Appendix 1- CRC Technical Advice- Groundwater: s53(2)(a) Fast Track Approvals Act 2024

Date	23 October 2025		
То	Joanne Mitten, Principal Consents Planner, Environment Canterbury		
From	Carl Hanson, Senior Scientist – Water Quality Science, Water and Land Science, Environment Canterbury		
Project advice provided for	Pound Road Industrial Development		
Documents referred to	Assessment of Effects on the Environment (AEE), in Fast-Track Approval - Resource Consent Applications & Wildlife Act Permit Pound Round Industrial Subdivision (prepared for NTP Development Holdings Limited by Novo Group, July 2025)		
	 Appendix 5, Geotechnical Engineering Investigation, Pound Road Industrial Development, 2-94 Barters Road, 111 & 173 Pound Road, 4, 22 - 48 Hasketts Road, 570 & 578 Waterloo Road, Islington, Canterbury. Prepared for NTP Development Holdings Ltd by KGA Geotechnical, 30 June 2025. 		
	Appendix 6, pages 175-336, Soil Contamination Investigations, Pound Road Industrial Development, Christchurch. Prepared by Momentum Environmental, Ltd, May 2025.		
	Appendix 12, Infrastructure Report, Pound Road Industrial Subdivision, Pound Road/Barters Road • Islington, NTP Development Holdings Limited, Proposed Industrial Subdivision. Prepared by Davie Lovell Smith, June 2025		
	Appendix 14, Updated ECan Conditions - updated condition set provided by the applicant on 5 October 2025		
Qualifications	I am currently employed as a Senior Scientist with the CRC, focusing on groundwater science. I have been employed by the CRC since June 2001. I was first hired as a Groundwater Quality Scientist, and in 2010, my title changed to Team Leader Groundwater Quality. In 2014, I became the Manager of the Groundwater Science section, and I held that position until April 2024, when I moved into my current role.		
	I hold the qualifications of a Bachelor of Science degree in geology from Syracuse University in New York, USA, and a Master of Science degree in geology from Dartmouth College in New Hampshire, USA. I also studied geology for a year at the University of Otago, funded by a Fulbright scholarship.		
	I have 35 years of experience in groundwater science. My focus at the CRC has been on regional groundwater resource management. In previous jobs, I		

	was involved in investigations into the environmental fate and transport of agricultural chemicals in soils and groundwater, and investigations of soil and groundwater contamination on numerous industrial sites in the USA and New Zealand.
Code of Conduct	I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. This technical report has been prepared in accordance with that Code. In particular, unless I state otherwise, the opinions I express are within my area of expertise, and I have not omitted to consider material facts that might alter or detract from the opinions that I express.

Executive summary/overview

1. The proposal does not pose a threat to the quality of groundwater beneath the site.

Agreement with the Applicant

- 2. I agree with the description of the ground and groundwater characteristics of the site set out in paragraphs 38 to 41 of the AEE and in Appendix 5 of the Application.
- 3. The design of the stormwater infiltration basins described in the fifth paragraph of Section 9 (Stormwater) of Infrastructure Report (Appendix 12) will be enough to ensure contaminants are removed from stormwater sufficiently to avoid adverse effects on groundwater quality beneath the site. To clarify, the description is as follows: "The basin will be constructed so as that the base of the infiltration treatment media is exposed to natural gravels, this will ensure that once treated stormwater can soak away efficiently. The infiltration media is expected to consist of a makeup similar to the following: 50% screened soil, 25% 2A sand, 25% bark mulch. The media will be required to provide an infiltration rate of between 75mm/hr and 300mm/hr in accordance with the CCC Global Stormwater Discharge Consent and the CCC WWDG."
- 4. If all contaminated land is remediated prior to earthworks occurring, per revised ECan consent condition 5 provided by the applicant on 5 October 2025, this will prevent stormwater discharged to land from leaching contaminants into the underlying groundwater.

Benefits of the project

5. No particular benefits to groundwater.

Outstanding areas of contention and significance of these

6. None with respect to groundwater.

Appendix 2- CRC Technical Advice- Terrestrial Ecology: s53(2)(a) Fast Track Approvals Act 2024

Date	10 October 2025	
То	Joanne Mitten, Principal Consents Planner, Environment Canterbury	
From	Jean Jack, Team Leader, Land Ecology Science, Environment Canterbury	
Project advice provided for	Pound Road Industrial Development	
Documents referred to	The proposed conditions contained in Appendix 14 (CM: C25C/168331-18).	
	2. Appendix 7, Terrestrial Assessment C25C/168331-11	
	Appendix 8 Lizard Habitat Assessment and Lizard Management Plan C25C/168331-12	
	Updated Lizard management plan (Wildlands Consultants Ltd Contract Report No. 7316b); and	
	 Assessment of Potential Wetland Areas at 111 Pound Road (Wildland Consultants Report No. 7316c-i 3/10/2025). 	
Qualifications	I hold a PhD in Ecology and have expertise within several areas of ecology; most of my experience, including routine field survey, relates to Canterbury habitats including braided rivers, wetlands and drylands. From 2017 I have worked in the Science Group as a Senior Scientist and for the past year as Team Leader of Land Ecology. These roles involve providing advice to Regional Council staff and external customers regarding ecological monitoring, ecological impact assessment and effects management.	
Code of Conduct	I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. This technical report has been prepared in accordance with that Code. In particular, unless I state otherwise, the opinions I express are within my area of expertise, and I have not omitted to consider material facts that might alter or detract from the opinions that I express.	

Executive summary/overview

- 1. I agree with the Terrestrial Assessment provided with the Application (Appendix 7).
- 2. I agree that no natural inland wetlands occurs onsite (111 Pound Road).

3. While the best outcome would be for the development to reconsider whether it could avoid some lizard habitat on site, I consider that the proposed conditions set out in Attachment 1 are adequate to address actual/potential effects.

(a) Agreement with the Applicant

- 4. Proposed conditions are adequate to address actual/potential effects.
- 5. However, I would still recommend that the avoidance of some areas of lizard habitat is preferable.

Benefits of the project

6. Proposed offsets through the proposed Lizard Management Plan (updated October 2025; Wildlands Consultants Ltd Contract Report No. 7316b) will provide lizards / lizard habitat off site.

Outstanding areas of contention and significance of these

7. None

Appendix 3: CRC Technical Advice- Surface Water Ecology s53(2)(a) Fast Track Approvals Act 2024

Date	8 October 2025	
То	Joanne Mitten, Principal Consents Planner, Environment Canterbury	
From	Chris Meijer, Scientist – Water Ecology Science, Water and Land Science, Environment Canterbury	
Project advice provided for	Pound Road Industrial Development	
Documents referred to	Assessment of Effects on the Environment (AEE). Pound Road Industrial Development application (PDF, 106KB)	
	Appendix 9 - Aquatic Ecology Assessment. Appendix 9 - Aquatic Ecology Assessment (PDF, 4 MB)	
	3. Appendix 12 - Infrastructure Report. Appendix 12 - Infrastructure Report (PDF, 34 MB)	
	4. Appendix 14 - Conditions. Appendix 14 - Conditions (PDF, 557 KB)	
Qualifications	My qualifications are a Doctor of Philosophy degree in Ecology, a Master of Science in Ecology, and a Bachelor of Science Degree in Biological Sciences, specialising in freshwater ecology. I have carried out research and professional work in the fields of freshwater quality and ecology, freshwater restoration and teaching on university courses for 10 years.	
	I have been employed by the Canterbury Regional Council (Environment Canterbury) as a Scientist - Water Ecology since May 2024.	
Code of Conduct	I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. This technical report has been prepared in accordance with that Code. In particular, unless I state otherwise, the opinions I express are within my area of expertise, and I have not omitted to consider material facts that might alter or detract from the opinions that I express.	

Executive summary/overview

- 1. My advice relates to proposed activities related to the water race that is adjacent to the Pound Road development site and flows north to south along Barters Road.¹ The water race is a part of the Paparua Water Race Network (PWRN) and provides a connection between the water race system upstream and the Huritini/Halswell River catchment downstream.
- 2. I agree with the conclusions made in the Ecological Assessment² conducted on behalf of the Applicant, including the clear recommendations for culvert installation along Barters Road and closing the internal portion of the water race network.

- 3. I also consider the proposed methodology for culvert installation³ appropriate for mitigating the potential adverse effects on water quality and ecological values within the water race.
- 4. I consider that the proposed conditions of consent⁴ adequately address the other potential risks to water quality and ecological values in the adjacent water race from the proposed activities.

Agreement with the Applicant

5. I have not provided further discussion because I agree with the conclusions of the Applicant.

Benefits of the project

6. While there are no direct water quality or ecology benefits arising from this project, I acknowledge that the establishment of a 5-m wide planted buffer along Barters Road may have some indirect benefits on ecological values within the adjacent water race.

Outstanding areas of contention and significance of these

Outstanding areas of contention

7. I have no outstanding areas of contention.

Solutions and/or Conditions sought

8. No amendments or changes are sought for this application in relation to the water quality or ecological values in the water race along Barters Road.

Appendix 4: CRC Technical Advice- Contaminated Land: s53(2)(a) Fast Track Approvals Act 2024

Date	10 October 2025	
То	Joanne Mitten, Principal Consents Planner, Environment Canterbury	
From	Edward Cromwell, Team Leader – Contaminated Land and Waste Science, Hazards Science, Environment Canterbury	
Project advice provided for	Pound Road Industrial Development	
Documents referred to	Soil Contamination Investigations (PSI, DSI, SMP and RAP)- Pound Road Industrial Development Christchurch, (Momentum Environmental Limited, May 2025)	
	Erosion and Sediment Control Management Plan Pound Road Industrial Subdivision (Davie Lovell Smith, June 2025)	
	 Fast-Track Approval - Resource Consent Applications & Wildlife Act Permit Pound Round Industrial Subdivision (Novo Group, July 2025) 	
Qualifications	Geosciences MSci, 10 years contaminated land professional experience and CEnvP general practitioner	
Code of Conduct	I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. This technical report has been prepared in accordance with that Code. In particular, unless I state otherwise, the opinions I express are within my area of expertise, and I have not omitted to consider material facts that might alter or detract from the opinions that I express.	

Executive summary/overview

- 1. Prior to bulk earthworks commencing, remedial works in accordance with the Soil Contamination Investigations (Momentum Environmental Limited, 2025) must be undertaken in order to ensure the soils at the site do not pose a risk to environmental and human health receptors during bulk earthworks (ANZG GV-High within 500 m of any surface water body (i.e. water race on western boundary) and Class 4 (Table C-3 adopted values WasteMINZ,2018 Guidelines) outside of that area. This is an amendment that is needed in the conditions and is provided in the conditions set from CRC.
- 2. The majority of the site has been appropriately investigated / characterised however there are currently some information gaps. Additional investigation and potentially remediation and validation of portions of the site are required including 94 Barters Road (a bund of material that has not yet been fully characterised), 40 Hasketts Road (overall site) and 111 Pound Road (overall site). Once these areas are assessed, remediation may be required to ensure the soil contaminant concentrations in these areas meet the relevant ecological criteria (listed in point 1).

- 3. Once remediation is completed, validation sampling should be undertaken and summarised in a site validation report (SVR) completed by a SQEP in contaminated land to be provided to Environment Canterbury, showing that remaining soils meet the relevant ecological and human health criteria. I recommend that the SVR be provided to ECan for acceptance/ approval prior to the bulk earthworks commencing on the site.
- 4. The Application shows that there are both:
 - a. temporary construction-phase soak pits proposed across the site (refer the Erosion and Sediment Control Management Plan, Davie Lovell Smith, 2025); and
 - b. stormwater basins (refer Novo Group AEE, 2025),

in areas currently containing contaminant levels exceeding human health and ecological criteria which are highlighted as requiring remediation.

- 5. I consider it necessary that the consent conditions ensure that the Applicant demonstrates during the implementation of the consent that the necessary remedial work has occurred and the remaining soils validated, prior to the initiation of bulk earthworks and installation of the temporary soak pits and stormwater basins. As such, I recommend that an updated remedial action plan (RAP) be provided for ECan certification/approval prior to remedial works commencing on the site. I also recommend that an SVR is submitted to ECan for approval prior to bulk earthworks occurring at the site.
- 6. The preceding points should be enshrined in consent conditions/requirements for the applicant.

Agreement with the Applicant

7. It is understood that the Applicant is in agreement that the above points need addressing prior to bulk earthworks, as that approach is outlined in the aforementioned report and in subsequent communication with the Applicant's contaminated land specialist. However, the proposed conditions do not require the necessary steps be followed. The changes to the recommended conditions are set out in CRC's condition set.

Benefits of the project

8. Once remediation is completed as described in the remedial action plan and the proposed remedial areas are validated to confirm successful remediation to acceptable concentrations, the soil contaminant levels at the site will be improved to suitable levels for the intended land use and that meet relevant ecological guidelines.

Outstanding areas of contention and significance of these

Discussions with Applicant

9. On site remediation and further investigation still required.

Outstanding areas of contention

10. See paragraph 7 above.

Significance of these matters

11. It is necessary to ensure the soil contains acceptable levels for the planned earthworks and proposed land use. I do not consider this to be an onerous requirement.

Solutions and/or Conditions sought

12. Conditions to require remedial works, additional investigation where required and acceptable contaminant levels.

Appendix 5- CRC Technical Advice- Policy Planning: s53(2)(a) Fast Track Approvals Act 2024

Date	15 October 2025
То	Joanne Mitten, Principal Consents Planner, Environment Canterbury
From	Isolina O'Brien, Planner, Planning, Environment Canterbury
Project advice provided for	Pound Road Industrial Development
Documents referred to	Pound Road fast track RPS assessment.docx
Qualifications	I have a Bachelor of Laws and Bachelor of Arts majoring in Sociology from the University of Canterbury. I have worked in Planning since 2023 and have experience drafting submissions on plan changes and notified consents. My experience also includes preparing evidence and participating in the hearings process.
Code of Conduct	I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. This technical report has been prepared in accordance with that Code. In particular, unless I state otherwise, the opinions I express are within my area of expertise, and I have not omitted to consider material facts that might alter or detract from the opinions that I express.

Executive summary/overview

- I have reviewed the proposal against the Canterbury Regional Policy Statement (CRPS) and relevant higher order directions. I have not reviewed the proposal against the relevant regional plans, which has been considered seperately.
- 2. There are four key areas in which the proposal diverges from the policy direction in the Canterbury Regional Policy Statement (CRPS),¹ as follows:
 - Out of sequence development
 - Loss of primary production and versatile soils
 - Effects on regionally significant infrastructure
- Many of these issues can be addressed through consent conditions, however the loss of the
 availability of versatile soils for primary production cannot be addressed in that way. This
 issue is separate from considerations relating to whether the site should be considered to be
 Highly Productive Land under the National Policy Statement for Highly Productive Land
 (NPS-HPL).

4. Agreement with the Applicant

- 5. Effects on Southern Grass Skink which are classified as At Risk Declining can be managed through the consent conditions.
- 6. Contaminated land has been identified on the site. The proposed consent conditions seek to protect people and the environment from adverse effects of that contaminated land. I acknowledge the technical advice included in a separate technical report and that recommends further changes to the conditions to ensure that the proposed approach is mandated in the delivery of the proposal.
- 7. Consent conditions have been developed to manage dust, and to manage stormwater discharges which could otherwise impact groundwater quality.
- 8. The site is located directly to the south of the Christchurch International Airport which is regionally significant infrastructure. Conditions are proposed that will allow the safe operation of that infrastructure to continue.
- The Integrated Transport Assessment identifies significant effects on the transport network, requiring upgrades to key intersections, although these are outside the Applicant's control. To align development with infrastructure provision, a consent condition is proposed to delay issuing titles until 31 December 2027.²

Benefits of the project

- 10. There are clear economic benefits associated with the project. Savvy estimates that the project will contribute \$483 million in direct and indirect value added and \$568 million in total value added to the Greater Christchurch economy over 16.5 years. It is also estimated that the development would sustain total employment for around 4,290 FTE-years in Greater Christchurch, which is equivalent to around 260 full-time workers for 16.5 years.³
- 11. The development will help to enable people and communities to provide for their economic well-being which is consistent with Objective 5.2.1 of the CRPS.

Outstanding areas of contention and significance of these

Out of sequence development

12. The proposal is for 'out of sequence' development. This is because the site is not within the existing urban area, a greenfield priority area for business development or a future development area as identified on Map A of the CRPS. The policy framework within the CRPS precludes development outside areas identified on Map A.

- 13. Policy 6.3.11 of the CRPS requires 'adequate monitoring' to demonstrate that the requirements of the NPS-UD are being achieved. The policy provides for changes to Map A of the CRPS in specific circumstances, which would need to be made through a Schedule 1 process. One circumstance is where Housing and Business Development Capacity Assessments undertaken to meet the requirements of the NPS-UD indicate insufficient feasible development capacity to meet demand in the short to medium term. The Greater Christchurch Partnership undertook a capacity assessment in 2023 which concluded that there was sufficient industrial land in greater Christchurch for the next 30 years and beyond, with a surplus in Christchurch City.
- 14. It is worth noting that the site borders an operative industrial zone. This may indicate that, although the development is 'out of sequence' in accordance with Map A and Policy 6.3.1 of the CRPS, it may not necessarily be in an inappropriate location.
- 15. The Industrial land capacity assessment provided by the Applicant concludes that there is insufficient capacity in Greater Christchurch, conflicting with the Greater Christchurch Partnership assessment.
- 16. Highly Productive Land
- 17. The majority of the site contains LUC2 soils and therefore consideration is required as to whether the site is Highly Productive Land under the NPS-HPL.
- 18. The Draft Canterbury Regional Policy Statement was identified by the Applicant as having relevance to the proposal, however as it has not been notified the Draft CRPS has no legal effect and is not relevant to the Application.

