Appendix 8.4

Heritage Scoping Assessment

HERITAGE SCOPING ASSESSMENT FOR THE PROPOSED KERRIE FONTEIN AND DARLING PHASE 2 WIND FARM ON KERRIE FONTEIN 555 AND SLANGKOP 552, MALMESBURY MAGISTERIAL DISTRICT, WESTERN CAPE

(Assessment conducted under Section 38 (8) of the
National Heritage Resources Act (No. 25 of 1999) as part of an EIA

Prepared for

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EXECUTIVE SUMMARY

The UCT Archaeology Contacts Office was requested by the Environmental Evaluation Unit to conduct a scoping heritage assessment for the proposed addition of 16 turbines and associated infrastructure to the existing four turbines at the Darling Wind Energy Facility (WEF). The site lies immediately northeast of the R27/R315 intersection, not far from the town of Darling, on the farms Slangkop 552 and Kerrie Fontein 555. The new turbines (60 m) will be slightly higher than the four existing ones (50 m) and six will be placed on a similar alignment to the existing four with a second row of ten being placed to the north.

The site is on a westwards-facing hill that is predominantly agricultural land, some of it in an advanced state of recovery. An inspection was carried out on 15th June 2010. One Early Stone Age and several Later Stone Age artefacts were noted but none occurred in a concentration suggestive of the presence of an archaeological site.

Visual impacts to the landscape and scenic routes (R27 and R315) are considered to be the most significant heritage aspects to this project. A separate Visual Impact Assessment is being carried out and this will need to examine the significance of these impacts.

Although the project is only at the scoping stage, it is felt that the current heritage component can stand as a full Phase 1 Archaeological Impact Assessment.

Subject to the approval of Heritage Western Cape and to the outcome of the VIA, the proposed project should be allowed to proceed with no further heritage intervention required. It should be noted, however, that unmarked human burials can occur anywhere, particularly in sandy substrates, and that should such a find be made during construction then work in its vicinity should be halted and the find reported to Heritage Western Cape (021 483 9685).

Declaration of Independence:

Mr Jayson Orton is an independent specialist consultant who is in no way connected with the proponent, other than in the delivery of consulting services. He has an MA in Archaeology and 11 years of working experience in heritage throughout the western parts of South Africa. He is accredited with Principal Investigator status with the Association of Professional Archaeologists of Southern Africa.

Contents

1. INTRODUCTION

The UCT Archaeology Contacts Office was requested by the Environmental Evaluation Unit to conduct a scoping heritage assessment for the proposed addition of 16 turbines to the existing four at the Darling Wind Energy Facility (WEF). The site lies immediately northeast of the R27/R315 intersection, not far from the town of Darling, on the farms Slangkop 552 and Kerrie Fontein 555 (Figure 1). The new turbines (60 m) will be slightly higher than the four existing ones (50 m) and six will be placed on a similar alignment to the existing four with a second row of ten being placed to the north.

