# **SITE VERIFICATION REPORT**

February 2023

THE PROPOSED NAOS SOLAR PV PROJECT TWO NEAR VILJOENSKROON, FREE STATE PROVINCE















# **PROJECT DETAIL**

**DFFE Reference No's.** : To be confirmed

**Project Title**: The proposed Naos Solar PV Project Two near Viljoenskroon, Free

**State Province** 

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Client : Naos Solar PV Project Two (Pty) Ltd

**Report Status**: Site Verification Report

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This Site Verification Report is compiled in compliance with Government Notice No. 320, dated 20 March 2020, which includes the requirement for an Initial Site Sensitivity Verification Report to be produced for a development footprint. The outcome of the Initial Site Verification must be recorded in the form of a report that-

- a) Confirms or disputes the current use of the land and environmental sensitivity as identified by the national web based environmental screening tool;
- b) Contains a motivation and evidence of either the verified or different use of the land and environmental sensitivity;
- c) Is submitted together with the relevant reports prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

#### 1.1 Specialist Assessments identified by the Screening Report

The DFFE Screening Tool Report (Appendix B of the Basic Assessment Report) identified the following specialist assessment to be included in the assessment:

- 1. Agricultural Impact Assessment
- 2. Landscape/Visual Impact Assessment
- 3. Archaeological and Cultural Heritage Impact Assessment
- 4. Paleontology Impact Assessment
- 5. Terrestrial Biodiversity Impact Assessment
- 6. Aquatic Biodiversity Impact Assessment
- 7. Civil Aviation Assessment
- 8. Defense Assessment
- 9. RFI Assessment
- 10. Geotechnical Assessment
- 11. Socio- Economic Assessment
- 12. Plant Species Assessment
- 13. Animal Species Assessment

The table included below provides an indication of the specialist studies identified by the DFFE Screening Tool Report, as well as an indication of whether the studies were undertaken or not and a motivation or confirmation of the studies being included or not.

**Table 1.1:** Specialist studies identified by the DFFE Screening tool and specialist studies conducted

Study identified in the DFFE Screening Tool and sensitivity	Study included?	Confirmation / motivation
Agricultural Impact Assessment Sensitivity: High	Yes	An Soil and Agricultural Impact Assessment is included in Appendix D4.
Landscape / Visual Impact Assessment Sensitivity: Very High	Yes	A Visual Impact Assessment is included in Appendix D3.
Archaeological and Cultural Heritage Impact Assessment Sensitivity: Low	Yes	A Heritage Impact Assessment (including consideration of the archaeology of the area) is included in Appendix D5.  This assessment is undertaken to comply with the requirements of the National Heritage Resources Act.
Palaeontological Impact Assessment Sensitivity: Very High	Yes	A Palaeontological Impact Assessment is included in Appendix D6.  This assessment is undertaken to comply with the requirements of the National Heritage Resources Act.
Terrestrial Biodiversity Impact Assessment Sensitivity: Very High	Yes	A Terrestrial Biodiversity Impact Assessment is included in Appendix D1.  This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.
Aquatic Biodiversity Impact Assessment	Yes	A Wetland Impact Assessment is included in Appendix D8.

Sensitivity: Low		This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.
Civil Aviation Assessment Sensitivity: Low	No	The Civil Aviation Authority has been consulted regarding the development of the project since the commencement of the EIA Process. No specific negative impacts or issues have been raised to date by the CAA regarding the project. The project is also not located within an area considered to be of a high sensitivity.  Refer to Appendix E for the Site Verification Report.
Defence Assessment Sensitivity: Low	No	The sensitivity is low and therefore no assessment has been included.  Refer to Appendix E for the Site Verification Report.
RFI Assessment Sensitivity: Medium	No	A small section of the affected property infringes into a 1km buffer from a telecommunications facility. However, the remaining extent of the property is indicated as being of a low sensitivity.
		The South African Radio Astronomy Observatory (SARAO) has been consulted regarding the development of the project since the commencement of the EIA Process. No specific negative impacts or issues have been raised to date by the SARAO regarding the project. The project is also not located within an area considered to be of a high sensitivity.

