

VISUAL IMPACT ASSESSMENT

**10MW PHOTOVOLTAIC ELECTRICITY GENERATION FACILITY
ON THE FARM ROOIPAD 15/9
AUGRABIES
NORTHERN CAPE PROVINCE**

**SUPPLEMENTARY INFORMATION
SWARTRANTE VIEW SITE**

Prepared for

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On behalf of

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1 INTRODUCTION

The author was approached by Rosenthal Environmental Consultants on behalf of Mulilo Renewable Energy Pty Ltd to supplement the visual impact assessment dated March 2012 with comment on the potential visual impacts of the solar generation facilities on a new viewpoint in the Augrabies Falls National Park known as Swartrante.

2 STATEMENT OF INDEPENDENCE

I hereby declare that I have no conflicts of interest related to the work of this report. Specifically, I declare that I have no personal financial interests in the property and/or development being assessed in this report, and that I have no personal or financial connections to the relevant property owners, developers, planners, financiers or consultants of the development other than the fees obtained for compiling this report.

I declare that the opinions expressed in this report are my own and a true reflection of my professional expertise.

3 COPYRIGHT

The contents of this document are copyright of the author and, except as quotations in other documents concerned with this project, may not be used, copied, or altered in any way or form without the permission of the author.

4 ASSUMPTIONS AND LIMITATIONS

This supplementary report only comments on the potential visual influence on the new Swartrante viewpoint in the Augrabies Falls National Park that will be incurred by the implementation of the solar facility on each of the two alternative sites. All information and findings in the VIA remain valid and form the background for this report.

The visual analysis was made using the 3D computer model that was generated for the full visual impact assessment and no site visit was undertaken.

The accuracy of the visual analysis is dependent on the accuracy of the contour information obtained from the Directorate National Geospatial Information.

5 METHODOLOGY

The following sequence was employed in the visual analysis for the Swartrante Viewpoint:

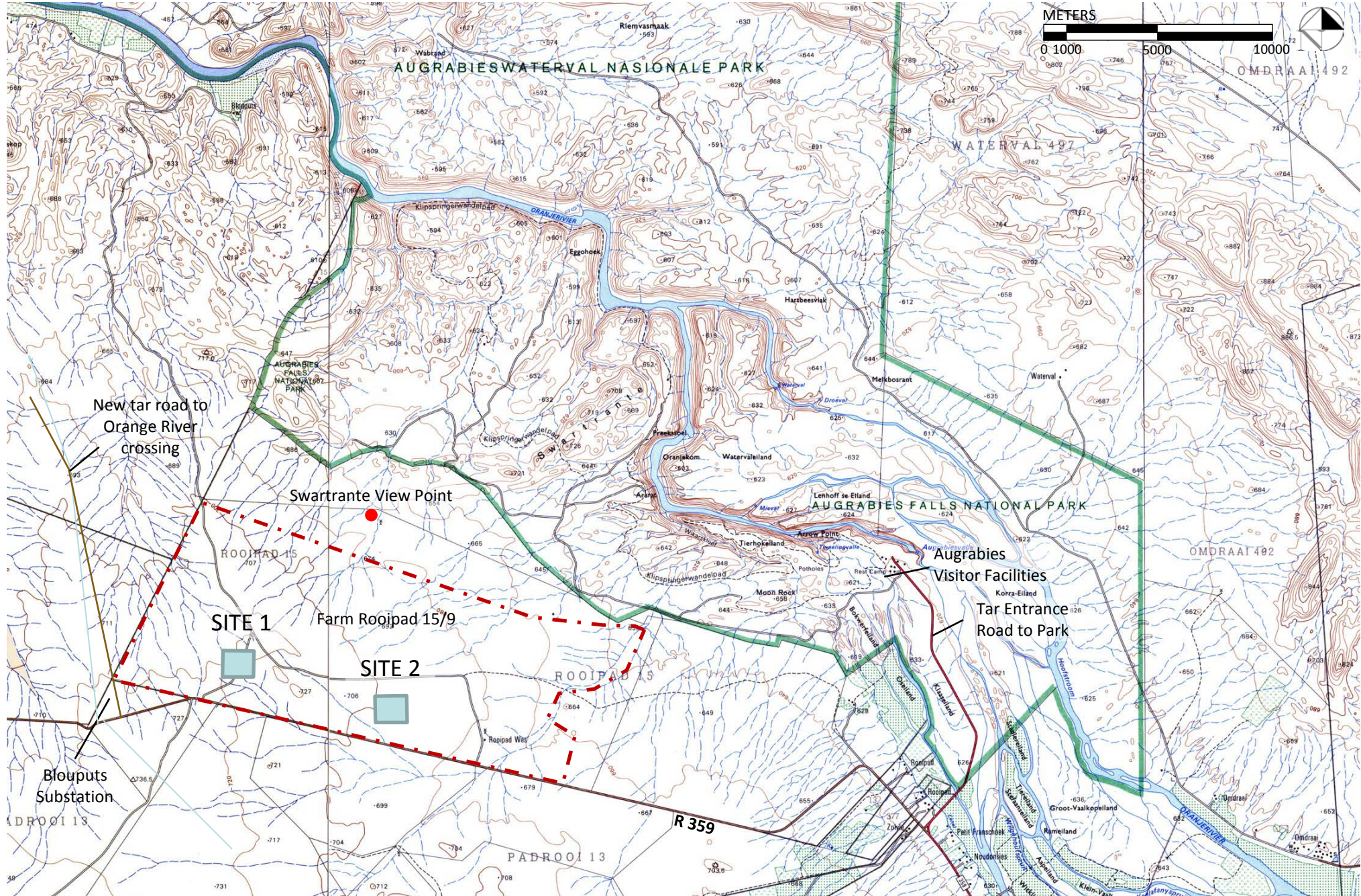
- 2 cameras were placed in the 3D computer model at the Swartrante viewpoint, one focussed on each of the two potential sites for the solar facility.

