Proposed Solar PV Facility

Melkboskuil Farm 132/26 Carolusberg: A Heritage Impact Assessment

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Report prepared for
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Executive Summary

Proposed Construction of a <20MW Solar PV on farm 132/26, Melkboskuil within the NamaKhoi Municipality in the Northern Cape Province (DEA Ref 14/12/16/3/3/1/974).

Instructions were given by Footprint Environmental Services for a Heritage Impact Assessment of the Farm Melkboskuil 132/26 at Carolusberg, some 8 km northeast of Springbok. A 20 MW solar photo voltaic facility is proposed on the northwest facing slopes of the farm, below the mountains.

The vegetated area below the granite mountain was inspected on foot, and a track was made using a Garmin 60 GPS instrument, and any relevant or noteworthy sites marked as way points. Inspection of open areas, tracks and erosion gullies were made to see if any archaeological material might be exposed.

In the open veld, the only point of heritage interest was a pile of stones which may indicate an aboriginal grave. Almost no stone tools were seen, except around the small granite inselberg at the southern end of the property. This kopje has a small overhang which people have been using for some time, as indicated by the large amounts of broken glass strewn across the talus slope in front. Mixed with the glass were a few small pieces of quartz, as well as a single fragment of blue and white porcelain.

The fact that a few stone tools were seen on the talus of theinselberg at the southern end of the property means that there may be in situ deposit inside the overhang, so this space should be avoided by the development.

Equally, the heap of stones that may be a grave marker also needs highlighting, and should be fenced off and avoided. If this is impossible, a permit for excavation would have to be obtained from the South African Heritage Resources Agency (SAHRA), and if human remains were uncovered, these need special treatment under the National Heritage Resources Act (NHRA), and require the skills of a trained archaeologist for exhumation.

These observations indicate a very low heritage signature. Should the sites identified be avoided, there would be no other heritage impediments to the development taking place.

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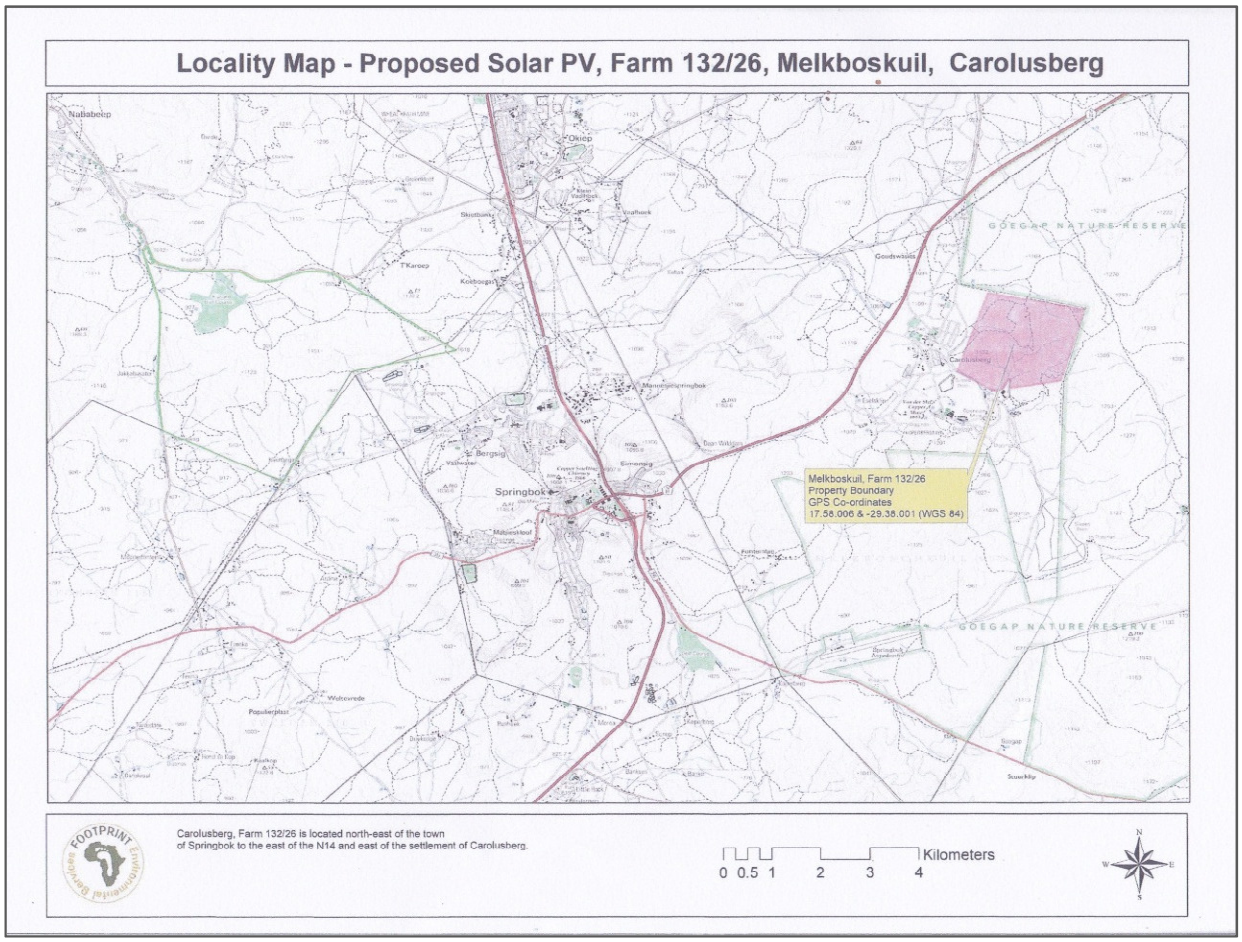
1. INTRODUCTION