		OpenServe has also been consulted regarding the development of the project since the commencement of the EIA Process.  Refer to Appendix E for the Site Verification Report.
Geotechnical Assessment Sensitivity: Not indicated	No	The assessment of geotechnical considerations of the site is considered to be a technical aspect and not an environmental aspect. Therefore, the Geotechnical Assessment will be undertaken by the Applicant as part of the micrositing process and prior to the commencement of the construction phase.
Socio-Economic Assessment Sensitivity: Not indicated	Yes	A Social Impact Assessment is included in Appendix D7.
Plant species Assessment Sensitivity: Medium	Yes	A Terrestrial Biodiversity Impact Assessment is included in Appendix D1, which also includes an assessment of the plant species present within the site.  This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.
Animal Species Assessment Sensitivity: Low	Yes	A Terrestrial Biodiversity Impact Assessment is included in Appendix D1, which also includes an assessment of the animal species present within the site.  This assessment has been undertaken in terms of the

	Protocols of GNR320 – refer to the
	content of the report.

#### 1.2 Sensitivities of the studies not conducted

This report has been produced specifically to consider the Civil Aviation, Defence and RFI theme and addresses the content requirements of (a) and (b) above.

The sensitivities for the Civil Aviation, Defence and RFI themes associated with the proposed development are as follows:

### 1.2.1 Civil Aviation Theme

The site sensitivity is classified as low since no major or other types of civil aviation aerodromes are in close proximity of the project site. Refer to Figure 1.1 below.

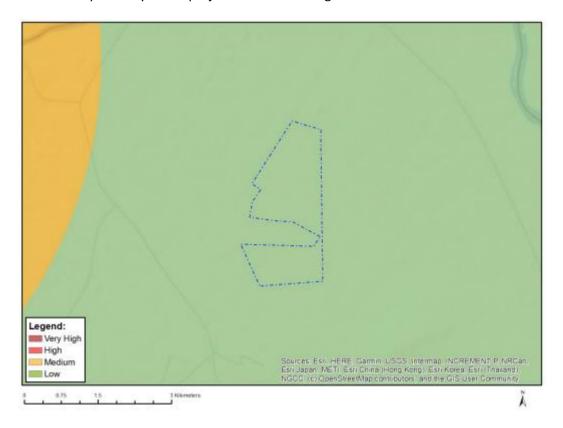


Figure 1.1: Civil aviation sensitivity as indicated by the DFFE Screening Tool Report

#### 1.2.2 Defence theme

The defence theme is considered to be low for the proposed project. Refer to Figure 1.2 below.



Figure 1.2: Defence theme sensitivity as indicated by the DFFE Screening Tool Report

### 1.2.3 RFI Theme

A section of the site infringes into a 1km buffer from a telecommunications facility. However, the remaining extent of the site is indicated as being of a low sensitivity. Refer to Figure 1.3 below.

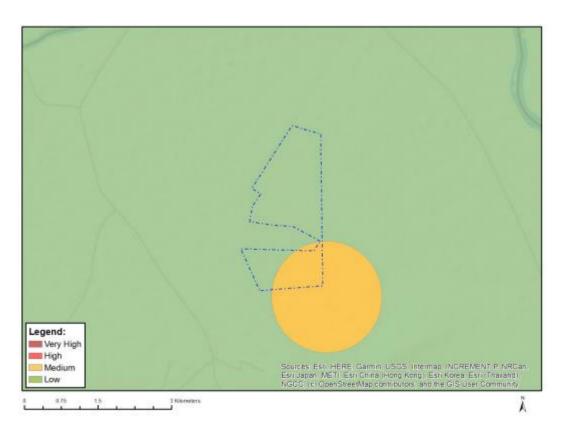


Figure 1.3: RFI theme sensitivity as indicated by the DFFE Screening Tool Report

### 1.3 Current/ Verified Land Use

The current land use of the property is mainly used for agricultural purposes, primarily cattle grazing and some crop production. The town of Viljoenskroon is located approximately 24 km south of the proposed development. The majority of the project area of influence (PAOI) can be characterized by agricultural activities. Refer to Figures 1.4 - 1.8 for photographs of the current land uses present within the affected property and site.



