

Proposed Solar PV Facility
Klipdam Farm 134/17 Springbok: A Heritage Impact
Assessment



AUGUST 2013

Report prepared for
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Executive Summary

Instructions were given by Footprint Environmental Services for a Heritage Impact Assessment of the farm Klipdam 134/17 Springbok, where a 75 MW solar facility is proposed. A site visit was made on the 26th and 27th July 2013, and conducted in two parts: 1) the power corridor from the substation on the N7 highway to the farm; 2) the Klipdam property itself.

The survey was conducted on foot, inspecting open areas, tracks and erosion gullies where archaeological material might be exposed. A GPS track was made using a Garmin 60 GPS instrument, and any relevant or noteworthy material was marked by a GPS way point.

Powerline Corridor: The existing powerline runs across several sites which included: quartz chips and a core; a stone-walled kraal;; a large boulder below which were stone tools and porcelain; and a stone cairn (possibly a grave).

Klipdam Farm: on the whole the heritage on the farm is primarily historical. This includes the golf clubhouse, which is probably less than 60 years old, and associated infrastructure. The most noteworthy finds were grave markers

The incidence of possible graves needs to be dealt with, by avoidance, if possible. The three historic graves across from Jakkalswater are in a formal graveyard which should be left alone, as this area is probably outside the project plan. Three aboriginal graves are just beyond the golf course boundary, and if any construction takes place nearby, they should probably be fenced off to avoid damage by equipment, and a fourth also needs highlighting to avoid damage during the construction phase. Failing this, exhumation would be needed, and require requisite permits dealing with human remains from SAHRA.

The extremely limited prehistoric signature on the farm itself would indicate a low heritage potential for that part of the heritage. If the graves are highlighted, and avoided, there appears to be no other impediment to the project going ahead, at least from a heritage perspective.

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1. INTRODUCTION

Instructions were given by Footprint Environmental Services for a Heritage Impact Assessment of the farm Klipdam 134/17 Springbok where a 75 MW solar facility is proposed.

The farm is located on the south side of the road linking Okiep with Nababeep, (Figure 1) and is identified by the sign 'Klipdam Golf Course', which is now unused. The property has been zoned Agriculture 1. The climate of the farm is relatively dry with the main rains falling between May to August, but seldom exceeding 30mm per month. The basalt batholiths produce sheet runoff across the farm.

A site visit was made on the 26th and 27th July 2013, and conducted in two parts: 1) the power corridor from the substation on the N7 highway to the farm; 2) the Klipdam property itself.