Loss of primary production and versatile soils

19. Regardless of whether the site is Highly Productive Land under the NPS-HPL, an effect of the development is the loss of primary production and versatile soils. The site contains versatile soils that are currently used for rural production activities. Productive use of those soils will be foreclosed by the proposed use of the site. In this respect, the proposal is inconsistent with the CRPS.

Solutions and/or Conditions sought

20. See the table below.

Table 2: Solutions

Issue	Solution	Condition wording	Consideration against FTAA
Out of Sequence Development	It is for the Panel to determine whether there is sufficient industrial land already available within Christchurch City.	N/A	The FTAA provides a pathway for the panel to approve projects which do not align with planning instruments, including National Policy Statements and Regional Policy Statements.
Highly Productive Land	It is open to the Panel to determine whether the site contains Highly Productive Land. CRC defer to CCC in this respect.	N/A	Statements.
Loss of primary production and versatile soils	This is not an issue that can be resolved.	N/A	

FAST TRACK - Pound Road Industrial Development -

National Policy Statement for Freshwater Management (NPS-FM)

The assessment of the NPS-FM in the Application is incomplete and requires further analysis. The following should be addressed:

- 1. Full Policy Analysis:
 - o The assessment lists the relevant policies but does not assess/evaluate them in detail.
 - o This should include a clearer explanation of how the proposal aligns with each relevant policy
- 2. There is a potential wetland on the site, a full assessment against the NPS-FM cannot be undertaken until the extent of the wetland is confirmed.

National Policy Statement for Indigenous Biodiversity (NPS-IB)

The assessment on the NPS-IB is incomplete and requires further analysis. The following should be addressed:

- 1. Full Policy Analysis:
 - o The assessment lists the relevant policies but does not assess/evaluate them in detail.
 - o This should include a clearer explanation of how the proposal aligns with each relevant policy, particularly:
 - Policy 1: How the decision-making principles (Clause 1.3) and the Treaty principles have been considered, especially in relation to tangata whenua involvement.
 - Policy 3: How the precautionary approach has been applied, especially in areas where indigenous biodiversity values may not be fully mapped or known.
 - Policy 5 and Policy 6: Whether there are any Significant Natural Areas (SNAs) affected and how potential effects are managed or avoided.
 - Policy 7 and 8: Any actions proposed to restore or maintain indigenous biodiversity, particularly outside of SNAs.
- 2. Assessment of Effects on Indigenous Biodiversity:

- o It should be clearly demonstrated within the policy assessment whether the site overlaps with any mapped or potentially qualifying SNA areas, or areas of indigenous vegetation or habitat.
- o The planning assessment should elaborate on the findings in Appendix 7 of the application and contain an analysis of the criteria in appendix 1 of the NPS-IB. Based on this analysis, a conclusion should be made as to whether any areas on the site qualify as a Significant Natural Area (SNA).

National Policy Statement on Highly Productive Land (NPS-HPL)

The assessment on the NPS-HPL is incomplete and requires further analysis. I understand that CRC is not commenting on whether the site falls within the interim definition of 'Highly Productive Land' in the NPS-HPL, which will be addressed by CCC.

The following should be addressed:

The assessment lists the relevant policies but does not assess/evaluate them in detail. The assessment should include a clearer explanation of how the proposal aligns with each relevant policy.

Appendix 20 of the application concludes that constraints make long-term primary production economically unviable on the subject site and therefore the exemption in Clause 3.10 applies. There is not enough evidence provided to support this conclusion. No analysis is provided of what productive use might be supported by the current water allocation or by low-input farming systems, despite the land containing LUC Class 2 soils which are classified as versatile and capable of supporting multiple production systems. It is also noted that similar water and nutrient constraints apply across most farmland in Canterbury.

The assessment examines cumulative loss of HPL in relation to Clauses 3.8 and 3.9 of the NPS-HPL but fails to provide baseline data on historical loss rates of HPL in Christchurch District or the region, or analysis of how this application, when considered alongside other recent decisions and proposals, contributes to ongoing cumulative loss.

Appendices 20 and 23 rely on the draft Canterbury Regional Policy Statement maps. As these draft maps have not been notified, they have no legal effect and are therefore irrelevant to the proposal. For this reason, the NPS-HPL assessment in both appendices may be incomplete.

National Policy Statement on Urban Development (NPS-UD)

The assessment on the NPS-UD is incomplete and requires further analysis. The following should be addressed:

- 1. Full Policy Analysis:
 - o The assessment lists the relevant policies but does not assess/evaluate them in detail.
 - o The planning assessment focuses on Policy 8 of the NPS-UD. While Policy 8 is still relevant, it does not strictly apply as it relates specifically to plan changes. As this proposal is not a plan change, a more robust analysis of the other applicable provisions of the NPS-UD is required. Without this, the assessment may be incomplete.

Pound Road industrial development Fast Track application - Consistency with Canterbury Regional Policy Statement (CRPS)

Main issues identified:

• Out of sequence development – the site is not part of a Future Development Area or greenfield priority area in Map A in the RPS. There is disagreement between capacity modelling completed by the Greater Christchurch Partnership (in 2023) and the Applicant as to whether there is sufficient industrial land available in Christchurch City to meet demand without the development of this site.

- Loss of primary production and versatile soils as defined by the RPS this can't be managed through consent conditions. This is independent of the determination that will need to be made by the Panel as to whether the site consists of highly productive land for the purposes of the NPS-HPL.
- At Risk species lizards being managed through the Lizard Management Plan.
- Potential wetland more information is needed in regards to the potential wetland determine compliance with RPS objectives and policies
- Effects on Christchurch International Airport these effects are identified and managed through the proposed consent conditions.
- Effects on other infrastructure there will be significant effects on SH1 the necessary upgrades to mitigate these effects are outside of the applicants control. Conditions will need to manage the timing and provision of upgrades.
- Contaminated land consent conditions manage the effects subject to the recommended changes.

Assessment against relevant CRPS provisions:

Relevant definitions in the CRPS:

Definition	Relevance to the Pound Road Industrial
	Development
Business or business activities	The proposal is an industrial subdivision
means land or activities that include commercial and industrial and any	
ancillary activity.	
Community-scale irrigation, stockwater and rural drainage infrastructure	Paparua water race which runs along the boundary of
Any community scale intake, canal, pipe, drain, pumps and overflow network,	the site as well partially onto the site before turning
including associated structures, necessary to convey and store water for	'obsolete' meets the definition of community-scale
enhancing primary productivity and that serves multiple properties and is	irrigation, stockwater and rural drainage
centrally administered.	infrastructure.
Critical Infrastructure	1. Christchurch International Airport is a regionally
Infrastructure necessary to provide services which, if interrupted, would have	significant airport and therefore falls under the
a serious effect on the communities within the Region or a wider population,	definition of Critical Infrastructure.
and which would require immediate reinstatement. This includes any	

structures that support, protect or form part of critical infrastructure. Critical	8. Strategic road networks are no longer defined in the
infrastructure includes:	Regional Land Transport Strategy, however SH1 which
1. regionally significant airports	would be impacted by the subdivision is clearly
2. regionally significant ports	critical infrastructure.
3. gas storage and distribution facilities	
4. electricity substations, networks, and distribution installations, including	
the	
electricity distribution network	
5. supply and treatment of water for public supply	
6. storm water and sewage disposal systems	
7. telecommunications installations and networks	
8. strategic road and rail networks (as defined in the Regional Land Transport	
Strategy)	
9. petroleum storage and supply facilities	
10. public healthcare institutions including hospitals and medical centres	
11. fire stations, police stations, ambulance stations, emergency	
coordination facilities.	
Essential Structures	1. The road transport network is an essential
Structures that support or form part of:	structure.
1. a maritime, road or rail transport network or service;	
2. water supply, including irrigation infrastructure;	2 & 8. Three waters infrastructure are essential
3. a telecommunications or radio-communication network;	structures.
4. an energy generation, supply or transmission facility or network;	
5. a flood-protection work or facility;	
6. water containment, flow or diversion infrastructure;	
7. a water level or flow-measurement facility;	
8. a drainage or sewerage system; or	
9. the infrastructure forming parts of other network utilities. This includes any	
structures that support essential infrastructure.	
Greater Christchurch	The site is located in Greater Christchurch in the
greater Christchurch means the districts of the Christchurch City Council,	Christchurch District and borders the Selwyn District.

the Selwyn District Council, and the Waimakariri District Council, and	
includes the coastal marine area adjacent to these districts, as defined in	
·	
the Canterbury Earthquake Recovery Act 2011.	71 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Hazardous activity or industry	The proposal includes a HAIL site.
An activity or industry that appears on the Hazardous Activity and Industry List	
(HAIL) 2004. The HAIL is published as Schedule A in the Contaminated Land	
Management Guidelines - Ministry for the Environment (2004) updated	
September 2007.	
Industrial	The proposal is an industrial subdivision
means the manufacturing, assembly, packaging, wholesaling or	
storage of products or the processing of raw materials and other	
ancillary activities.	
Primary production	Currently part of the site is used for primary
The production (but not processing) of primary products including	production.
agricultural, horticultural, pastoral, aquacultural, and forestry products and	
includes the use of land and auxiliary buildings for these purposes.	
Regionally Significant Infrastructure	Christchurch International Airport is regionally
Regionally significant infrastructure is:	significant infrastructure, as is three waters
	infrastructure.
8. Sewage collection, treatment and disposal networks	
11. Established community-scale irrigation and stockwater infrastructure	
14. Infrastructure defined as 'strategic infrastructure' in this regional policy	
statement. Note: For the avoidance of doubt, this infrastructure is also	
referred to as 'infrastructure that is regionally significant'.	
Versatile Soils	The site is identified as Land Use Capability II.
Land classified as Land Use Capability I or II in the New Zealand Land	The site is identified as Land Ose Capability II.
Resource Inventory.	
Urban activities	The proposal is an industrial subdivision and industrial
	activities fall under the definition of business activities
means activities of a size, function, intensity or character typical of	activities rait under the definition of business activities

those in urban areas and includes:

- Residential units (except rural residential activities) at a density of more than one household unit per 4 ha of site area;
- Business activities, except those that fall within the definition of rural activities;
- Sports fields and recreation facilities that service the urban population (but excluding activities that require a rural location);
- Any other land use that is to be located within the existing urban area or new Greenfield Priority Area or Future Development Area.

Objective and Policy Assessment:

Objective/ Policy	Assessment	
Chapter 5 – Land Use and Infrastructure		
Objective 5.2.1	1. The site for the proposed development is adjacent to the existing	
Location, Design and Function of Development (Entire	urban area (zoned industrial).	
Region)		
Development is located and designed so that it functions in a	2. The proposed development will enable people and communities	
way that:	to provide for their economic well-being.	
1. achieves consolidated, well designed and sustainable		
growth in and around existing urban areas as the primary	a. To assess whether the natural environment will be enhanced or	
focus for accommodating the region's growth; and	maintained more information is required about the wetland that	
2. enables people and communities, including future	may be located on the site and any restoration or protection	
generations, to provide for their social, economic and	measures that may occur in relation to the possible wetland. It is	
cultural well-being and health and safety; and which:	noted there is indigenous planting proposed in relation to both the	
a. maintains, and where appropriate, enhances the	paparua water race and the lizard management plan in order to	
overall quality of the natural environment of the	maintain and enhance natural values.	
Canterbury region, including its coastal environment,		
outstanding natural features and landscapes, and	c. The site is not identified as a greenfield priority area for business.	
natural values;	It is worth noting that the site borders the industrial zone and this	
	may indicate that, although the development is out of sequence, it	

- b. provides sufficient housing choice to meet the region's housing needs;
- c. encourages sustainable economic development by enabling business activities in appropriate locations;
- d. minimises energy use and/or improves energy efficiency;
- e. enables rural activities that support the rural environment including primary production;
- f. is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure;
- g. avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, and where avoidance is impracticable, remedies or mitigates those effects on those resources and infrastructure;
- h. facilitates the establishment of papakāinga and marae; and
- i. avoids conflicts between incompatible activities.

may not necessarily be in an inappropriate location. If the site is highly productive land this would indicate it may not be an appropriate location for business activities.

- e. The loss of LUC2 land may impact primary production opportunities. Part of the site is currently used for rural activities, and the proposed development would foreclose the ability to continue those activities on the site.
- f. Christchurch International Airport is regionally significant infrastructure. The proposed consent conditions are designed to allow the continued safe, efficient and effective use of that airport. Effects on the water race and council wastewater system can also be managed through consent conditions.
- g. No significant natural resources have been identified at the site. The proposed consent conditions are appropriately designed to avoid adverse effects on Christchurch International Airport which is regionally significant infrastructure.
- i. The expansion of industrial activity into the rural urban fringe zone may be incompatible with the rural and residential uses which exist in that zone.

Objective 5.3.7 Strategic land transport network and arterial roads (Entire Region)

In relation to strategic land transport network and arterial roads, the avoidance of development which:

 adversely affects the safe efficient and effective functioning of this network and these roads, including the ability of this infrastructure to support freight and passenger transport services; and The proposed development is predicted to generate 856 vehicle movements per hour in the AM Peak, 780 vehicles per hour in the PM peak and 9,736 vehicles per day.

It is noted in the AEE that an upgrade of the Pound Rd / Waterloo / SH1 intersection would be required where there is a known issue that is forecasted to worsen as a result of both wider development growth and as a result of the proposal.

 in relation to the strategic land transport network and arterial roads, to avoid development which forecloses the opportunity for the development of this network and these roads to meet future strategic transport requirements.

Effects can be managed through upgrades to the SH1/pound road and pound road/waterloo road intersections but without these upgrades the effects will be significant. In the ITA upgrades to the SH1 and Pound Road intersections are recommended to address existing and future capacity and safety concerns. However it is noted that these upgrades are outside the Applicant's control.

The Applicant has proposed conditions which are designed to give NZTA and Christchurch City Council adequate time to complete the upgrades before the traffic effects become significant.

Chapter 6 - Recovery and Rebuilding of Greater Christchurch

Objective 6.2.1 Recovery framework

Recovery, rebuilding and development are enabled within Greater Christchurch through a land use and infrastructure framework that:

- 1. identifies priority areas for urban development within Greater Christchurch;
- 2. identifies Key Activity Centres which provide a focus for high quality, and, where appropriate, mixed-use development that incorporates the principles of good urban design;
- avoids urban development outside of existing urban areas or greenfield priority areas for development, unless expressly provided for in the CRPS;
- protects outstanding natural features and landscapes including those within the Port Hills from inappropriate subdivision, use and development;

Impact of 'industrial creep' into rural area. Argument rural urban fringe is a buffer. Site is adjacent to industrial general zone. Increased industrial activity may have an impact on rural area.

- 1. The site is not within a priority area for urban development identified on Map A of the RPS.
- 3. The site is outside of existing urban areas and greenfield priority areas identified in Map A of the RPS, and the development is not expressly provided for in the RPS.
- 5. Conditions relating to the potential wetland as well as the lizard management plan have been put forward to protect indigenous biodiversity.
- 6. Proposed stormwater consent conditions are designed to protect the groundwater aquifers below the site. The site is located in a red nutrient allocation zone so protection of groundwater is particularly important.

- 5. protects and enhances indigenous biodiversity and public space;
- 6. maintains or improves the quantity and quality of water in groundwater aquifers and surface waterbodies, and quality of ambient air;
- 7. maintains the character and amenity of rural areas and settlements;
- 8. protects people from unacceptable risk from natural hazards and the effects of sea-level rise;
- 9. integrates strategic and other infrastructure and services with land use development;
- 10. achieves development that does not adversely affect the efficient operation, use, development, appropriate upgrade, and future planning of strategic infrastructure and freight hubs;
- 11. optimises use of existing infrastructure; and
- 12. provides for development opportunities on Māori Reserves in Greater Christchurch.

- 7. The proposed development may impact the character and amenity of the rural area, noting that there are activities located close to the site, for example the Ruapuna Raceway, which already impact amenity in the area.
- 9. Although the site has not been identified as a priority area for development, it is able to be appropriately serviced with reticulated drinking water and wastewater, as well as electricity and telecommunications. Stormwater consent conditions allow for the appropriate disposal of both construction-phase and operational-phase stormwater.
- 10. The proposed consent conditions are designed to manage adverse effects on the efficient operation, use, development, appropriate upgrade, and future planning of Christchurch International Airport.

The development is inconsistent with Objective 6.2.1(3).

Objective 6.2.2 Urban form and settlement pattern

- (...) Avoids unplanned expansion of urban areas by:
- 4. providing for the development of greenfield priority areas, and of land within Future Development Areas where the circumstances set out in Policy 6.3.12 are met, on the periphery of Christchurch's urban area, and surrounding towns at a rate and in locations that meet anticipated demand and enables the efficient provision and use of network infrastructure;
- 4. the site is not identified as a greenfield priority area or a future development area, however it is on the periphery of Christchurch's urban area.

Assessments of anticipated demand for industrial land in Christchurch City disagree, therefore it is not possible to determine consistency with this objective.