- The cameras were placed approximately 5m above the ground level in the model. This was done to compensate for any errors in the contour information which lacked detail in the area of the viewpoint.
- As the facility on site 1 was not visible and the facility on site 2 was only marginally visible markers in the form of red balls were placed at the corners of the sites. The tops of these markers are 20m above the level of the corners of the solar facilities. This allowed for the corners of the facilities to be identified even when the facilities were not visible thus showing the extent of the potential visual impact.
- The accuracy of the generated graphics was confirmed by the generation of CAD sections between the viewpoint and the facilities. This confirmed that, although the facilities were above the level of the viewpoint, the slopes of the intervening terrain were able to shield Site 1 completely from view and Site 2 partially from view.

6 FINDINGS

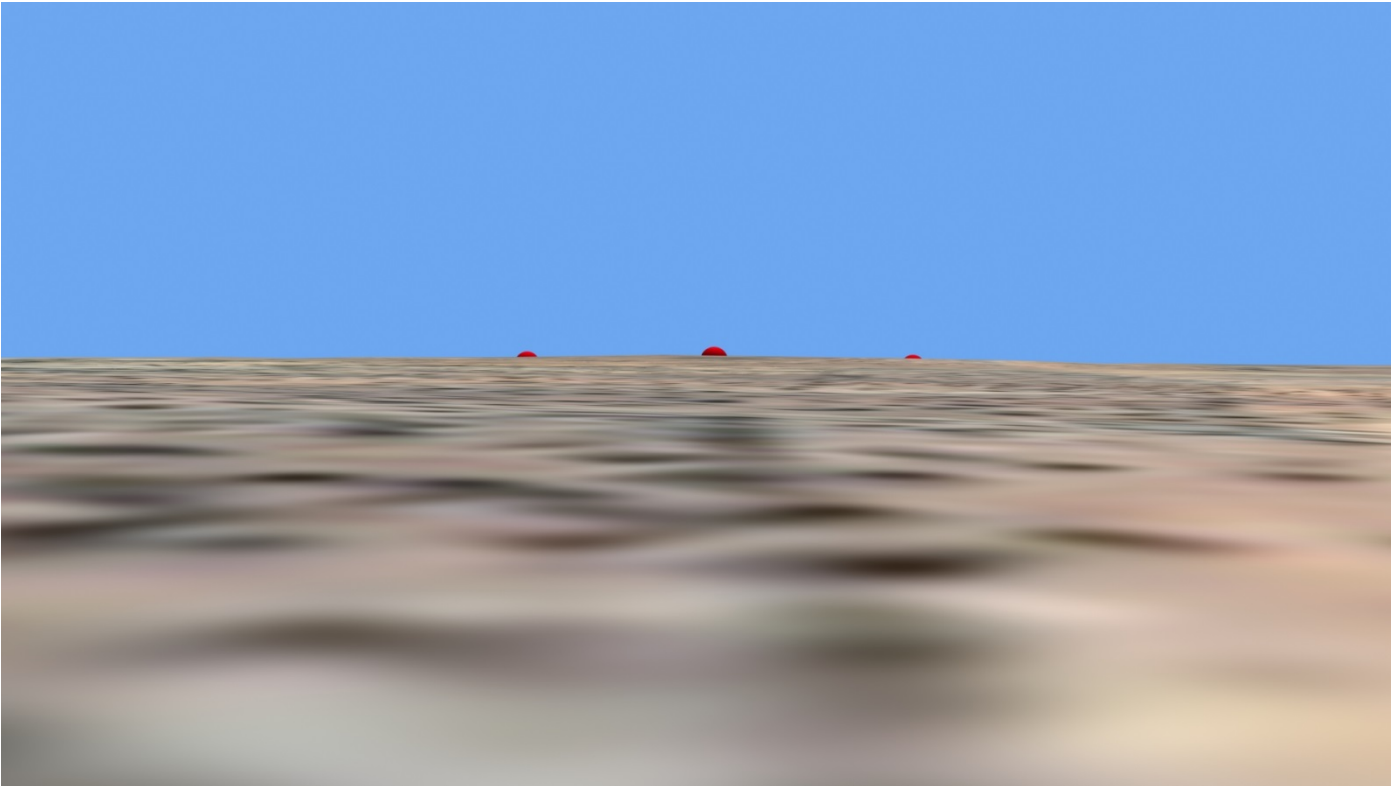
The implementation of the solar facility on Site 1 will have no visual influence on the Swartrante Viewpoint as it will be shielded from view by the intervening terrain. The implementation on Site 2 will have a limited visual influence on the viewpoint as the facility will be partially visible at a distance of approximately 2,4km.

