ARCHAEOLOGICAL REPORT

Proposed 75MW Solar Facility on Farm 426 Skuitdrift, Northern Cape Province

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Prepared for

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EXECUTIVE SUMMARY

Instructions were given by Cape EAPrac to conduct an archaeological impact assessment of the proposed 75MW solar facility on Farm 410 Skuitdrift in the Northern Cape Province.

Site visits were made on 22 and 24 February 2012, and the footprint of the solar facility inspected for archaeological remains by walking, and a GPS track recorded any archaeological material. Tracks and burrowing animal activity were inspected, but only around the number of koppies that exist on the farm was any material of significance found.

The conclusions are that the flat, open country has low archaeological significance, but the koppies need to be avoided by any construction teams and their vehicles. It is suggested that a 'buffer zone' of 50m extending around the base of each koppie would be adequate protection of the archaeological sites. There appear to be no other inhibitors to the solar facility from an archaeological perspective.

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1. INTRODUCTION

Instructions were given by Cape EAPrac to conduct an archaeological assessment of the proposed 10 MW solar facility on Farm 410 Skuitdrift in the Northern Cape Province (Figure 1)(1:250,000 map 2818 Onseepkans). This study would be part of a larger Environmental Impact Assessment (EIA) to conform to NEMA legislation.

A site visit was made on 22 and 24 February 2012 and contact with the farmer, Fanus Nel, assisted in orientation of where the footprint of the solar facility would be. Orientation was also facilitated by the location of the Farmhouse at Skuitdrift and the existing powerlines on the farm.

GPS way points marked where significant material was found on a track using a Garmin 60 instrument (Figure 2).