Objective 6.2.4 Integration of transport infrastructure and land use

Prioritise the planning of transport infrastructure so that it maximises integration with the priority areas and

The proposed development is predicted to generate 856 vehicle movements per hour in the AM Peak, 780 vehicles per hour in the PM peak and 9,736 vehicles per day.

new settlement patterns and facilitates the movement of people and goods and provision of services in Greater Christchurch, while:

- 1. managing network congestion;
- 2. reducing dependency on private motor vehicles;
- 3. reducing emission of contaminants to air and energy use:
- 4. promoting the use of active and public transport modes;
- 5. optimising use of existing capacity within the network; and
- 6. enhancing transport safety.

It is noted in the AEE that an upgrade of the Pound Rd / Waterloo / SH1 intersection would be required where there is a known issue that is forecasted to worsen as a result of both wider development growth and as a result of the proposal.

Effects can be managed through upgrades to the SH1/pound road and pound road/waterloo road intersections but without these upgrades the effects will be significant. In the ITA upgrades to the SH1 and Pound Road intersections are recommended to address existing and future capacity and safety concerns, however it is noted that these upgrades are outside the Applicant's control.

The applicant has proposed conditions which are designed to give NZTA and the council adequate time to complete the upgrades before the traffic effects become significant.

Objective 6.2.6 Business land development

Identify and provide for Greater Christchurch's land requirements for the recovery and growth of business activities in a manner that supports the settlement pattern brought about by Objective 6.2.2, recognising that:

- 1. The greenfield priority areas for business in Christchurch City provide primarily for the accommodation of new industrial activities;
- 2. Except where identified for brownfield redevelopment, areas used for existing industrial activities are to be used primarily for that purpose, rather than as a location for new commercial activities;

Industrial = business activity per definitions Not within 6.2.2 settlement pattern

- 1. The proposed development is not located in a greenfield priority area.
- 4. It is difficult to determine whether the site is an appropriate location for business activities. The site has not been identified as a greenfield priority area for business. A determination of the appropriateness of the location will in part rely on an assessment of the anticipated demand for industrial land in the Christchurch City area.

Assessments of the anticipated demand disagree, which means it is difficult to determine whether the site is an appropriate location for business activities.

3. New commercial activities are primarily directed to the Central City, Key Activity Centres, and neighbourhood centres; 4. A range of other business activities are provided for in appropriate locations; and 5. Business development adopts appropriate urban design qualities in order to retain business, attract investment and provide for healthy working environments. Policy 6.3.1 Development within the Greater Industrial = Business activities = urban activities (unless rural business). Therefore, an industrial subdivision is a new urban activity. Christchurch area 1. the proposed development is not located within a greenfield priority area In relation to recovery and rebuilding for Greater Christchurch: or a future development area identified in Map A. 1. give effect to the urban form identified in Map A, 3. the proposed development is not located within an existing urban area or which identifies the location and extent of urban greenfield priority area identified in Map A. development that will support recovery, Site is rural urban fringe zone it is unclear if this zone is an existing urban rebuilding and planning for future growth and area. infrastructure delivery; The proposal is inconsistent with Policy 6.3.1. 2. give effect to the urban form identified in Map A (page 6-27) by identifying the location and extent of the indicated Key Activity Centres;

Policy 6.3.4 Transport effectiveness

3. enable development of existing urban areas and

intensification in appropriate locations, where it supports the recovery of Greater Christchurch;
4. ensure new urban activities only occur within existing urban areas or identified greenfield priority areas as shown on Map A, unless they are otherwise expressly provided for in the CRPS

greenfield priority areas, including

1. It is noted in the AEE that an upgrade of the Pound Rd / Waterloo / SH1 intersection would be required where there is a known issue that is

Ensure that an efficient and effective transport network that supports business and residential recovery is restored, protected and enhanced so that it maintains and improves movement of people and goods around Greater Christchurch by:

- avoiding development that will overload strategic freight routes;
- 2. providing patterns of development that optimise use of existing network capacity and ensuring that, where possible, new building projects support increased uptake of active and public transport, and provide opportunities for modal choice;
- 3. providing opportunities for travel demand management;
- 4. requiring integrated transport assessment for substantial developments; and
- 5. improving road user safety.

forecasted to worsen as a result of both wider development growth and as a result of the proposal.

Effects can be managed through upgrades to the SH1/pound road and pound road/waterloo road intersections but without these upgrades the effects will be significant. In the ITA upgrades to the SH1 and Pound Road intersections are recommended to address existing and future capacity and safety concerns, however it is noted that these upgrades are outside the Applicant's control.

The applicant has proposed conditions which are designed to give NZTA and the council adequate time to complete the upgrades before the traffic effects become significant.

- 2. the development can be accessed by public transport with a stop for the number 5 bus located in the adjacent waterloo business park. The site is not currently connected to a dedicated cycleway but once the planned extension of the southern cycleway is completed there will be a cycleway which connects to the adjected waterloo business park.
- 4. Applicant has provided an ITA.

Policy 6.3.5 Integration of land use and infrastructure

Recovery of Greater Christchurch is to be assisted by the integration of land use development with infrastructure by:

1. Identifying priority areas for development and Future Development Areas to enable reliable

Overall, the proposal is consistent with Policy 6.3.4

- 1. The site is not within a Future Development Area or greenfield priority area identified in Map A of the RPS.
- 2. Although the proposed development would take place outside the areas identified on Map A, it is able to connect to existing water and electricity infrastructure. Noting that at present the properties which are part of the proposal are not reticulated. The Integrated Transport Assessment (ITA) notes that effects on the transport network will be significant. To mitigate these effects an upgrade is required to both the Pound Road/Waterloo Road

- forward planning for infrastructure development and delivery;
- 2. Ensuring that the nature, timing and sequencing of new development are co-ordinated with the development, funding, implementation and operation of transport and other infrastructure in order to:
 - a. optimise the efficient and affordable provision of both the development and the infrastructure;
 - maintain or enhance the operational effectiveness, viability and safety of existing and planned infrastructure;
 - c. protect investment in existing and planned infrastructure;
 - d. ensure that new commercial film or video production facilities are connected to reticulated water and wastewater systems; and
 - e. ensure new development does not occur until provision for appropriate infrastructure is in place;
- 3. Providing that the efficient and effective functioning of infrastructure, including transport corridors, is maintained, and the ability to maintain and upgrade that infrastructure is retained;
- 4. Only providing for new development that does not affect the efficient operation, use, development, appropriate upgrading and safety of existing strategic infrastructure, including by

- and Pound Road/SH1 intersections. It is noted that these upgrades are outside of the Applicant's control. The ITA proposes to include a consent condition that delays issuing of titles for Lots until 31 December 2027, to ensure the sequencing of development and provision of infrastructure is aligned.
- 3 & 5 The proposed development is predicted to generate 856 vehicle movements per hour in the AM Peak, 780 vehicles per hour in the PM peak and 9,736 vehicles per day. This is a significant number of Vehicle movements that will have significant effects on the transport network particularly SH1, unless the necessary upgrades to the SH1 and Pound Road intersections are made.
- 4. The proposed conditions relating to Christchurch International Airport are designed to ensure that the development does not affect its efficient operation, use, development, appropriate upgrading and safety. No noise sensitive activities are proposed for the site.

Although the proposal is for out of sequence development, it is consistent with the other aspects of policy 6.3.5 when proposed conditions are taken into account.

avoiding noise sensitive activities within the 50dBA Ldn airport noise contour for Christchurch International Airport, unless the activity is within an existing residentially zoned urban area, residential greenfield area identified for Kaiapoi, or residential greenfield priority area identified in Map A (page 6-28) and enabling commercial film or video production activities within the noise contours as a compatible use of this land; and

5. Managing the effects of land use activities on infrastructure, including avoiding activities that have the potential to limit the efficient and effective, provision, operation, maintenance or upgrade of strategic infrastructure and freight hubs.

Policy 6.3.6 Business land

To ensure that provision, recovery and rebuilding of business land in Greater Christchurch maximises business retention, attracts investment, and provides for healthy working environments, business activities are to be provided for in a manner which:

- Promotes the utilisation and redevelopment of existing business land, and provides sufficient additional greenfield priority area land for business land through to 2028 as provided for in Map A;
- 2. Recognises demand arising from the relocation of business activities as a result of earthquake damaged land and buildings;

1. The site is not existing business land and is not a greenfield priority area identified on Map A

7&9 Current properties on the site are not connected to reticulation however the site can be connected to reticulation. The site is also in close in proximity to existing transport and freight hubs.

- 8. there is the potential for conflict between incompatible activities the rural urban fringe zone currently acts as a buffer between rural and urban or industrial uses.
- 10. As detailed in the economic assessment provided by the applicant there is significant economic benefit, and employment opportunities associated with the proposed development.

Aside from the map A issue, the proposal is consistent with Policy 6.3.6.

- 3. Reinforces the role of the Central City, as the city's primary commercial centre, and that of the Key Activity Centres;
- 4. Recognises that new commercial activities are primarily to be directed to the Central City, Key Activity Centres and neighbourhood centres where these activities reflect and support the function and role of those centres; or in circumstances where locating out of centre, will not give
- 2. rise to significant adverse distributional or urban form effects;
- 5. Recognises that new greenfield priority areas for business in Christchurch City are primarily for industrial activities, and that commercial use in these areas is restricted;
- 6. Recognises that existing business zones provide for a range of business activities depending on:
 - the desired amenity of the business areas and their surrounds; and
 - ii. the potential for significant distributional or urban form effects on other centres from new commercial activity.
- 7. Utilises existing infrastructure availability, capacity and quality;
- 8. Ensures reverse sensitivity effects and conflicts between incompatible activities are identified and avoided or mitigated against;
- Ensures close proximity to labour supply, major transport hubs and passenger transport networks;

- Encourages self-sufficiency of employment and business activities within communities across Greater Christchurch;
- 11. Promotes, where appropriate, development of mixed-use opportunities, within Key Activity Centres provided reverse sensitivity issues can be appropriately managed; and
- 12. Incorporates good urban design principles appropriate to the context of the development.

Policy 6.3.11 Monitoring and Review

In relation to development in Greater Christchurch:

1. The Canterbury Regional Council, in conjunction with the

territorial authorities, shall undertake adequate monitoring to

demonstrate in the short, medium and the long term that there is

an available supply of residential and business land to meet the

Objectives and Policies of this Chapter and the requirements of

the National Policy Statement on Urban Development 2020.

...

- 4. The Canterbury Regional Council, following relevant territorial
- authority input, shall initiate a review of the extent and location of

land for development if any of the following situations occur:

- 1. The assessments supplied by the Applicant identify that existing available industrial land in Christchurch City is inadequate to meet demand in the medium to long term. This is in contrast to the assessment prepared by the Greater Christchurch Partnership in 2023 which concluded that there was sufficient industrial land in greater Christchurch for the next 30 years and beyond, with a significant surplus in Christchurch City.
- 4. The assessment prepared by the Greater Christchurch Partnership in 2023 to meet the requirements of the NPS-UD concluded that there was sufficient industrial land in greater Christchurch for the next 30 years and beyond, with a significant surplus in Christchurch City.

5.

- a. Infrastructure such as upgrades to the transport or three waters network must be either in place or able to be economically and efficiently provided. There are some upgrades to the transport network that will need to be completed to prevent significant effects caused by the development. These upgrades are outside of the Applicants control and must be able to be economically and efficiently provided by CCC and NZTA.
- c. While the site is outside of the urban area it is in the rural urban fringe zone and is adjacent to the urban area.

a. a shortfall in available land is identified by monitoring under

Policy 6.3.11; or

b. it is identified that altered circumstances have arisen or will

arise either in one or more parts of Greater Christchurch, in

relation to the expected availability of sub– regional infrastructure, and a reconsideration of the extent, location and

timing of land for development is necessary to achieve the

objectives and policies of this chapter; or

c. Housing and Business Development Capacity
Assessments

undertaken to meet the requirements of the National Policy

Statement on Urban Development 2020 indicate insufficient

feasible development capacity to meet demand in the short to

medium term.

5. Any change resulting from a review of the extent, and location of land for development, any alteration to the Greenfield Priority Areas, Future Development Areas, or provision of new greenfield priority areas, shall commence only under the following circumstances:

a. infrastructure is either in place or able to be economically and efficiently provided to support the urban activity;

d. Assessments provided by the Applicant indicate that Community Drinking Water supplies are unlikely to be contaminated by activities taking place in the proposed development. The proposed consent conditions have been designed to minimise risk to those supplies. Assessments of the anticipated demand for industrial land in the Christchurch City area (by the Greater Christchurch Partnership) disagree. As a result of that disagreement, it is not possible to determine whether the proposal is consistent with this objective.

- b. provision is in place or can be made for safe, convenient and sustainable access to community, social and commercial facilities;
- c. the objective of urban consolidation continues to be achieved; d. urban land use, including industrial and commercial activities, does not increase the risk of contamination of drinking water sources, including the groundwater recharge zone for Christchurch's drinking water;

••

- g. sufficient rural land is retained to maintain the open space landscape character either between or surrounding the areas of urban activity within Greater Christchurch; and
- h. the operational capacity of strategic infrastructure is not compromised.

Chapter 7 – Freshwater

Objective 7.2.3

Protection of intrinsic value of waterbodies and their riparian Zones

The overall quality of freshwater in the region is maintained or improved, and the life supporting capacity, ecosystem processes and indigenous species and their associated fresh water ecosystems are safeguarded.

To assess whether the natural environment will be enhanced or maintained more information is required about the wetland that may be located on the site and any restoration or protection measures that may occur in relation to the possible wetland.

Indigenous planting is proposed along barters drain in order to offset the loss of the portion of the drain within the site that will be infilled and improve ecological values in the waterway.

Barters drain which runs along the boundary of the site will need to be culverted for access to the site from barters Road. The culvert has been designed to allow fish passage and protect instream values. Fish salvage will take place prior to any works in the drain.

Without more information on the wetland, it is difficult to determine consistency with Objective 7.2.3. Conditions relating to the possible wetland may provide sufficient certainty in approach to determine that the proposal is consistent. **Policy 7.3.1** To assess whether the natural environment will be enhanced or Adverse effects of activities on the natural character of maintained more information is required about the wetland that may be located on the site and any restoration or protection freshwater To identify the natural character values of fresh water bodies measures that may occur in relation to the possible wetland. and their margins in the region and to: 1. preserve natural character values where there is a high state Indigenous planting is proposed along barters drain in order to offset the loss of the portion of the drain within the site that will be of natural character; 2. natural character values where they are modified but highly infilled and improve ecological values in the waterway. valued; and 3. improve natural character values where they have been Barters drain which runs along the boundary of the site will need to degraded to unacceptable levels; be culverted for access to the site from barters Road. The culvert unless modification of the natural character values of a fresh has been designed to allow fish passage and protect instream water body is provided for as part of an integrated solution to values. Fish salvage will take place prior to any works in the drain. water management in a catchment in accordance with Policy

Policy 7.3.3

Enhancing fresh water environments and biodiversity

7.3.9, which addresses remedying and mitigating adverse

effects on the environment and its natural character values

To promote, and where appropriate require the protection, restoration and improvement of lakes, rivers, <u>wetlands</u> and their riparian zones and associated Ngāi Tahu values, and to:

 identify and protect areas of significant indigenous vegetation and significant habitats, sites of significant cultural value, wetlands, lakes and lagoons/Hapūa, and other outstanding water bodies; and To assess whether the natural environment will be enhanced or maintained more information is required about the wetland that may be located on the site and any restoration or protection measures that may occur in relation to the possible wetland.

Without more information on the wetland, it is difficult to determine

consistency with Policy 7.3.1. Conditions relating to the possible wetland may provide sufficient certainty in approach to determine

that the proposal is consistent.

Indigenous planting is proposed along barters drain in order to offset the loss of the portion of the drain within the site that will be infilled and improve ecological values in the waterway.

- require the maintenance and promote the enhancement of indigenous biodiversity, inland basin ecosystems and riparian zones; and
- 3. promote, facilitate or undertake pest control.

Barters drain which runs along the boundary of the site will need to be culverted for access to the site from barters Road. The culvert has been designed to allow fish passage and protect instream values. Fish salvage will take place prior to any works in the drain.

Without more information on the wetland, it is difficult to determine consistency with Policy 7.3.3. Conditions relating to the possible wetland may provide sufficient certainty in approach to determine that the proposal is consistent.

Policy 7.3.6

Fresh water quality

In relation to water quality:

- to establish and implement minimum water quality standards for surface water and groundwater resources in the region, which are appropriate for each water body considering:
 - a. the values associated with maintaining life supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, and natural character of the water body;
 - any current and reasonably foreseeable requirement to use the water for individual, marae or community drinking water or stockwater supplies, customary uses or contact recreation;
 - the cultural significance of the fresh water body and any conditions or restrictions on the discharge of contaminants that may be necessary or appropriate to protect those values; and
 - d. any other current or reasonably foreseeable values or uses; and

To assess whether the natural environment will be enhanced or maintained more information is required about the wetland that may be located on the site and any restoration or protection measures that may occur in relation to the possible wetland.

Indigenous planting is proposed along barters drain in order to offset the loss of the portion of the drain within the site that will be infilled and improve ecological values in the waterway.

Barters drain which runs along the boundary of the site will need to be culverted for access to the site from barters Road. The culvert has been designed to allow fish passage and protect instream values. Fish salvage will take place prior to any works in the drain.

Without more information on the wetland, it is difficult to determine consistency with Policy 7.3.6. Conditions relating to the possible wetland may provide sufficient certainty in approach to determine that the proposal is consistent.