As with the findings of the full VIA it is therefore recommended that Site 1 be used for implementation and that no additional mitigation measures are required.

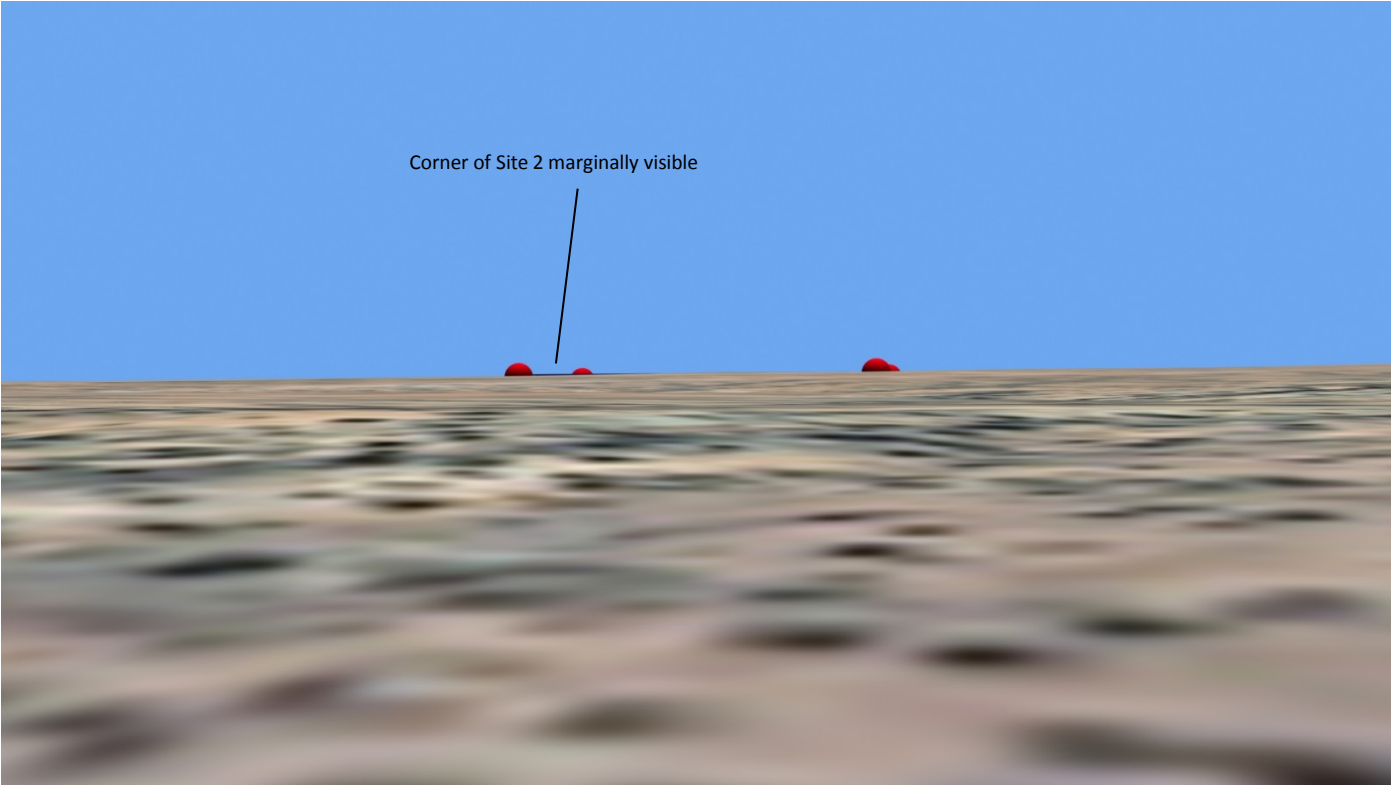




Note: Image generated from 3D computer model..



View from Swartrante View point Looking at Site 1 (Minimum distance to site 2427m)



View from Swartrante Viewpoint Looking at Site 2 (Minimum distance to site 2323m)

Please read the notes in the text on interpreting these graphics (Section 1.5)