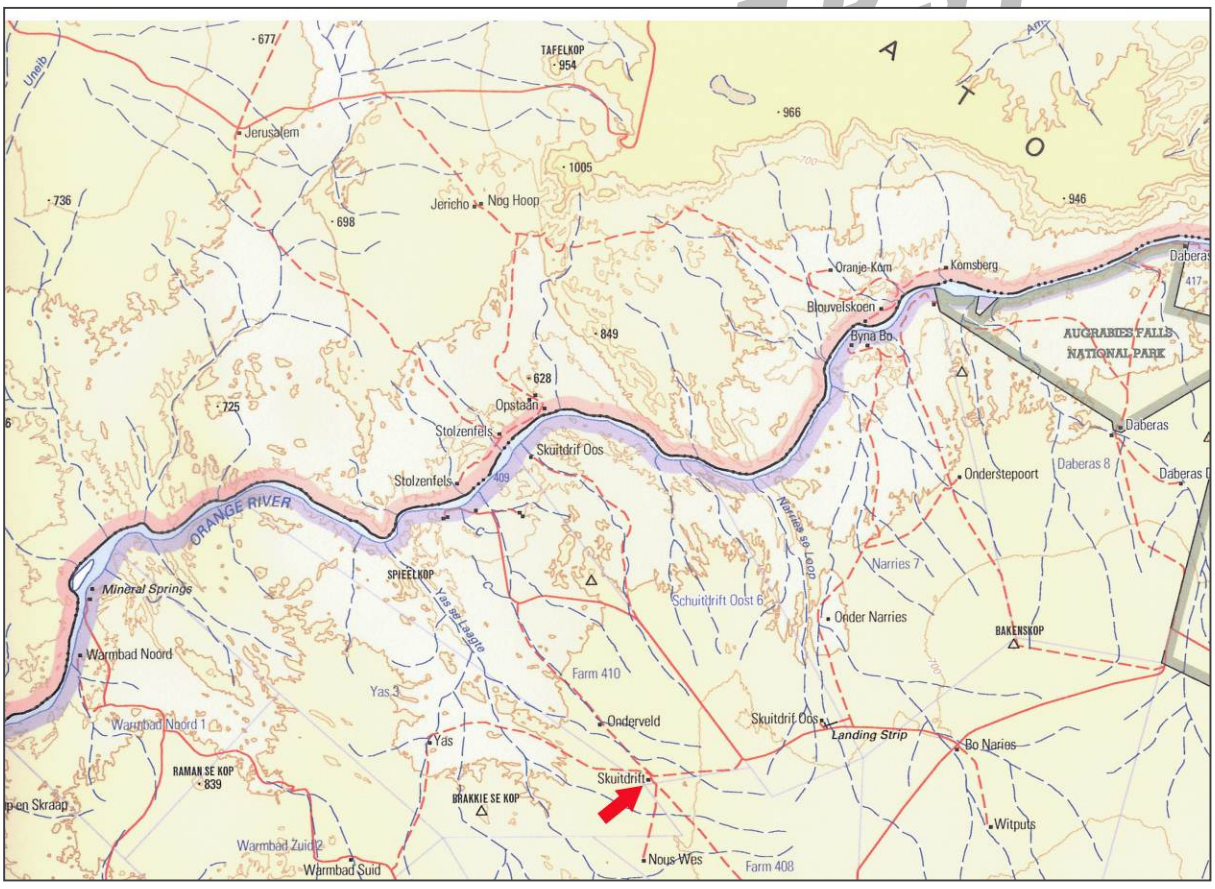

Figure 1: Location of the Farm Skuitdrift (Reference: 1:250,000 map 2818 Onseepkans)

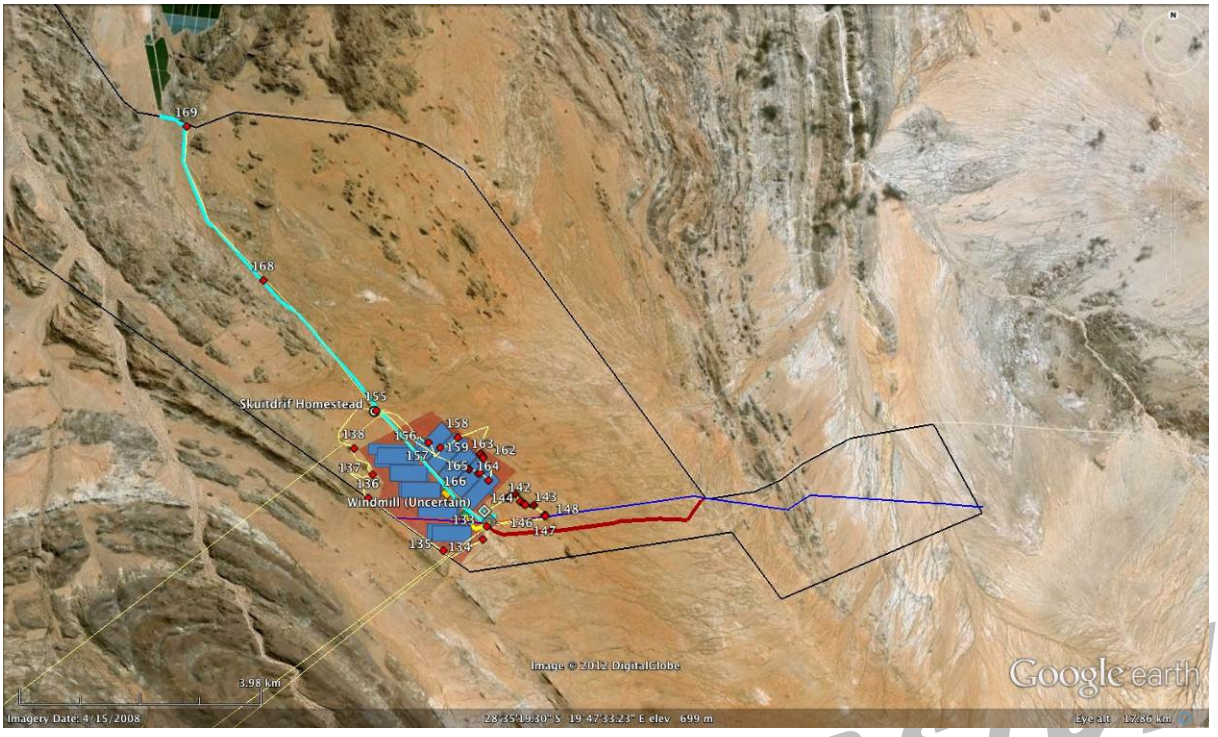

Figure 2: Footprint of the proposed 75MW solar facility, Skuitdrift, and GPS track (Ref: Google Earth 2012)