- to manage activities which may affect water quality (including land uses), singularly or cumulatively, to maintain water quality at or above the minimum standard set for that water body; and
- 3. where water quality is below the minimum water quality standard set for that water body, to avoid any additional allocation of water for abstraction from that water body and any additional discharge of contaminants to that water body, where any further abstraction or discharges, either singularly or cumulatively, may further adversely affect the water quality in that water body:
 - a. until the water quality standards for that water body are met: or
 - b. unless the activities are undertaken as part of an integrated solution to water management in the catchment in accordance with Policy 7.3.9, which provides for the redress of water quality within that water body within a specified timeframe.

Policy 7.3.7

Water quality and land uses

To avoid, remedy or mitigate adverse effects of changes in land uses on the quality of fresh water (surface or ground) by:

- identifying catchments where water quality may be adversely affected, either singularly or cumulatively, by increases in the application of nutrients to land or other changes in land use; and
- 2. controlling changes in land uses to ensure water quality standards are maintained or where water quality is already below the minimum standard for the water body, it is improved to the minimum standard within an appropriate timeframe.

To assess whether the natural environment will be enhanced or maintained more information is required about the wetland that may be located on the site and any restoration or protection measures that may occur in relation to the possible wetland.

Indigenous planting is proposed along barters drain in order to offset the loss of the portion of the drain within the site that will be infilled and improve ecological values in the waterway.

Barters drain which runs along the boundary of the site will need to be culverted for access to the site from barters Road. The culvert has been designed to allow fish passage and protect instream values. Fish salvage will take place prior to any works in the drain.

	Without more information on the wetland, it is difficult to determine consistency with Policy 7.3.7. Conditions relating to the possible wetland may provide sufficient certainty in approach to determine that the proposal is consistent.
Chapter 9 – Ecosystems and Indigenous Biodiversity	
Objective 9.2.1	The site contains Southern Grass Skink which are classified as At
Halting the decline of Canterbury's ecosystems and indigenous biodiversity The decline in the quality and quantity of Canterbury's ecosystems and indigenous biodiversity is halted and their lifesupporting capacity and mauri safeguarded.	Risk – Declining. A Lizard Management Plan has been prepared, and details measures to protect the Southern Grass Skink. Approval under the Wildlife Act is sought as part of the Fast Track application to relocate the skink to an appropriate release site and indigenous planting and landscaping works will be undertaken to improve the habitat of the release site.
	Indigenous planting is also proposed along Barters Drain to improve ecological values in the waterway.
Objective 9.2.2	The site contains Southern Grass Skink which are classified as At
Restoration or enhancement of ecosystems and indigenous biodiversity Restoration or enhancement of ecosystem functioning and indigenous biodiversity, in appropriate locations, particularly where it can contribute to Canterbury's distinctive natural character and identity and to the social, cultural, environmental and economic well-being of its people and communities.	Risk – Declining. A Lizard Management Plan has been prepared, and details measures to protect the Southern Grass Skink. Approval under the Wildlife Act is sought as part of the Fast Track application to relocate the skink to an appropriate release site and indigenous planting and landscaping works will be undertaken to improve the habitat of the release site.
	Indigenous planting is also proposed along Barters Drain to improve ecological values in the waterway.
Objective 9.2.3	The site contains Southern Grass Skink which are classified as At
Protection of significant indigenous vegetation and habitats Areas of significant indigenous vegetation and significant	Risk – Declining. A Lizard Management Plan has been prepared, and details measures to protect the Southern Grass Skink. Approval

under the Wildlife Act is sought as part of the Fast Track application

to relocate the skink to an appropriate release site and indigenous

habitats of indigenous fauna are identified and their values and

ecosystem functions protected.

	planting and landscaping works will be undertaken to improve the habitat of the release site.
	Indigenous planting is also proposed along Barters Drain to improve ecological values in the waterway.
Policy 9.3.1	Based on information provided there are no Significant Natural
Protecting significant natural areas	Areas on the site, however this cannot be determined conclusively
Significance, with respect to ecosystems and indigenous biodiversity, will be determined by assessing areas and	without a wetland investigation.
habitats against the following matters:	it is therefore difficult to determine consistency with Policy 9.3.1.
a. Representativeness	Conditions relating to the possible wetland may provide sufficient
b. Rarity or distinctive features	certainty in approach to determine that the proposal is consistent.
c. Diversity and pattern	
d. Ecological context	
The assessment of each matter will be made using the criteria	
listed in Appendix 3.	
2. Areas or habitats are considered to be significant if they	
meet one or more of the criteria in Appendix 3.	
3. Areas identified as significant will be protected to ensure n	
net loss of indigenous biodiversity or indigenous biodiversi	У
values as a result of land use activities.	
Policy 9.3.2	The site contains Southern Grass Skink which are classified as At
Priorities for protection	Risk - Declining. A Lizard Management Plan has been prepared,
To recognise the following national priorities for protection:	and details measures to protect the Southern Grass Skink. Approval
1. Indigenous vegetation in land environments where less tha	- '
20% of the original indigenous vegetation cover remains.	to relocate the skink to an appropriate release site and indigenous
 Areas of <u>indigenous vegetation associated with</u> sand dunes and <u>wetlands</u>. 	planting and landscaping works will be undertaken to improve the habitat of the release site.
3. Areas of indigenous vegetation located in "originally rare"	
terrestrial ecosystem types not covered under (1) and (2) above.	Indigenous planting is also proposed along Barters Drain to improve ecological values in the waterway.

4. Habitats of threatened and at risk indigenous species.	
Policy 9.3.3 Integrated management approach To adopt an integrated and co-ordinated management approach to halting the decline in Canterbury's indigenous biodiversity through:	A Lizard Management Plan has been developed to protect any lizards that may be present at the site. The proposal is likely to be consistent with Policy 9.3.3
4. setting best practice guidelines for maintaining indigenous biodiversity values, particularly maintaining conditions suitable for the survival of indigenous species within their habitats, and safeguarding the life-supporting capacity and/or mauri of ecosystems	
Policy 9.3.4	The site contains Southern Grass Skink which are classified as At
Promote ecological enhancement and restoration	Risk – Declining. A Lizard Management Plan has been prepared,
To promote the enhancement and restoration of Canterbury's ecosystems and indigenous biodiversity, in appropriate locations, where this will improve the functioning and long term sustainability of these ecosystems.	and details measures to protect the Southern Grass Skink. Approval under the Wildlife Act is sought as part of the Fast Track application to relocate the skink to an appropriate release site and indigenous planting and landscaping works will be undertaken to improve the habitat of the release site.
	Indigenous planting is also proposed along Barters Drain to improve ecological values in the waterway.
Policy 9.3.5	There is a potential wetland on 111 Pound Road, without a wetland
Wetland protection and enhancement	investigation it is difficult to determine consistency with Policy
In relation to wetlands:	9.3.5. Conditions relating to the possible wetland may provide
 To assess an ecologically significant wetland against the matters set out in Policy 9.3.1 and the national priorities listed in Policy 9.3.2 For the purposes of this policy, ecologically significant wetlands do not include areas that are predominantly pasture and dominated by exotic plant 	sufficient certainty in approach to determine that the proposal is consistent

species and where they are not significant habits of indigenous fauna. 2. To ensure that the natural, physical, cultural, amenity, recreational and historic heritage values of Canterbury's ecologically significant wetlands are protected. 3. To generally promote the protection, enhancement and restoration of all of Canterbury's remaining wetlands. 4. To encourage the formation of created wetlands that contribute to the restoration of indigenous biodiversity.	
5. To protect adjoining areas of indigenous and other	
vegetation which extend outside an ecologically significant	
wetland and are necessary for the ecological functioning of	
the wetland.	
Chapter 11 - Natural Hazards	It is continuous the second line on increasing the second sink of a
Objective 11.2.1	It is unlikely there will be an increase in natural hazard risk as a
Avoid new subdivision, use and development of land that increases risks associated with natural hazards	result of proposed subdivision
New subdivision, use and development of land which increases	- A geotechnical report has been provided (app 5)
the risk of natural hazards to people, property	
and infrastructure is avoided or, where avoidance is not possible,	
mitigation measures minimise such risks.	
Policy 11.3.1	The site is not in a High Hazard area.
Avoidance of inappropriate development in high hazard areas	
To avoid new subdivision, use and development (except as	
provided for in Policy 11.3.4) of land in high	
hazard areas, unless the subdivision, use or development:	
1. is not likely to result in loss of life or serious injuries in the event	
of a natural hazard occurrence;	
and	
2. is not likely to suffer significant damage or loss in the event of a	
natural hazard occurrence; and	

3. is not likely to require new or upgraded hazard mitigation works	
to mitigate or avoid the natural	
hazard; and	
4. is not likely to exacerbate the effects of the natural hazard; or	
5. Outside of greater Christchurch, is proposed to be located in an	
area zoned or identified in a district plan for urban residential,	
industrial or commercial use, at the date of notification of the	
CRPS, in which case the effects of the natural hazard must be	
mitigated; or	
6. Within greater Christchurch, is proposed to be located in an	
area zoned in a district plan for urban residential, industrial or	
commercial use, or identified as a "Greenfield Priority Area" on	
Map A of Chapter 6, both at the date the Land Use Recovery Plan	
was notified in the Gazette, in which the effect of the natural	
hazard must be avoided or appropriately mitigated; or	
7. Within greater Christchurch, relates to the maintenance and/or	
upgrading of existing critical or significance infrastructure.	
Policy 11.3.3	Application includes geotechnical report (app 5)
Earthquake hazards	
New subdivision, use and development of land on or close to an	
active earthquake fault trace, or in areas susceptible to	
liquefaction and lateral spreading, shall be managed in order to	
avoid or mitigate the adverse effects of fault rupture, liquefaction	
and lateral spreading.	
Policy 11.3.5	The site is not in a high hazard area. There is no unacceptable risk
General risk management approach	from natural hazards associated with the proposal.
For natural hazards and/or areas not addressed by policies 11.3.1,	
11.3.2, and 11.3.3, subdivision, use or development of land shall	
be avoided if the risk from natural hazards is unacceptable. When	
determining whether risk is unacceptable, the following matters	
will be considered:	

1. the likelihood of the natural hazard event; and	
2. the potential consequence of the natural hazard event for:	
people and communities, property and infrastructure and the	
environment, and the emergency response organisations.	
Where there is uncertainty in the likelihood or consequences of a	
natural hazard event, the local authority shall adopt a	
precautionary approach.	
Chapter 12 - Landscape	
Objective 12.2.2	I agree with the statement in the applicants planning assessmen
Identification and management of other landscapes	(appendix 23) that these provisions are of limited importance.
The identification and management of other important	
landscapes that are not outstanding natural landscapes. Other	
important landscapes may include:	
1. natural character	
2. amenity	
3. historic and cultural heritage	
Policy 12.3.3	
Identification and management of other important landscapes	
Identifying and managing other important landscapes that are not	
outstanding natural landscapes, for natural character, historic	
cultural, historic heritage and amenity purposes.	
Chapter 14 – Air Quality	
Objective 14.2.1	Consent conditions have been developed to manage dust at the
Maintain or improve ambient air quality	site
Maintain or improve ambient air quality so that it is not a danger	
to people's health and safety, and reduce the nuisance effects	
of low ambient air quality.	
Objective 14.2.2	Consent conditions have been developed to manage dust at the
Localised adverse effects of discharges on air quality	site
Enable the discharges of contaminants into air provided there	
are no significant localised adverse effects on social, cultural	

and amenity values, flora and fauna, and other natural and	
physical resources.	
Policy 14.3.1	Consent conditions have been developed to manage dust at the
Maintain and improve ambient air quality	site
In relation to ambient air quality:	
1. To set standards to maintain ambient air quality in	
Canterbury based on concentrations of contaminants that	
cause adverse health effects and nuisance	
2. Where existing ambient air quality is higher than required by	
the standards set, to only allow the discharge of	
contaminants into air where the adverse effects of the	
discharge on ambient air quality are minor.	
3. To give priority to ensuring that PM10 ambient air quality	
improvements are achieved in Rangiora, Kaiapoi,	
Christchurch, Ashburton, Timaru, Geraldine and Waimate.	
Policy 14.3.3	Consent conditions have been developed to manage dust at the
Avoid, remedy or mitigate localised adverse effects on air	site
quality	
To set standards, conditions and terms for discharges of	
contaminants into the air to avoid, remedy or mitigate localised	
adverse effects on air quality.	
Chapter 15 - Soils	
Objective 15.2.1	The proposed activity will not maintain the productive capacity of
Maintenance of soil quality	the soil at the site.
Maintenance and improvement of the quality of Canterbury's	
soil to safeguard their mauri, their life supporting capacity, their	The proposal is therefore inconsistent with this objective.
health and their productive capacity.	
Policy 15.3.1	The proposed activity will not maintain the productive capacity of
Avoid remedy or mitigate soil degradation	the soil at the site.
In relation to soil:	
	The proposal is therefore inconsistent with this objective.

1.	to ensure that land-uses and land management practices	
	avoid significant long-term adverse effects on soil quality,	
	and to remedy or mitigate significant soil degradation whe	
	it has occurred, or is occurring; and	

2. to promote land-use practices that maintain and improve soil quality.

Chapter 16 - Energy

Objective 16.2.1

Efficient use of energy

Development is located and designed to enable the efficient use of energy, including:

- 1. maintaining an urban form that shortens trip distances
- 2. planning for efficient transport, including freight
- 3. encouraging energy-efficient urban design principles
- 4. reduction of energy waste
- 5. avoiding impacts on the ability to operate energy infrastructure efficiently.

Located close to existing industrial area.

On the edge of the city but adjacent to industrial area which contributes to the efficient use of energy.

Chapter 17 – Contaminated Land

Objective 17.2.1

Protection from adverse effects of contaminated land

Protection of people and the environment from both on-site and off-site adverse effects of contaminated land

Contaminated land has been identified at the site.

The proposed consent conditions seek to protect people and the environment from adverse effects of that contaminated land. Some further changes are sought by CRC to these conditions.

The proposal is likely to be consistent with this Objective, provided the consent conditions are adequate to address the contamination.

Policy 17.3.2

Development of, or discharge from contaminated land

In relation to actually or potentially contaminated land, where new subdivision, use or development is proposed on that land, or where there is a discharge of the contaminant from that land: There is contaminated land on the site. The applicant has provided a DSI. Where contaminated land can be managed through consent conditions, the proposal aligns with Policy 17.3.2.

1 a sita investigation is to be undertaken to determine the	
1. a site investigation is to be undertaken to determine the	
nature and extent of any contamination; and	
2. if it is found that the land is contaminated, except as	
provided for in Policy 17.3.3, the actual or potential adverse	
effects of that contamination, or discharges from the	
contaminated land shall be avoided, remedied or mitigated	
in a manner that does not lead to further significant adverse	
effects.	
Chapter 18 – Hazardous Substances	T
Objective 18.2.1	Proposed consent conditions cover spills of fuel or any other
Avoid, remedy or mitigate adverse effects	hazardous substances within the site.
Adverse effects on the environment from the storage, use,	
disposal and transportation of hazardous substances are	The proposal is likely to be consistent with Objective 18.2.1.
avoided, remedied or mitigated.	
Objective 18.2.2	For earthworks occurring on contaminated Land– remediation is
New contamination of land	required to avoid spread of contaminated land. Conditions are in
To avoid contamination of land.	place to manage contaminated Land, although further changes are
	sought by CRC to ensure the outcomes sought, are mandated in the
	delivery of the consent.
	Proposed consent conditions cover spills of fuel or any other
	hazardous substances within the site.
Policy 18.3.1	3. Site is over an unconfined or semi-confined aquifer and in the
Protection of sensitive areas and activities	Christchurch Groundwater Protection Zone. Groundwater depth is
Avoid actual or potential adverse effects, resulting from the use,	15m.
storage or disposal of hazardous substances, in the following	
locations:	
1. High hazard areas	
Within a community drinking water protection zone, or	

	supply that there is a risk of contamination of that drinking water source
3.	. In areas of unconfined or semi-confined aquifer, where the
	depth to groundwater is such that there is a risk of
	contamination of that groundwater
4.	. Within the coastal marine area and in the beds of lakes and
	rivers
5.	. Within any area identified by a district or regional plan as
	being sensitive to the potential effects of hazardous
	substances, which may include, but are not limited to,
	areas such as wāhi tapu, urupā, institutions and residential
	· · ·
	areas.
Po	licy 18.3.2
Αv	oid, remedy or mitigate adverse effects
То	avoid, remedy or mitigate adverse effects on the
en	vironment, including contamination of land, air and water,
as	sociated with the storage, use, transportation or disposal of
ha	zardous substances.

Appendix 6- CRC- Proposed Conditions

CRC Key: CRC's changes to the conditions are shown in underline and strikethrough text.

