equipment controlling the discharge be operated and maintained to prevent equipment failure, and what measures will be implemented to ensure that the effects of any malfunction are remedied?

Refer to the draft Construction Air Quality Management Plan (Volume 5).

[Continue on a separate page if necessary]

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

Refer to Section 11.5 of Technical Report 13 (Volume 3).

[Continue on a separate page if necessary]

Air discharge permit information (required for Industry Groups)

Combustion processes

- Describe combustion processes and details of boiler or heat unit.
- Heat release rate (kilowatts, megawatts)
- Contaminants discharged to the atmosphere.
- Concentration of contaminants in discharge (ppm).
- Height of discharge point (chimney).
- Describe fitting on top of chimney (cone, rain excluded, China man's hat).
- Frequency of discharge.
- Describe air pollution control equipment.
- Velocity of flue gas.
- Monitoring system (for checking and recording discharge).
- Location of discharge points in relation to factory and boundaries.
- Condition of boiler or heat unit, chimney and details of last service.

Quarries

- Describe quarrying process.
- Type of rock being mined.
- Open cast extraction capacity (tonnes/hour).
- Size reduction and screening capacity (tonnes/hour).
- Storage capacity (tonnes/hour).
- Dust control measures.
- Monitoring systems (for checking and recording dust emissions).
- Frequency of discharge (ie, hours of operation).
- Quarry management plan.

Wood processing industries

- Describe the process and contaminants discharged to atmosphere.
- Describe air pollution control equipment (including height of discharge point, exit velocity).
- Monitoring system (for checking and recording discharge).
- Particulate emission test (to determine dust concentration and mass emission levels discharged from the stack, measure over three runs, with all wood sanding equipment working at the same time).
- Frequency of discharge (ie, hours of operation).
- Location of discharge points in relation to the premises and neighbouring premises.

Chemical manufacturing blending processes/electroplating

- Describe the process.
- Describe contaminants/gases discharged to atmosphere and their concentrations.
- Describe air pollution control equipment.
- Monitoring system (for checking and recording discharge).
- Frequency of discharge (ie, hours of operation).
- Location of discharge points in relation to the premises and neighbouring premises.

Air discharge permit information (continued)

Abrasive blasting

- Describe the process and details of blasting chamber, blasting media used.
- Describe air pollution control equipment and height of discharge point, velocity of gases, fitting on top of chimney.
- Describe contaminants discharged to the atmosphere.
- Particulate emission tests (to determine dust concentration and mass emission levels discharged from the stock, measured over three runs).
- Monitoring system (for checking and recording discharge).
- Frequency of discharge (ie, hours of operation).
- Location of discharge points in relation to the premises and neighbouring premises.

Wool scourers and tanneries

- Describe the process.
- Describe contaminants/gases discharged to atmosphere and their concentrations.
- Describe air pollution control equipment and height of discharge point, fitting on top of chimney.
- Monitoring system (for checking and recording discharge).
- Describe raw material capacity of operation.
- Frequency of discharge (ie, hours of operation).
- Location of discharge points in relation to the premises and neighbouring premises.

Spray painting process

- Describe the process and details of spray painting booth.
- Describe air pollution control equipment and height of discharge point, velocity of gases, fitting on top of chimney.
- Describe contaminants discharged to atmosphere.
- Frequency of discharge (ie, hours of operation).
- Monitoring system (for checking and recording discharge).
- Location of discharge points in relation to the premises and neighbouring premises.

Concrete manufacturing plants

- Describe the process.
- Describe contaminants/gases discharged to atmosphere.
- Give details of raw material capacity (tonnes/hour).
- Dust control measures.
- Frequency of discharge (ie, hours of operation).
- Monitoring system (for checking and recording dust).

Air discharge permit information (continued)

Rendering process

- Describe the rendering process (high/low temperature, drying, etc.).
- Describe combustion process (if applicable, ie, type of combustion process, fuel uses, fuel combustion rate, contaminants released to air, exit velocity, concentration).
- Describe air pollution control equipment.
- Height and number of discharge points, and any fitting on top of chimney.
- Frequency of discharge (ie, hours of operation).
- Monitoring system (for checking and recording discharge).
- Location of discharge points in relation to the premises and neighbouring premises.

