



09 March, 2017

Att: Mr Bernard de Wit  
EnviroAfrica cc  
PO Box 5367  
Somerset West  
7135

Dear Mr de Wit,

**ARCHAEOLOGICAL IMPACT ASSESSMENT ROMA ENERGY MOUNT ROPER PV PLANT ON FARM 321 NEAR KURUMAN, NORTHERN CAPE PROVINCE**

An Archaeological Impact Assessment (AIA) for the Roma Energy Mount Roper Solar Energy Facility on Farm 321 near Kuruman (Ga-segonyana local Municipality) in the Northern Cape, was undertaken by ACRM in 2012<sup>1</sup> (Figures 1 & 2).

The following observations were made:

➤ 31 archaeological occurrences (numbering more than 50 stone implements) were recorded during the study. Most of the tools are assigned to the Middle Stone Age (MSA) and Later Stone Age (LSA), while only one Early Stone Age (ESA) biface was found. The tools comprised utilized and retouched pieces, round cores and chunks, while several large blade tools of the Fauresmith Industry were also noted. More than 90% of the lithics are made on locally available banded ironstone, with the remainder in indurated shale, chalcedony and quartzite. The tools are spread very thinly and unevenly over the surrounding landscape. Most of the implements were found on patches of ironstone gravels. The bulk of the site, however, is underlain by red Kalahari sands with little surface stone present.

No graves or typical grave markers were found during the study.

*Grading of the archaeological remains*

Despite the relatively small number of tools recorded, the archaeological remains have provisionally been rated as having *medium-low* (Grade 3B-3C) significance, subject to further investigation of the site.

The following recommendations were made:

1. The footprint area across the northern portion of the development site must be re-surveyed once the vegetation has been cleared from the site. Archaeological visibility will be higher and many more tools are likely to be encountered on the ironstone gravels which cover this portion of the farm. These should be documented before any physical construction takes place on the site, so as to record a more representative sample of the archaeological record.

---

<sup>1</sup> Kaplan, J. 2012. Archaeological Impact Assessment, proposed Mount Roper Roma Energy Solar Plan on Farm 321 near Kuruman, Northern Cape Province. Report prepared for EnviroAfrica. ACRM, Cape Town



# Agency for Cultural Resource Management

Specialists in Archaeological Studies and Heritage Resource Management

2. Should any unmarked human burials/remains or ostrich eggshell water flask caches be uncovered, or exposed during construction activities, these must immediately be reported to the contracted archaeologist (Jonathan Kaplan 082 321 0172), or the South African Heritage Resources Agency (Natasha Higgitt 021 462 4509).