CRC260879 S9 Land Use Consent

Applicant: NTP Development Holdings Limited

Duration: Applicant to inform us of requested duration but **CRC would suggest 5 years**

	Limits	CRC comments
1.	The works authorised by this resource consent are limited to the excavation of land associated with the development of an industrial subdivision at Pound Road Industrial Development at 173 Pound Road, legally described as: Lot 3 DP 33334, Lot 2 DP 33334, Lot 10 DP 23834, Lot 2 DP 23834, Lot 1 DP 33334, Lot 2 DP 20738, Lot 1 DP 20738, Lot 2 DP 38418, Lot 7 DP 23834, Lot 6 DP 23834, Lot 2 DP 24156, Lot 1 DP 24156, Lot 1 DP 23834, Lot 1 DP 38418 and has a total area of approximately 60 hectares (ha).	Clarification needed as to whether 173 Pound Road should be the only address listed, and that all of the lots sit within 173 Pound Road.
2.	The works shall be undertaken in accordance with within the area of the attached design plan, plan CRCXX260879 which forms a part of this consent.	Plan CRC260879 as follows - Per CHCG300 Pe
3.	The maximum depth of excavation for the works authorised by this resource consent must not exceed 5.5 metres below <u>natural</u> ground level.	The word "natural" has been added to clarify that the specified depth is measured relative

	Limits	CRC comments
	Advice Note: It will be up to the Consent Holder to demonstrate compliance with the maximum excavation depth. This can be done, for example, via reference to a specified datum and reduced levels from that datum or via site specific survey points or other measurements.	to the original ground level, prior to any earthworks.
	Prior to Commencement	
4.	Prior to any bulk earthworks occurring on the site (excluding Lots 400 and 401), further investigation of any outstanding areas of land not already investigated including the 94 Barters Road bund, shall be undertaken via a Preliminary Site Investigation (PSI) and/or a Detailed Site Investigation (DSI) with the results submitted to Canterbury Regional Council, Attention: Compliance Manager and Contaminated Land Team (via ECinfo@ecan.govt.nz).	The section relating to Lots 400 and 401 has been removed, as these lots will not form part of the site if land acquisition is not completed. The added text reflects the combination of Conditions 4 and 5 into a single consolidated condition.
5.	Prior to any bulk carthworks occurring within Lots 400 and Lot 401, further investigation of this land shall be undertaken via a Preliminary Site Investigation (PSI) and/or a Detailed Site Investigation (DSI) as required, with the results submitted to Canterbury Regional Council, Attention: Compliance Manager and Contaminated Land Team.	The removal of this Condition reflects the combination of Conditions 4 and 5 into a single consolidated condition above.
5.	A site validation report must be provided to Canterbury Regional Council for approval at least 10 working days prior to the commencement of bulk earthworks. The report must demonstrate that the remaining soils at the site meet ANZG GV-High criteria within 500 m of any surface water body or stormwater infrastructure (e.g., the water race on the western boundary), and meet Class 4 criteria (Table C-3, adopted values, WasteMINZ, 2018 Guidelines) outside of that area. Advice note: This condition does not apply to Lots 400 and 401, which will require separate remediation prior to any works commencing on these two balance lots.	Condition added in as a result of Mr Cromwell, CRC's contaminated land expert's advice. The Advice Note has been removed, as Lots 400 and 401 will not form part of the site if land acquisition is not completed.
6.	Any contaminated land identified on Lots 400 and 401 through the investigations required under Condition 5 of this resource consent shall be remediated prior to earthworks occurring within either of those Lots.	The condition has been removed as Lots 400 and 401 will not form part of the site if land acquisition is not completed.

	Limits	CRC comments
7. 6.	Prior to commencement of the works described in Condition (1), all personnel working on the site must be made aware of, and have access to, the following: a. The contents of this resource consent document and all associated documents, including the Earthworks Management Plan prepared by Davie Lovell Smith and attached as Appendix 13; and b. Resource Consents and all associated documents, including the Erosion and Sediment Control Plan (ESCP) as set out in Condition (10). c. Resource Consents and all associated documents, including the Erosion and Sediment Control Plan (ESCP) as set out in Condition (X).	Clause (c) duplicated the content of Clause (b) and has therefore been incorporated into a single clause under (b).
8.7.	At least 15 working days prior to the commencement of works to remediate contaminated land, the consent holder must submit a Remedial Action Plan (RAP) to Canterbury Regional Council, Attention: Compliance Manager (via ECinfo@ecan.govt.nz) for certification that it complies with the conditions of this consent. The RAP required under condition (X) must: a. Outline the proposed soil sampling procedure to identify the extent of contamination, including guidelines used to analyse samples; b. Detail a procedure for managing any discovery of contaminated soil or material; c. Describe the methodology for soil removal and how soil will be prevented from being entrained in stormwater; i. Including but not limited to an ESCP d. Outline where the contaminated soil will be displaced of; and e. Describe any validation sampling that will be undertaken.	Clause (i) has been added to ensure the Erosion and Sediment Control Plan (ESCP) includes measures to prevent contaminated soil from being tracked across the site prior to bulk earthworks.
9. <u>8.</u>	The RAP may be amended at any time. Any amendments must be: a. Only for the purpose of improving the efficacy of the management of contaminated soil and must not result in an increase of sediment being discharged from the site; and b. Consistent with the conditions of this resource consent; and c. Submitted in writing to the Canterbury Regional Council, Attention: Compliance Manager (via ECinfo@ecan.govt.nz), prior to any amendment being implemented.	
10. <u>9.</u>	The ESCP must: a. include a map showing the location of all works; b. Detailed plans showing the location of sediment control measures, on-site catchment boundaries, and sources of run-off;	The formatting has been updated from bullet points to a numbered sub-clause format (i., ii., etc.) where the text is underlined for consistency.

	Limits	CRC comments
	c. Detail how best practicable measures are taken to minimize discharges of sediment-laden stormwater run-off beyond the boundaries of the site; i. Include drawings and specifications of designated sediment control measures, if these are not designed and installed in accordance with the ESCT; ii. Detail the methodology for stabilizing the site entrance and exit points and any measures employed to prevent off-site tracking of sediment and other materials from the site. d. Include a confirmation that the erosion and sediment control devices have been sized appropriately in accordance with the ESCT; e. Include a programme of works, including a proposed timeframe for each stage of the works and the earthworks methodology; f. Detail the management of any stockpiled material; g. Detail inspection and maintenance of the sediment control measures. h. Detail sampling procedures and protocols; i. Define the discharge points where stormwater is discharged onto land / infiltrates into land; j. Include a description of dust mitigation to be used and details of best practicable options to be applied to mitigate dust and sediment discharge beyond the site boundary; k. Detail the methodology for stabilizing the site if works are paused for more than five working days or abandoned; l. detail the methodology for stabilizing the site and appropriate decommissioning of all erosion and sediment control measures after works have been completed; and m. Include measures such as a Chemical Treatment Plan should the use of water treatment chemicals be required. Note the use of Water treatment chemicals may require additional consent under section 15 of the Resource Management Act.	The note and Clause (m) have been removed, as the applicant has not proposed the use of chemical treatment.
11. 10.	a. The ESCP must be submitted to the Canterbury Regional Council, Attention: Compliance Manager (via ECinfo@ecan.govt.nz), after the commencement of resource consent and at least 10 working days prior to works commencing, for approval that it complies with the ESCT and the conditions of this resource consent; b. The discharge must not commence until approval has been received from the Canterbury Regional Council that the ESCP is consistent with the ESCT or equivalent industry guideline; and	A section of text has been removed to streamline and maintain the clarity of the condition.

	Limits	CRC comments
	c. Notwithstanding Condition (9(a)), if the ESCP has not been reviewed and/or approved within ten working days of the Compliance Manager receiving the ESCP, the discharge may commence.	
12. <u>11.</u>	The ESCP may be amended at any time. Any amendments must be: a. Only for the purpose of improving the efficacy of the erosion and sediment control measures and must not result in reduced discharge quality; and b. For the purpose of applying best practicable measures to mitigate [dust and] sediment transport off-site; c. Consistent with the conditions of this resource consent; and d. Submitted in writing to the Canterbury Regional Council, Attention: Compliance Manager, prior to any amendment being implemented.	
13. 12.	Erosion and sediment control measures must be inspected at least once per day, as well as following any rainfall event that results in more than five millimeters of rainfall at the site. Any accumulated sediment must be removed, and repairs made, as necessary, to ensure effective functioning of measures and devices. Records of any inspections must be kept and provided to the Canterbury Regional Council on request.	
14. 13.	If the consent holder abandons work on-site, or pauses works for more than five working days, adequate preventative and remedial measures must be taken to control sediment discharged from exposed or unconsolidated surfaces. These measures must be maintained for so long as necessary to prevent sediment discharges from the earth worked areas.	
15. <u>14.</u>	At least 10 working days prior to the commencement of works on site, the Canterbury Regional Council, Attention: Compliance Manager (via ECinfo@ecan.govt.nz) must be informed of the commencement of works.	
16. <u>15.</u>	At least 10 working days prior to commencement of works on site, the consent holder must request a pre-construction site meeting with the Canterbury Regional Council, Attention: Compliance Manager (via ECInfo@ECan.govt.nz), and all relevant parties, including the primary contractor. At a minimum, the following must be covered at the meeting: a. Scheduling and staging of the works; b. Responsibilities of all relevant parties, including confirmation that the person (or persons) implementing the ESCP on the site is (are) suitably trained and/or experienced; c. Contact details for all relevant parties; d. Expectations regarding communication between all relevant parties; e. Procedures for implementing any amendments; f. Site Inspection; and	A section of text has been removed to streamline and maintain the clarity of the condition.

	Limits	CRC comments
	g. Confirmation that all relevant parties have copies of the consents of this resource consent document and all associated erosion and sediment control plans and any other discharge treatment methodologies employed.	
	During works	
17. 16.	All practicable measures must be taken to: a. Minimise soil disturbance to that necessary to carry out the works described under Condition 1; b. Prevent soil erosion; c. Avoid placing excavated material in a position where it may enter: i. any neighbouring site; ii. a surface water body; and/or iii. the [territorial authority's] Christchurch City Council reticulated stormwater network, or any other private or public stormwater devices.	The territorial authority is Christchurch City Council so they have been named in the condition.
18. 17.	All earthworks shall be managed to avoid the potential for cross-contamination of materials to occur, in particular movement of contaminated soil around the site and/or deposition of contaminated soil on other parts of the site shall be avoided.	
19. 18.	 a. Tracking of material off-site during the works must be avoided at all times. b. In the event that material is tracked off-site, the tracked material must be removed as soon as practicable. 	The paragraphs have been reformatted as (a) and (b) to clearly distinguish which requirement applies in the first instance.
20. <u>19.</u>	Excess soil or waste materials removed from the application site shall be taken to a consented site whose waste acceptance criteria would be met. Evidence of waste disposal such as weighbridge receipt shall be reported in the SVR. provided upon remediation or upon request to account for accidental discovery.	The wording has been amended to account for the potential accidental discovery of contaminated land.
	Installation of Culverts- Fish Protection	
21. <u>20.</u>	The consent holder shall ensure that all practicable measures are undertaken to ensure that there is no stranding of fish in pools or channels up and downstream of the works.	
22. 21.	Any pump used to take water in accordance with condition (x) of CRCXXX <u>260878</u> must be fitted with fish screens in general accordance with the Christehurch City Council's "Standards for Temporary Fish Screens on Christehurch City Council Projects" (2023).	This condition belongs to the water permit CRC260878 and thus has been moved.
23. <u>22.</u>	A Fish Management Plan shall be prepared by a suitably qualified freshwater ecologist and submitted to the Canterbury Regional Council for their records (via ECinfo@ecan.govt.nz) prior to any works in waterways. The Plan should include the following information as a minimum: a. Locations where the Plan will be implemented;b. Methods to ensure fish cannot access works areas	

	Limits	CRC comments
	c. Protocols to be followed including methods to rescue and relocate fish; d. Person/s responsible for ensuring the plan is implemented; e. Protocols if pest fish are encountered; f. Protocols to ensure fish are not entrained in pumps during pumping (water pumping should have fish screens with a maximum mesh width and height size of three millimeters).	
24. 23.	In the event that fish are required to be salvaged and relocated to an appropriate waterway. The fish salvage must include the following measures; a. Be conducted by or under supervision of a certified, suitably qualified and experienced freshwater ecologist; b. Be in general accordance with Canterbury Regional Council and Christchurch City Council's "Fish Salvage Guidance for Works in Waterways" (12 October 2017) attached as Appendix CRC260879; c. The fish must be relocated to a habitat deemed suitable by the certified, suitably qualified and experienced freshwater ecologist; d. The certified, suitably qualified and experienced freshwater ecologist must hold any necessary permits and approvals required by the Ministry for Primary Industries, Department of Conservation and Fish and Game to conduct fish salvage.	The 'Fish Salvage Guidance for Works in Waterways' has been attached as Appendix CRC260879.
25. 24.	Following Within 10 working days completion of works, the consent holder shall provide a record to the Canterbury Regional Council. Attention Compliance Manager records (via ECinfo@ecan.govt.nz) of any fish captured and relocated. This record shall include: a. The location where fish were captured; b. The species and number of fish captured; and c. The location where fish were relocated	Addition of a timeframe for the record to be submitted and provide certainty of where to send the record.
	Discovery of Contaminated Soil or Materials	
26. 25.	In the event that any contaminated soil or material is uncovered by the works, a contamination discovery protocol must be implemented, including but not limited to the following steps: a. Earthworks within ten metres of discovered contaminant soil or material must cease immediately; b. All practicable steps must be taken to prevent the contaminated material becoming entrained in stormwater. Immediate steps must include, where practicable: i. Diverting any stormwater runoff from surrounding areas away from the contaminated material; and ii. Minimizing the exposure of the contaminated material, including covering the contaminants with an impervious cover;	

	Limits	CRC comments
	c. Notification of the Canterbury Regional Council, Attention: Contaminated Sites Manger, within 24 hours of the discovery; d. Earthworks within ten metres of discovered contaminant soil or material must not recommence until a suitably qualified and experienced contaminated land practitioner (SQEP) confirms to Canterbury Regional Council, Attention: Compliance Manager, that continuing works does not represent a significant risk to the environment; e. All records and documentation associated with the discovery must be kept and copies must be provided to the Canterbury Regional Council upon request.	
27. <u>26.</u>	 a. Any material removed from the site during the works that is potentially or confirmed as contaminated, must be disposed of at a facility authorised to receive such material. b. Disposal dockets shall be retained and provided to Canterbury Regional Council upon request, Attention: Compliance Manager (via ECinfo@ecan.govt.nz). 	Contact details added to the condition.
00.55	Spills	
20. 27.	All practicable measures must be taken to avoid spills of fuel or any other hazardous substances within the site. These measures must include: a. Refueling of machinery and vehicles must not occur within 20 metres of: i. open excavations; ii. exposed groundwater; and iii. stormwater devices. b. A spill kit must be kept on site that is capable of absorbing the quantity of oil and petroleum products that may be spilt on site at any one time, remains on site at all times. c. In the event of a spill of fuel or any other hazardous substance, the spill must be cleaned up as soon as practicable, the stormwater system must be inspected and cleaned, and measures taken to prevent a recurrence; d. The Canterbury Regional Council, Attention: Compliance Manager, must be informed within 24 hours of a spill event exceeding five litres and the following information provided: i. The date, time, location and estimated volume of the spill; iii. The cause of the spill; iii. The type of hazardous substance(s) spilled; iv. Clean up procedures undertaken; v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment; vi. An assessment of any potential effect of the spill; and vii. Measures to be undertaken to prevent a recurrence.	Clause (vii) has been added. The text now under (vii) was originally included with the text under (vi).

	Limits	CRC comments
	Artesian Aquifer Interception	
29. 28.	In the event of an interception of unanticipated levels of artesian flows, all practicable measures must be undertaken to remedy or mitigate any change in aquifer pressure water quality or temperature. This must include: a. The contractor must immediately cease all works within the immediate area of excavation that caused the interception of the artesian flows; b. The contractor must determine and document whether the flow is constant or increasing, if the turbidity is constant or increasing and if the flow is confined to the excavation. c. The contractor must notify the site engineer and/or other appropriate personnel to determine the emergency measures required to arrest the artesian flow. Emergency measures must include, but not be limited to: i. The installation of a layer of impermeable material to the extent required to reform a capping layer over the aquifer to prevent the upward movement of groundwater through the confining layer; or ii. Inserting a vertical pipe in the aquifer interception point (if practicable) and provide for a secure seal against the pipe to enable the stabilisation of the artesian flow in the pipe, and to determine the above ground water level to assess any further measures. d. The temporary artesian flow beyond the excavation must be controlled and mitigated with appropriate erosion and sediment control measures; e. The Canterbury Regional Council, Attention: Compliance Manager must be notified as soon as practicable but no later than two working days after the interception; and Upon remediation and arresting of flow from the aquifer interception, the construction methodology must be reconsidered and, if required, revised to avoid future interceptions of the aquifer.	
	Accidental Discovery of Archaeological Material	
30. 29.	a. Any activity which may modify, damage or destroy a pre-1900 archaeological site or material must follow the archaeological authority process under the Heritage New Zealand Pouhere Taonga Act 2014. An archaeological authority is required from Heritage New Zealand to modify, damage or destroy any archaeological site, whether recorded or not in the New Zealand Heritage List/Rārangi Kōrero.	

