MOTIVATION FOR ARCHAEOLOGICAL MITIGATION OF TWO SITES FOR THE PHEZUKOMOYA WEF ON THE FARM KLEINFONTEIN RE 117 OUTSIDE NOUPOORT, PIXLEY KA SEME DISTRICT, NORTHERN CAPE

APPLICANT:

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LOCATION OF SITES:

Kleinfontein Re 117 is located approximately 5,6 km west of Noupoort on the R389, in the Umsobomvu Local Municipality and the Pixley ka Seme District Municipality (Figure 1).

The two sites that are the subject of this application are located on 1:50 000 map sheet: 3124BB Carlton (Figure 2).

Both sites are within the development footprint of the authorised Phezukomoya Wind Energy Facility.

PROPOSED SITE REFERENCE NUMBER:

KFT001: historical ashheap / midden

KFT002: Later Stone Age lithic scatter

GPS CO-ORDINATES:

KFT001: -31.206250°S / 24.876848°E

KFT002: -31.228773°S / 24.872254°E

PROPERTY OWNER AND ADDRESS:

Mr Jim de Villiers

Kleinfontein Farm, Noupoort, Northern Cape

Contact telephone: 083 654 9256

BACKGROUND

EDF Renewables are developing the authorised Phezukomoya Wind Energy Facility (WEF) on a number of farms east and south of Noupoort (Figure 1). The WEF has been subject to two archaeological assessments: in 2017 as part of the Environmental Impact Assessment process (Hart et al, 2017a) and in 2019 as part of a Part 2 EA Amendment Application when

the authorised WEF was split into two: the Phezukomoya and Hartebeesthoek West WEFs (Gribble & Euston-Brown, 2019a).

More recently ACO Associates was commissioned to undertake the pre-construction survey required as a condition (No. 37, 38 and 138) of the Environmental Authorisation for the WEF issued in October 2021.

The aim of the survey was to ground truth the authorised wind turbine generator (WTG) positions, internal WEF cable and roads alignments, substation sites, laydown areas, etc., to identify heritage resources which may be impacted by the construction, operation and decommissioning of the WEF, to assess their significance and provide recommendations for mitigation that can be incorporated into the project Environmental Management Programme.

The walkdown survey (Gribble & Euston-Brown, 2022) identified two sites that will be impacted by the construction of an access road for the WEF:

> **KFT001** is a historical ashheap or midden, probably associated with the nearby Kleinfontein farm complex measuring approximately 30 x 7 m in extent and with a possible depth of deposit of about 20 cm. The site is heavily bioturbated by ground squirrels but is rich in bone, mid- to late19th century ceramics, glass, metal (Figure 3, Plate 1 - Plate 3).
>
> **KFT002** is a large and dense scatter of LSA lithics in erosion gullies and on sheetwash on a slope below a shale outcrop. Visible in area of approximately 80 x 150 m, the lithics include substantial numbers of endscrapers typical of the both the Lockshoek and Smithfield (Figure 4, Plate 4 - Plate 6).

Gribble & Euston-Brown (2022) recommended that both sites should be sampled by a professional archaeologist prior to the commencement of construction work.

Methodology and Excavation Equipment

Both sites will be gridded with 1 x 1 m squares. If there are clear stratigraphic units in the ashheap, KFT001, the site will be excavated according to these. If this is not the case, as the bioturbation on the site evident during the ACO survey suggests, then the site will be excavated by spits. All deposit will be passed through a 3 mm sieve and the artefactual material will be bulked fin marked bags or sorting and analysis in Cape Town.

At KFT002 the area with the highest concentration of lithics will be gridded with 1 x 1 m squares and thorough surface collection of all visible lithics will take place in each square. Given that these lithics have been moved by erosion and sheetwash and are not in primary context, their collection by 1 x 1 m square will provide an adequate spatial reference. Following the surface collection, we will test a few squares to ascertain whether buried lithics are present in the underlying sediment.

