



Date: 17 June 2022

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Dear Ms Mol,

## **RICHTERSVELD WIND FARM ON PTN6 (WITBANK) OF KORRIDOR WEST 2: PART 2 AMENDMENT APPLICATION: HERITAGE STATEMENT**

### **1. Current proposal**

RINA was appointed by Richtersveld Wind Farm (Pty) Ltd to prepare a Part 2 Amendment Application in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), as amended. The client holds an existing Environmental Authorisation (EA) (DEAT/EIA/12668/2011) and subsequent amendment approvals. Based on project description changes (both layout and technical design) proposed by the client, there is a need to amend the EA as required in terms of NEMA and thus support any future applications for the Renewable Energy Independent Power Producer Programme in South Africa. The Department of Forestry, Fisheries, and the Environment (DFFE) is the competent authority for the Part 2 Amendment as contemplated by the NEMA.

The proposed amendments include inter alia the following:

Specification	Approved	Proposed
Hub height	100 m	130 m
Rotor diameter	117 m	175 m
Number of turbines	70	32
Output	Between 2MW and 3MW per turbine for a total project output of 225MW	7MW per turbine for a total project output of 224MW

The proposed layout is shown in Attachment 1.

### **2. Previous heritage assessments**

Mr T. Hart of ACO Associates previously compiled a heritage impact assessment of the initial Richtersveld Wind Energy Facility (WEF) layout, which included up to 75 turbines in 2011 (Hart 2011). Subsequently, he compiled a supplementary report of an amended 75 turbine layout in 2013 (Hart 2013). Both assessments were based on fieldwork undertaken on-site to inspect the differing layouts. The powerline route was not assessed as part of this scope of work.

While archaeological sites were present, a number of these were ephemeral stone artefact scatters and not considered to be significant. A small number of sites were considered significant and it was indicated that they could be mitigated by buffering, or if that was not feasible, that they could be mitigated by sampling and collection. In the 2011 assessment, significant sites included 006 and 003, while in 2013, significant sites included L003a-i and D002a,b, both of which were located at a prominent rock outcrop in the south of the farm. D007, consisting of a scatter of MSA stone artefacts, fossil bone and ostrich eggshell fragments at an old pan, was also in the south of the farm.

No fatal flaws were identified for either the 2011 or 2013 layouts. We note that a number of the turbine positions in the current proposal overlap with positions assessed 2011 and 2013 layouts (information with regards to assessed turbines and roads is mapped as Figure 1).

### 3. Heritage sites in terms of the new layout

#### 3.1 Archaeology

A list of heritage sites located during fieldwork in 2011 and 2013 that are located within the proposed 2022 WEF layout, is presented as Attachment 2. We have not included sites found to the south as these are no longer relevant to the development. The location of the relevant sites in Attachment 1 is indicated on Figure 1

The infrastructure associated with the currently proposed WEF layout has avoided all the significant archaeological sites identified previously. A number of those sites are now located within areas identified as “High Risk” or in defined “No Go” areas from which WEF infrastructure is excluded (except for the reference masts east and west). Reference mast east is located was to be located ~250 meters south west of Hart’s 2011 site known as 006 (28°44'13.26"S 16°42'33.53"E) and due to distance, it should not have been impacted by erection of the meteorological mast (already constructed and decommissioned).

One significant site recorded by Hart in 2011, known as 003 (28°45'20.37"S 16°39'37.85"E) is within the area of the new layout, but is sufficiently far (~200 meters) from the entrance road and (~400 meters) from Turbine 13 and is therefore unlikely to be impacted. All other sites were considered to be of low significance and no mitigation is required. Most are in any event unlikely to be impacted by the construction.

Archaeological information is mapped in Figure 1 and listed in Table 1.

#### 3.2 Palaeontology

According to the Palaeo sensitivity map on the SAHRIS database, the WEF site is located in a Low sensitivity area (Blue), and it is unlikely that the proposed work will impact palaeontological resources.

### 4. Further work

As two phases of fieldwork were completed previously, the assessment of the latest proposed layout was evaluated as a desktop study. No “red flag” issues were identified before and none are anticipated from the new layout. Only a few of the proposed new turbine locations have not been assessed by fieldwork (see Figure 1). The newly proposed service road network for the new layout could not previously be assessed by field work, except in a few instances where they coincided with previous layouts or fieldwork movements on-site. The powerline was not assessed by ACO.

### 5. Conclusions and recommendations

Based on previous work on the site, it is concluded that the proposed layout as it stands will not result in any significant change to the conclusions of the impact assessment that was previously undertaken. The reduction in the number of turbines and associated service roads, and the avoidance of areas containing significant archaeological sites from development is a positive outcome that has reduced the chances of impact on heritage sites.