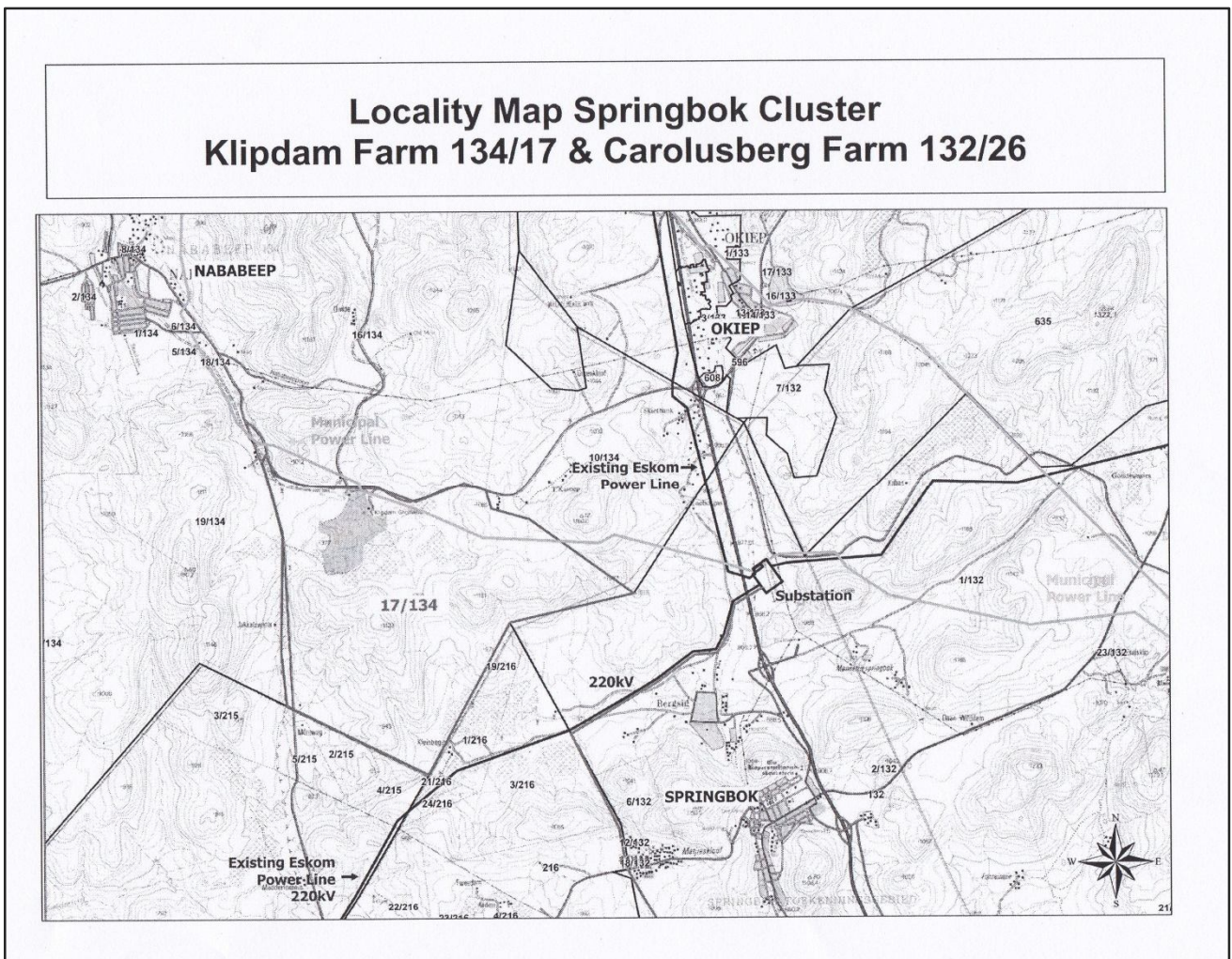


Figure 1: Location of Klipdam Farm 134/17 Springbok

2. METHODOLOGY

The landscape is primarily open veld with vegetation interspersed with granite bedrock exposures situated below steep granite batholiths (Figure 2). The target area on the farm was the vegetated north-facing slopes which would be best position for the solar panels (see green areas on Klipdam Sensitivity Map) (Figure 3). The work was facilitated by open access to the ground due to the relatively sparse vegetation on sandy soil. The survey was conducted on foot, inspecting open areas (Figure 4), tracks and erosion gullies (Figure 5) where archaeological material might be exposed.