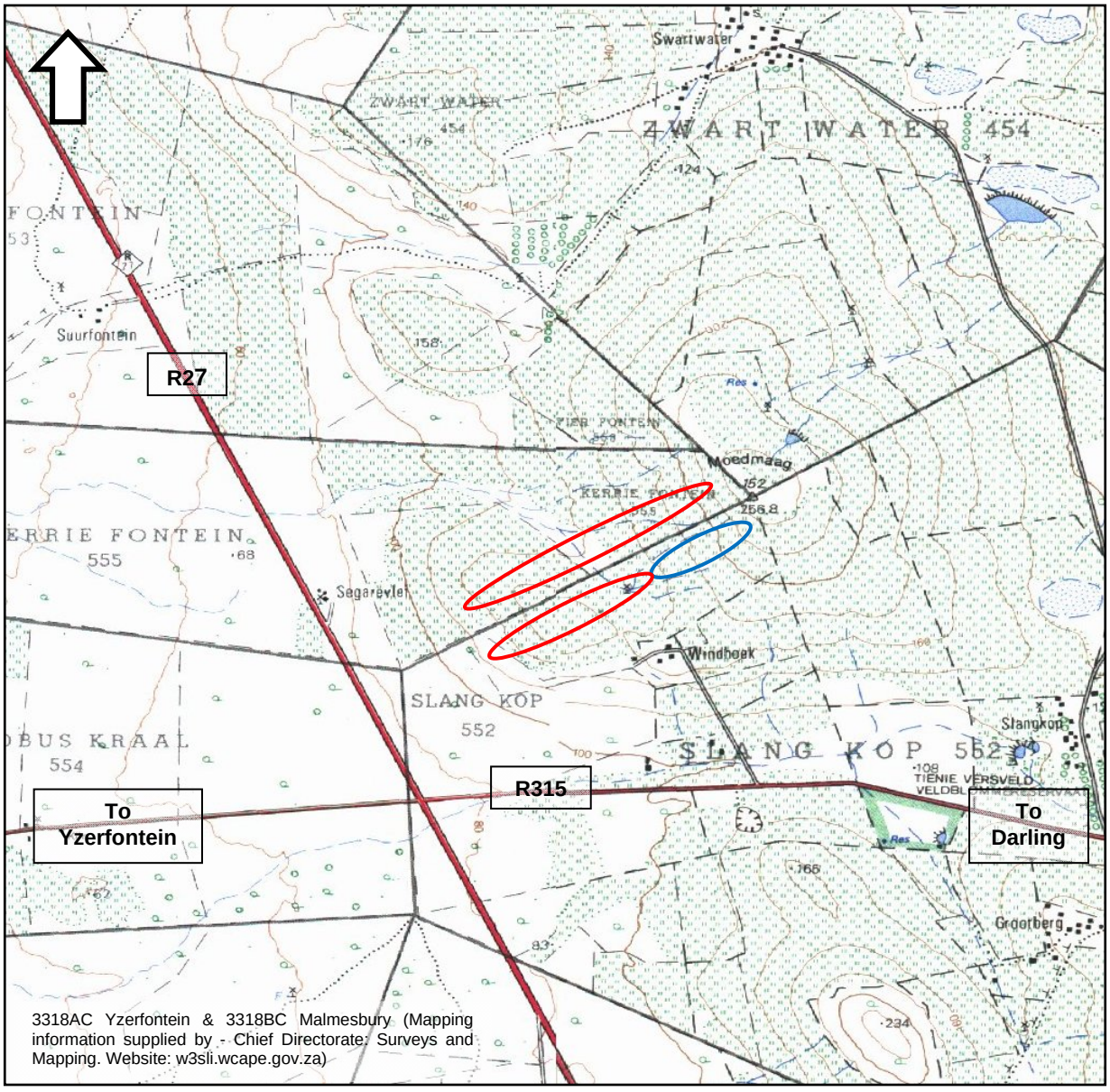

Figure 1: Map showing the location of the study area. The blue oval indicates the position of the existing four turbines while the red ovals show the approximate areas where new turbines will be sited.

Associated infrastructure that will also be required includes access roads, subsurface cabling, a substation and gravelled working areas for the cranes during installation.

Although this report is intended to be a scoping report, it was felt prior to the field assessment that a full Phase 1 assessment could easily be carried out without further need for future work.

2. HERITAGE LEGISLATION

The National Heritage Resources Act (NHRA) No. 25 of 1999 protects a variety of heritage resources including palaeontological, prehistoric and historical material (including ruins) more than 100 years old (Section 35), human remains (Section 36) and non-ruined structures older than 60 years (Section 34). Landscapes with cultural significance are also protected under the definition of the National Estate (Section 3 (3.2d)).

Since the project is subject to an Environmental Impact Assessment, Heritage Western Cape (HWC) is required to provide comment on the proposed project in order to facilitate final decision making by the Department of Environmental Affairs and Development Planning (DEA&DP).

3. APPROACH TO SCOPING

A survey of the site was conducted on 15th June 2010. Only the approximate footprint area was examined. Finds were photographed and their positions recorded using a hand-held GPS-receiver set to the WGS84 datum. Although the project was only at the scoping phase, it was felt that a fairly extensive survey could be carried out in the time available.

A brief literature review was also conducted so as to inform on aspects of heritage likely to be encountered within the study area.