Asphalt production

- Describe the process.
- Describe contaminants/gases discharged to atmosphere.
- Give details of raw material capacity (tonnes/hour).
- Describe air pollution control equipment (dust controls, etc.).
- Frequency of discharge (ie, hours of operation).
- Monitoring systems.

Coffee roasting processes/vegetable frying processes

- Describe roasting process (roast or frying cycle, maximum raw material capacity (kg/hr)).
- Describe combustion process (if applicable, ie, type of combustion process, fuel uses, fuel combustion rate, contaminants released to the atmosphere, concentration of contaminants in ppm, exit velocity).
- Describe air pollution control equipment.
- Height and number of discharge points, and any fitting on top of chimney.
- Frequency of discharge (ie, hours of operation).
- Monitoring system (for checking and recording discharge).
- Location of discharge points in relation to the premises and neighbouring premises.

Other processes

- Describe the process.
- Describe contaminants/gases discharged to atmosphere.
- Describe air pollution control equipment.
- Frequency of discharge (ie, hours of operation).
- Monitoring systems.

For office use only

Consent No.

Renewal:	Yes 🗌	No 🗌
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6a Land use consent application for works in or on the beds of lakes and rivers

You should use this form for activities in or on the beds of lakes or rivers.

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. What do you propose to do and why?

Refer to Chapters 7 and 8 of the AEE report (Volume 1) for a description of the proposed activity.

Refer to Chapter 2 for the reasons why the activity is proposed.

2. Are you:

(1)	Erecting, reconstructing, placing, altering, extending, removing or demolishing any structure?	Yes 🖂	No 🗌
(2)	Excavating, drilling, tunnelling or disturbing the bed?	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 🗌

3. (1) Describe how establishing the activity (ie, construction) will affect the stream, lake or riverbed:

Refer to Chapter 8 of the AEE report (Volume 1) and plans DR01-21 (Volume 4).

(2) Describe how the completed work will affect the stream, lake or riverbed:
 <u>Refer to Chapter 7 of the AEE report (Volume 1) and plans DR01-21 (Volume 4).</u>

4. What is the proposed commencement date of the work? 2014

5. What is the proposed completion date? 2021

Part A: general (continued)

6.	Desc	Describe how the work will be carried out:			
	Refer to Chapter 8 of the AEE report (Volume 1) and the draft SSEMPs 1-6 (Volume 5).				
7.	Will t	he work be completed in stages?	Yes 🛛	No 🗌	
	lf so,	in what stages?			
	Refe	r to Chapter 8 of the AEE report (Volume 1).			
8.		e work permanent 🛛 or temporary 🗌 ?			
9.	Who will be undertaking the work? A contractor appointed by the NZ Transport Agency.				
10.	Wha	t are the proposed hours of operation/construction? Determined through the	manageme	ent plan.	
Ра	rt B:	assessment of effects on the environment			
env	ironm	our activity could have a significant adverse effect on the environment a more detental assessment is required in accordance with the Fourth Schedule of the Rese A resource advisor can discuss this with you.		ıgement	
1.	What is the name of the watercourse or natural water on which the works will take place?				
	For c	questions 1 to 3, refer to Chapter 6 of Technical Report 14 (Volume 3).			
2.	What is the area of land involved? hectares				
3.	Are t	here any alternative locations or methods for carrying out the work?	Yes 🖂	No 🗌	
	(1)	If yes, where or how?			
		Refer to Chapter 9 of the AEE report (Volume 1) for questions 3(1) and 3(2)).		

(2) Why have you chosen this location or method over the others?

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

4.	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)	Waste discharges (eg, from rural sources, industries, sewage plants)?	Yes 🗌	No 🖂
	(5)	Recreational activities carried out (eg, swimming, fishing, canoeing, boating)?	Yes 🖂	No 🗌
	(6)	Areas of particular aesthetic or scientific value (eg, scenic waterfalls, rapids, archaeological sites)?	Yes 🖂	No 🗌
	(7)	Will the proposed activity disturb plants on land?	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 🖂
	(11)	Will the flow of the lake or river be affected?	Yes 🗌	No 🖂
	(12)	Areas or aspects of significance to iwi that you are aware of?	Yes 🖂	No 🗌
	(13)	Will the proposed activity increase the risk of flooding?	Yes 🗌	No 🖂
5.	Desc	ribe the plants, animals and habitat of the surrounding area:		
	Terrestrial ecology: Chapter 21 of the AEE report (Volume 1).			
	Fresh	water ecology: Chapter 22 of the AEE report (Volume 1).		