	Limits	CRC comments
	b. In the event of accidental discovery of any archaeological material, all works must cease immediately in the part of the site known, or suspected, to be an archaeological site. c. The Canterbury Regional Council, Heritage New Zealand Pouhere Taonga and Papatipu Rūnanga, as well as the New Zealand Police in the case of discovery of kōiwi/human bones, must be informed immediately of the disturbance, and the archaeological authority process under the Heritage New Zealand Pouhere Taonga Act 2014 must be followed. d. In the event of the accidental discovery of Māori archaeological sites or material, the attached accidental discovery protocol for Māori archaeology must be followed in addition to the process under the Heritage New Zealand Pouhere Taonga Act 2014. e. To ensure that all statutory and cultural requirements have been met, any works in the part of the site subject to the archaeological discovery must not recommence until authorised by the Canterbury Regional Council and: i. Upon completion of the archaeological authority process referred to under (c); and ii. In the event of the accidental discovery of Māori archaeological sites or material, and in addition to (c) upon completion of the process referred to under (d); and iii. In the event of the discovery of kōiwi/human bones, immediately advise the New Zealand police.	
	After Completion of Works	
31. 30.	Within two weeks 10 working days of the completion of each stage of works authorised by this resource consent: a. All disturbed areas must be stabilized and/or revegetated; and b. All spoil and other waste materials from the works must be removed from site.	Use of working days to ensure consistency within the conditions.
32.	Within 3 months of the completion of earthworks on the site, a Site Validation Report (SVR) shall be provided to Canterbury Regional Council. The SVR shall be prepared by a SQEP in contaminated land.	This condition is not required as all land must be remediated prior to bulk earthworks.
	Administration	
33. 31.	The Canterbury Regional Council may annually, on the last working day of May or November, serve notice of its intention to review the conditions of this resource consent for the purposes of: a. Dealing with adverse effect on the environment which may arise from the exercise of this resource consent, and which is not appropriate to deal with at a later stage; or	

	Limits	CRC comments
	b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.	
34. <u>32.</u>	If this resource consent is not exercised before 31 January March 2031, it lapses in accordance with Section 125 of the Resource Management Act 1991. Advice note: Exercised is defined as implementing any requirements to operate this	
	consent and undertaking the activity as described in these conditions and/or application documents.	

Plan CRC260879







Fish Salvage Guidance for Works in Waterways

12 October 2017

Greg Burrell (CCC) and Duncan Gray (ECAN)

1. Background

Freshwater fish, including eels, are found in a range of aquatic environments, ranging from native forest streams through to wetlands, ponds, and highly modified urban drains and artificial waterways. There is a responsibility under several Acts of Parliament to protect these fish, which has implications for anybody undertaking works in and around waterways. Individuals or groups attempting to obtain a resource consent for an activity that will adversely impact fish communities may be required to carry out fish salvage. It is important to note that fish salvage should not be the first mitigation considered. If it is possible to preserve the habitat of fish from effects, that should occur preferentially. The ability to salvage any fish present does not mitigate against unnecessary habitat destruction.

This document provides guidance around fish salvage¹ in Canterbury, to help address uncertainties around what is required of contractors and councils working in waterways. In particular, the purpose of this document is to provide guidance as to:

- · Where fish salvage needs to be considered in relation to waterway works.
- · What kinds of activities may trigger the need for fish salvage.
- What types of salvage methods are available.
- Who needs to be involved.

This information will be critical in the preparation of an Assessment of Environmental Effects (AEE) to avoid requests for further information and ensure the smooth processing of a consent application or compliance assessment.

Many of New Zealand's freshwater fish species are endemic, which means they are native to this country and found nowhere else. Native fish (found naturally in New Zealand and elsewhere) are found in waterbodies throughout Canterbury (Figure 1); commonly encountered species include several bully species, inanga (a whitebait species), and eels (Figure 2 and Figure 3). Rare and threatened species, such as Canterbury mudfish, lamprey or lowland longiaw galaxiids tend to have more restricted ranges.

When working in rivers the Freshwater Fisheries Regulations 1983 dictate that indigenous, or native, fish shall not be knowingly destroyed, as detailed under Section 70:

Section 70 No killing of indigenous fish

(1) No person shall in any water intentionally kill or destroy indigenous fish.

¹ We define fish salvage here as removing fish from a work area prior to commencing works, with the aim of avoiding and minimising impacts of work activities on aquatic species. Note that fish passage is a separate matter, which is generally better provided for through the resource consent process.

(2) No person, having taken indigenous fish from any water, shall leave the fish upon the bank or shore of any stream or lake, except where such indigenous fish is used in accordance with any provisions of a District Anglers Notice relating to lures.

Many organisations and contractors are unaware of the legal requirements that may apply to, and may require, fish salvage to be undertaken for waterway projects and maintenance. Permits, consents or approvals must be obtained under any relevant legislation (including the Resource Management Act 1991, the Freshwater Fisheries Regulations 2003, the Fisheries Act 1996, and/or the Conservation Act 1987). Offences could be committed under these Acts and Regulations for not having an appropriate approval, taking the wrong fish or using the wrong method to take them, or killing fish.

Note that this document does not cover all of the legal requirements associated with working around waterways, and only provides guidance for fish salvage. For example, works in or around waterways will usually trigger the need for a resource consent under the Resource Management Act. Seek the advice of an expert before conducting any works around waterways.

This document was prepared by Christchurch City Council and Environment Canterbury with input from internal and external construction and drainage engineers, ecologists and planners.

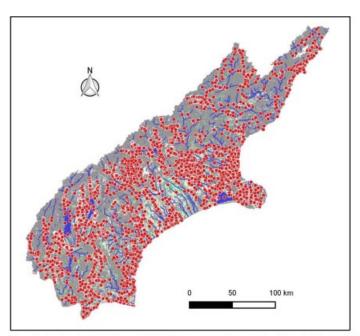


Figure 1: Location of native fish recorded in Canterbury, extracted from the New Zealand Freshwater Fish Database on 22 March 2017. Note that the absence of a record at a given location may simply mean the site has not been sampled, not that fish are absent from that location.



Figure 2: A large longfin eel caught in a Canterbury waterway. Longfin eels are an At Risk species in decline².

² Goodman, J. M., Dunn, N. R., Ravenscroft, P. J., Allibone, R. M., Boubee, J. A. T., David, B. O., Griffiths, M., Ling, N., Hitchmough, R. A., and Rolfe, J. R. (2014). Conservation status of New Zealand freshwater fish, 2013. New Zealand Threat Classification Series 7, Department of Conservation.



Figure 3: An adult inanga. Juvenile inanga are commonly known as whitebalt. Inanga are classified as an At Risk species in decline².

2. Where is Fish Salvage Necessary?

General Advice: If a watercourse has water in it most of the time and the water depth is more than one or two centimetres, then it may contain fish and fish salvage may be required.

While deeper waterways provide habitat for a greater range of species, even very small streams, or concrete and timber-lined drains with minimal water, will often contain small-bodied species such as bullies or juvenile eels. Several species of fish, notably eels and lamprey, will burrow into stream beds or banks during times of low flow such that a temporary absence of water does not indicate an absence of fish. Fish are also highly mobile, recolonising a previously dewatered reach rapidly once flow returns. Even waterways that are mostly dry may include isolated pools that contain fish.

3. What Activities may Require Fish Salvage?

General Advice: If the activity involves channel dewatering or will disturb the bed and submerged banks of a watercourse, and the watercourse may contain fish that might be harmed or killed by the activity, then fish salvage or other mitigation will likely be required.

Particular activities that may require fish salvage or other mitigation include:

- Decommissioning waterways prior to piping or realigning.
- · Waterway restoration projects.
- Installation of fish passes.
- · Channel dewatering (including isolated areas).
- Bank protection works.
- Bridges and other structures on the bank both new builds and repairs.
- Sediment removal (including routine waterway maintenance).

The Freshwater Fisheries Regulations 1983 make no distinction regarding the scale of the activity, so fish salvage or other mitigation should always be considered, regardless of the size of the project. However, the scale and specifics of the activity will determine the most appropriate method of salvage or other mitigation. The most appropriate methods should be determined with the guidance of a council or consulting freshwater ecologist who can tell you the most appropriate methods of fish salvage and ensure the work is done correctly. An activity that involves dewatering of an area of stream will likely require fish salvage to be carried out

by an ecologist or other suitably trained and permitted person under the guidance of an ecologist.

Activities that may result in fish being stranded on the bank will require fish to be returned to a suitable stretch of water by an ecologist or suitably trained person. Such activities include the removal of weed and sediment using a digger or dredging methods. Activities with the potential to impact downstream water quality to the detriment of fish should be mitigated primarily through monitoring of water quality (with trigger levels that dictate when works should cease) and changing the timing of the works, but fish salvage may be required in the event of fish stranding or suffocation.

General Advice: Speak to a council or consulting ecologist during the project planning or consent application phase to determine if and how fish salvage should be undertaken.

A Case study of Waterway Maintenance

Many lowland waterways are subjected to regular aquatic plant and fine sediment removal to aid drainage and mitigate against flooding. Studies have highlighted the ecological and water quality effects of standard practice methods of drainage clearance and the need for associated fish salvage.34,5 Consequently, Environment Canterbury's "Code of Practice for Defences Against Water and Drainage Schemes" states on page 24 that:

Where works are undertaken in water and there is potential for fish to be stranded, the person or organisation undertaking the works shall ensure that native and sport fish recovery is conducted for the duration of the works and at least one day after they have been completed. Fish recovery shall be conducted both instream (for suffocating fish) and bank side (for stranded fish). Recovered fish shall be returned upstream of the targeted section of waterway.

The Environment Canterbury Code of Practice for Defences Against Water and Drainage Schemes provides an example of an approach to fish salvage developed between engineers and ecologists.

4. What Fish Salvage Methods should be used?

General Advice: A range of fish salvage methods are available, but the method used should be effective at avoiding and minimising fish mortality, and be appropriate for the scale and significance of potential effects caused by the activity.

Prior to conducting any work, an initial fish population assessment may be helpful to identify the scale and significance of potential effects and the most appropriate fish salvage method or mitigations to employ. Timing of the works in relation to sensitive periods (e.g., fish spawning or migration) is a key first consideration for avoiding and minimising effects. The next step is ensuring all practicable steps have been taken to isolate the worksite (e.g., by

Hudson, H.R. and Harding, J.S., 2004. Drainage management in New Zealand: A review of existing activities and alternative management practices. Department of Conservation, Science for Conservation 235.
 Ballantine, D. and Hughes, A., 2012. The effects of drain clearing on water quality of receiving environments; Water quality effects of drain clearing. Prepared by NIWA for Environment Southland. May 2012.
 James, A., 2013. A review of the ecological effects of macrophyte management in soft-bottomed waterways. Waikato Regional Council Technical Report 2013/03. Prepared by EOS Ecology for Waikato Regional Council, January 2013.

using sheet piling). The types of fish salvage methods that may be used include electric fishing, trapping (e.g., fyke nets and minnow traps), and seine netting. If the activity may result in fish stranding on the bank (e.g., weed clearance or sediment removal), then salvage may involve both in-channel salvage (e.g., trapping or electric fishing) as well as examining the banks (including sediment spoil piles) for stranded fish. The decision on which method to use should be made with the guidance of a council or consulting ecologist.

All fish salvage methods assume appropriate permissions, permits, and controls are in place. The method chosen will rely on expert judgement and will depend on factors such as fish species present, water depth and velocity, fine sediment depth, and macrophyte (weed) cover.

5. Who should be involved?

General Advice: A freshwater ecologist should be involved in any project likely to require fish salvage and they can advise on mitigations.

A council or consulting freshwater ecologist with fisheries experience is the appropriate person to assess whether fish salvage is required and what methods should be used.

Fish salvage requires a Special Permit under Section 97 of the Fisheries Act 1996, and the permits are issued by the Ministry for Primary Industries (MPI). Additional authorisations are also typically required from the Department of Conservation, Fish and Game, and rūnanga. While "general authorisation" Special Permits may be valid for a wide range of projects, they still usually require that MPI and other organisations are notified in advance of any salvage work being conducted. In addition, there are a number of activities not covered by general authorisations (e.g., relocating fish outside of the catchment it was caught from) that may require a project-specific Special Permit and associated authorisations from the Department of Conservation, Fish and Game, and rūnanga.

Special Permits and other authorisations typically include a reporting requirement (usually an annual report in the case of Special Permits), including as a minimum what species were caught and their abundance.

Environment Canterbury Regional Council

Christchurch City Council

Peer reviewed by:

Signature:

Position: Surface Water Manager

Date: <u>1 March 2018</u>

Approved by:

Signature:

Position: <u>Director, Science</u>

Date: <u>1 March 2018</u>

Waterways Ecologist

26 March 2018



Manager, Planning & Delivery WWW

26 March 2018

Resource Consent: CRC260878 (s14 – water permit)

Applicant: NTP Development Holdings Limited

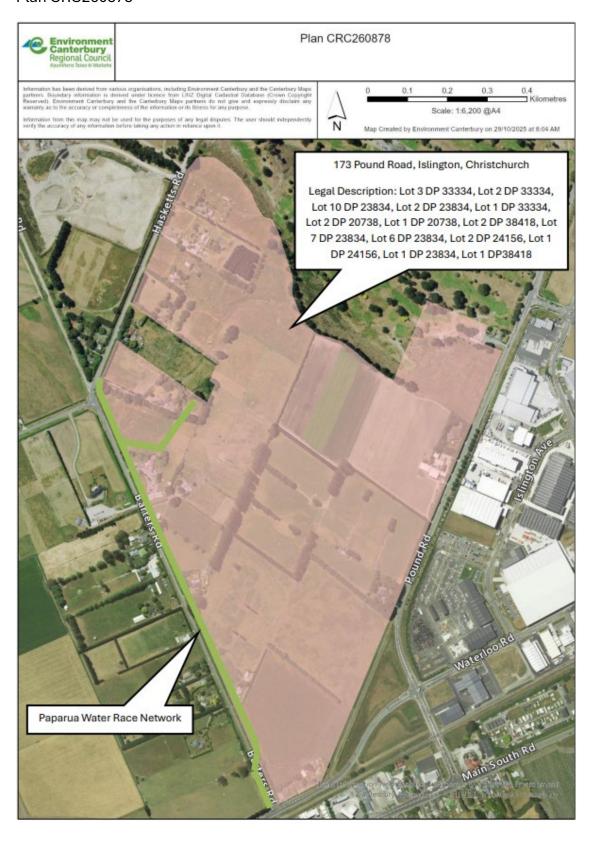
Duration: Applicant to inform us of requested duration but **CRC would recommend 5 years**

	Limits	CRC comments
1.	The activities authorised by this consent shall be limited to: a. The temporary instream damming of the Paparua Water Race Network at 173 Pound Road, legally described as: Lot 3 DP 33334, Lot 2 DP 33334, Lot 10 DP 23834, Lot 2 DP 23834, Lot 1DP 33334, Lot 2 DP 20738, Lot 1 DP 20738, Lot 2 DP 38418, Lot 7 DP 23834, Lot 6 DP 23834, Lot 2 DP24156, Lot 1 DP 24156, Lot 1 DP 23834, Lot 1 DP 38418 to facilitate the take and use of water for non-consumptive purposes; and b. The temporary non-consumptive take and use of water from the Paparua Water Race Network at 173 Pound Road, legally described as: Lot 3 DP 33334, Lot 2 DP 33334, Lot 10 DP 23834, Lot 2 DP 23834, Lot 1 DP 33334, Lot 2 DP 20738, Lot 1 DP 20738, Lot 2 DP 38418, Lot 7 DP 23834, Lot 6 DP 23834, Lot 2 DP 24156, Lot 1 DP 24156, Lot 1 DP 23834, Lot 1 DP 38418 for the purpose of bypassing flows around the locations of the culvert installation.	Clarification needed as to whether 173 Pound Road should be the only address listed, and that all of the lots sit within 173 Pound Road.
2.	The works shall be undertaken in accordance with the attached design plan, plan CRCXXX260878 which forms a part of this consent.	Plan as follows -

		Figure 1 (Control of the Control of
3.	Water may only be taken under Condition (1) for no longer than 12 weeks as an overall total, with no longer than 2 weeks continuous.	
4.	All water taken in accordance with Conditions 1 and 2 this consent must be discharged back into the lateral channel of the PWNR.	The wording has been revised to provide greater clarity regarding the scope of the consent.
	Water Take	
5.	Over pumping of the Paparua Water Race Network must be carried out at a rate that maintains existing water levels at the time of pumping. Over-pumping must not result in a reduction of water levels in the upstream reach.	
6.	Water taken from over-pumping the Paparua Water Race Network and removing water from the culvert installation sites shall be returned to the Paparua Water Race Network, immediately downstream of the culvert installation sites.	
	Fish Protection	
7.	Any pump used to take water in Condition (1) must be fitted with fish screens in general accordance with the Christchurch City Council's "Standards for Temporary Fish Screens on Christchurch City Council Projects" (2023) attached as Appendix CRC260878.	The appendix is attached below the consent.

	Administration	
8.	The Canterbury Regional Council may, once per year, on any of the last five	
	working days of May or November, serve notice of its intention to review the	
	conditions of this consent for the purposes of:	
	a. Dealing with any adverse effect on the environment that may arise from the	
	exercise of the consent or	
	b. Requiring the adoption of the best practicable option to remove or reduce any adverse	
	effect on the environment.	
9.	If this resource consent is not exercised before X January 31 March 2031, it lapses in	
	accordance with Section 125 of the Resource Management Act 1991.	
	Advice note: 'Exercised' is defined as implementing any requirements to operate this	
	consent and undertaking the activity as described in these conditions and/or application	
	documents.	

Plan CRC260878





Standard for Temporary Fish Screens on Christchurch City Council Projects

1. Purpose of this Standard

All manner of temporary fish screen designs and materials have been employed in the past on construction Council projects; many have failed. This standard provides guidance on how and where to place a temporary fish screen when works in a waterway are required as part of a Christchurch City Council ("Council") project. It is very difficult to state with any certainty that there are no fish within any given body of water, even for an expert ecologist, therefore where a fish screen is required this standard shall apply as a minimum.

2. Exceptions

On a project specific basis, where a suitably qualified and experienced freshwater ecologist (who is registered on the Council's Freshwater and Marine Ecology panel) provides advice that contradicts or supersedes this standard, the advice of the ecologist will apply. In such instances, the ecologist will need to describe in writing the reason for the exception and either: detail the new fish screen design; or explain the reason why screening is not necessary.

This standard only applies to temporary screens for works in waterways. For permanent fish screens, refer to separate guidance for fish screen facilities¹.

