

## Our Ref: TJG/LET/G003.Carbis Bay Hotel.Rev0

12<sup>th</sup> August 2023

## Re: Letter in support of Planning Application PA23/01527 Former G7 Conference Facility at Carbis Bay Hotel, Carbis Bay, Cornwall

## Dear Sir / Madam

Slope Stability Southwest (SSSW) have been requested to undertake a GeoSLOPE Stability Assessment on the site and surrounds of the former G7 Conference Facility site, located immediately adjacent to and to the northwest of the Hotel.

A site inspection was undertaken by a Chartered Engineering Geologist on Tuesday 1st August 2023 and a GeoSLOPE stability assessment report was undertaken. Please refer to Report Reference TJG/SSA/G003 Carbis Bay Hotel.Rev0 for details.

Subsequent to this report, SSSW have also been requested to provide a professional opinion on the proposed remediation of the site to create a wildflower garden and viewing area in accordance with Planning Application PA23/01527, with particular regard as to the effect of these proposed works on the overall geotechnical stability of the site and the slopes both above the site and the sea cliffs below.

In is understood the site is currently under an Enforcement Notice (reference EN21/00308) which requires (amongst other things):

To demolish and remove all concrete slabs and foundations, and To demolish and remove the concrete retaining wall on the southern boundary of the site.

The Planning Application currently under review (PA23/01527) proposes to retain some of the constructed features on the site, including:

The shallow concrete foundations,

- The timber clad concrete retaining wall on the southern boundary of the site,
- The stone terrace retaining walls and granite boulders, and
- The timber and wire fencing around the perimeter of the site.

Parts of the site will be raised and retained with granite boulders and it is proposed the site is to be planted with wildflowers.

It is the professional opinion of the author and Slope Stability Southwest Ltd that the concrete foundations, retaining wall, stone terrace and granite boulders should be retained for the following reasons:



- 1. These features are considered to have a significant net beneficial effect on the stability to the site. It is considered that the removal of these constructed features will have the following effect:
  - a. To increase the rate and extent of erosion from the crest of the slope on the northern boundary of the site and to increase the risk of rockfall and collapse of material from the slope face onto the beach below, and
  - b. To significantly reduce the stability of the slope on the southern boundary of the site, and therefore to increase the risk of landslip and collapse of material from the slope face onto the site. Such an event could lead to the damage and destabilisation of the south west coastal path and associated risk to safe public transit.
- 2. The excavation and removal of these constructed features is considered likely to have a significantly destabilising impact on the stability of the site and the slope face. It is likely that the removal of these features will require large excavators (18 to 24T) capable of lifting the embedded foundations and it is also likely that significant demolition works will be required using a hydraulic breaker. Both these activities are likely to impose localised dynamic loads to the slope face in excess of 20 tonnes and cause significant vibration to the slope face.
- 3. The works will require the placement and operation of large plant and operatives close to an unsupported slope face. These operations would be considered potentially significantly hazardous.

It is the opinion of SSSW therefore that the removal of these features will significantly reduce the geotechnical stability of the site and will therefore significantly increase the risk of future episodes of slope instability including landslip of the upper slope behind the site and possible rockfall and collapse of material from the sea cliffs onto the beach below.

The findings of the GeoSLOPE stability assessment report indicate that the proposed retention of these features under Planning Application PA23/01527 (and assuming the recommendations set out in the report are considered and adhered to), will enable the future geotechnical stability of the site and reduce the risk of slope instability to an acceptable level.

Yours faithfully

for Slope Stability Southwest

Tim Green – Chartered Engineering Geologist. BSc, MSc, FGS, CGeol, APMP and Manging Director.

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<sup>&</sup>lt;sup>1</sup> Mass of concrete slab assumed to be < 3500kg (based on typical concrete mass of 2300 kg/m3). Lifting capacity of 20 T excavator approximately 3000kg.