



Eastern Cape Provincial Heritage Resources Agency (ECPHRA)
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05 September 2016

Attention Sello Mokhanya

Dear Mr Mokhanya

**132kV POWER LINE AND SUBSTATION INFRASTRUCTURE,
Dieprivier - Kareedouw Substations,
Kouga Local Municipality, Sarah Baartman District Municipality,
Eastern Cape Province**

Project Description

In 2012 eThembeni Cultural Heritage was appointed by Arcus GIBB Engineering and Science to undertake a Phase 1 Heritage Impact Assessment of a proposed 132kV transmission power line between Kareedouw and Dieprivier and the construction of a new substation (SS) site in the vicinity of the existing Dieprivier SS. This was conducted in terms of the National Environmental Management Act 107 of 1998 as amended (NEMA), in compliance with Section 38 of the National Heritage Resources Act 25 of 1999, as amended (NHRA).

As per our original HIA report the proposed project entails the following:

- Construction of approximately 35km of overhead 132kV power line from Dieprivier to Kareedouw Substations.
- Decommissioning of existing power lines made redundant by new lines.
- Construction of a new substation at Dieprivier and decommission of the existing substation.
- Extension of the existing Kareedouw substation.
- Construction of new or maintenance of existing access and maintenance roads.
(See SAHRIS Case: Dieprivier to Kareedouw 132kV Powerline and associated Infrastructure).

The Record of Decision for the project and the EMPR (DEA Ref.14/12/16/3/3/1/572) recommended a “walk through” assessment of the powerline servitude and associated construction areas prior to the start of construction.

Subsequent to the field work undertaken for the above alignment in 2012, Eskom has considered a minor change to the Dieprivier (Eastern) end of the alignment, diverting the line south of the R62 and off the alignment of the existing powerline (See Figure 1 and kml. loaded to SAHRIS).

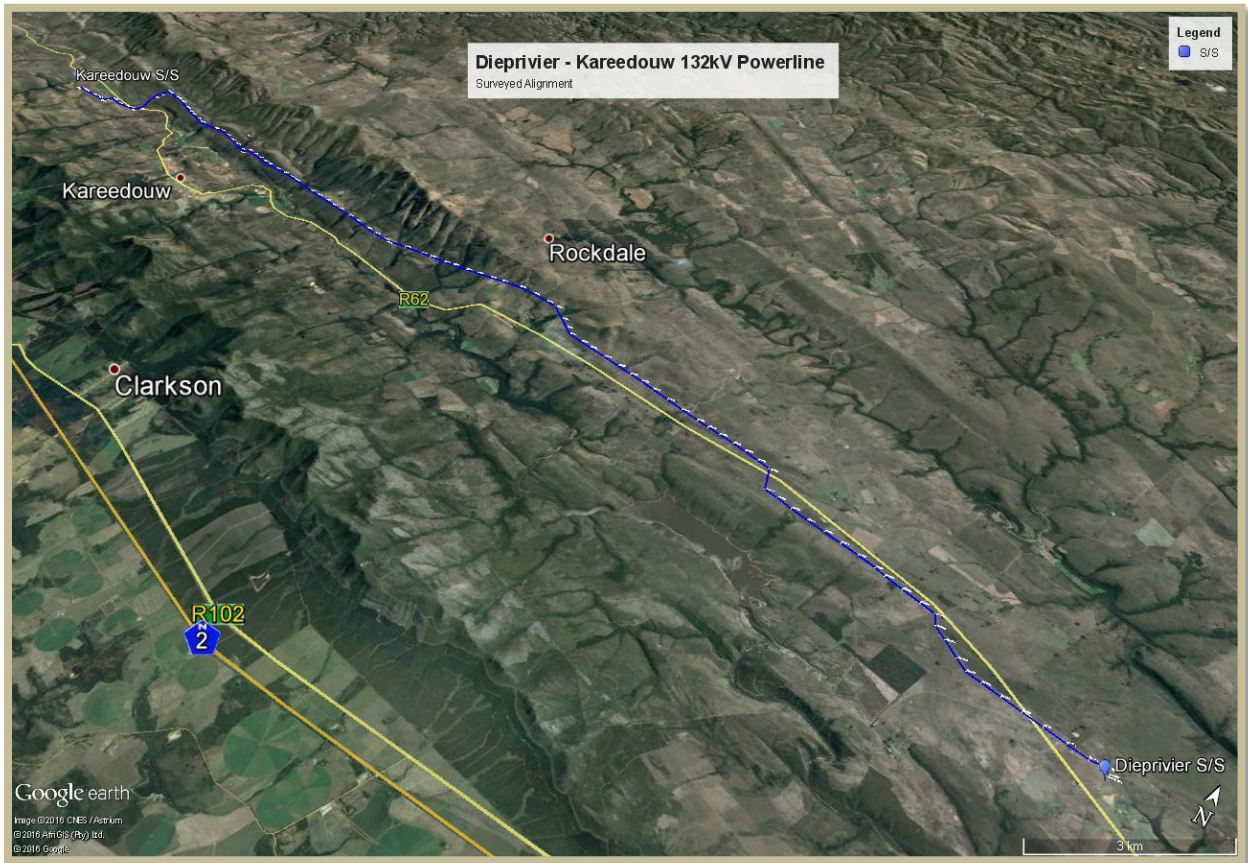


FIGURE 1: PROPOSED KAREEDOUW-DIEPRIVIER 132KV POWERLINE SERVITUDE AND SUBSTATIONS

Site Assessment and Recommendations

eThembeni staff conducted a walkthrough of the proposed route alignment and inspected the proposed servitude re-alignment and both substation localities on September 3rd and 4th 2016.