3. Fundamental Considerations

Fish screens are used to keep fish out of an area that may cause them harm, such as when physical works occur in a waterway, and/or when a section of waterway needs to be dewatered to undertake work. The underwriting principal of a fish screen is to create a barrier which fish cannot pass, but which allows the passage of water with the minimum of impediment. The greater the degree of flow impairment, the greater the risk of the fish screen failing due to water pressure.

The most common forms of fish screen failure include:

- Incorrect mess size.
 - If the mesh size is too course, it will not prevent the passage of all fish. If the mesh size is too fine, it will impede flow too greatly.
- Water pressure at the base and/or sides of the fish screen exceeds the structural integrity of the screen.
 This causes the screen to disconnect from the bed and/or banks of the watercourse, creating a pathway through which fish can pass the screen.
- · The fish screen is not high enough.
 - Rising water level on the upstream side of the screen (due to a rain event or because the screen and/or trapped debris impedes the flow too much) causes the screen to be overtopped. As a minimum this creates a pathway for fish to pass the screen, but it may also cause the screen to fail completely.
- The screen fails completely.
 - Overtopped, washed away, damaged by debris. Whatever the cause, the materials used to construct the fish screen are now just more flotsam in a waterway.

If a fish screen fails, works within the isolated area must cease until the fish screen is replaced and an ecologist has undertaken fish salvage from within the isolated area, and the new fish screen has been accepted.

¹ Hickford M, Jellyman P, Bowle S, McCormick T, McNally S, Meredith A, Morgan P, Webb M, Pringle BZ. 2023. Toward national guidance for fish screen facilities to ensure safe passage for freshwater fishes. Report prepared by NIWA for SFF Project 4405972: Adoption of good practice fish screening, Milestone 14 - Final Report, May 2023.



4. Constructing a Fish Screen

Material such as windbreak or shade cloth is often used to provide a screen of appropriate mesh size. The drawback of such soft material is that it requires structural support to retain shape and integrity in a flowing water environment, especially where water depth/velocity may increase in response to storm events or other activities. Use of steel mesh is preferable where this is available.

There are two commonly used types of fish screen; for the purposes of this Standard, they are referred to as a 'fence' and a 'box'. Fence refers to a fish screen that spans the full width of waterway; box refers to a cage like fish screen that is used to enclose a discrete intake, such as a pipe or pump. An image of each type of fish screen is shown below.

On Council projects, fences are typically used where fish must be excluded from a length of waterway where the passage of water must be maintained. They work well in steep sided waterways such as box culverts. Box screens are most commonly employed on a pump intake hose and can be used in any waterway that is large enough to accommodate a suitably sized box.





Example of a 'fence' type fish screen.

Example of a 'box' type fish screen.

5. Installation

They key requirements for an effective fish screen are:

5.1 General

- The fish screen must be constructed with a mesh size of 2-3mm gaps.
- If a soft material like shade cloth is used for the fish screen this will need to be supported by a strong wire
 mesh within a frame (e.g. hurricane fencing or concrete reinforcing mesh for a fence, a gabion basket or
 IBC frame for a box). This will provide strength and support to the screen material with minimal reduction
 in cross sectional area relative to flow.
- If the fish screen becomes regularly clogged with debris, consider installing an additional trash screen
 upstream of the fish screen to trap larger debris. This will facilitate easier cleaning and minimise
 damage/blocking of the fish screen.
- Check the fish screen prior to commencing any works and regularly thereafter to ensure it has not been damaged or failed in any way and to remove any collected debris.
 - Once satisfied that the screen is effective, works can commence, with ongoing regular checks.
 More frequent checks (every 1-2 hours) will be needed in locations with higher water velocities and/or soft sediments, due to the greater risk of erosion and screen failure, or when there is a lot of debris (e.g. leaves) that may clog the screen and result in it overtopping.



5.2 Fence Screens

- Install a fence on an angle (30-45°) to increase cross sectional area and minimise risk of the screen being
 undercut or bypassed (or blowing out completely) due to flow pressure on the screen. It will also
 encourage debris to slide down the fence to the lowest corner; this will help keep the fence clear and also
 make debris clearance easier from the bank.
- Ensure a fence is well keyed into the bed and banks of the waterway and use sandbags to ensure no gaps
 along the bottom edge of the fence. Ensure a fish screen fence extends far enough up the bank to ensure
 it is not overtopped if the flow backs up.
- Ensure any pump intake hose is positioned away from the fence by at least 1m to avoid fish and debris
 getting sucked onto or through the screen.
- If a fence is used in a waterway with shallow banks, it is important to ensure there are no gaps at the sides/ends of the fence. Consider using a sheet pile or steel plate (or similar) pushed into the bank to create a straight vertical surface the fence can butt up against and be fixed to securely.

5.3 Box Screens

- A suitably sized box screen must be used on any pump intake.
- If the pump is 4" or smaller a box screen should be at least 500mm on a side, if the pump is larger than 4" the box screen should be 1m on a side².
- The bottom of the box must be covered with a solid sheet (e.g. plywood) that prevents fish entry as well
 as disturbance/induction of bed sediments.
- Ensure the box and the pump hose are both adequately secured/supported (e.g. using warratahs or fence
 posts) so that the box screen does not get tipped over by the weight of the hose.
- A pump intake hose must be capped with a rose with the smallest hole diameter available for that pump size/make, and the rose should be suspended mid water depth. Avoid resting on the base where possible.
- If a box is used in a flowing water environment, install the box at 45° to the direction of flow to encourage debris to slide of the box.

6. Other Related Requirements

Council holds a number of resource consents which in unison authorise the damming, diversion and bypass pumping of surface water. Therefore, the following considerations must also be allowed for when planning to installation and use a fish screen:

- The pump intake and discharge must be set up in a way that does not generate suspended sediment or
 cause scour/erosion of the bed banks of the waterway, particularly at the discharge point. The discharge
 water quality will need to be to a standard that is acceptable to Council and Environment Canterbury.
- To avoid fish stranding, ensure sections beyond the area of works do not go dry because of dewatering or
 bypass pumping activities. This is a particular risk in small waterways with little flow. In such waterways, it
 may be necessary to walk some distance downstream, to ensure the entire flow is not lost to the bed.

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² In small/narrow waterways, boxes of these dimensions may not always be practicable. Where this is the case, form a box that fully encompasses the pump intake with as much space between the box and the intake as possible so as to minimise damage to the fish screen and chocking of the pump intake. Alternatively, seek expert advice from an ecologist.



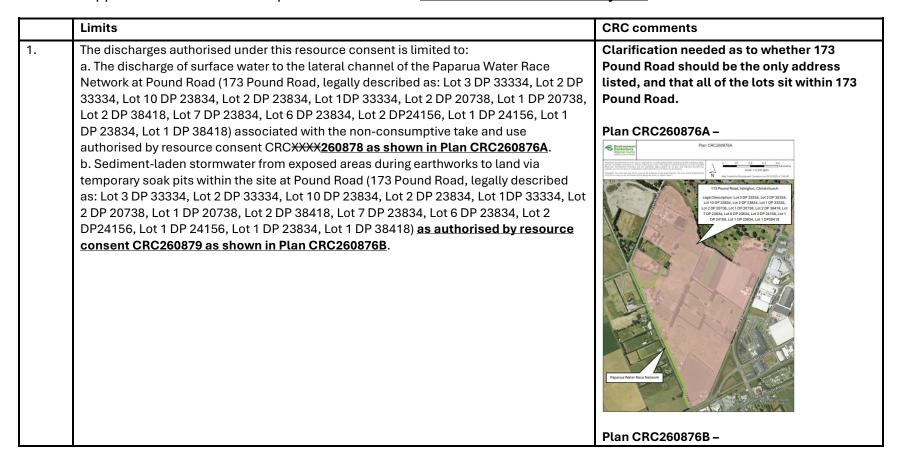
Fish Screen Installation Checklist

Item Not			Yes	No	N/A
1.	Ge				
	a)	Screen mesh gaps no greater than 3 mm?			
	b)	If mesh is soft material, is it adequately supported?			
	c)	Are screen checks frequent enough for this operation/environment?			
			177	100	
2.	Fer	nce Screens			
	a)	Is the screen at an appropriate angle to flow?			18
	b)	Is the screen sufficiently keyed into the bed and banks?			
	c)	Confirmed the screen is not being undermined? (look and feel under the screen)			18
	d)				
	e)				
	f)	If the screens have overtopped, has fish salvage occurred again?			a a
_		A 100 A 10 A 10 A 10 A 10 A 10 A 10 A 1	-	-	
3.	_	x Screens – For All Pumps	4	iş.	
	a)	Is the pump intake fully enclosed within a box screen?	4		
	b)	Is the box screen big enough for the pump (see Section 5.3 above)?	-		
	c)		4		
	d)				
_	e)	Are the pump intake holes the smallest available for pump size/type?	-		_
	f)	Is the box installed at an angle to the flowing water, if applicable?			
	01	hav Dalated Danvilsaments	1	T	al .
4.	-	her Related Requirements			
_	a)	Has the person doing the work read this standard & the accompanying Plan?			
	b)	Has the work been done or checked by experienced workers?	-		
	c)	Are appropriate erosion & sediment controls in place?	1		
	d)	Is there sufficient flow downstream to prevent fish stranding?			
Nie	tor	(include any observable non-conformance, non-standard alterations, or adjustmen	te undo	rtakan)	
IVO	tes	include any observable non-comormance, non-standard alterations, or adjustmen	its unue	takenj	

Resource Consent CRC260876 (s15 – Discharge Permit – Construction Phase)

Applicant: NTP Development Holdings Limited

Duration: Applicant to inform us of requested duration but CRC would recommend 5 years



		Peac CRC200578B Page CRC200578B Page CRC200
2.	Sediment laden stormwater must be discharged: a. In accordance with the Erosion and Sediment Control Plan (ESCP) required by Condition (X6) of this resource consent; b. Onto and/or into land via temporary soak pits.	
	Prior to Commencement of Works	
3.	Prior to commencement of the works described in Condition (1) all personnel working on the site must be made aware of, and have access to, the following: a. The contents of this resource consent document and all associated erosion and sediment control plans and other discharge treatment methodologies; b. Resource Consents CRCXXX260878 and CRCXXX260879, and any subsequent variations, and all associated documents.	Added 'any subsequent variations' to ensure future changes are also captured and complied with.
4.	All erosion and sediment control measures detailed in the ESCP required by Condition (6) of this resource consent must be installed prior to the commencement of any earthworks or stripping of vegetation and topsoil occurring on the site.	
5.	At least 10 working days prior to the commencement of works on site, the Canterbury Regional Council, Attention: Compliance Manager (via ECinfo@ecan.govt.nz) must be informed of the commencement of works.	

<u>6.</u>	Any remaining soils in areas where temporary construction-phase soakpits and stormwater basins are proposed, or on any contaminated land within the project area, must be tested and confirmed to be below ANZG GV-High concentrations prior to use.	Added in as a result of Mr Cromwell, CRC's contaminated land expert's advice.
	Erosion and Sediment Control	
6. 7.	The discharges authorised under this resource consent must occur in accordance with an ESCP. The ESCP must: a. Detail best practicable sediment control measures that will be implemented to ensure compliance with the conditions of this resource consent; b. Be prepared by a suitably qualified person with experience in erosion and sediment control in accordance with: i. Canterbury Regional Council's Erosion and Sediment Control Toolbox for the Canterbury Region (ESCT), which can be accessed under http://escanterbury.co.nz/; or ii. An equivalent industry guideline. If an alternative guideline is used, the ESCP must provide details of the relevant alternative methods used and an explanation of why they are more appropriate than the ESCT; and c. Be signed by an engineer or suitably qualified person with experience in erosion and sediment control, confirming that the erosion and sediment control measures for the site are appropriately sized and located in accordance with the ESCT or alternative guideline.	The reference to the link is being removed as the website will no longer be supported.
7. 8.	The ESCP must: a. Include a map showing the location of all works; b. Detailed plans showing the location of sediment control measures, on-site catchment boundaries, and sources of run-off; c. Detail how best practicable measures are taken to minimize discharges of sediment-laden stormwater run-off beyond the boundaries of the site; i. include drawings and specifications of designated sediment control measures, if these are not designed and installed in accordance with the ESCT; ii. Detail the methodology for stabilizing the site entrance and exit points and any measures employed to prevent off-site tracking od sediment and other materials from the site; d. Include a confirmation that the erosion and sediment control devices have been sized appropriately in accordance with the ESCT;	Clause (m) has been deleted, as the applicant has not proposed the use of chemical treatment.

	e. Include a programme of works, including a proposed timeframe for each stage of the	
	works and the earthworks methodology;	
	f. Detail the management of any stockpiled material;	
	g. Detail inspection and maintenance of the sediment control measures;	
	h. Detail sampling procedures and protocols;	
	i. Define the discharge points where stormwater is discharged onto land / infiltrates into	
	land;	
	j. Include a description of dust mitigation to be used and details of best practicable	
	options to be applied to mitigate dust and sediment discharge beyond the site boundary;	
	k. Detail the methodology for stabilizing the site if works are paused for more than five	
	working days or abandoned;	
	l. detail the methodology for stabilizing the site and appropriate decommissioning of all	
	erosion and sediment control measures after works have been completed; and	
	m. include measures such as Chemical Treatment Plan should the use of water	
	treatment chemicals be required.	
8. <u>9.</u>	The ESCP must be submitted to the Canterbury Regional Council Attention: Compliance	
	Manager (via ECinfo@ecan.govt.nz), after the commencement of the resource consent	
	and at least 10 working days prior to works commencing.	
9. 10.	The ESCP may be amended at any time. Any amendments must be:	
	a. Only for the purpose of improving the efficacy of the erosion and sediment control	
	measures and must not result in reduced discharge quality; and	
	b. For the purpose of applying best practicable measures to mitigate sediment transport	
	off-site;	
	c. Consistent with the conditions of this resource consent; and	
	d. Submitted in writing to the Canterbury Regional Council, Attention: Compliance	
	Manager (via ECinfo@ecan.govt.nz), prior to any amendment being implemented.	
10. 11.	Erosion and Sediment Control measures must be inspected at least once per day, as	
	well as following any rainfall event that results in more than five millimetres of rainfall at	
	the site. Any accumulated sediment must be removed, and repairs made, as necessary,	
	to ensure effective functioning of measures and devices. Records of any inspections	
	must be kept and provided to the Canterbury Regional Council on request.	
	During the works	
11. <u>12.</u>	The discharge to surface water described in Condition 1(a) must not at any time:	
	a. Have a concentration of Total Suspended Solids (TSS) exceeding 50 milligrams per	
	litre; and	
	b. Result in within the receiving waterbodies:	

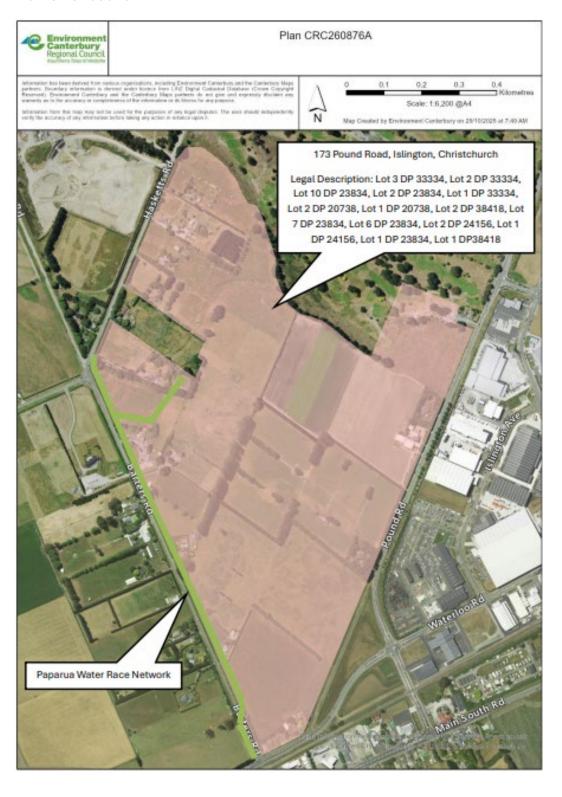
	i. the production of any oil or grease films;	
	ii. the production of any floatable or suspended materials;	
	iii. the production any sludge or emulsion deposited on the bed.	
12. 13.	a. Prior to the discharge of water in accordance with Conditions (1)(a) of this resource	
	consent, a set of laboratory calibrated samples must be made up in clear bottles	
	containing the following concentrations of TSS:	
	i. 0 milligrams per litre;	
	ii. 50 milligrams per litre;	
	iii. 100 milligrams per litre;	
	b. The calibrated samples must be:	
	i. prepared using representative soil samples from the site and then calibrated by	
	a suitable laboratory to the unique combination of soil types at the site and the	
	TSS concentrations detailed under (a); and	
	ii. be replaced by a newly prepared sample every six months.	
	c. The set of calibrated samples must be held on site.	
	d. Records of the laboratory calibration, including records of replacement samples	
	prepared must be kept and provided to Canterbury Regional Council on request.	
13. 14.	During the discharge to surface water described in Condition (1)(a), samples of	
	discharge water must be:	
	a. Taken by a suitably qualified person and in accordance with best practicable	
	sampling methodology;	
	b. Collected in clean containers at the end of the sediment treatment system prior to	
	the discharge to land or water;	
	c. Collected one, two, four, and 24 hours after the discharge has commenced, and	
	once per day thereafter if discharge exceeds one working day; and	
	d. Visually compared to the calibrated samples prepared in accordance with	
	Condition (X12).	
14. 15.	If it becomes apparent at any stage during water quality monitoring detailed in	
	Conditions (X11) and/or (X13) that a maximum TSS concentration of 50 milligrams per	
	litre in the discharge will not, or is unlikely to be achieved, or if the visual assessment	
	and observations undertaken in accordance with Condition (X) indicate a sheen of oil or	
	grease or discoloration, or any sludge or emulsion below the water surface, then:	
	a. the discharge must cease immediately;	
	b. the discharge can only recommence once amendments have been made to the	
	treatment process such that:	
	i. a TSS concentration of 50 milligrams per litre in the treated discharged is	
	achieved;	

	ii. the source of the sheen of oil or grease, discoloration, or any sludge or	
	emulsion below the water surface, has been removed.	
15. <u>16.</u> <u>17.</u>	All practicable measures must be taken to: a. minimizse soil disturbance to that necessary to minimise the potential for sediment- laden stormwater runoff to be generated; b. Prevent soil erosion as a result of stormwater runoff generated from the works area; c. Avoid placing excavated material in a position where it may become entrained in stormwater runoff and discharged to: i. Any surface water body; ii. Any neighbouring site; and/or iii. The CCC Christchurch City Council reticulated stormwater network. a. Tracking of material off-site during the works must be avoided at all times.	
	 b. In the event that material is tracked off-site, the tracked material must be removed as soon as practicable. Stockpiling of Contaminated Material/Soil 	
17. 18.		
17. <u>10.</u>	Stockpiling of contaminated material or soils must be avoided where possible. In the event that temporary stockpiling of suspected contaminated or contaminated material is required, then the contaminated material stockpiles must be managed as below: a. Stockpiled contaminated material or soils must be kept separate from uncontaminated excavated soils stockpiles and any virgin aggregate or other material also stockpiled on-site; and b. Stockpiled contaminated material must be placed on polythene sheeting or similar impervious material to prevent contamination of underlying material; and c. Stockpiled contaminated material must include a perimeter bund or berm installed to prevent runoff leaving the area and stormwater from other areas entering the stockpile area; and d. Stockpiled material must be covered or dampened during dry and windy conditions so as to prevent wind erosion; and e. If any rainfall is forecasted that has the potential to cause runoff from the stockpiles, or if the stockpiles are left overnight, over the weekend or over public holidays, the stockpiled material must be covered with plastic sheeting or a suitable material such as clean topsoil, or otherwise stabilised, to prevent stormwater runoff coming into contact with contaminated material.	
	Advice note: For the purpose of this condition, temporary stockpiling means material being stockpiled for no longer than the overall construction period or the stage of	

