

Killermont (WHL) Works in the bed or banks of lakes and rivers

CRC073112 and CRC073113 (Option 2)

1. The works shall be limited to:
 - (a) The construction, maintenance and use of an intake structure and associated infrastructure at or about NZMS 260 H39:547-285.
2. Excavation shall not exceed a depth of 3.5 metres below the level of the river bed prior to excavation, or a surface area of 60 metres by 40 metres.
3. If further excavation at the site in the river bed is not to occur within seven days following the last working at the site, then the following shall occur:
 - (a) All deposits of gravel, sand and other natural material shall be levelled to the natural bed level;
 - (b) The excavation area shall be reshaped and formed to a state consistent with the surrounding natural river bed.
4. Prior to commencing excavation, a copy of this resource consent shall be given to all persons undertaking activities authorised by this consent.
5.
 - (a) Works shall not be carried out on public holidays, or on public holiday weekends;
 - (b) Works shall only occur during the hours of 7am to 7pm.
6. All practicable measures shall be undertaken during construction and maintenance to minimise adverse effects on property, amenity values, wildlife, vegetation and ecological values

Accidental Discovery Protocol

7. The consent holder shall ensure that the following procedure is adopted in the event that koiwi (human remains) or taonga (cultural artefacts) are unearthed or are reasonably suspected to have been unearthed during the course of construction and other activities.
 - (a) Immediately as it becomes apparent, or is suspected by workers at the site that koiwi or taonga have been uncovered, all activity at the site will cease.
 - (b) The plant operator will shut down all machinery or activity immediately, and leave the area and advise his or her supervisor of the occurrence.
 - (c) The supervisor shall take steps to immediately secure the area in a way that ensures that koiwi or taonga remain untouched as far as possible in the circumstances and shall notify the consent holder.
 - (d) The Project Manager will notify the New Zealand Police (in the case of koiwi) and the relevant runanga representatives that it is suspected that koiwi and/or taonga have been uncovered at the site.
 - (e) The runanga representatives will contact the appropriate kaumatua to act on their behalf in this matter in order to guide and advise the consent holder as to the appropriate course and the consent holder will immediately advise the consent holder of the identity of such kaumatua.

- (f) The consent holder shall ensure that representatives on its behalf are available to meet and guide kaumatua and police (as appropriate) to the site, assisting with any requests they may make.
- (g) If the kaumatua are satisfied that the koiwi or taonga are of Maori origin the kaumatua will decide how they are to be dealt with and will communicate its decision to the consent holder, New Zealand Police and such other parties as are considered appropriate.
- (h) Activity on site shall remain halted until the New Zealand Police and the kaumatua have given approval for operations to recommence.
- (i) The consent holder shall ensure that kaumatua are given the opportunity to undertake karakia and such other religious or cultural ceremonies and activities at the site as may be considered appropriate in accordance with tikanga Maori (Maori custom and protocol).

Erosion Protection

- 8. Works shall not cause erosion, or instability to the banks and bed of the Ahuriri River.
- 9. Erosion controls shall be installed on all earthworks to prevent sediment from flowing into any surface water body.
- 10. Works shall not be undertaken in any manner likely to cause erosion of or instability to, the banks or bed of the Ahuriri River; or reduce the flood-carrying capacity of the waterway.

Sediment Control

- 11. The consent holder shall adopt the best practicable options to:
 - (a) Minimise soil disturbance and prevent soil erosion;
 - (b) Prevent sediment from flowing into any surface water; and
 - (c) Avoid placing cut or cleared vegetation, debris, or excavated material in a position such that it may enter surface water.
- 12. The consent holder shall ensure that construction of the intake does not occur during the period of 1 June to 14 November inclusive, in any one year.
- 13. At least 20 working days prior to the commencement of the works, the consent holder shall submit to the Canterbury Regional Council, Attention: RMA Enforcement and Compliance Manager an Erosion and Sediment Control Plan (ESCP) that includes, but is not limited to the following:
 - (a) a locality map; and
 - (b) detailed drawings showing the type and location of erosion and sediment control measures, on-site catchment boundaries, and off-site sources of run-off; and
 - (c) drawings and specifications of all designated erosion and sediment control measures with supporting calculations; and
 - (d) a programme of works, which includes but is not limited to a proposed timeframe for the works;
 - (e) a schedule of inspections and maintenance of erosion and sediment control measures; and

