Wendy Collard

From: MWH Hazards Team <MWHHazardsTeam@stantec.com>

Sent: Tuesday, 12 January 2021 04:32 p.m. **To:** Laura Mulder; MWH Hazards Team

Cc: 'Kirstyn Lindsay'

Subject: RE: LUC-2020-631 Request for department comments - Recreation Reserve

Hello Laura,

We have assessed the application in relation to the hazard register, street files and available aerial photography. We have not visited the site.

We have the following comments to make regarding the application.

Proposal

The proposed activity is to construct a carpark at the Tunnel Beach Track.

Site investigation reports have not been provided.

Plans for the proposal are provided within the application

Hazards

From the Hazard Register, street files, and previously sent emails; for both this title and nearby properties

- Hazard ID 10560: Land Stability (Land Movement)
- Hazard ID 11965: Land Stability
- Hazard ID 11504: Land Stability Land Movement (Landslip ID=42)

Global Setting

The underlying geology consists of third main eruptive phase volcanics and caversham sandstone towards the sea.

Earthworks / Excavations / Retaining Structures

The proposed earthworks consist of leveling for the carpark. There are no significant slopes near the car park. The slope instability is associated with soils further towards the coast.

Discussion

There are no significant slopes near the car park. The slope instability hazards are associated with soils further towards the coast and not at the carpark location. The slope to the south is unlikely to be affected by the proposed works provided adequate stormwater control.

Although not a listed hazard, we consider that the greatest risk relates to stormwater management and control of runoff to prevent any land instability in the slopes below. The carpark reduced permeability will

We recommend that the application not be declined on the ground of known natural hazards.

There are no general potential instabilities of concern.

The proposal will not create or exacerbate instabilities on this or adjacent properties.

Conditions

The following conditions are standard conditions, some of which are generic in order to address a potential of work that whilst not indicated, could conceivable occur at the site. We recommend that the following conditions be required:-

- Slopes may not be cut steeper than 1:1 (45°) or two metres high without specific engineering design and construction
- Slopes may not be filled steeper than 2h:1v (27°) or two metres high without specific engineering design and construction
- As-built records of the final extent and thickness of any un-engineered fill should be recorded
- Any modifications to stormwater flow or new culverts shall be designed by appropriately qualified person/s
 and ensure that overland stormwater flows are not interrupted and not increase any adverse effects from
 local ponding during storm rainfall events.

Regards,

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