Marine ecology: Chapter 23 of the AEE report (Volume 1).

6. 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:

Terrestrial ecology: Chapter 21 of the AEE report (Volume 1).

Freshwater ecology: Chapter 22 of the AEE report (Volume 1).

Marine ecology: Chapter 23 of the AEE report (Volume 1).

Refer to Part H of the AEE report (Volume 1) for proposed mitigation.

[Continue on a separate page if necessary]

7. Do you propose to undertake any type of monitoring?

If yes, what? Refer to the draft Ecological Management and Monitoring Plan (Volume 5).

No 🗌

Yes 🖂

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Consent No.		
Renewal:	Yes	No 🗌



6c Bridge design information

The following information is required to accompany resource consent applications for bridges or culverts on waterways. Please answer all questions if possible. If you do not know the exact answer(s) an approximate answer will do.

You may wish to discuss the data requirements with one of Greater Wellington's resource advisors.

Please attach any other useful information, calculations, plans or descriptions.

1. Give a full description of why the works are to be constructed:

Refer to Part A of the AEE report (Volume 1).

For questions 2 and 3 below, refer to Chapter 6 and Appendices 14.A, 14.B, 14.C and 14.D of Technical Report 14

(Volume 3).

2. Catchment area

(1) What is the area of the catchment above the site of the proposed bridge/culvert?

hectares

(2) What is the topography (landform) of the area (eg, flat, gently rolling, mountainous)?

Refer to Plan GA-04 (Volume 4).

- (3) What is the shape of the catchment (eg, long, circular, oval, fan)?
- (4) What is the length from the site of the proposed bridge/culvert to the remotest point of the catchment?

_____ km

- (5) What is the soil type of the catchment (eg, clay, rock, loam, sand)?
- (6) What are the vegetation types that could produce debris?

3. Design data

- (1) Please complete at least one of the following methods of analysis and attach calculations. Results of flow frequency analysis should be used if available.
 - (a) Tech Memo 61 use modified TM61 formula for catchments less than 25 km².
 - (b) Rational method give estimated run-off coefficient "C"
 - (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 site?	furthest point of the catchment to the
(3)	What is the design rainfall?	_ mm/hour [not required for Publication No. 20.]
(4)	What is the design discharge?	_ M ³ /s
	What calculation method did you use?) 🗌 1(b) 🗌 1(c)
	Other, specify	
(5)	What is the design discharge frequency (return perio	od or annual exceedence probability)?
(6)	Do you have any measured flows?	Yes 🗌 No 🗌
	If yes, please attach showing date, discharge (m ³ /s), measurement.	, estimated frequency and method of
(7)	What is the highest known flood level at the site?	m
(8)	What was the estimated frequency for this flood even	ent? years
(9)	What was the method for obtaining this flood level?	
(10)	Are there any other bridges or culverts nearby on the	e same channel? Yes 🗌 No 🗌
	If yes, give details:	
(11)	What is the velocity of design flood for the proposed	
(12)	Are the flood levels affected by backwater effects?	Yes 🔄 No 🔤
	Please describe:	

[Continue on a separate page if necessary]

4. Channel data

5.

Provide a representative cross section of the river/stream.

(1)	How wide is the channel?		m
(2)	What is the gradient at the site of the proposed bridge/culvert?	1 in	
(3)	Is the flood gradient different to the normal gradient?	Yes 🗌	No 🗌
	If yes, what is the flood gradient?	1 in	
(4)	Are there any features likely to affect the normal and flood gradients of the channel or cause channel restrictions?	Yes 🗌	No 🗌
	If yes, what are these features?		
(5)	Please describe the bed material type and size (eg, silt, gravel, coarse or f	ine):	
	For question 4, refer to Chapter 3 of Technical Report 14 (Volume 3).		
(6)	What is the estimated value of Manning's n upstream of the proposed culv	ert/bridge sit	e?
Culv	verts		
(1)	What type of culvert do you propose to build (eg, pipe, box, arch)?		
(2)	What is the estimated design flood level and waterway area of the propose	ed structure?	
	Flood level: m		
	Waterway area: m ²		
(3)	Are overflows anticipated from the culvert?	Yes 🗌	No 🗌
	If yes, will the overflow return directly to the waterway?	Yes 🗌	No 🗌
	If no, where will the overflow go?		
(4)	Does the design anticipate surcharge?	Yes 🗌	No 🗌
	If yes, please describe the effects and identify affected parties (see Form 1	l):	
	For question 5, refer to Appendices 14.F and 14.G of Technical Report 14 ((Volume 3).	
(5)	What is the length of the proposed culvert? m		
(6)	What is the slope of the culvert? 1 in		
(7)	Do you have any inlet/outlet details?	Yes 🗌	No 🗌
	If yes, please attach.		