Powerline servitude re-alignment

With regard to the powerline servitude re-alignment (Towers # 1 to 25), no archaeological material of significance was observed. Towers #13 to 24 traverse lands previously ploughed for cultivation and thus no primary context archaeological remains are expected. Towers # 2 to 12 traverse current grazing lands. Surface visibility was good but no material was observed.

There is consequently a very low possibility of any archaeological residues being impacted by the proposed re-alignment and we recommend that this alignment be given positive consideration

Existing Powerline Servitude and substation localities

As observed during spot checks during the 2012 survey the archaeological footprint of the study area is very low. The current assessment endorsed these observations. Further, one of the field observers commented as follows:

“At least 1 km of the new blue route from the Dieprivier Substation towards Kareedouw has been surveyed on foot in the past and a survey was also conducted in the general vicinity of the following 1 km. No archaeological sites/materials were observed during these surveys. Earlier Stone Age stone tools were observed previously some 800 m south of the route.

The rest of the route to where it rejoins the red route runs over disturbed/old ploughed fields. Experience and knowledge gained from several other investigations in the wider surrounding region would suggest that it is highly unlikely that any significant sites/materials will be exposed during the development. However, it is possible that occasional isolated Earlier and Middle Stone Age stone tools may be encountered. Nevertheless, these will be in secondary contexts and not associated with any other archaeological remains and therefore will be of low scientific significance. In general the archaeological visibility for the area is poor due to the vegetation cover which makes it difficult to locate sites/materials (Dr.J. Binneman, pers.comm. 05/09/2016).

The overall impact of the proposed route alignment as surveyed in 2012 was rated as medium, based on the potential visual impact of the line on a recognised scenic route. The alignment of the proposed power line however, within the existing powerline servitude, was considered as a positive mitigation. The realignment of a portion of the proposed line to the south of the R62 does not affect this rating. The realignment runs for the greater part of its length closely parallel to two existing sets of linear infrastructure, namely the narrow gauge railway line and the R62. As described above, the proposed deviation from the existing servitude, does not traverse a “greenfield” landscape, but rather one that has been substantially modified by both agricultural practices and existing linear infrastructure.

Conclusion

The powerline alignment within the existing servitude is endorsed and no further heritage monitoring or mitigation is recommended.

Standing protocols in terms of the NHRA will prevail in the instance of any archaeological material or human remains being exposed during construction activities. See Appendix 1.

Please could you convey the Eastern Cape Provincial Heritage Resource's Agency decision on this project to the appointed Environmental Scientist, Kate Parkinson, of **GIBB**:
kparkinson@gibb.co.za

Yours sincerely



Len van Schalkwyk.
Principal Investigator.

Appendix 1

Protocol for the identification, protection and recovery of heritage resources during construction and operation

It is possible that sub-surface heritage resources will be encountered during the construction phase of this project. The Project Engineer, Environmental Control Officer and all other persons responsible for site management and excavation should be aware that indicators of sub-surface sites could include:

- Ash deposits (unnaturally grey appearance of soil compared to the surrounding substrate);
- Concentrations of humanly modified stone and stone tools;
- Bone concentrations, either animal or human;
- Ceramic fragments, including potsherds;
- Stone concentrations that appear to be formally arranged (may indicate the presence of an underlying burial); and
- Fossilised remains of fauna and flora, including trees.

In the event that such indicator(s) of heritage resources are identified, the following actions should be taken immediately:

- All construction within a radius of at least 20m of the indicator should cease. This distance should be increased at the discretion of supervisory staff if heavy machinery or explosives could cause further disturbance to the suspected heritage resource.
- This area must be marked using clearly visible means, such as barrier tape, and all personnel should be informed that it is a no-go area.
- A guard should be appointed to enforce this no-go area if there is any possibility that it could be violated, whether intentionally or inadvertently, by construction staff or members of the public.
- No measures should be taken to cover up the suspected heritage resource with soil, or to collect any remains such as bone or stone.
- If a heritage practitioner has been appointed to monitor the project, s/he should be contacted and a site inspection arranged as soon as possible.
- If no heritage practitioner has been appointed to monitor the project the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) must be notified [Tel. 043 642 2811; Fax 043 642 2812; smokhanya@ecphra.org.za]
- The South African Police Services should be notified by a SAHRA staff member or an independent heritage practitioner if human remains are identified. No SAPS official may disturb or exhume such remains, whether of recent origin or not.
- All parties concerned should respect the potentially sensitive and confidential nature of the heritage resources, particularly human remains, and refrain from making public statements until a mutually agreed time.
- Any extension of the project beyond its current footprint involving vegetation and/or earth clearance should be subject to prior assessment by a qualified heritage practitioner, taking into account all information gathered during this initial heritage impact assessment.