#### 5.1 Archaeology

Areas of the project not previously assessed by fieldwork (including the powerline), should be reassessed on foot prior to construction to allow for micro-siting in the event of any significant heritage sites being located.

Human burials are sometimes found near archaeological sites. A chance find procedure shall be incorporated in the EMP for the project stating that: “should any human remains be uncovered during excavations, they should not be disturbed and further work at the specific location must cease. The location must be marked and the remains securely covered and reported to the heritage specialist, who will indicate the way forward. Permission is required from a Heritage Authority to move a burial.

If any significant additional heritage resources are identified which may be impacted by the latest project layout, it is likely that they could be mitigated by micrositing of infrastructure (avoidance), or sampling.

## 5.2 Palaeontology

Should any buried palaeontological material be encountered during excavations, the heritage specialist must be informed to determine way forward.

## 6. References

Hart, T. 2011. Proposed Richtersveld Wind Farm on 7/2 Rooibank, 6/2 Witbank and part of Re/ Farm 1. Unpublished report prepared for ERM (Pty) Ltd on behalf of G7 Renewable Energies (Pty) Ltd. ACO Associates cc.

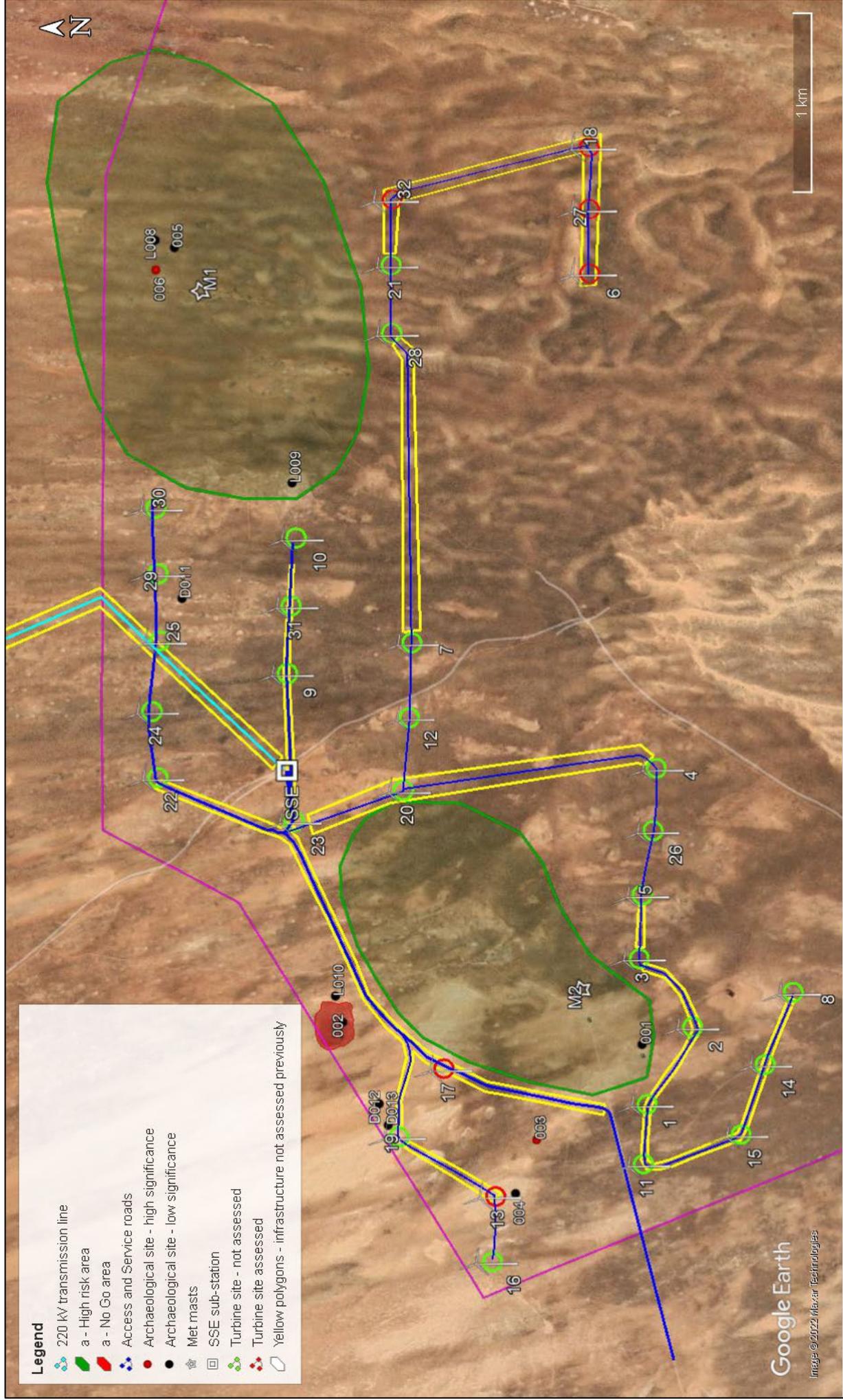
Hart, T. 2013. Proposed Richtersveld Wind Farm: Findings of supplementary heritage survey. Unpublished report prepared for ERM (Pty) Ltd on behalf of Richtersveld Wind Farm (Pty) Ltd. ACO Associates cc.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'D Halkett', with a horizontal line underneath.

