



an agency of the
Department of Arts and Culture

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CaseID: 9050

Date: Wednesday August 31, 2016
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Final Comment

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Gamma Solar Power Plant (Pty) Ltd

Environmental Impact Assessment for the proposed Gamma Photovoltaic Solar Energy Facility near Vryburg, Naledi Local Municipality, North West Province

Gamma Solar Power Plant (RF) (Pty) Ltd has contracted Environamics to conduct an Environmental Impact Assessment (EIA) for the proposed development of the Gamma Photovoltaic Solar Energy Facility. The proposed development is located on Portion 4 of the farm Champions Kloof 731 HN within the Naledi Local Municipality (Vryburg Magisterial District, North West Province). The site is approximately 10.5km to the south-east of the town of Vryburg. The development plan for the 285ha PV facility includes the following; a 115MW PV Solar Array; Central inverters; On-site substation; Control facility; Plus other supporting infrastructure (including: current and voltage regulators, internal road network, fencing).

In an Interim Comment issued on the 16 May 2016, it was requested that the survey be redone according to SAHRAs Minimum Standards, the impact on heritage resources by the proposed development footprint be assessed during the EIA phase, and the visual impact on the Cape to Cairo Railway and the Provincial Heritage Site Tiger Kloof School be assessed.

van Schalkwyk, J. 2016. Cultural Heritage Impact Assessment for the development of the proposed Gamma Solar Power Plant on portion 4 of the farm Champions Kloof 731, Vryburg Region, North West Province

A number of stone tools artefacts were identified along the rim of a natural pan, the scatter is, however, located just outside the affected area of the proposed development, and will therefore not be directly impacted on during the construction of the Gamma PV facility. No additional sites were identified as a result of the revised survey.

There is some discussion regarding the Tiger Kloof School, however no assessment has been conducted and there is no discussion regarding the railway. No assessment taking into account the visual impact has been conducted, however an excerpt from the Visual Impact Assessment (VIA) conducted for the project has been included in the report, noting that the visual impact of the proposed development will be insignificant.



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Recommendations provided in the report include that in the instant that accidental discovery of any artefactual material or burials or made, they should be reported to a qualified heritage practitioner so that the finds may be evaluated.

Almond, J. 2016. Palaeontological Heritage Impact Assessment: Combined Desktop & Field-Based Study: Proposed Gamma Solar Plant on the remaining extent of Portion 4 (Bos Kop, Farm Champions Kloof 731 near Vryburg, Naledi Local Municipality, North West Province.

The northern and western portions are underlain by late Archaean (c. 2.6 billion years) sedimentary rocks of the Schmidtsdrif subgroup (Ghaap Group, Transvaal Supergroup). This is comprised of marine carbonates and siliciclastic sediments of the Boomplaas Formation. Most of the Boomplaas Formation is mantled by soils and surface gravels of low palaeontological significance. The south eastern portion of the study area is underlain by Permo-Carboniferous glacial deposits of the Dwyka Group (c.300 million years BP). This is overlain by soils and downwasted gravels which are not palaeontologically sensitive.

Densely-packed and well-preserved stromatolite assemblages were identified within the Boomplaas Formation carbonate rocks, just to the west of the farmstead. It is recommended that this area be excluded from the development area with a buffer zone of 20m around the identified area. This area should be clearly demarcated during the construction phase in order to prevent accidental damage to any of the fossil exposures.

Final Comment

It must be noted that the quality of the report does not allow SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit to provide an informed comment, and as such SAHRA APM does not endorse or deny the proposed development. The following conditions and the recommendations provided with the report must be included in the Environmental Management Programme (EMPr):

- Comments must be sought from North West Provincial Heritage Resources Authority (NWPHRA) regarding the Provincial Heritage Site Tiger Kloof School;
- The identified stromatolites must be avoided with a buffer of 50 m. If this not be possible, a permit in terms of section 35 of the National Heritage Resources Act, 1999 (Act 25 of 1999) (NHRA) and Chapter IV of the NHRA Regulations must be applied for from SAHRA. This must be completed by a professional palaeontologist and must occur prior to construction;
- The final EIA and all appendices must be submitted to SAHRA and uploaded to the case file;
- If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils,



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stromatolites or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Natasha Higgitt/John Gribble 021 462 5402) must be alerted. Instances of stromatolite mats have been identified in the surrounding areas, and the Environmental Control Officer must be alerted to this;

- If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Itumeleng Masiteng/Mimi Seetelo 012 320 8490), must be alerted immediately. A professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required;
- Should the proposed development be granted an EA, SAHRA must be informed and the decision letter must be uploaded to the case file.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Natasha Higgitt
Heritage Officer
South African Heritage Resources Agency

John Gribble
Manager: Maritime and Underwater Cultural Heritage Unit / Acting Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency



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ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/354800>