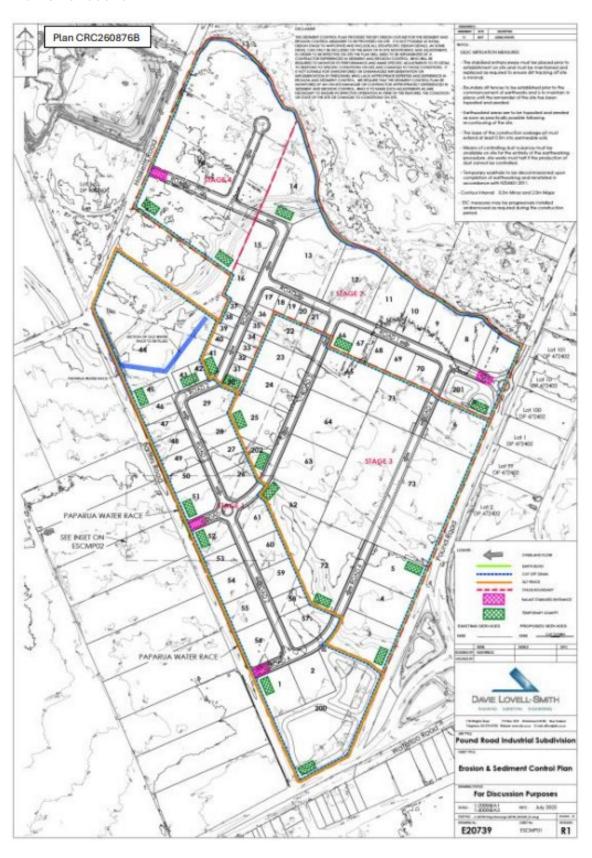
	construction if construction occurs in stages, whichever is the shorter period, and only	
	for as long as reasonably necessary. The overall requirement to avoid, where possible,	
	the stockpiling of contaminated material or soils prevails.	
	Spills	
18. 19.	All practicable measures must be taken to avoid spills of fuel or any other hazardous substances within the site. These measures must include: a. Refueling of machinery and vehicles must not occur within 20 metres of: i. open excavations; ii. exposed groundwater; and iii. stormwater devices. b. A spill kit must be kept on site that is capable of absorbing the quantity of oil and petroleum products that may be spilt on site at any one time, remains on site at all times. c. In the event of a spill of fuel or any other hazardous substance, the spill must be cleaned up as soon as practicable, the stormwater system must be inspected and cleaned, and measures taken to prevent a recurrence; d. The Canterbury Regional Council, Attention: Compliance Manager, must be informed within 24 hours of a spill event exceeding five litres and the following information provided: i. The date, time, location and estimated volume of the spill; ii. The cause of the spill; iii. The type of hazardous substance(s) spilled; iv. Clean up procedures undertaken; v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;	
	vi. An assessment of any potential effect of the spill; and	
	vii. Measures to be undertaken to prevent a recurrence.	
	Upon Completion of Works	
19. 20.	Erosion and sediment control measures must not be decommissioned until the site is stabilised and the stormwater system for the developed site is functioning. Decommissioning of the measures must be undertaken in the following order:- The following decommissioning measures must be undertaken: a. All disturbed areas must be stabilised and re-vegetated within two weeks 10 working days of the completion of the works; b. Any visible debris, litter, sediment and hydrocarbons must be removed from all sediment control measures and disposed at a suitable facility; and c. Erosion and sediment control measures must be removed.	Wording amended to ensure the applicant is able to comply with the condition.

20. 21.	Upon completion of works and the removal of erosion and sediment control measures, any visible sediment accumulated on impervious surfaces within or immediately adjacent to the works site must be removed to minimise the risk of sediment becoming entrained in stormwater. All sediment removed must be disposed of at a suitable facility.	
	Administration	
21. 22.	The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of: a. Dealing with any adverse effect on the environment that may arise from the exercise of the consent or b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.	
22. 23.	If this resource consent is not exercised by 31 January March 2031, it lapses in accordance with Section 125 of the Resource Management Act 1991. Advice note: 'Exercised' is defined as implementing any requirements to operate this consent and undertaking the activity as described in these conditions and/or application documents.	

Plan CRC260876A



Plan CRC260876B



Resource Consent: CRC260877 (s15 – Discharge permit – Operational Phase)

Applicant: NTP Development Holdings Limited

Duration: Applicant to inform us of requested duration **but CRC would recommend 15 years**

	Limits	CRC comments
1.	The activity authorised under this resource consent is limited to the discharge of stormwater generated from: a. Roofs b. Roads c. Berms d. Footpaths e. Hardstand and impervious surface areas associated with the proposed industrial subdivision 'Pound Road Industrial Development' labelled as 'Lots 1 to X' on Plan CRC***X260877*A attached to and forming part of this consent.	Plan CRC260877A Par CRC20877A Par
2.	Stormwater must only be discharged onto and into land within the boundary of the site in accordance with Conditions (4) to (1514) of this resource consent.	
3.	Unless treatment is provided, the discharge of roof stormwater must not arise from: a. Copper building materials; or b. Unpainted galvanized sheet materials. Individual Lot Stormwater Systems	
4.	Stormwater must be discharged into land via the following stormwater system: a. Stormwater from roofs shall be discharged via a sealed system that excludes all other stormwater to soakage pits;	The advice note provides the compliance team with certainty regarding the intent.

5.	b. A minimum of one infiltration test at the location of each of the proposed soakage pits; c. The soakpits and associated detention shall have a minimum capacity to attenuate and dispose all rainfall events up to and including the 24 hour duration two percent annual exceedance probability event from the contributing catchment; e. d. Stormwater in excess of the specified event in Condition 4(d) (c) must be directed towards the roading reserve. Advice Note: The intent of clause (d) of this condition is to avoid flooding of properties. The individual lot soak pits must: a. Along with its associated detention, store and dispose of all stormwater from the contributing catchment for up to and including the 24 hour duration two percent annual exceedance probability event from the contributing catchment;	The addition of this text in (e) ensures that groundwater will not be encountered during the establishment of stormwater
	b. Have a base that extends into free draining soil strata; and c. Have a factor of safety of three incorporated into the soak pit design to account for reduction of infiltration performance over time (clogging). d. Be sized and designed based on infiltration tests completed at the proposed soakpit location and target depth; e. Have a maximum depth to the base of 5.5 metres below natural ground level or a minimum separation distance of 1 metre to groundwater.	infrastructure.
7. <u>6.</u>	Stormwater generated within each individual site must only be discharged onto and into land within the boundary of each individual site <u>except where specified in Condition</u> (9).	The addition of this text allows stormwater generated from areas referenced in Condition 9 to be directed to the road reserve if necessary.
8. <u>7.</u>	The discharges must not arise from a site where any of the activities or industries listed in Schedule 2 of the Land and Water Regional Plan attached as Appendix CRCXXX260877, which forms part of this consent, are conducted or operated.	This refers to Fish Screen Standards, so it is unclear why they are attempting to reference it.
9. <u>8.</u>	For the avoidance of doubt, Conditions (109) to (1514) do not apply to the individual lot discharges from roof surfaces covered by Conditions (4) to (8).	
	Overall Subdivision Stormwater System	
10. <u>9.</u>	Stormwater from roads, footpaths, berms, hardstand areas, impervious surfaces, and excess stormwater run-off from industrial lots must be conveyed via kerb and channel to submerged outlet sumps and treated via a first flush infiltration basin and/or soakpits system.	This will be Plans CRC260877B and CRC260877C. It is not entirely clear which table(s) the reference pertains to. It may relate to Table S5A, and possibly Table S5B,

This must meet the water quality requirements of the Land and Water Regional Plan water quality outcomes and standards set out in Table 1, Schedules 5 and 8 and Section 5 to 15 (whichever applies) are being met or will be met prior to being discharged to ground as shown on the attached Plans CRCXXXXXXX260877B and CRCXXXXXXX260877C which forms part of this resource consent.

given the 95% criteria specified for artificial watercourses. Alternatively, it could refer to the table in Schedule 8; however, this may not be applicable, as the artificial watercourse is not formally defined as a river. Clarification from the applicant or reference to the relevant schedule is recommended to ensure consistent interpretation.

Plan CRC260877B



11. 10. The infiltration basin and/or soakpits shall:

- a. Along with its associated detention, store and dispose of all rainfall events up to and including the 24 hour duration two percent annual exceedance probability event from the contributing catchment;
- b. Have a base that extends into free draining soil strata; and
- c. Have a factor of safety of [three] incorporated into the soak pit design to account for reduction of infiltration performance over time (clogging);
- d. Be sized and designed based on infiltration tests completed at the proposed soakpit location and target depth.

The addition of this text ensures that groundwater will not be encountered during the establishment of stormwater infrastructure.

	e. Have a maximum depth to the base of 5.5 meters below natural ground level <u>or a</u>	
	minimum separation distance of 1 metre to groundwater.	
12. 11.	Where the capacity of the primary stormwater system is exceeded, stormwater must be	
	directed towards the internal roading network and to the CCC Christchurch City	
	Council stormwater network in Pound Road or Waterloo Road.	
13. 12.	All sumps must be fitted with submerged outlets capable of trapping at least 60 litres of	
	hydrocarbons.	
14. 13.	Stormwater shall not pond in any open detention area for longer than 48 hours after the	
	cessation of any storm event.	
15. 14.	Stormwater shall only be discharged onto and into land via the stormwater system	
	detailed under Condition (10 9) of this resource consent.	
	Design Plans	
16. 15.	At least 20 working days prior to the installation of the stormwater system the consent	
	holder or lot owner shall submit to the Canterbury Regional Council, Attention	
	Compliance Manager:	
	a. Final detailed design plans for the stormwater system/component.	
	b. A certificate signed by a Chartered Professional Engineer (CPEng) with stormwater	
	system design and construction experience confirming that:	
	i. The stormwater system has been designed in accordance with the Conditions of	
	this resource consent; and	
	c. A statement signed by the CPEng confirming that they are competent to certify the	
	engineering work.	
17 . <u>16.</u>	At least Within 10 working days of the installation of the stormwater system, the consent	The inclusion of "or lot owner" ensures that,
	holder or lot owner shall submit to the Canterbury Regional Council, Attention:	in the event the lot is sold prior to the
	Compliance Manager (via ECinfo@ecan.govt.nz):	installation of the stormwater system, the
	a. All as built design plans of the {stormwater system /component/etc.} installed;	obligation to provide the information
	b. A certificate signed by a CPEng with stormwater system design and construction	specified in the consent conditions remains
	experience confirming that confirming that the installed fstormwater	enforceable. This wording maintains
	system /component/etc.] complies with the conditions of this resource consent; and	accountability regardless of changes in
	c. A statement signed by the CPEng confirming that they are competent to certify the	ownership.
	engineering work.	·
	Inspection and Maintenance	

18. 17.	The soakage pits must be inspected at least once every six months, and the following maintenance carried out if necessary, unless otherwise agreed with Canterbury Regional Council: a. Inspecting the [list of components] at least once every [three/six/twelve] month(s) depending on which first flush treatment solution has been designed for the individual site. b. Removing any visible hydrocarbons, debris or litter within ten working days of the inspection. c. Removing any accumulated sediment in the [infiltration components] within five working days of the inspection. d. Removing any accumulated sediment in the sumps and [component] when the sediment occupies more than one quarter of the depth below the invert of the outlet pipe. e. Repairing any scour or erosion within ten working days of the inspection.	Clarification required from the applicant regarding the matters currently indicated in brackets [], to ensure certainty and completeness in the assessment of the consent. The phrase "unless otherwise agreed with Canterbury Regional Council" provides flexibility for potential variations in the stormwater infrastructure to be installed.
19. 18.	Any material, including sediment, hydrocarbons and other contaminants removed in accordance with condition X17 of this consent shall be disposed of at a location or facility authorised to receive such material.	
20. 19.	Records of the inspection and maintenance of the stormwater system must be kept. The records must include, but not be limited to, information that demonstrates compliance with C-conditions X, X17 and X18 of this consent. Copies of these records must be provided to the Canterbury Regional Council on request. These records must include, but not be limited to: a. Date and details of inspections of the stormwater system; b. Date and details of any maintenance work, repairs and upgrades to the stormwater system, including removal of material and its disposal; c. Any complaints received about the stormwater discharge.	
	Spills	
21. 20.	All practicable-measures must be taken to avoid spills of fuel or any other hazardous substances within the site. These measures must include: a. Refueling of machinery and vehicles must not occur within 20 metres of: i. open excavations; ii. exposed groundwater; and iii. stormwater devices.	The construction-phase spill condition is being replaced with the operational-phase spill condition.

b. A spill kit must be kept on site that is capable of absorbing the quantity of oil and petroleum products that may be spilt on site at any one time, remains on site at all times.

c. In the event of a spill of fuel or any other hazardous substance, the spill must be cleaned up as soon as practicable, the stormwater system must be inspected and cleaned, and measures taken to prevent a recurrence;

d. The Canterbury Regional Council, Attention: Compliance Manager, must be informed within 24 hours of a spill event exceeding five litres and the following information provided:

i. The date, time, location and estimated volume of the spill;

ii. The cause of the spill;

iii. the type of hazardous substance(s) spilled;

iv. Clean up procedures undertaken;

v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;

vi. An assessment of any potential effect of the spill; and

vii. Measures to be undertaken to prevent a recurrence.

All practicable measures shall be taken to avoid spills of fuel or any other hazardous substances within the site. In the event of a spill of fuel or any other hazardous substance:

- a) The spill shall be cleaned up as soon as practicable, the stormwater system shall be inspected and cleaned, and measures shall be taken to prevent a recurrence;
- b) The Canterbury Regional Council, Compliance Manager shall be informed within 24 hours of a spill event exceeding five litres and the following information provided:
 - i. The date, time, location and estimated volume of the spill;
 - ii. The cause of the spill;
 - iii. The type of hazardous substance(s) spilled;
 - iv. Clean up procedures undertaken;
 - v. <u>Details of the steps taken to control and remediate the effects of the spill on the receiving environment;</u>
 - vi. An assessment of any potential effects of the spill; and
 - vii. Measures to be undertaken to prevent a recurrence.

22. 21.	All best practicable options shall be used to contain spills or leaks of any hazardous substance from being discharged via the stormwater system. These shall include, but not be limited to the following: a. Using a tank filling procedure to minimise spills during any fuel delivery; b. Making spill kits available to contain or absorb any hazardous substances used or stored on the site; c. Maintaining signs to identify the location of the spill kits; and d. Maintaining written procedures in clearly visible locations that are to be undertaken to contain, remove and dispose of any spilled hazardous substance.	
	Administration	
23. 22.	The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of: a. Dealing with any adverse effect on the environment that may arise from the exercise of the consent or b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.	
24. 23.	If this resource consent is not exercised before 31 January March 2031, it lapses in accordance with Section 125 of the Resource Management Act 1991. Advice note: 'Exercised' is defined as implementing any requirements to operate this consent and undertaking the activity as described in these conditions and/or application documents.	