

Inspection report and landslide reinstatement sign off

Project No.	P.23.1016	Date	25 September 2023
Project Name	Collins Cap Quarry Landslip		
Inspected	28/07/2023	Inspected By	FG
Client	Alltas Engineering		pitt&sherry



On 5th March 2021 a landslide remediation options report, Ref. T-P.20.1697-GEO-MEM-001-Rev01, was issued after a landslide occurred on the quarry site reaching the neighboring property. The report contained recommendations in terms of remediation options for the landslide.

The following remediation works were proposed:

- Reinstatement, reshape and revegetate the failed slope (< 30° angle, compacted to optimum moisture and maximum density)
- Reinstatement northern evaporation ditch
- Installation of overflow pipe; and
- Bund construction.

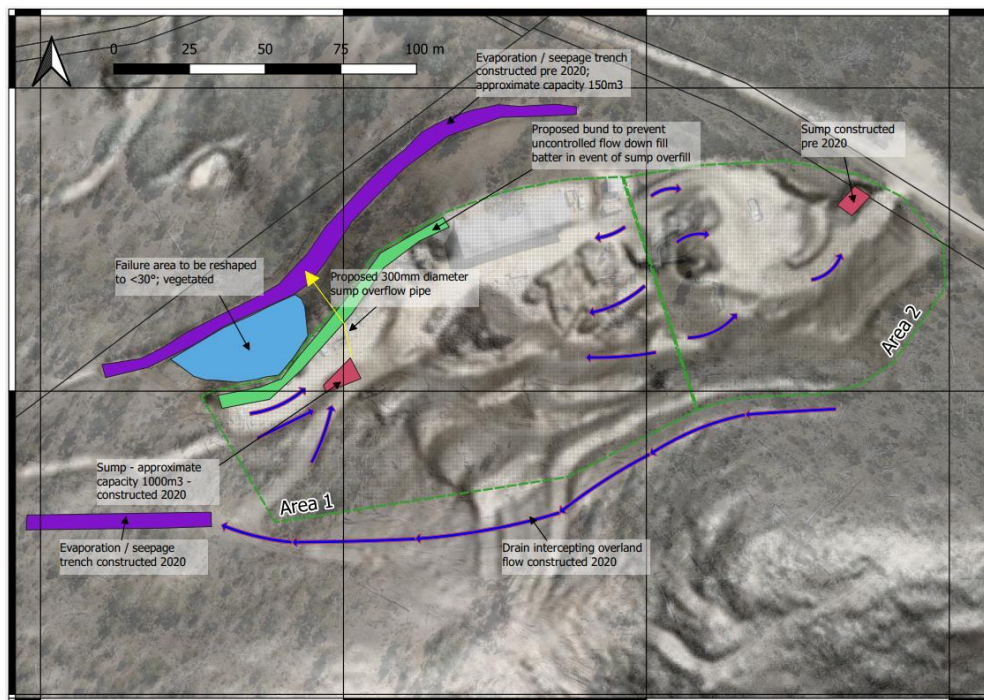


Figure 1 - recommended remediation works

A site inspection was undertaken on 28th July to assess the works that had been undertaken since the 2021 landslide event occurred. This document contains a summary and an evaluation of these works.

The slope has been reinstated by filling up the concave areas predominantly with cobbles and boulders and gaps filled with soil. The backfill has been compacted using the bucket of the excavator present on site. The areas downhill from the landslide have been reinstated to their original condition prior the landslide occurred, including the evaporation ditch.



Figure 2 - landslide area reinstatement

The slope has been reinstated to an angle steeper than recommended. Revegetation has been attempted by the quarry managers, however the abundant wildlife present in the area has not allowed it to establish.

A bund approximately 1m wide and 0.8 to 1m high has been built above the landslide scarp to reduce the potential of any possible sump overflow entering the landslide area.



Figure 3 - bund on the left hand side

The sump overflow pipe has not been installed as the issue has been addressed using a different approach as detailed in the report Ref. T-P.23.1016-ENV-REP-001-RevA.

Figure 3 shows the internal track that sits above the 2021 landslide. It has been recommended to the quarry managers during the inspection that the track is shaped so that water drains into the sump and that a gravel layer is added in order to avoid machinery creating depressions and to maintain the road shape.

Despite the fact that the recommended slope angle has not been achieved it is assessed that the addition of the large blocks and the interlocking nature of these has achieved the intended level of stability. It is unfortunate that the vegetation has not established due to the high numbers of native animals in the area, but again, as the stability has been achieved through the use of interlocking larger blocks, the necessity for stabilisation through root growth is reduced.

Overall, it is assessed that the landslide area has been reinstated to an acceptable condition.

Prepared by:



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