Figure 1.4: View of the project site – agricultural activities



Figure 1.5: View of the project site



Figure 1.6: View of the project site



Figure 1.7: View of the project site



Figure 1.8: View of the project site

This section will evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report and provide feedback from the EAP.

#### 2.1 Civil Aviation Theme

The site sensitivity is classified as low since no major or other civil aviation aerodromes are located within close proximity to the project site.

Table 2.1: Verification of DFFE Screening Report Sensitivity Ratings for the Civil Aviation Theme

Identified Sensitivity		Comment
Low  Low potential for negative impacts on the civil aviation installations, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts may not be required.	EAP Feedback Low	The site verification report confirms the low sensitivity of the site.  The Project Area of Influence (PAOI) consists of agricultural activities. The surrounding landscape are characterised by agricultural activities and the operation of mines.  The Civil Aviation Authority (CAA) has been identified as an I&AP, and has received the Draft Basic Assessment Report for review and comment. No comments from the CAA have been received as part of the public participation process.

The proposed development will not have an unacceptable negative impact on civil aviation installations based on the findings of the site visit and the lack of existing civil aviation infrastructure present within the general area.

Although the development is for the construction of a solar power plant, the associated power lines will be adequately fitted with the necessary identifier devices and will be constructed according to applicable standards.

Based on the above, the EAP confirms the outcome and results for the Civil Aviation Theme for the proposed development.

This assessment is considered sufficient for the civil aviation theme. There is no reason for the development not to proceed based on the results of the assessment and no objections are made.

### 2.2 Defence Theme

The defence theme is considered to be low for the proposed project.

Table 2.2: Verification of DFFE Screening Report Sensitivity Ratings for the Defence Theme

Identified Sensitivity		Comment
DFFE Screening Report  Low  Low potential for negative impacts on the defence installations, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts may not be required.	EAP Feedback Low	The site verification report confirms the low sensitivity of the site.  The affected property is confirmed to be used for agricultural activities and therefore the development of the solar facility will not have any impact on defence installations.  The project is therefore not expected to have an impact on Defence Installations.

The proposed development will not have an unacceptable negative impact on defence installations.

The EAP confirms the outcome and results for the Defence Theme for the proposed solar facility. Considering the site under assessment and the surrounding defence aspects the sensitivity is confirmed as low.

This assessment is considered sufficient for the defence theme. There is no reason for the development not to proceed based on the results of the assessment and no objections are made.

# 2.3 Radio Frequency Interference (RFI) Theme

**Table 2.3:** Verification of the DFFE Screening Tool Report Sensitivity Ratings for the Radio Frequency Interference (RFI) Theme

The EAP confirms the low RFI sensitivity for the site base on the limited infringement of the site into an area of medium sensitivity, which is a 1km buffer for an installation which is not located within the site proposed for development.

Furthermore, comment has been sought from the relevant telecommunications representatives during the application process for the proposed development. This includes the South African Radio Astronomy Observatory and OpenServe.

The DFFE Screening Tool Report identified thirteen (13) specialists' studies to be conducted, which includes Agricultural Impact Assessment, Landscape/Visual Impact Assessment, Archaeological and Cultural Heritage Impact Assessment, Palaeontology Impact Assessment, Terrestrial Biodiversity Impact Assessment, Aquatic Biodiversity Impact Assessment, Avian Impact Assessment, Civil Aviation Assessment, RFI Assessment, Geotechnical Assessment, Social Impact Assessment, Plant Species Assessment and Animal Species Assessment. The screening report identified the Defence Theme as having a low sensitivity, however no study was recommended.

The low sensitivity ratings for the Civil Aviation and Defence themes is confirmed by the site verification report. The medium sensitivity in terms of the RFI theme is disputed based on the very limited infringement of the soite on a medium sensitivity area. Therefore, the project is not expected to have an unacceptable negative impact on any civil aviation, defence or RFI installations.