- (f) details of when the erosion and sediment control measures are to be established and decommissioned; and
 - (g) measures to ensure that there is no tracking of mud or earth onto the surrounding road network, including the provision of shaker ramps and/or wheel washes where appropriate; and
 - (h) measures to be undertaken should erosion and sediment control measures fail and result in contamination of any watercourse or water body.
14. The ESCP shall be prepared in general accordance with the Environment Canterbury Erosion and Sediment Control Guidelines 2007 (ECAN ESC Guidelines).
 15. The ESCP shall be communicated to all persons undertaking activities authorised by this consent and a copy of the ESCP shall be kept on site at all times.
 16. The Erosion and Sediment Control Plan and any revisions of that document shall be submitted to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager for certification that the Erosion and Sediment Control Plan meets all the requirements of the conditions of this consent.
 17. No activities authorised by this consent shall commence or be undertaken other than in full compliance with the Erosion and Sediment Control Plan that has been certified by or on behalf of the Canterbury Regional Council RMA Compliance and Enforcement Manager in terms of condition 13.
 18. Prior to any construction works being carried out in the period 1 September to 1 February, the consent holder shall ensure that:
 - (a) a suitably qualified and independent person inspects the proposed area of works, no earlier than eight working days prior to any works being carried out, and locates any bird breeding sites of birds listed in Appendix A;
 - (b) the person carrying out the inspection prepares a written report that identifies all the located bird breeding or nesting sites and provides copies of that report to the consent holder and the Canterbury Regional Council;
 - (c) the name and qualifications of the person carrying out the inspection are provided to the Canterbury Regional Council with the report;
 - (d) any person carrying out works authorised by this consent are informed of any bird breeding or nesting sites located; and
 - (e) where work ceases for more than 10 days, the site will be re-inspected for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition.

Appendix A – list of bird species

South Island Pied Oystercatcher
 Black Stilt
 Pied Stilt
 Wrybill

Banded Dotterel
 Black-fronted Dotterel
 Grey warbler
 Fantail
 Bellbird
 Silvereye
 Spur-winged Plover
 Paradise Shelduck
 Grey Duck
 NZ Shoveler
 Grey Teal
 NZ Scaup
 Black-billed Gull
 Red-billed Gull
 Caspian Tern
 White-fronted Tern
 Black-fronted Tern
 White-winged Black Tern
 Australasian Bittern
 Marsh Crake
 Spotless Crake
 Cormorant/shag colonies
 Or any other bird species deemed by a suitably qualified person to require protection.

19. The consent holder shall ensure that no construction or maintenance work is undertaken within 100m of any bird breeding or nesting sites as identified in accordance with condition 17.
20. Any maintenance works that require bed disturbance in flowing water should be avoided in the first two weeks of November and outside that period Fish and Game should be consulted prior to any works.
21. To prevent the spread of Didymo or any other aquatic pest, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures.
22. The consent holder shall ensure that during construction:
 - (a) All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery.
 - (b) There shall be no storage of fuel or refuelling of vehicles and machinery within 20 metres of the bed of a river.
 - (c) Fuel shall be stored securely or removed from site overnight.
23. The consent holder shall ensure that works do not prevent the passage of fish, or cause the stranding of fish in pools or channels.
24. The consent holder shall ensure that machinery shall be free of plants and plant seeds prior to use in the waterbody.

Upon Completion

25. All disturbed areas outside the lake or river bed shall be stabilised and revegetated with similar species to those found in the intermediate vicinity of the particular site following completion of the works.
26. All spoil and other waste material from the works shall be removed from site on completion of works.

Fish Screens

27.
 - (a) Water shall only be taken when a fish screen with a maximum mesh width and height size of 3 millimetres or slot width and height of 2 millimetres is operated and maintained across the intake to ensure that fish and fish fry are prevented from passing through the intake screen.
 - (b) The fish screen shall be positioned to ensure that there is unimpeded fish passage to and from the waterway and to avoid the entrapment of fish at the point of abstraction, and to minimise the risk of fish being damaged by contact with the screen face.
 - (c) The fish screen shall be designed and installed to ensure that:
 - i. the majority of the screen surface is oriented parallel to the direction of water flow.
 - ii. where practicable, the screen is positioned in the water column a minimum of 300 millimetres above the bed of the waterway and a minimum of one screen radius from the surface of the water.
 - iii. the approach velocity perpendicular to the face of the screen shall not exceed 0.06 metres per second if no self-cleaning mechanism exists, or 0.12 metres per second if a self-cleaning mechanism is operational.
 - iv. the sweep velocity parallel to the face of the screen shall exceed the design approach velocity.
 - (d) The fish screen shall be designed or supplied by a suitably qualified person who shall ensure that the design criteria specified in condition 24(a) –(c)(iv) of this consent is achieved. Prior to the installation of the fish screen, a report containing final design plans and illustrating how the fish screen will meet the required design criteria, and an operation and maintenance plan for the fish screen shall be provided to Environment Canterbury, Attention: RMA Compliance and Enforcement Manager.
 - (e) A certificate shall be provided to Environment Canterbury by the designer or supplier of the fish screen to certify that the fish screen has been installed in accordance with the details provided to Environment Canterbury in accordance with condition 24(a) of this consent.
 - (f) The fish screen shall be maintained in good working order. Records shall be kept of all inspections and maintenance, and those records shall be provided to Environment Canterbury upon request.

Review

28. 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 dealing with any adverse effect on

the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.

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