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2. METHODOLOGY

The SW fence line parallels an extruding granite-gneiss hill. The fence line was walked as far as the point where the fence started to climb onto the hill (Figure 3). Open areas where there was less vegetation were examined, as were activity areas of burrowing animals, to see if there was any material sub-surface.

Areas around the koppies within the footprint area were closely examined, as previous surveys across this dry region of South Africa had shown that: "…large areas away from… river beds have failed to yield any signs of human occupation, except around the granite inselbergs extruding above the peneplain which would have produced both shelter from the prevailing winds, as well as good viewing points for hunters after game, the red dines which produced clean sand for sleeping, or around the seasonal pans." (Beaumont et al.1995: 264).

Figure 3: View of W corner outside footprint

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3. RESULTS

A series of koppies on the western corner of the footprint were examined. There, on clean sand between the hills, were crystal; quartz and hornfels flakes (GPS 137-138: Figure 4).

Figure 4: Quartz and hornfels flakes on clean sand between hills (GPS 137)

Beyond the Onderveld farmhouse, on the other side of the road linking it to Skuitdrift farmhouse is a large hill labelled Manhaarkoppie. This had some quartz pieces at the base (GPS 156: Figure 5).

Figure 5: Quartz core at base of koppie (GPS 156)

An open stony surface (GPS 158-160) (Figure 6) produced a few isolated stone tools, but widely dispersed, so of low significance. This also existed next to the hill, which ESKOM workers have been using as their dumping ground (GPS 161-163), and similarly across to another koppie (GPS 164-167). The open areas around the hills are almost devoid of grass, and in some places horizontal slabs of bedrock extrude (thus there is very little soil).

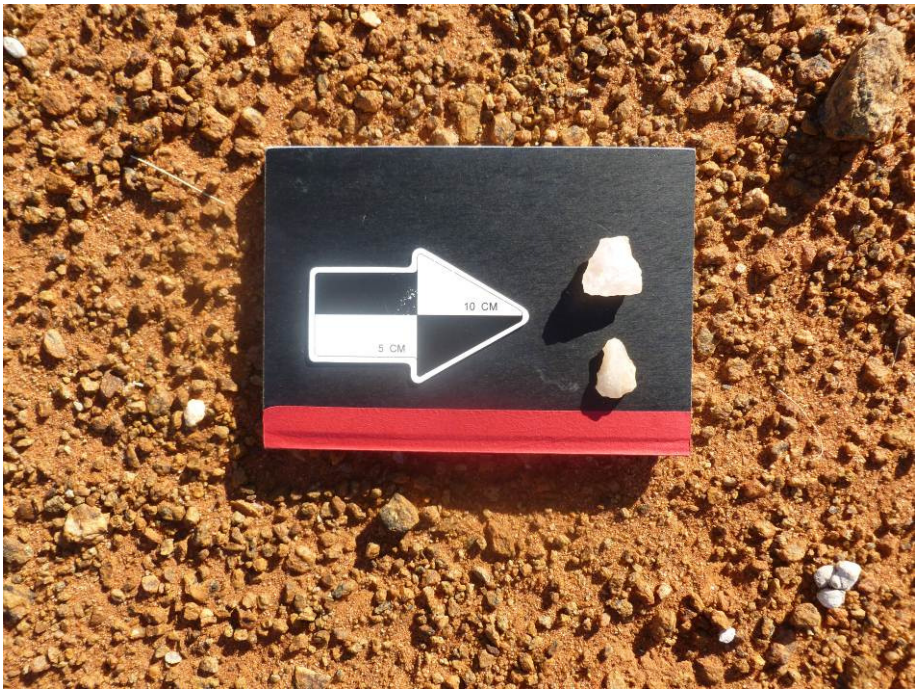

Figure 6: Quartz flake and scraper (GPS 157)

