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Project Ref: 27019

28 July 2021

Horizons Regional Council
via email

Attention: Sara Westcott

By Email: sara.westcott@horizons.govt.nz

Dear Sara

NORTH EAST LEVIN STORMWATER
APP-2017201547.00

Further to the meeting held with Horizons Regional Council and Horowhenua District Council on 19 July 2021 in regard to the above application we advise, on behalf of the applicant, as follows with respect to the queries raised by Horizons Regional Council.

1. **Palmer Affected Party Approval**

   HDC has further engaged with Mr Palmer to discuss the notation on his affected party approval stating "approval in principle". Joe Fletcher of HDC discussed the proposal with Mr Palmer prior to the affected party approval being signed and has had further discussions with Mr Palmer subsequent to Horizons seeking clarification as to the "approval in principle" notation. It has been confirmed verbally that the intent of this notation was that there was approval to the concept design as submitted in the application, and that the landowner was seeking to be able to see the detailed design prior to works commencing. HDC have asked Mr Palmer to re-sign the affected party approval confirming his approval of the application. At the time of writing, this has not been received but is expected to be received the week of 2 August 2021.

2. **Updated Erosion & Sediment Control Plan for Attenuation Areas 3 and 4**

   The ESCP submitted with the application provided for earthworks which have subsequently been increased as a result of the proposal to provide more attenuation within Areas 3 and 4. The ESCP for Stage 2 (being the works downstream of Coley Pond) has been updated and a revised ESCP is attached. The erosion and sediment control measures are similar to that previously proposed namely stabilised construction entrances, cut-off perimeter drains up-gradient of the earthworks areas, silt fencing along the watercourse margins, and staged earthworks with progressive stabilisation. A detention pond is now proposed with respect to the earthworks in Area 3 on the true left of the tributary as those earthworks are above the 3,000 m^2 threshold where detention ponds and decanting outlet is required. It is noted that the attenuation area is designed to provide storage above normal water level for storm events, and therefore the earthworks required to create the additional attenuation volume are above normal water level in the tributary (ie, volume is not being created via earthworks within flowing water).

3. **NZTA Culvert**

   HDC has been actively engaging with NZTA as to the culvert on SH57. Verbal responses have been provided by NZTA stating that they approve of, and agree with, the monitoring approach proposed in order to address any risk of potential erosion. As previously stated, there are no capacity issues with this culvert arising from the proposal given that peak flow has been attenuated at this point. The SH57 culvert is also programmed for

renewal and replacement within the term of consent due to NZTA's proposed and fully funded O2NL project. This matter is in hand. NZTA has confirmed they will respond in writing. However, at the time of writing we have yet to receive this.

4. **Effect on Powelliphanta Snails**

Over the last week, HDC has undertaken further investigations regarding any potential effects on the powelliphanta snails as per the sites identified by Horizons. This has included seeking and obtaining clearance from KiwiRail in order to access the railway corridor and undertaking site inspections to assess the potential for inundation of these area (noting that inundation will occur due to flows from the overall catchment and these coinciding with peak flows in the Manawatu River such that inundation may occur, of which the proposal being considered contributes up to an additional 2.6-4% of volume depending on the event). These site inspections were undertaken given the previous hydrologic assessment considered only the estimated land below the level of the stopbanks and did not consider potential inundation pathways.

The attached GHD memo provides the further assessment undertaken. As set out in this memo, it is considered that the railway embankment provides a retention function to prevent inundation flows entering the Koputaroa Scientific Reserve (site 2 in the attached memo). As inundation flows are retained via the railway embankment the memo concludes that "no incremental impact on Site 2 would occur from development in north east Levin".

Site 1 in the attached memo has been assessed as not receiving any additional extent of flooded area as a consequence of the North-East Levin stormwater. Additional duration and depth of flooding is considered to be commensurate with the additional volume amount. That is, 3 or 3.1% in the 100- and 10-year events, and 4.0% in the 2-year event.

The Koputaroa Drainage Scheme is understood to have a level of service of at least the 2-year event, and therefore inundation (and any subsequent effect of the increased volume) would not be expected to occur during this event. Therefore, effects on the Site 1 area in terms of additional duration and depth would be in the order of 3% at worst.

HDC has engaged Wildland Consultants Ltd to provide further advice as to any potential effects of an increase in depth and inundation duration, noting that the hydrologic assessment concludes that the proposal will not produce any additional extent of flooded area. It is expected that this opinion will be available by close of business Friday, 6 August 2021

HDC requests that Horizons defer its decision as to procedural matters until the assessment from Wildland Consultants Ltd is available. HDC will support a request to the commissioner to extend the time for reporting back on scope matters to enable consideration of this report.

Yours faithfully

Annette Sweeney

Enc: Updated ESCP
GHD memo dated 27 July 2021