(8)	What provision will you make to prevent overflow scour or approaches?		
	[Continue on a separate page if necessary]		
(9)	Will a stilling basin be used?	Yes 🗌	No 🗌
	If yes, please give details:		
(10)	Is there flood protection downstream?	Yes 🗌	No 🗌
	If yes, please describe:		
(11)	Will debris be collected upstream?	Yes 🗌	No 🗌
(12)	What allowances have been made in the waterway for collected debris?		
(13)	Attach a stream cross section showing the culvert and associated filling.		
Brid			
(1)	What is the estimated design flood level and waterway area of the proposed structure?		m
(2)	Will the bridge cause overflows upstream?	Yes 🗌	No 🗌
	If yes, will the overflow return directly to the waterway?	Yes 🗌	No 🗌
	If no, where will the overflow go? (Please identify any affected parties on	Form 1.)	
(3)	What is the angle of river approach to the bridge?		degrees
(4)	Could river meanders or erosion alter the approach angle?	Yes 🗌	No 🗌
(5)	For question 6, refer to TechnicWhat is proposed as abutment protection?(Volume 3).	cal Report 14	4

Attach details of any bank protection proposed for abutment.

(6) What is the depth of the scourable bed material?

m

(8)	Will debris be collected upstream?	Yes 🗌	No 🗌
(9)	What allowances have been made in the waterway for collected debris?		
	For (10) below, refer also to Plans S01-28 (Volume 4).		
	[Continue on a separate page if necessary]		
(10)		foundina lev	el.
	Attach a waterway cross section.		
For offic	e use only		
Consent	No		

Renewal: Yes No



6d Culvert design information

The following information is required to accompany resource consent applications for bridges or culverts on waterways. Please answer all questions if possible. If you do not know the exact answer(s) an approximate answer will do.

You may wish to discuss the data requirements with one of Greater Wellington's resource advisors.

Please attach any other useful information, calculations, plans or descriptions.

1. Give a full description of why the works are to be constructed:

Refer to Chapter 2 of the AEE report (Volume 1).

For questions 2 and 3 below, refer to Technical Report 14 (Volume 3) and plan set GA01-09.

2. Catchment area

(1) What is the area of the catchment above the site of the proposed bridge/culvert?

hectares

- (2) What is the topography (landform) of the area (eg, flat, gently rolling, mountainous)?
- (3) What is the shape of the catchment (eg, long, circular, oval, fan)?
- (4) What is the length from the site of the proposed bridge/culvert to the remotest point of the catchment?

km

(5) What is the soil type of the catchment (eg, clay, rock, loam, sand)?

(6) What are the vegetation types that could produce debris?

3. Design data

- (1) Please complete at least one of the following methods of analysis and attach calculations. Results of flow frequency analysis should be used if available.
 - (a) Tech Memo 61 use modified TM61 formula for catchments less than 25 km².
 - (b) Rational method give estimated run-off coefficient "C"
 - (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 site?	furthest point of the	e catchment to	the	
(3)	What is the design rainfall?	mm/hour [not require	required for Publication No. 20.]		
(4)	What is the design discharge?	M ³ /s			
	What calculation method did you use?	🗌 1(b)	☐ 1(c)		
	Other, specify				
(5)	What is the design discharge frequency (return peric			y)?	
(6)	Do you have any measured flows?		Yes 🗌	No 🗌	
	If yes, please attach showing date, discharge (m ³ /s), measurement.	estimated frequen	cy and method	of	
(7)	What is the highest known flood level at the site?	m			
(8)	What was the estimated frequency for this flood eve	nt?	years		
(9)	What was the method for obtaining this flood level?				
(10)	Are there any other bridges or culverts nearby on the	e same channel?	Yes 🗌	No 🗌	
	If yes, give details:				
(11)	What is the velocity of design flood for the proposed	structure?	m/s		
(12)	Are the flood levels affected by backwater effects?		Yes	No 🗌	
()	Please describe:				

[Continue on a separate page if necessary]

4. Channel data

5.