3.1. Limitations and assumptions

The exact footprints for the new turbines were not yet known so estimates had to be made. For the southern row the alignment was simply extended towards the west, while for the northern row an alignment between about 250 m and 350 m north of the existing line was chosen for the survey. Despite these assumptions, it is felt that the survey will have provided an adequate reflection of heritage resources present in the study area.

4. BASELINE ENVIRONMENTAL CONDITIONS

4.1. The receiving environment

The site lies on a westwards-facing slope between Moedmaag Hill and the R27. Much of it is transformed land, having been ploughed in the past, but some areas may not have been ploughed and still others are in a state of recovery (Figure 2). Figures 3 to 10 show various views of the study area and its vegetation cover.

Figure 2: Aerial photograph of the study area showing the different states of the land as well as positions of finds and the walk paths created during the survey.

Figure 3: View west in the north-eastern part of the study area.

Figure 4: View west along the stream that traverses the site.

Figure 5: View south across the north-eastern part of the study area.

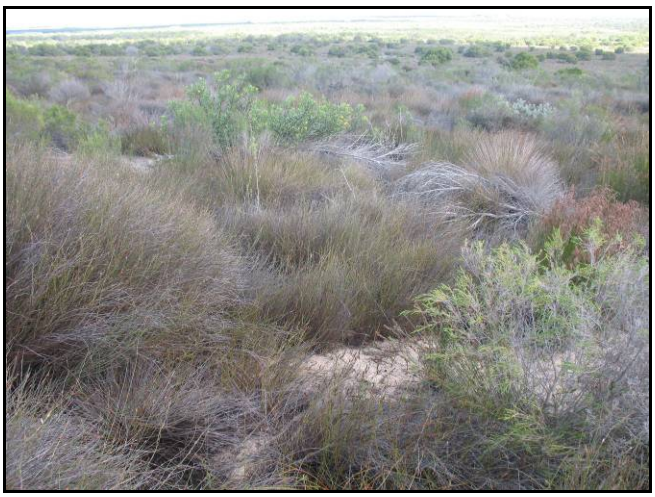

Figure 6: An unploughed or recovered area in the centre of the study area.

Figure 7: The large granite outcrop between the two turbine rows.

Figure 8: View east along the southern row showing Agricultural land and small granite outcrops.

Figure 9: View east along the southern row showing agricultural land.

Figure 10: View west along the cable servitude in the southwest part of the study area.

4.2. HERITAGE CONTEXT

This part of the Cape has been farmed for many years and is a well established agricultural landscape revolving primarily around dairy cattle and wheat. The vast majority of the land area has been transformed through ploughing such that little remains of the natural environment. Farmsteads dot the region, mostly lying towards the east among the Darling Hills. These are mostly late 19th century and the nearby town of Darling was only established in 1853 (Fransen 2006). Since the late 1600s, however, the area was well used as grazing land by the Dutch East India Company. A more extensive background to the region has already been compiled by Webley & Hart 2010). Two little-known aspects of Darling's history are that the town saw action during the Anglo-Boer War in 1901 and an airforce base operated from the local airfield during World War II (Route 27, n.d.). Since then the area has become well known for its Spring flowers.

The archaeology of the area is not well known. The Darling Hills would undoubtedly have been used extensively by the Khoekhoen for grazing their stock and their settlements would likely have dotted the open landscape. The local geology is not conducive to the formation of rock shelters and none are known. One does routinely come across stone artefacts of various ages in the wheat lands of the Cape and such finds would be expected here. The presence of Stone Age people in the general area is well documented by the excavations of both Middle and Later Stone Age archaeological sites at Yzerfontein, some 9 km to the southwest (Avery *et al.* 2008; Halkett *et al.* 2003; Klein *et al.* 2004; Orton 2007; in press).

Two other surveys in the vicinity of the study area found no heritage resources (Halkett 2001; Hart 2008).

5. ISSUES AND IMPACTS

5.1. Palaeontology

Fossils are completely unknown from the Cape Granite Suite rocks that cover most of the study area, but in the low-lying areas to the west important fossils are known from the Cenozoic deposits (Almond & Pether 2008). Most of the sand on the slopes below the granite hills in the study area, however, is windblown and unlikely to contain any significant fossil heritage. Impacts to fossil resources would take place during the construction phase only.