Figure 2: Vegetation between granite bedrock exposures

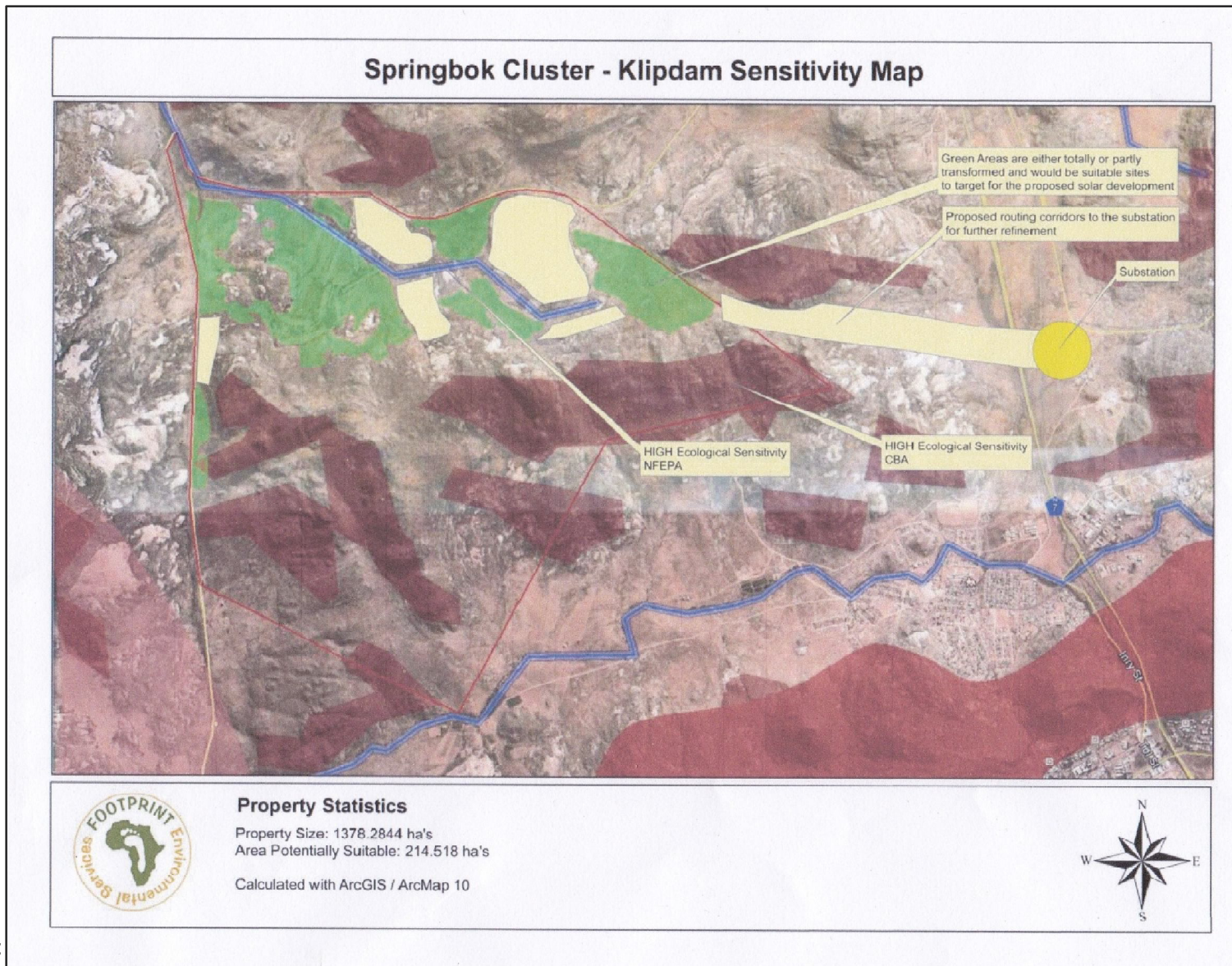


Figure 3:

map (green areas

optimal for the solar arrays)



Figure 4: Open area in vegetation



Figure 5: Sand deposit over weathered granite bedrock

A GPS track was made using a Garmin 60 GPS instrument, and any relevant or noteworthy material was marked by a GPS way point (Figure 6).



Figure 6: GPS track and waypoints

Table 1: Waypoints

WAYPOINT	COORDINATE	DESCRIPTION
053	S29 37.860 E17 52.740	View across from sub-station on N7
054	S29 37.834 E17 52.379	Quartz chips and core
055	S29 37.838 E17 52.337	Stone-walled kraal
056	S29 37.744 E17 52.142	Stone tools were found below this boulder
057	S29 37.761 E17 52.392	Stone cairn (possibly a grave)
058	S29 37.685 E17 51.251	Loose sands on weathered bedrock
059	S29 37.689 E17 50.982	North-east border fence line from power line
060	S29 37.502 E17 50.521	Quartz flakes
061	S29 37.599 E17 48.569	Historical graveyard on western boundary road
064	S29 37.225 E17 49.301	Klipdam Golf Course gate
065	S29 37.477 E17 49.612	Stone trough
066	S29 37.441 E17 49.906	Stone ring (possibly a grave)
067	S29 37.849 E17 50.400	Deadman bolt ring
068	S29 37.660 E17 49.509	Grave no. 1 near golf course