Proposed Construction of a <20MW Solar PV on farm 132/26, Melkboskuil within the NamaKhoi Municipality in the Northern Cape Province (DEA Ref 14/12/16/3/3/1/974).

Instructions were given by Footprint Environmental Services for a Heritage Impact Assessment of the Farm



Melkboskuil 132/6 at Carolusberg, some 8 km northeast of Springbok, off the N14 highway (Figure 1). A 20 MW solar photo voltaic facility is proposed on the northwest facing slopes of the farm, below the mountains.

Figure 1: Locality Map Farm 132/26 Melkboskuil, Carolusberg

The landscape is open veld below the high granite batholith, with vegetation interspersed with granite bedrock. The open vegetation facilitated inspection of the sandy soil for prehistoric material (Figure 2). A feature is a small kopje at the southern end of the farm.

The climate has relatively low rainfall, with the months of May to August producing the most rains, but seldom exceeding 30 mm per month. The open granite batholith produces sheet wash onto the vegetation on the lower slopes. The current land use is agriculture. There are no buildings or other structures on the proposed development area.A site visit was made on 26th July 3013.

Figure 2: Melkboskuil Farm looking west

2. METHODOLOGY

The vegetated area below the granite mountain was inspected on foot (Figure 3), initially following the fence line along Goegap Nature Reserve on the north side of Melkboskuil (Figure 4). A track was made using a Garmin 60 GPS instrument, and any relevant or noteworthy sites marked as way points (Figure 5).

Inspection of open areas (Figure 6), tracks and erosion gullies were made to see if any archaeological material might be exposed. Three areas have been selected as possible sites for the pv solar arrays (Figure 5). Two of these were walked, since these vegetated areas was where there seemed the likelihood of surface prehistoric material. As almost nothing was noted in these lower slopes, the third area was deemed even less likely to produce results, as this was up against the mountain (Figure 3), so was not walked.

