

Attachment 1: Papakāinga Development – Rāpaki, Christchurch Application – ECan Comments

Contaminated Land Status

The application states that “A search of [Environment Canterbury’s Listed Land Use Register] LLUR indicates that no known HAIL activities have been carried out on the Site and that it is not listed on the LLUR” and further that LLUR “identifies that the site has been verified as a ‘non-HAIL’ site”.

Comments:

The Listed Land Use Register is not an exhaustive or complete list of contaminated sites in Canterbury; it is only a ‘snapshot’ of sites currently known to Environment Canterbury. The LLUR does not hold any information on the subject site, and therefore it cannot be confirmed whether the site is, or is not, contaminated. Only a preliminary and/or detailed site investigation will provide clarity on whether or not the site is not contaminated.

Earthworks

The proposed development will require approximately 500 m³ of cut and 50 m³ of for the installation of building foundations, car parks, retaining walls and services.

Comments:

- No regional land use consent is required.
- It is recommended that best practice erosion and sediment control measures in accordance with the *Erosion & Sediment Control Toolbox For Canterbury* are implemented for the duration of the earthworks.

Construction-phase Stormwater Discharges

Construction-phase stormwater is proposed to be discharged onto/into ground the site via natural infiltration and contaminants (sediment) are proposed to be managed by an Erosion and Sediment Control Plan.

Comments:

- It is not clear whether all stormwater is to be managed within the site or whether there will be secondary flows across the site boundary or to the Christchurch City Council’s (CCC) reticulated stormwater network (as stated in the application) or the ‘open drain’ on the eastern site boundary (as stated on the Erosion and Sediment Control Plan (ESCP)) during larger rainfall events. The ESCP shows a hay bay area at the site’s natural low point, where all construction-phase stormwater is collected. It is not clear:
 - o Whether construction-phase stormwater is proposed to be infiltrated in this location or elsewhere on the site; and
 - o Whether infiltration/soakage testing has been carried out to confirm whether all construction-phase stormwater discharges can be managed and infiltrated within the site (or in the low point location). The applications states that a Geotechnical Report was prepared in June 2013, but this report has not been provided.
 - o What would happen if hay bay area overflowed during larger rainfall events or successive smaller events that cumulatively exceed the capacity to infiltrate stormwater in this location.
 - o In the event that construction-phase stormwater flowed into the CCC’s reticulated stormwater network (which appears to be discharging either to Rāpaki Bay Drain or to the Coastal Marine Area (CMA)) to or the adjacent ‘open drain’, it is not clear what the effects of this discharge would be on the receiving environment, specifically in

light of sediment load and the uncertainties around the soil contamination status of the site.

- It should be ensured that the cut-off fence in the north-eastern part of the site does not accelerate (clean) run-on water and discharge it offsite or into the 'open drain' along the eastern site boundary in a way that results in scour or erosion on neighbouring land.
- A discharge permit may be required:
 - o Depending on the soil contamination status of the site; or
 - o If any other condition of Rule 5.94A of the LWRP cannot be met; or
 - o If the discharge is not entirely into land within the site and flows to the CCC's reticulated stormwater system and no written permission has been obtained from CCC to satisfy the conditions of Rule 5.93A of the LWRP.

Operational Stormwater Discharges

While the Canterbury Land and Water Regional Plan (LWRP) Planning Maps does not classify the water body along the eastern site boundary (within the neighbouring site) and further along Rāpaki Drive, the application and supporting documents refer to the water body as 'open drain', 'river/stream', 'neighbouring creek', 'open swale', 'hill waterway' and 'CCC reticulated stormwater system'.

Comments:

- It is not clear if the water body is permanently or intermittently flowing or whether it is ephemeral.
- From the information provided, it cannot be determined whether the water body is an artificial watercourse or a river. On this basis, it is not clear what the sensitivity of the receiving environment is to receiving the stormwater discharges.
- Confirmation is needed whether the discharge occurs to the CCC's reticulated stormwater system or to a river.
- A discharge permit may be required:
 - o If the discharge is to a river and not the CCC's reticulated stormwater system; or
 - o If CCC has not provided written permission to satisfy the conditions of Rule 5.93A of the LWRP.
- The application states that stormwater from the hardstand areas (car parks, etc.) is proposed to be discharged to the CCC's reticulated stormwater system via sumps, which are stated to provide primary treatment. Sumps are not considered to provide effective stormwater treatment other than trapping debris and, to a very limited degree, hydrocarbons (if trapped outlet sumps are used, which is unclear). Given the receiving environment is surface water and ultimately the CMA, more formal treatment of the discharge may be required, for example, via a grassed swale prior to the discharge to the adjacent water body. A Proposed Stormwater Swale is shown on the Proposed Stormwater, Wastewater & Water Supply plans, but this is not mentioned in the application. Clarification is required.

Works in Adjacent Water Body to Install Stormwater Outfall

Stormwater is proposed to be discharged to the adjacent water body at the southern end of the site.

Comments:

- A Section 13 land use consent may be required if the water body is considered a river.

Sub-soil Drainage Water Take and Discharge

Comments:

Retaining walls are proposed to be installed with subsoil drainage pipes. The take of groundwater for land drainage purposes and discharge to the CCC's reticulated stormwater network require resource consents under Rules 5.6 and 5.100 of the LWRP, respectively.