3. RESULTS

Powerline Corridor (Figure 7): The existing power line runs across several archaeological sites which included: quartz chips and a core (GPS 054: Gallery); a stone-walled kraal (GPS 055)(Figure 8); a large boulder (Figure 8), below which were stone tools and porcelain (GPS 056: Gallery); and a stone cairn (possibly a grave)(GPS 057)(Figure 10).



Figure 7: The power line corridor looking towards the substation



Figure 8: Stone-walled kraal (GPS 055)



Figure 9: Stone tools were found below this boulder(GPS 056)



Figure 10: Stone cairn (possibly a grave)(GPS 057)

Klipdam Farm: On the whole, the heritage on the farm is primarily historical. This includes the golf clubhouse (Figure 11) and associated infrastructure (e.g. garden and the fairways among the blue gum trees, Figures 12 & 13). Currently living on the farm are a caretaker, and a shepherd, the latter has a small house behind the clubhouse, and a small flock of sheep. The most noteworthy finds were grave markers (Historical: Family Dixon, Figure 14, GPS 061), and possibly aboriginal one (GPS 066, Figure 15), and three more (GPS 068, Figures 16, 17 & 18).



Figure 11: Golf clubhouse



Figure 12: Golf clubhouse garden



Figure 13: Golf club fairways among the blue gum trees.

Other historical material included a deadman ring, presumably for supporting a structure (but no structure is evident)(GPS 067: Gallery), and a stone trough (GPS 065: Gallery), located about 150m downslope from a current windmill.

It is noteworthy that very few prehistoric stone tools were seen on the farm, in spite of the information received that there were water seeps and springs below the high berg which would have always been attractive for human occupation.

I was informed by the caretaker on the property, Vic Bourne, that there had existed a narrow gauge railway in the northwest corner of the farm. The sleepers from the tracks have been collected, and are stacked on the stoep of the clubhouse.



Figure 14: Historical graveyard on western boundary road (GPS 061)



Figure 15: Stone ring (possibly a grave)(GPS 066)



Figure 16: Grave no. 1 near golf course (GPS 068)



Figure 17: Grave no. 2 near golf course



Figure 18: Grave no. 3 near golf course

4. DISCUSSION AND CONCLUSIONS

The only limitation to the survey was a lack of a development footprint. As far as observations were concerned, open areas were easily seen for prehistoric material, and historical sites could be identified. Within the power line corridor, there is an existing power line which runs across the

heritage sites identified in this report. Any additional power structures which might be built need to be aware of these sites, and to avoid them.

The incidence of possible graves needs to be dealt with, by avoidance, if possible. The three historic graves across from Jakkalswater (GPS 061, along the boundary road) are in a formal graveyard which should be left alone, as this area is probably outside the project plan. The three aboriginal graves (GPS 068) are just beyond the golf course boundary, and if any construction takes place nearby, they should probably be fenced off to avoid damage by equipment. The fourth (GPS 066) also needs highlighting to avoid damage during the construction phase. Failing this, if indeed these are graves, excavation and exhumation would be required. This would require the requisite permits dealing with human remains from the South African Heritage Resources Agency (SAHRA), and appointment of a qualified archaeologist.

Although the golf course existed prior to WWII, the clubhouse is much younger, and is probably less than 60 years old, so has limited heritage value.

The extremely limited prehistoric signature on the farm itself would indicate a low heritage potential for that part of the heritage.

If the graves are highlighted, and avoided, there appears to be no other impediment to the project going ahead, at least from a heritage perspective.

5. GALLERY



Quartz chips and core: GPS 054



Porcelain and quartz chips: GPS 056



Quartz flakes; GPS 060



Stone trough: GPS 065



Deadmanring: GPS 067