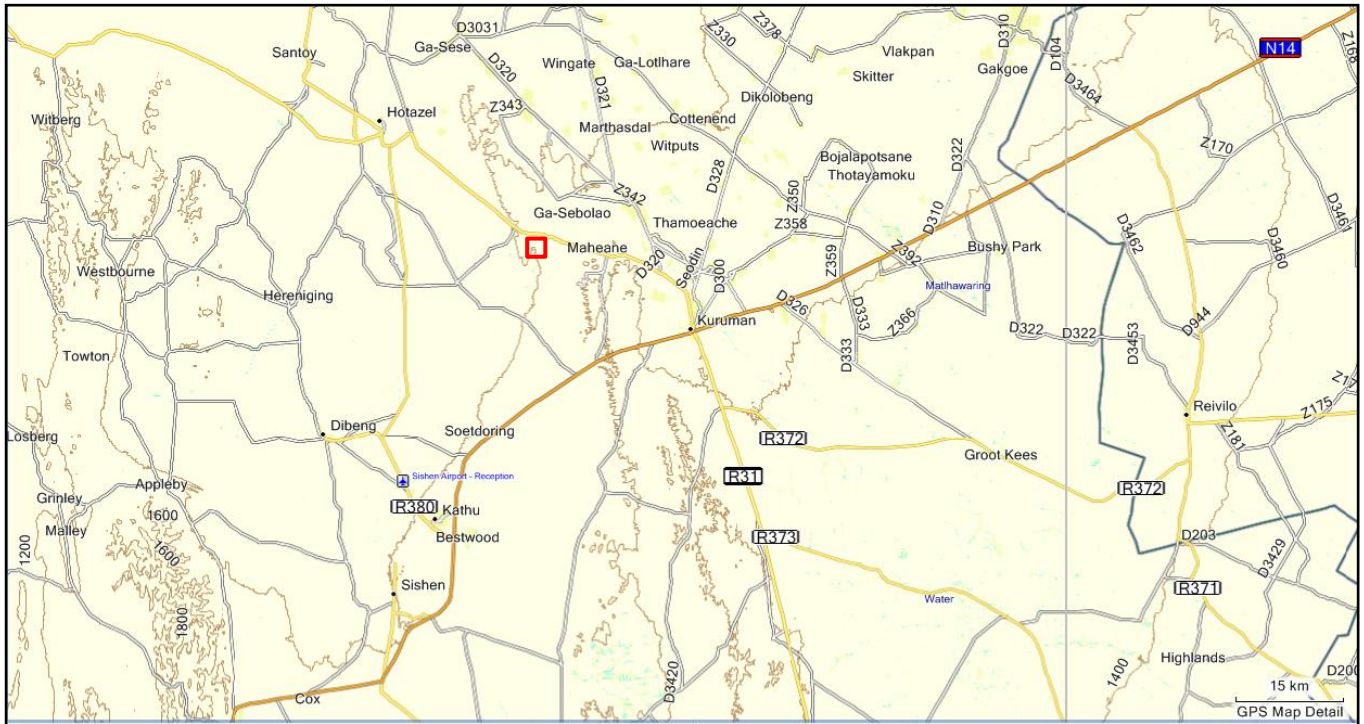


Figure 1. Locality map. Arrow indicates the study site (red polygon)

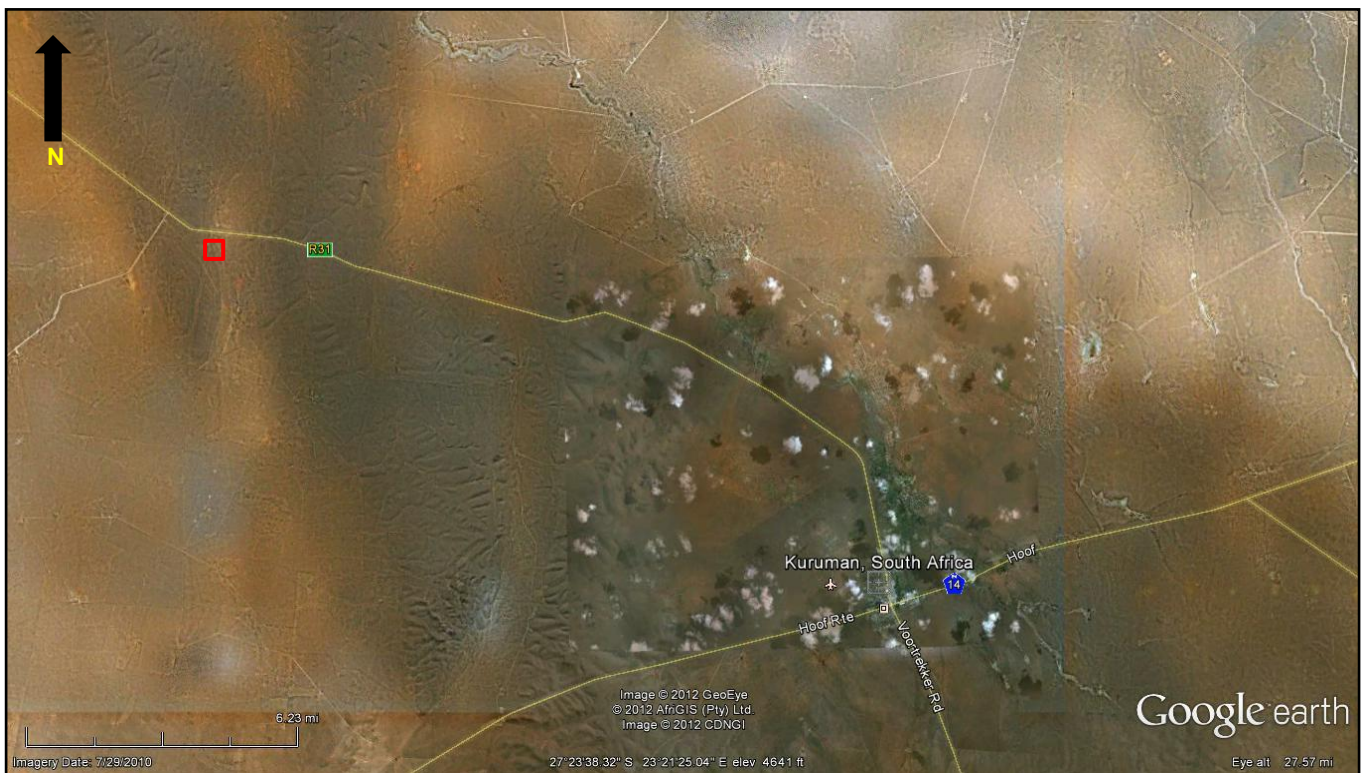


Figure 2. Google satellite map indicating the location of the proposed Mount Roper PV facility (red polygon)



# Agency for Cultural Resource Management

**Specialists in Archaeological Studies and Heritage Resource Management**

SAHRA reviewed the AIA report (File No. 9/2/055/0002) on 28 June, 2012 and supported the recommendations made by the heritage practitioner.