Figure 3: Erosion area on Melkboskuil Farm looking east

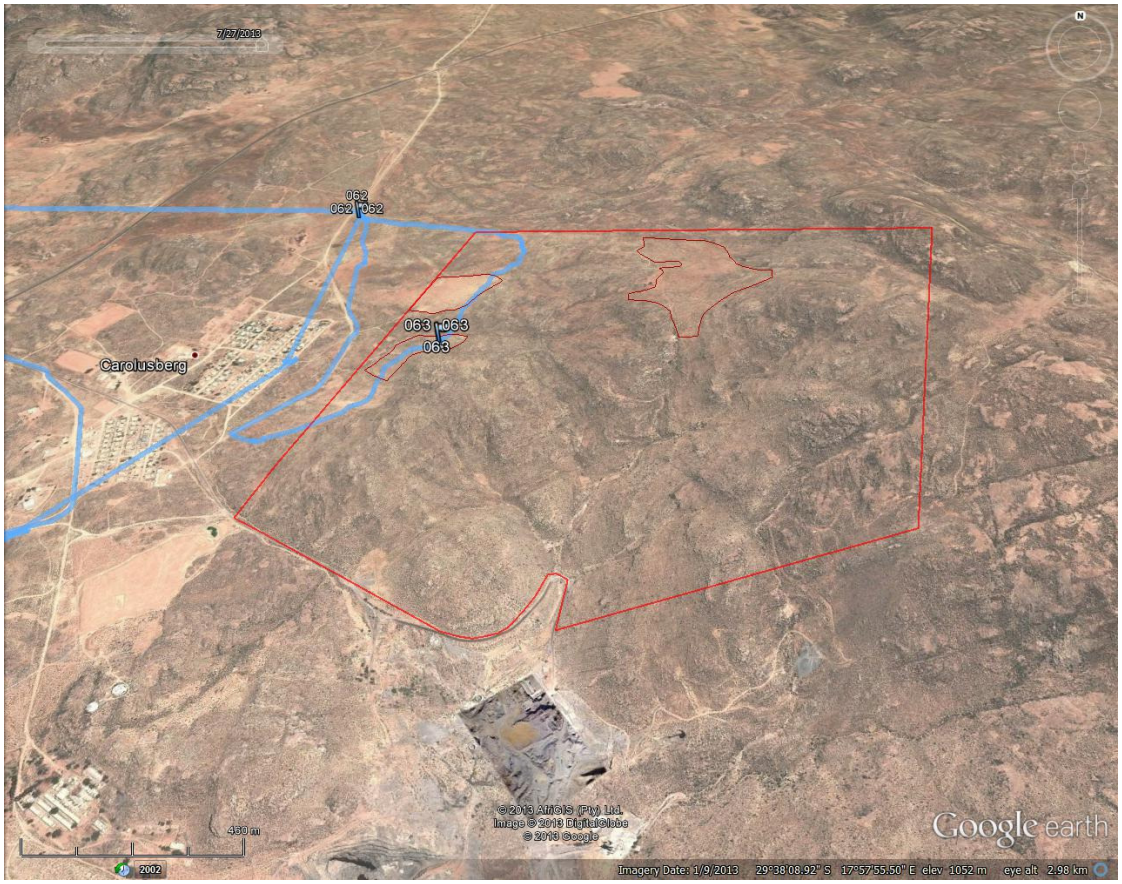


Figure 4: Fence line along north side of Melkboskuil Farm looking east.

Figure 5: GPS tracks and waypoints on Melkboskuil

Figure 6: Open area on Melkboskuil

Figure 7: Pile of stones (possibly a grave)(GPS 063)

3. RESULTS

In the open veld (Figure 6), the only point of heritage interest was a pile of stones which may indicate an aboriginal grave (GPS 063)(Figures 7).

Almost no stone tools were seen, except around the small granite inselberg at the southern end of the property (Figure 8). This kopje has a small rock shelter (Figure 9) which people have been using for some time, as indicated by the large amounts of broken glass strewn across the talus slope in front. Mixed with the glass were a few small pieces of quartz, as well as a single fragment of blue and white porcelain (Figure 10).

Figure 8: Small granite inselberg on Melkboskuil

Figure 9: Rock shelter on inselberg, Melkboskuil

Figure 10: Blue and white porcelain on talus slope below rock shelter at inselberg, Melkboskuil

4. DISCUSSION AND CONCLUSIONS

The farm Melkboskuil is only 2 km north of the famous copper mine visited by Governor Simon van der Stel on his expedition to Namaqualand in October/November 1685 (Waterhouse 1932).Van der Stel's artist drew a picture of the "Copper Mountains" (Figure 11) which may have included Melkboskuil, as a group of 10 men were sent by van der Stel to scout out another source to the NNW on October 25th (Waterhouse 1932: 137). They would certainly have had a good view of Melkboskuil on the trip. In spite of the proximity of this important site, there is nothing obvious that might tie Melkboskuil to that history.

The fact that a few stone tools were seen on the talus of the small granite inselberg at the southern end of the property means that there may be in situ deposit inside the overhang, so the kopje should be avoided by the development.

Equally, the heap of stones that may be a grave marker also needs highlighting, and should be fenced off and avoided. If this is impossible, a permit for excavation would have to be obtained from the South African Heritage Resources Agency (SAHRA), and if human remains were uncovered, these need special treatment under the National Heritage Resources Act (NHRA), and require the skills of a trained archaeologist for exhumation.

These observations indicate a very low heritage signature. Should these sites be avoided, there would be no other heritage impediments to the development taking place

Figure 11: Sketch of 'Copper Mountains' from Simon van der Stel's journey to Namaqualand (from Waterhouse, 1932: folio 728).

5. REFERENCE

Waterhouse, G. 1932*. Simon van der Stel's Journal of his Expedition to Namaqualand, 1685-6*. Dublin: Hodges, Figgis

6. DECLARATION OF INTEREST

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

	(For official use only)
File Reference Number:	12/12/20/
NEAS Reference Number:	DEAT/EIA/ 14/12/16/3/3/1/974
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2010

PROJECT TITLE

Heritage Impact Assessment : 20 MW Solar PV on Melkbosrivi, Farm 132/26 Caralusberg, Nama-Khoi Municipa

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Project Consultant:			
Contact person:			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

4.2 The specialist appointed in terms of the Regulations_

I, ANDREW B. SMITH , declare that --

General declaration:

I act as the independent specialist in this application
I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
I declare that there are no circumstances that may compromise my objectivity in performing such work;
I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
I will comply with the Act, regulations and all other applicable legislation;
I have no, and will not engage in, conflicting interests in the undertaking of the activity;
I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
all the particulars furnished by me in this form are true and correct; and
I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of section 24F of the Act.

Signature of the specialist:

Name of company (if applicable):

11 August 2013
Date: