



Appendix G – Permitted Activity Assessment

Permitted Activities

A number of activities associated with the project can be undertaken as a permitted activity under the AUP:OP as detailed in Table P1 and Table P2.

Table P3: Permitted activities under the AUP: OP (regional)

Rule	Comment
E4.4.1(A5) Discharge onto or into land and/or into water for the purpose of dewatering trenches or other excavations	Whilst groundwater concentrations of copper and zinc, and nickel, were reported above the 95% and 80% Australia and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC guidelines) respectively, ANZECC guidelines are intended to be applied after reasonable mixing in the receiving water body. The contaminants would be expected to be significantly diluted through this process, and after reasonable mixing, will result in rendering freshwater unsuitable for consumption by farm animals, a change in the natural pH of the water by more than 1 pH unit, or any significant adverse effect on aquatic life. Extracted groundwater will be treated via the use of sediment ponds or sediment tanks prior to discharging to existing freshwater bodies, with discharge considered to be in accordance with best management practice to minimise the contaminants to the extent practicable. With these measures in place, groundwater quality in the area of the pumpstation indicates that dewatering water quality is likely to be acceptable for discharge to either the wetland or to Sinton Stream (refer to the Pumpstation Dewatering Discharge Water Quality Assessment provided in Appendix O for further details). Discharge onto or into land and / or into water for the purpose of dewatering trenches or other excavations is a permitted activity under E4.4.1(A5).
E7.4.1 (A17) Dewatering or groundwater level control associated with a groundwater diversion permitted under the Unitary Plan	<u>Open trenching</u> A Groundwater Assessment has been completed for the Project (Appendix C). This assessment confirms that the trenched works can comply with standard E7.6.1.6 as the water take will not be geothermal water, the water take will be less than 30 days and will only occur during construction.
E7.4.1(A27) Diversion of groundwater caused by any excavation (including trench) or tunnel	<u>Open trenching</u> The ground diversions associated with the trenched construction are exempt from Standards E7.6.1.10(2)-(6) because the trenchless works will be less than 1.2m in diameter and the trenched works will be progressively opened, closed and stabilised with each section remaining open for no longer than 10 days.
E14.4.1(A166) Wastewater facility that is for the primary purpose of pumping or transfer or storage of raw or partially treated wastewater	The pump station and break pressure chamber are wastewater facilities which are for the primary purpose of pumping and transferring raw wastewater. The pump station provides for 700 m³ of emergency storage within an enclosed tank, which is less than the permitted activity standard threshold of 4,000 m³ under E14.6.1.24, whilst the break pressure chamber does not provide for wastewater storage. Wastewater facilities which are for the primary purpose of pumping or transfer of raw or partially treated wastewater are a permitted activity under Rule E14.4.1(A166).

E26.3.3.1(A74) Pest plant removal	Works require removal of 30 pest trees from the riparian area of Sinton Stream to construct the pump station. Removal of pest species is a permitted activity under Rule E26.3.3.1(A74).
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Table P2. Assessment against the conditions of regulation 70(2) of the NES-FW.

Permitted activity standard	Comment
the culvert must provide for the same passage of fish upstream and downstream as would exist without the culvert, except as required to carry out the works to place, alter, extend, or reconstruct the culvert;	Met – Fish passage will be maintained due to the design of the 3,500 x 3,500 concrete box culvert, which contains a natural compacted clay bed, a meandering low flow channel, and no height / grade alterations.
The culvert must be laid parallel to the slope of the bed of the river or connected area;	Met – the culvert will be parallel to the slope of the bed of the stream.
The mean cross-sectional water velocity in the culvert must be no greater than that in all immediately adjoining river reaches;	Met – the proposed embedment and culvert width (being 1.3 x stream bandfull width) will prevent velocity increases that would otherwise occur if flows were constricted.
The culvert's width where it intersects with the bed of the river or connected area (s) and the width of the bed at that location (w), both measured in metres, must compare as follows: where $w \leq 3$, $s \geq 1.3 \times w$; and where $w > 3$, $s \geq (1.2 \times w) + 0.6$; and	Met – the average width of the stream at the location of the culvert is 1.92 m. The proposed culvert width is 3.5, which meets the required width.
The culvert must be open-bottomed or its invert must be placed so that at least 25% of the culvert's diameter is below the level of the bed; and	Met – the invert of the culvert will be set down 0.875m below the stream invert, which is 25% of the culvert height of 3.5m.
the bed substrate must be present over the full length of the culvert and stable at the flow rate at or below which the water flows for 80% of the time; and	Met – the culvert will contain a compacted clay substrate, which will be stable at the flow rate at or below which the water flows for 80% of the time.
The culvert provides for continuity of geomorphic processes (such as the movement of sediment and debris).	Met – soft bottom substrates will move through the low flow channel and establish a natural streambed, which will be consistent with the stream habitat upstream and downstream of the culvert. The low flow channel will slope up to the culvert walls to assist in the natural stream bed formation.