



BPI for Palaeontological Research

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21 September 2011

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Dear Mr Khupe,

Palaeontological Report – Proposed Ilanga Lethemba PV Solar Energy Facility, Paarde Valley 145, De Aar

As requested, herewith a desk top study with regard to the palaeontological aspect of environmental management relevant to the proposed Ilanga Lethemba PV Solar Energy Facility, Paarde Valley 145, De Aar.

As will be evident from my report the proposed development will not have negative effect on palaeontological heritage. From a palaeontological perspective the development may proceed, but I have included a mitigation clause if fossils are unearthed in the development process

Yours sincerely

A handwritten signature in blue ink, appearing to read 'B. Rubidge'.

Bruce Rubidge PhD, FGSSA, Pr Sci Nat

PALAEONTOLOGICAL ASSESSMENT –

1. PROPOSED ILANGA LETHEMBA PV SOLAR ENERGY FACILITY, PAARDE VALLEY 145, DE AAR

1.1 Applicant:

Solar Capital (Pty) Ltd

1.2 Proposed activity:

Establishment of a photovoltaic solar energy facility and associated infrastructure.

1.3 Location

Portion 3 of the Farm Paarde Valley 145 approximately 7 km northeast of De Aar, in the Northern Cape Province

2.REPORT

2.1 Methodology

For this desk top study the 3024 Colesberg 1:250 000 Geological Map was consulted to determine the rock formations present in the area where the proposed development will occur. Combining literature review with personal experience the likelihood of damage to fossil heritage was determined.

2.2 Geology of the area affected by the proposed development

The area to be developed (Figure 1) is underlain by rocks of the Tierberg Formation of the Ecca Group of the Karoo Supergroup. This largely argillaceous Formation comprises mainly green mudrocks. The Tierberg Formation in turn is overlain by Quaternary alluvial deposits which cover large areas of the property.

2.3 Potential of finding fossils

As the entire area is covered by rocks and sediments of sedimentary origin there is the potential that fossils could be present in the area. The Tierberg Formation is, however, not known to be very rich in fossils having yielded only odd plant fragments and isolated fish scales and bones. These rocks were deposited in a prodelta environment.

The potential of fossils being present in the Quaternary alluvial deposits is also very limited.

2.4 Recommendation

It is the opinion of the specialist that the chances of fossils being damaged in the process of development of the proposed photovoltaic solar energy facility and associated infrastructure are extremely limited. However because all sedimentary deposits have the potential to preserve fossils it is essential that if fossilized remains of plants or animals are encountered in the construction process of development a professional palaeontologist must be consulted so that the necessary rescue operations are implemented. Depending on the nature of the fossil discovered, this could entail excavation and removal to a registered palaeontological museum collection. A list of professional palaeontologists is available from South African Heritage Resources Agency (SAHRA)

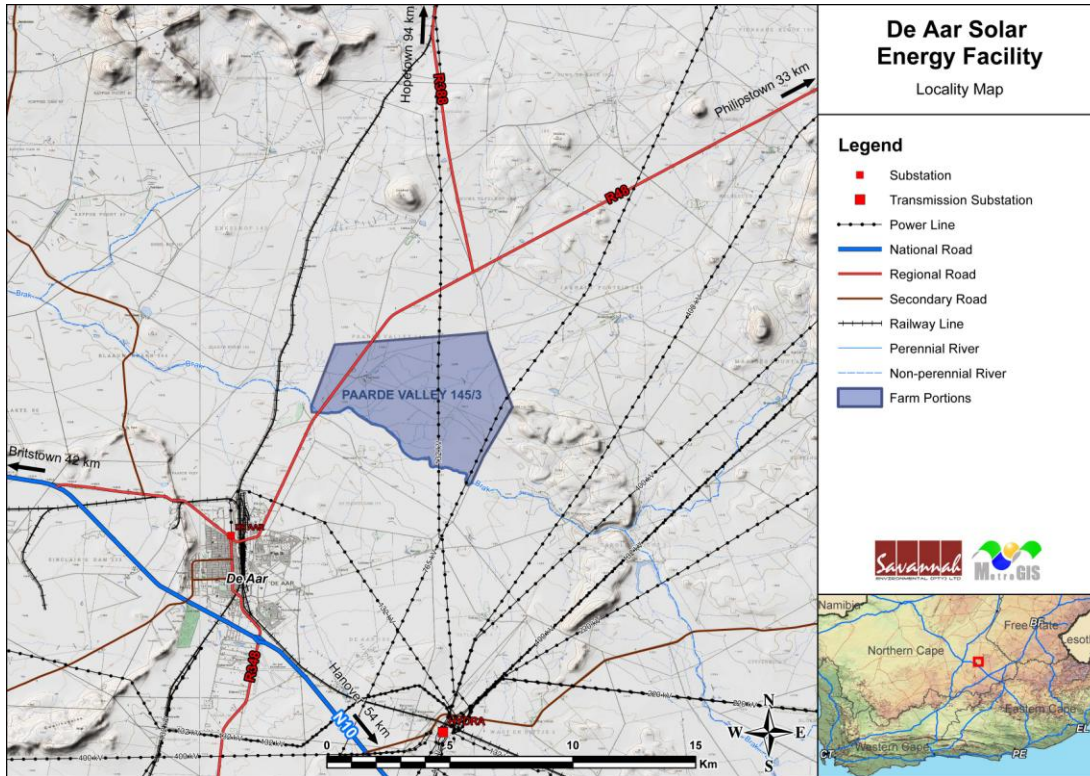


Figure 1: Locality of the proposed development on Paarde Valley 145, De Aar.

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