The track towards the Southern Farms on the Orange River was also inspected, as this is the proposed route of the water pipeline to the solar facility. The only area of note was a very large surface scatter of quartz pieces (GPS 168: Figure 7) without any signs of a quartz outcrop as source. Whether this is anthropogenic is uncertain. All the pieces appear to be on the surface.

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Figure 7: Large surface scatter of quartz pieces next to track from Southern Farms (GPS 168)

4. CONCLUSIONS & RECOMMENDATIONS

The only artefact concentrations of any note are around the base of the koppies on the footprint. It is recommended that in the installation of the solar panels that an area around each koppie is designated as a 'buffer zone' (perhaps 50m.) and no tracks be built through the buffer zone.

From an archaeological perspective the open terrain is of low significance, as there is little cultural material to be found.

With the proviso of the 'buffer zones' around the koppies, there is no other archaeological impediment to the solar facility going ahead.

5. REFERENCE

Beaumont, P.B., Smith, A.B. & Vogel, J.C. 1995. Before the Einiqua: The archaeology of the frontier zone. In: Smith, A.B. (ed.) *Einiqualand: Studies of the Orange River Frontier:* 236-264. Cape Town: UCT Press.

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Table 1

LABEL	LONGITUDE	LATITUDE	DESCRIPTION
133	19° 46’ 21.9048” E	28° 36’ 45.4485” S	Skuitdrift Farmhouse
134	19° 46' 19.5572" E	28° 36' 52.3740" S	MSA quartzite core
135	19° 45' 55.6168" E	28° 36' 58.5429" S	MSA quartz flake
136	19° 45' 9.5373" E	28° 36' 30.9380" S	Road junction along fence
137	19° 45' 12.2030" E	28° 36' 18.3298" S	Crystal quartz & hornfels flakes
138	19° 45' 0.5404" E	28° 36' 4.6168" S	Quartz core/scraper + flakes
155	19° 45' 13.9172" E	28° 35' 44.2171" S	Onderveld Farmhouse
156	19° 45' 45.8658" E	28° 36' 1.0559" S	Quartz core + few chips
157	19° 45' 53.1394" E	28° 36' 3.7239" S	Quartz flake + scraper
158	19° 46' 3.7064" E	28° 35' 58.1609" S	Scattered quartz flakes & core
159	19° 46' 17.6278" E	28° 36' 6.8516" S	Hornfels flake
160	19° 46' 17.6260" E	28° 36' 6.8522" S	Extent of above
161	19° 46' 17.6197" E	28° 36' 6.8507" S	Thin scatter of quartz pieces
162	19° 46' 19.0810" E	28° 36' 8.2710" S	Extent of above
163	19° 46' 19.2307" E	28° 36' 8.9328" S	Extent of above
164	19° 46' 22.6066" E	28° 36' 20.8929" S	Thin scatter of quartz pieces
165	19° 46' 17.5457" E	28° 36' 16.6144" S	Extent of above
166	19° 46' 16.3218" E	28° 36' 17.1901" S	Extent of above
167	19° 46' 10.7446" E	28° 36' 15.0335" S	Extent of above
168	19° 44' 4.3026" E	28° 34' 35.1013" S	Huge surface scatter of quartz
169	19° 43' 15.9230" E	28° 33' 12.6356" S	Road junction for Southern Farms access

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6. GALLERY

MSA quartzite core (GPS 134)

Quartz MSA flake (GPS 135)

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Quartz core and flakes (GPS 158)

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Hornfels flake (GPS 159)

Quartz pieces across open ground (GPS 161)

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