REFERENCES:

Gribble, J. & Euston-Brown, G.L. 2019a. *Archaeological Amendment Report: Phezukomoya Wind Energy Facility, Noupoort, Northern Cape*. Unpublished report prepared for Arcus Consulting. ACO Associates. Cape Town.

Gribble, J. & Euston-Brown, G.L. 2022. *Pre-Construction Archaeological Walkdown Report for the Phezukomoya Wind Energy Facility Outside Noupoort in the Northern Cape*. Unpublished report prepared for Arcus Consulting. ACO Associates. Cape Town.

Hart, T.G., Gribble, J. and Robinson, J. 2017a. *Heritage impact assessment for the proposed Phezukomoya Wind Energy Facility to be situated in the Northern Cape*. Unpublished report prepared for Arcus Consulting. ACO Associates. Cape Town.

Figure 1: Location of the farm Kleinfontein (green shaded area) in relation to Noupooort and the Phezukomoya WEF layout (Google Earth).

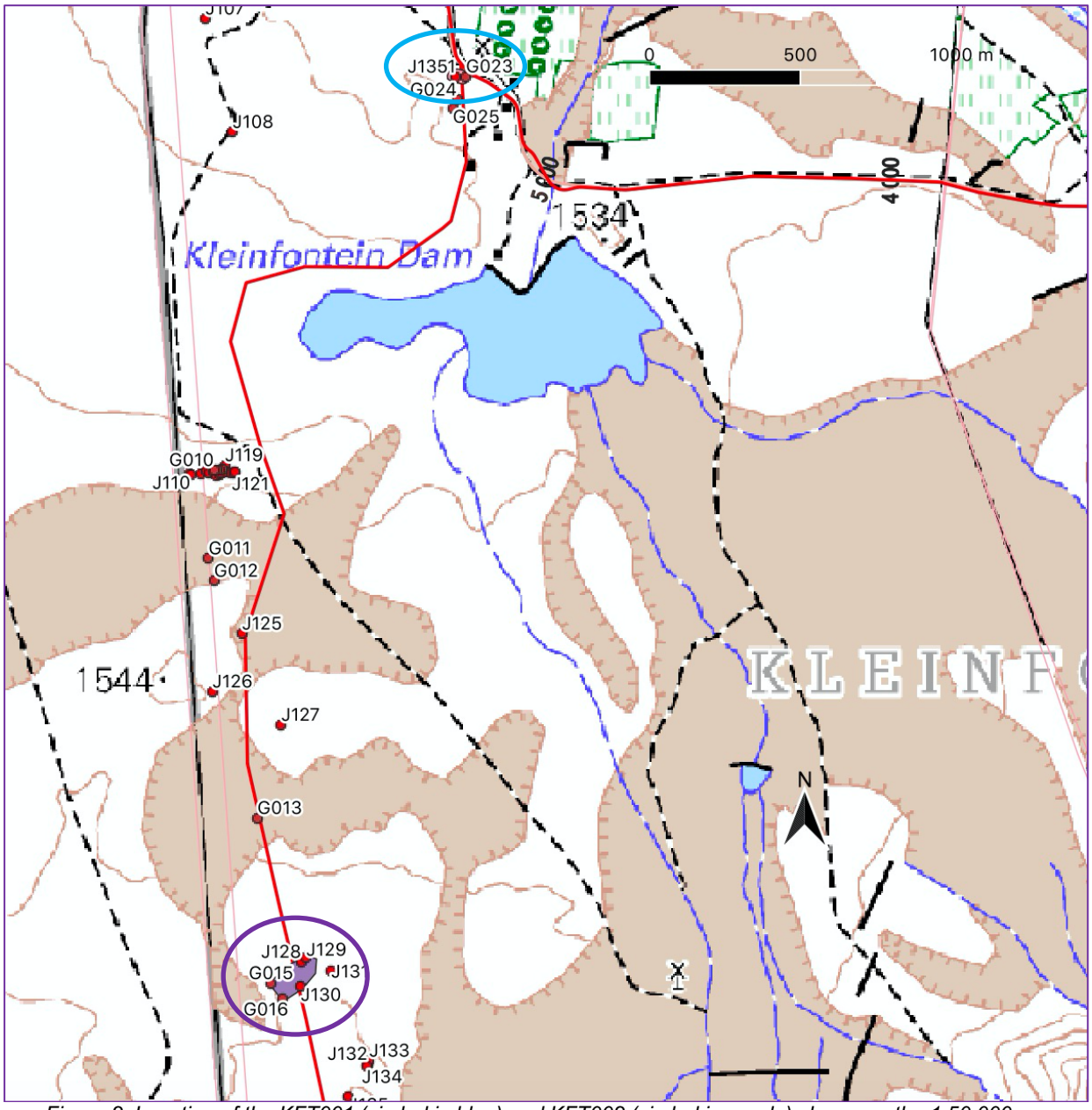

Figure 2: Location of the KFT001 (circled in blue) and KFT002 (circled in purple) shown on the 1:50,000 map sheet for the area. The red line is the WEF access road (3124BB Carlton, National Geo-spatial Information, http://www.ngi.gov.za).

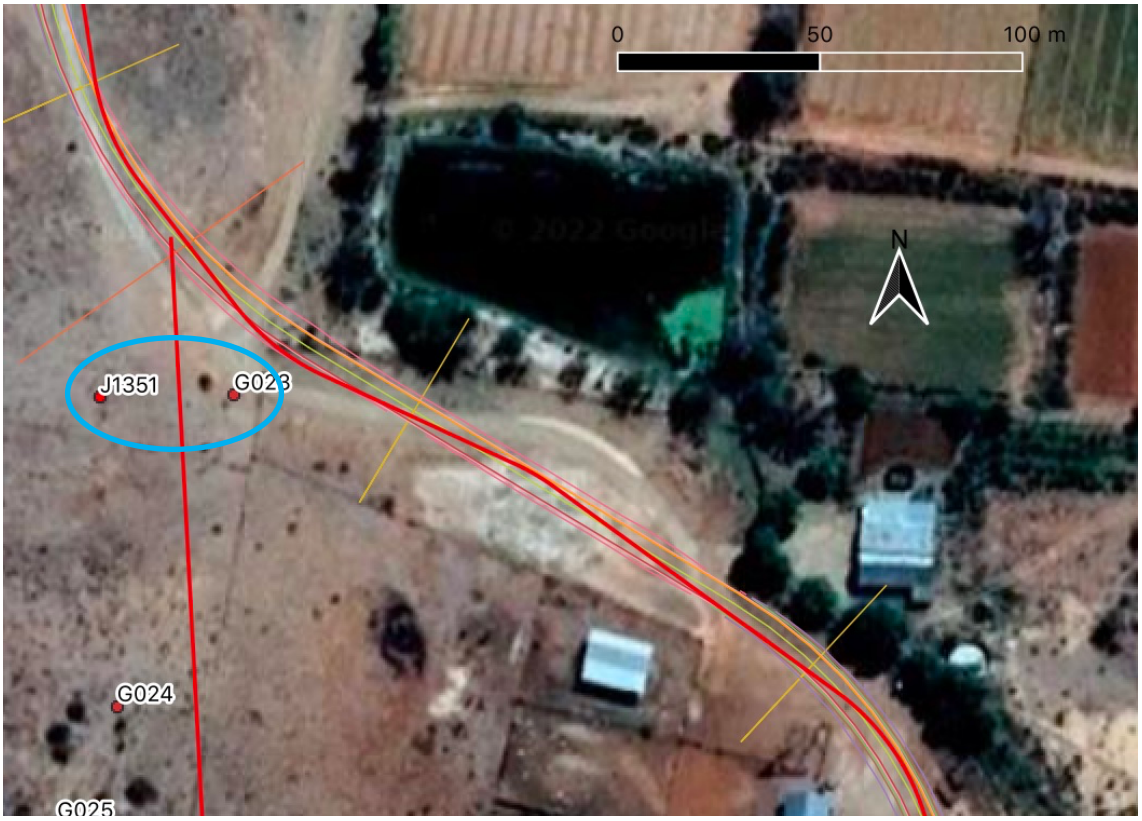

Figure 3: Location of the ashheap KFT001 (circled), in relation to the Kleinfontein farm werf (Google Earth).