The AIA report was submitted to the Department of Environment Affairs as part of the Environmental Impact Assessment process undertaken by EnviroAfrica cc.

However, the project did not proceed and the environmental authorization lapsed, necessitating a new Basic Assessment process, and re-submission of the archaeological assessment.

## **2. TERMS OF REFERENCE**

ACRM has been instructed to:

1. Undertake a field assessment;
2. Confirm or re-evaluate the findings of the original study, and
3. Address cumulative impacts

## **3. FINDINGS**

The proposed development site was visited on 22<sup>nd</sup> February 2017 (Figures 3-6), where two hours was spent walking the footprint area.

A track path of the survey was created (Figure 7).

A spreadsheet of waypoints and description of archaeological finds is presented in Table 1.

A collection of heritage resources and the context in which they were found is illustrated in Figures 8-13.



Figure 3. View of the proposed site facing north west



Figure 4. View of the site facing north west



Figure 5. View of the site facing west



Figure 6. View of the site facing west

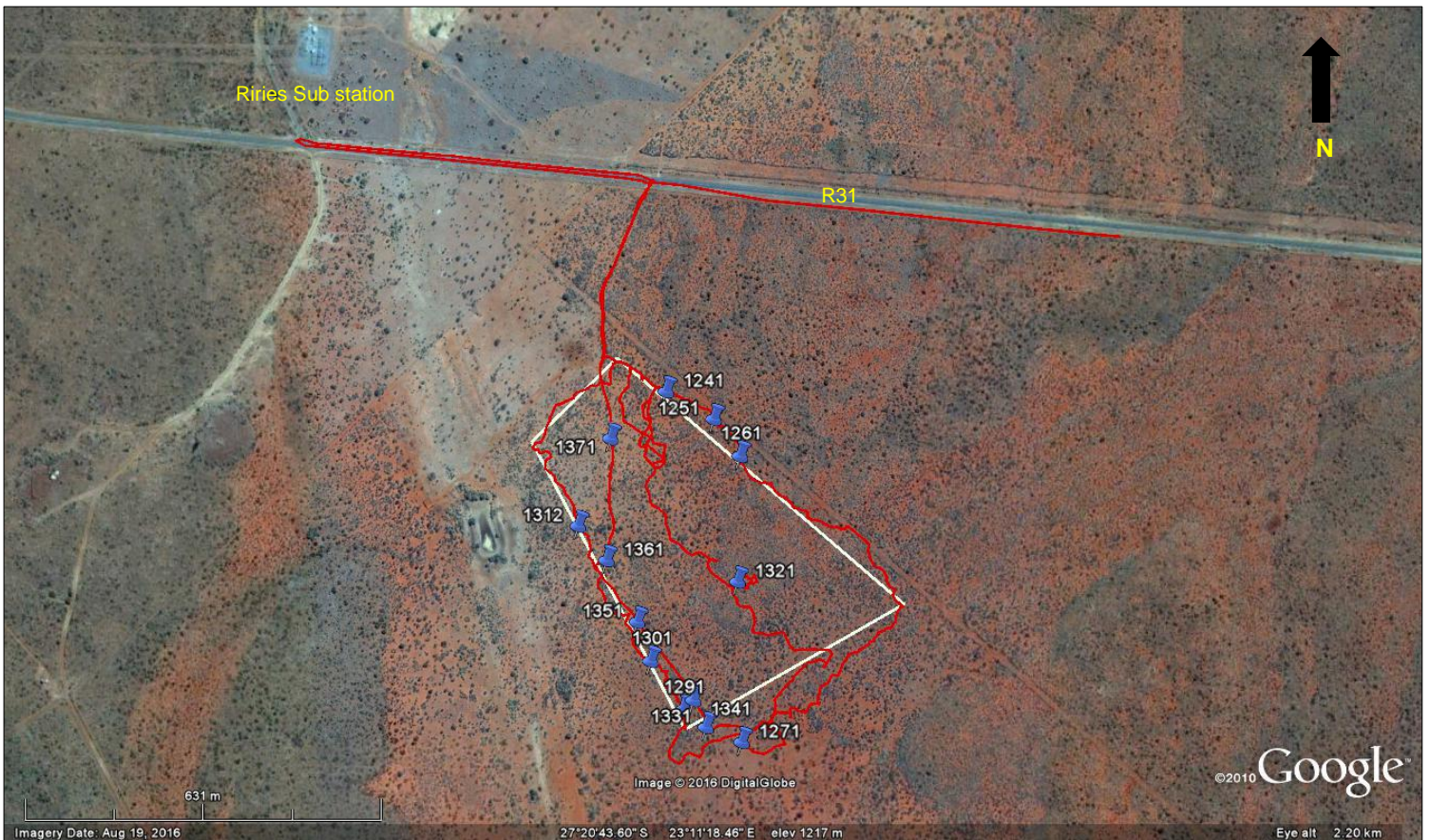


Figure 7. Track paths in red and waypoints of archaeological finds (refer to Table 1). Note the location of the Eskom Riries substation



Agency for Cultural Resource Management  
Specialists in Archaeological Studies and Heritage Resource Management

Site	Name of farm	Lat/long	Description of finds	Grading	Suggested mitigation
	Farm 321 Mount Roper				
1241		S27° 20.694' E23° 11.256'	Flakes, chunks, retouched/utilized pieces, 1 round core, in banded ironstone, on extensive sheet of ironstone gravels alongside powerline servitude	3C (low)	None required
1251		S27° 20.721' E23° 11.308'	Banded ironstone retouched flake & chunks on patch of ironstone gravels	3C (low)	None required
1261		S27° 20.756' E23° 11.336'	Large banded ironstone MSA retouched flake/end scraper on patch of ironstone gravels	3C (low)	None required
1271		S27° 21.029' E23° 11.338'	Several worked pieces of banded ironstone (flake & chunks) on patch of ironstone gravels and cobbles.	3C (low)	None required
1291		S27° 20.999' E23° 11.274'	Large banded ironstone flake in road running down middle of the site	3C (low)	None required
1301		S27° 20.952' E23° 11.240'	Large patch of stone in middle of road, - a few flakes and chunks in banded ironstone	3C (low)	None required
1312		S27° 20.823' E23° 11.162'	Banded ironstone core	3C (low)	None required
