## John Freer

From: Alan Frampton
Sent: 04 August 2021 10:55
To: Planning Christchurch BCP

Subject: Planning application 8/21/0591/HOU - 23 Wharncliffe Road, Christchurch - BCP

FCERM response

We have reviewed this planning application 8/21/0591/HOU for the erection of an outdoor swimming pool with associated works at 23 Wharncliffe Road, Christchurch, with expert advice being provided by a geotechnical engineer at WSP.

Based on the information provided, we have a number of concerns that would need further investigation and explanation of mitigation options before we would be comfortable with supporting the proposals, namely:

- 1) There is the potential presence of horizontal drainage within this section of cliffs that forms part of the Highcliffe slope stabilisation scheme constructed from the 1970s onwards, and any new piling etc. proposed will need to avoid any existing drainage or risk causing detrimental impact to the wider stability of the cliffs (reference should also be made to the property deeds by the owner to ensure they are compliant with any relevant covenants in respect to what is/is not appropriate in relation to the slope stabilisation scheme); and
- 2) There is no mention of how the swimming pool will be filled and emptied, or any potential mitigation measures in the events of leaks. As there is a substantial amount of water associated with this development proposal, potential leaks in the longer term could have a detrimental impact to the cliff stability in this area. It is not clear how this risk can be mitigated long-term.

The above notwithstanding, the preliminary proposals for piled foundation support to the structures seems a reasonable approach to reducing the risk of cliff instability from the proposed works - any piles should be installed using replacement methods (not driven); we would suggest this be a condition of planning consent in due course.

However, we would expect that a further assessment of the global cliff stability would be undertaken at the detailed design stage, once structural loadings and foundation form has been finalised. This should include both temporary and permanent conditions for the proposed works, with a clear demonstration of an assessment that the works do not result in global instability. Assessments should be undertaken in accordance with current revisions of BS EN 1997 (EC7) and NA to BS EN 1997-1, supported by a form of Geotechnical Design Report presenting derivation and selection of characteristic geotechnical parameters and the detailed assessment of slope stability supported by appropriate site-specific ground investigation data. Given the extent and nature of the works, site specific ground investigation is required. Perhaps these elements could be conditioned?

Generally, no soakaways should be permitted for any form of water disposal, and suitable alternative drainage provision should be made both during construction and for the permanent works. Additionally, existing water systems (sewerage and surface drainage water) should be inspected to verify that current defects (if any) would not lead to the introduction of additional discharge into adjacent slopes.

As with previous comments on applications in such settings, it is recommended that a geotechnical risk register is developed and maintained as a live document throughout the detailed design and construction phases.

Given the above, we would want to see the detailed assessments and risk mitigation proposals to address our concerns before coming to a final conclusion on this application, but based on the information provided so far we are currently minded to recommend this application is refused due to our concerns regarding potential adverse impacts on the slope stabilisation scheme.

I hope that is clear. Please get in touch if further clarification is needed.

## Kind regards



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