

7 September 2023

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PALAEONTOLOGICAL STATEMENT – MINOR WORKS – ERF 3132 SEA VISTA

The proposed minor works at 28 Lovemore Crescent entail completion of the boundary wall to enclose the seaward slope of the erf (65 m long on a foundation 60 cm wide and 23 cm deep) and construction of a viewing deck with storage beneath (7x5 m footprint).

The activities are on the aeolian sand slope 18-21 m asl. at the terminal end of the Cape St. Francis headland bypass dunefield. The old (1991) geological map (A) shows the site on recent aeolian sands (Qw-Schelm Hoek Formation), marginal to older aeolianites (dune deposits) assigned to the Nanaga Fm (T-Qn), both of which are rated as VERY HIGH/RED palaeontological sensitivity (B). On the later geomap (2019) (C) the site is on undifferentiated aeolianites (N-Qa) adjacent to recent loose sands of the Schelm Hoek Fm. (Qsc). Interestingly, the symbol 2+ nearby marks the site where dating of the sand in the shallow subsurface produced an age of 50 to 60 thousand years ago. These underlying older dune sands must therefore be assigned to the Nahoon Fm. which accommodates aeolianites younger than about 1 million years, while older aeolianites are assigned to the Nanaga Fm.

The palaeontological impact of subsurface disturbance depends on the sensitivity/scientific value of the fossils in a particular formation, together with the volume of excavations. The proposed minor works involve only shallow, low-volume disturbance at a site which has already been altered to some degree. Any material in the shallow subsurface such as bones and shells is very likely to be in an archaeological context. The seaward slopes of aeolianites at the shore are the preferred location of hyaena (strandwolf) dens wherein they hoard bones, thereby providing scientifically important “fossil bone bonanzas”. However, the limited footprint of the proposed works renders such finds improbable.

In conclusion, it is considered that the proposed minor works are very unlikely to have an impact on palaeontological resources. Nevertheless, should bones be unearthed work must cease at the spot and the Eastern Cape Provincial Heritage Resources Agency, ECPHRA, must then be informed and provided with information on the nature of the find.