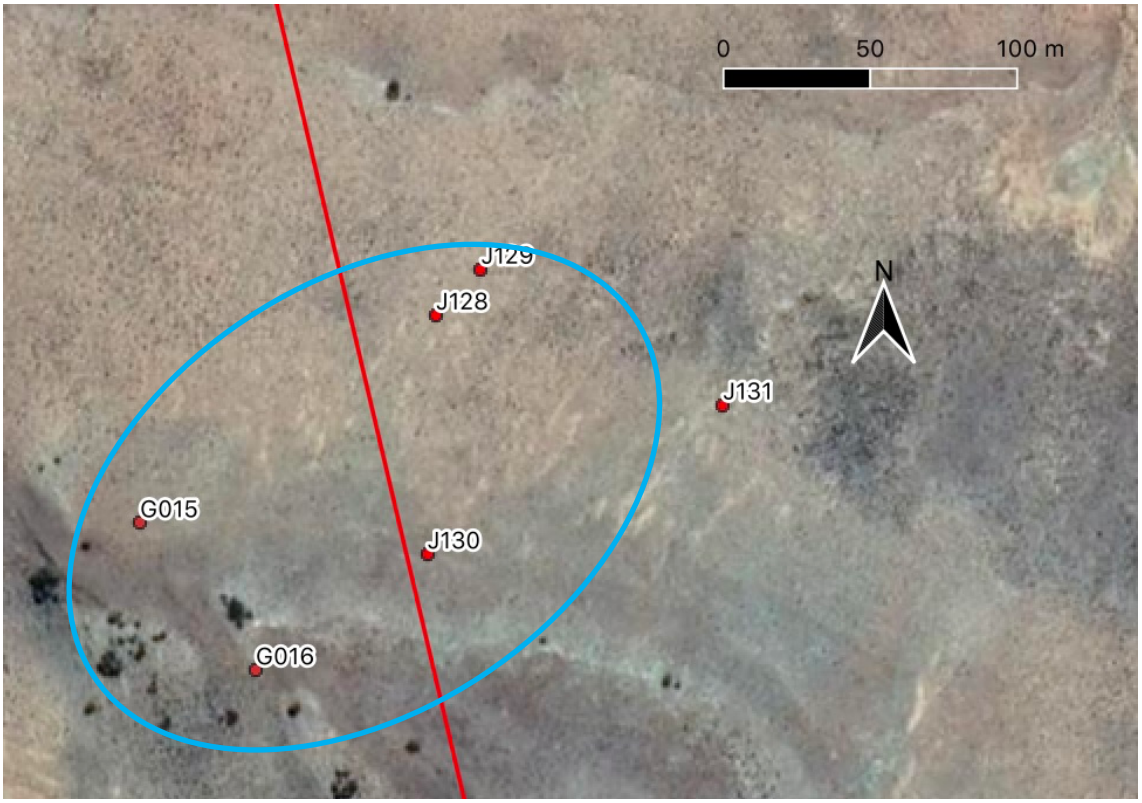

Figure 4: The approximate extent of the LSA lithic scatter, KFT002, (circled) (Google Earth).

Plate 1: View of KFT001 from adjacent hillside. The position of the site is arrowed

Plate 2: View of KFT001. The red line shows the approximate extent of the site. Note the ground squirrel burrows in the site.

Plate 3: View of artefacts on surface of KFT001.

Plate 4: View across KFT002 towards the northeast.

Plate 5: View upslope across KFT002 towards the southwest.

Plate 6: Selection of lithics from KFT002.