David Halkett: Director  
For ACO Associates cc

### Attachment 1



**Figure 1: Richtersveld Wind Energy Facility – proposed layout with respect to heritage findings**

## Attachment 2

Table 1: Archaeological sites within the new layout

LABEL	LAT	LON	Description	Significance	Mitigation
D011	-28.73832297	16.69085696	Very ephemeral scatter of silcrete MSA artefacts in track. May be impacted by roads or cable trenching (2013). The site is ~140 meters south of the access road between turbines 25 and 29 (2022).	Low	No mitigation required
D012	-28.74797397	16.66248900	Occasional quartz and quartzite MSA/LSA artefacts scattered across a bare calcrete "blowout" surface. Likely to be impacted by roads or cable trenching (2013). The site is now ~300m north of an access road and ~200 meters north east of turbine 19 (2022).	Low	No mitigation required
D013	-28.74840899	16.66125996	Small <i>S. argenvillei</i> shell scatter ~4m diam, on the edge of a large calcrete surface "blowout". No other cultural material was observed. Likely to be impacted by roads or cable trench (2013). The site is now ~50m north of an access road and ~79 meters north east of turbine 19 (2022).	Low	No mitigation required
L008	-28.73698773	16.71097714	Scatter of very dispersed and ephemeral LSA quartz flakes. 30m from Turbine 049 (2013). The site is now in a high risk buffer zone (2022)	Low	No mitigation required
L009	-28.74371706	16.69730432	Diffuse scatter of quartz artefacts over wide area. Area deflated onto a calcrete surface. On top of hill near small testing mast. 100m from T038 (2013). The site it is now in a high risk buffer zone (2022)	Low	No mitigation required
L010	-28.74582921	16.66854308	Very ephemeral scatter of quartz flakes on lower slopes of koppie. 30m from Turbine 010 (2013). The site is now ~145 meters north west of an access road and ~50 meters east of a "no-go" area (2022)	Low	No mitigation required
001	-28.760744°	16.665964°	Highly ephemeral LSA quartz scatter recorded in 2011. The site is now in a high risk buffer zone (2022).	Low	No mitigation required
002	-28.746191°	16.667123°	Small stone alignment recorded in 2011. It is now in a "no-go" area (2022)	Low	No mitigation required
003	-28.755658°	16.660514°	LSA scatter with ceramics recorded in 2011. This site was immediately noticeable as it contained marine shell and a large amount of Cape Coastal pottery, and informal-looking quartz artefacts. The presence of pottery indicates that the site is likely to be less than 2000 years old. The site is now ~375 meters south east of turbine 13 and ~230 meters west of an access road (2022).	High	Mitigation (2011): Cordon off the site to exclude it from construction activities or do systematic sampling prior to construction. In the 2022 layout, the site lies between Turbine 13 and an access road. Due to distance, no impact from 2022 layout is anticipated.
004	-28.754636°	16.657456°	Chert and quartz LSA scatter in an old pan recorded in 2011. The site is ~115 meters south of turbine 13 (2022)	Low	Mitigation (2011): The site should be flagged and the access road deviated by about 20 m to the north to avoid it. In 2022, the site should be far enough from development for impacts not to occur.
005	-28.737931°	16.710544°	Highly ephemeral LSA quartz scatter found in 2011. Site is now in a high risk buffer zone (2022).	Low	Mitigation (2011): No Mitigation required.
006	-28.737017°	16.709314°	LSA site associated with a significant granite outcrop. One of the larger granite boulders contained a natural water catchment hollow (waterbak) probably why this locality was favoured as an encampment. Artefacts included microliths and a strong retouched element suggesting an age > 3000 years ago. Site is now in a high risk buffer zone (2022).	High	Mitigation (2011): cordoning off the site to exclude it from construction activities, or systematic sampling prior to construction. No impact from 2022 layout.