5.2. Stone Age Archaeology

Stone artefacts were observed in several areas ranging from the top of Moedmaag Hill to the lower, sandy slopes. With one exception, where three artefacts were encountered, these were isolated occurrences and do not reflect archaeological sites in the conventional sense. The distribution of these artefacts is shown in Figure 2. They include an Early Stone Age (ESA) core in silcrete (Figure 11), and several Later Stone Age (LSA) artefacts, mostly in quartz. One of the latter appeared to be a formal scraper (right hand artefact in Figure 12) and was accompanied by the only silcrete flake seen during the survey. An isolated *Bullia* shell was also found but its age is unknown. None of these finds is of any significance but they demonstrate the presence of people in the landscape during pre-colonial times. Impacts to archaeological resources would take place during the construction phase only.

5.3. Cultural landscapes, scenic routes and visual impacts

The agricultural landscape of the area is well entrenched but a precedent has already been set through installation of the four original turbines. However, the additional turbines will further decrease the landscape qualities of the area. In general the visual impacts are likely to be of greatest concern in this development. Both the R27 and the R315 are regarded as scenic routes. These will be negatively impacted by the proposed development, although the additions should be considered in light of the fact that four existing wind turbines are already in place. A separate Visual Impact Assessment (VIA) is taking place and will need to address these concerns. It should be noted that the existing turbines have in fact been something of an attraction in the area but this feature will soon diminish as more and more similar projects are implemented across the province. Visual impacts to the landscape would take place during the construction and operational phases of the project.

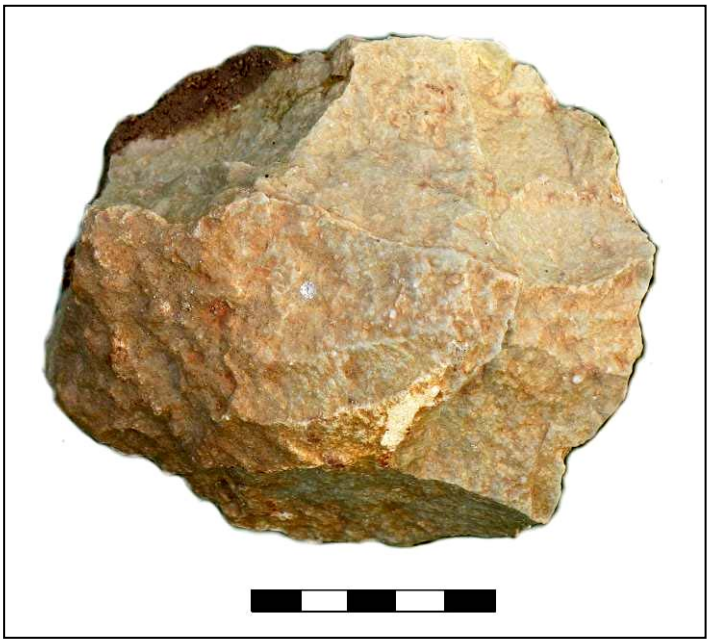

Figure 11: An Early Stone Age core found near the top of Moedmaag Hill. Scale = 5 cm.

Figure 12: Later Stone Age artefacts found on the lower slopes of Moedmaag Hill. Scale = 3 cm.

6. PROPOSED METHODOLOGY FOR EIA

No significant issues aside from those related to the visual impacts were noted during the scoping assessment. It is felt that the current report is suitable as a full Phase 1 Archaeological Impact Assessment and that no further heritage studies (aside from the VIA) will be required during the EIA process.

7. CONCLUSIONS AND RECOMMENDATIONS

Aside from the visual impacts associated with the proposed development, no other significant impacts to heritage resources are foreseen. The VIA will need to quantify the degree of visual impact that will be experienced.

This report was intended to be a scoping assessment, but included a field component. It is believed that no further heritage assessments (aside from the VIA) are required.

Subject to the approval of Heritage Western Cape and to the outcome of the VIA, the proposed project should be allowed to proceed with no further heritage intervention required. It should be noted, however, that unmarked human burials can occur anywhere, particularly in sandy substrates, and that should such a find be made during construction then work in its vicinity should be halted and the find reported to Heritage Western Cape (021 483 9685).

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