1321		S27° 20.876' E23° 11.333'	Large end scraper in banded ironstone	3C (low)	None required
1331		S27° 21.015' E23° 11.299'	Small LSA banded ironstone scraper	3C (low)	None required
1341		S27° 20.989' E23° 11.286'	Patch of ironstone gravels – 2 banded ironstone retouched Fauresmith MSA blades & flake	3C (low)	None required
1351		S27° 20.915' E23° 11.225'	Flake & chunk in road	3C (low)	None required
1361		S27° 20.856' E23° 11.192'	Core and chunk in road - gravels	3C (low)	None required
1371		S27° 20.739' E23° 11.197'	Flake on red sands	3C (low)	None required

Table 1. Spreadsheet of waypoints and description of archaeological finds (2017 study)



Figure 8. Collection of stone tools (February 2017). Scale is in cm



Figure 9. Collection of stone tools (February 2017). Scale is in cm



Figure 10. Site 1321. Scale in cm



Figure 11. Collection of tools (February 2017). Scale in cm



Figure 12. Site 1241. Context in which the remains were found



Figure 14. Site 1271. Context in which the remains were found



Figure 13. Site 1251. Context in which the remains were found



Figure 15. Site 1341. Context in which the remains were found



#### **4. CUMULATIVE IMPACTS ON ARCHAEOLOGICAL HERITAGE**

According to the Department of Environmental Affairs (DEA) Renewable Energy EIA Application Database for renewable projects (new builds)<sup>2</sup>, there is only one other renewable energy (RE) project planned within a 30km radius of Mt Roper. Despite the presence of this site, it will not impact on archaeological resources in the proposed PV site.

Apart from the Eskom Riries substation, overhead powerlines, and farming infrastructure on the property (fences, boreholes, earth dam, etc.), there are no other industrial-type developments surrounding the proposed PV facility.

#### **5. CONCLUSION**

A re-assessment of the proposed Roma Energy Mount Roper PV facility on Farm 321, confirms the observations made during the original archaeological study (Kaplan 2012), which found mainly dispersed scatters of stone implements associated with extensive ironstone gravels.

As long as the recommendations made in the 2012 study are adhered to, there are no objections to the proposed development, proceeding.

The recommendations must be included in the Environmental Management Plan (EMP) for the proposed development.

Yours sincerely

Jonathan Kaplan

---

<sup>2</sup><https://dea.maps.arcgis.com/apps/webappviewer/index.html?id=b8452ef22aeb4522953f1fb10e6dc79e>