Provide a representative cross section of the river/stream.

(1)	How wide is the channel?		m
(2)	What is the gradient at the site of the proposed bridge/culvert?	1 in	
(3)	Is the flood gradient different to the normal gradient?	Yes 🗌	No 🗌
	If yes, what is the flood gradient?	1 in	
(4)	Are there any features likely to affect the normal and flood gradients of the channel or cause channel restrictions?	Yes 🗌	No 🗌
	If yes, what are these features?		
(5)	Please describe the bed material type and size (eg, silt, gravel, coarse or fi	ine):	
	For question 4 (1-6), refer to Appendix 14.F of Technical Report 14 (Volum	ne 3).	
(6)	What is the estimated value of Manning's n upstream of the proposed culve	ert/bridge sit	e?
Culv	/erts		
(1)	What type of culvert do you propose to build (eg, pipe, box, arch)?		
(2)	What is the estimated design flood level and waterway area of the propose		
	Flood level: m		
	Waterway area: m ²		
(3)	Are overflows anticipated from the culvert?	Yes 🗌	No 🗌
	If yes, will the overflow return directly to the waterway?	Yes 🗌	No 🗌
	If no, where will the overflow go?		
(4)	Does the design anticipate surcharge?	Yes 🗌	No 🗌
	If yes, please describe the effects and identify affected parties (see Form 1):	
	For question 5 (1-13), refer to Chapter 5 and Appendix 14.G of Technical 1	Report 14	
	(Volume 3).		
(5)	What is the length of the proposed culvert? m		
(6)	What is the slope of the culvert? 1 in		
(7)	Do you have any inlet/outlet details?	Yes 🗌	No 🗌
	If yes, please attach.		

(8)	What provision will you make to prevent overflow scour or approaches?		
(9)	[Continue on a separate page if necessary] Will a stilling basin be used? If yes, please give details:	Yes 🗌	No 🗌
(10)	Is there flood protection downstream?	Yes 🗌	No 🗌
	If yes, please describe:		
(11)	Will debris be collected upstream?	Yes 🗌	No 🗌
(12)	What allowances have been made in the waterway for collected debris?		
(13)	Attach a stream cross section showing the culvert and associated filling.		
Brid			
(1)	What is the estimated design flood level and waterway area of the proposed structure?		m
(2)	Will the bridge cause overflows upstream?	Yes 🗌	No
	If yes, will the overflow return directly to the waterway?	Yes 🗌	No
	If no, where will the overflow go? (Please identify any affected parties on	Form 1.)	
(3)	What is the angle of river approach to the bridge?		degrees
(4)	Could river meanders or erosion alter the approach angle?	Yes 🗌	No
(5)	What is proposed as abutment protection? For question 6 (1-11), refer to	Chapter 6 a	nd
	Appendix 14.E of Technical Report 14 (Volume 3).		
	Attach details of any bank protection proposed for abutment.		
(6)	What is the depth of the scourable bed material?		m
(7)	What is the maximum depth of scour for design flood?		m

4

(8)	Will debris be collected upstream?	Yes 🗌	No 🗌
(9)	What allowances have been made in the waterway for collected debris?		
	For (10) & (11) below, refer to Plans S01-28 (Volume 4).		
	[Continue on a separate page if necessary]		
(10)	Attach a plan showing pier and abutment positions, span lengths, pier/pile	founding lev	el.
(11)	Attach a waterway cross section.		
For offic	e use only		
Consent	No		
Renewal	Yes 🗌 No 🗌		



6e Land use consent application for soil disturbance

You should use this form if you want to do something which involves soil disturbance. Soil disturbance means the disturbance of land surfaces by blading, blasting, contouring, cultivating, ripping, root-taking, moving, removing soil or earth, by excavation, or by cutting.

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

Please enclose a site plan on Form 1 of your application. This should include the area of proposed soil disturbance, any area of significant slope instability, stockpiles, cut and fill areas, property boundaries, neighbouring dwellings and watercourses (including names if known).

Part A: general

- 1. Please indicate the type of work to be carried out:
 - Soil disturbance of 500-2,000 m³

 \boxtimes Soil disturbance of more than 2,000 m³

2. What is the reason for the soil disturbance?

Construction of the Transmission Gully Main Alignment and the Kenepuru Link Road.

3. What is the area involved? Plans GM01-21 hectares

4. What is the topography of the area (eg, gently rolling, steep, hilly, flat, etc)?

Refer to Plan GA-04 (Volume 4).

- 5. What is the estimated amount of soil to be disturbed? _____ m³ At what rate? _____ m³/yr
- 6. Please describe the material which is to be disturbed (include soil type, underlying rock, slope, vegetation cover):

Refer to Illustration 3.8 of Technical Report 3 (Volume 3).

Part A: general (continued)

 Is there a watercourse, dry or flowing, in the vicinity of the activity (include those within 50 m for flat land, and within 500 m for sloping land)?
 Yes ⊠ No □

If yes, please name and give approximate distance from the activity. Include details of steps you propose to take to ensure that no vegetation, soil, slash or other debris can enter the watercourse:

Refer to Chapter 9 of Technical Report 15 (Volume 3), and plans GA01-08 (Volume 4).

What is the proposed commencement date of the work? For questions 8 and 9, refer to Chapter 8 of 8.

 What is the proposed completion date?
 the AEE report (Volume 1).

 9. 10. Please describe how the work will be carried out: Refer to Chapter 8 of the AEE report (Volume 1). 11. Will the work be completed in stages (include the length of time it will take to complete each stage)? Yes 🖂 No 🗌 If yes, in what stages? Refer to Chapter 8 of the AEE report (Volume 1). permanent \boxtimes or temporary \square ? 12. Is the work: 13. Who will be undertaking the work? A contractor appointed by the NZ Transport Agency. 14. What are the proposed hours of operation/construction? 15. Describe any cut or fill batters, or both (include height, depth of excavation, slope and extent): Refer to cross sections in plans GM35-84 (Volume 4). 16. Will you be stockpiling any material? Yes 🖂 No 🗌 If yes, please describe the dimension, location and duration of stockpiles: Indicative locations and dimensions of stockpiles of material are identified in plans AC01-21 (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?					
		Refer to Chapter 9 of the AEE report (Volume 1).					
	(2)	Why have you chosen this location or method over the others?					
		Refer to Chapter 9 of the AEE report (Volume 1).					
2.	With	in 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)	Waterbodies where quality may be affected?	Yes 🖂	No 🗌			
	(5)	Areas or aspects of significance to iwi that you are aware of?	Yes 🖂	No 🗌			
	(6)	Stormwater inlets?	Yes 🖂	No 🗌			
	(7)	Areas of slope instability (eg, slump, earth flow)?	Yes 🖂	No 🗌			
	Describe the plants, animals and habitat of the surrounding area:						
	Refe	r to Technical Reports 6-10 (Ecology) and 18 (Culturally significant areas) (Ve	olume 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 proposed to take to mitigate these:

Refer to Parts G and H of the AEE report (Volume 1).

[Continue on a separate page if necessary]

Pa	Part B: assessment of effects on the environment (continued)					
3.	Are you proposing sediment retention and/or sediment run-off control methods? Yes \boxtimes	No 🗌				
	If yes, what?					
	Refer to Chapter 8 of the AEE report (Volume 1), Technical Report 15 (Volume 3) and plans					
	DR01-21 (Volume 4).					
4.	Are you proposing any land rehabilitation? Yes 🖂	No 🗌				
	If yes, what?					
	Refer to plans LA01-21 (Volume 4).					
5.	Do you proposed to undertake any type of monitoring? Yes	No 🗌				
	If yes, what?					
	Refer to Part H of the AEE report (Volume 1), Technical Report 15 (Volume 3) and the draft					
	Ecological Mitigation and Monitoring Plan (Volume 5).					
Fo	r office use only					
Co	nsent No.					
Re	enewal: Yes No					