

SITE VERIFICATION REPORT

05 May 2023

THE PROPOSED ROODRAAI SOLAR
PHOTOVOLTAIC SOLAR ENERGY FACILITY
AND GRID CONNECTION INFRASTRUCTURE
NEAR CARLETONVILLE, NORTH WEST
PROVINCE



PROJECT DETAIL

DFFE Reference No's.	:	14/12/16/3/3/2/2344
Project Title	:	Proposed Rooidraai Solar Photovoltaic Solar Energy Facility and Grid Connection Infrastructure near Carletonville, North West Province
Authors	:	Ms. Roschel Maharaj
Client	:	Rooidraai Solar (Pty) Ltd
Report Status	:	Site Verification Report
Submission date	:	05 May 2023

When used as a reference this report should be cited as: Environamics (2023). Site verification Report: Proposed Rooidraai Solar Photovoltaic Solar Energy Facility and Grid Connection Infrastructure Near Carletonville, North West Province.

COPYRIGHT RESERVED

This technical report has been produced for Rooidraai Solar (Pty) Ltd. The intellectual property contained in this report remains vested in Environamics and Rooidraai Solar (Pty) Ltd. No part of this report may be reproduced in any manner without written permission from Environamics or Rooidraai Solar (Pty) Ltd.

TABLE OF CONTENTS

1	INTRODUCTION	5
1.1	Specialist Assessments Identified by the Screening Report	5
2	SITE VERIFICATION PV FACILITY	6
2.1	Screening Tool Results for the PV Facility	6
2.2	Sensitivities of the Studies not Conducted	6
2.3	Site Verification	12
3	SITE VERIFICATION SUBSTATION	16
3.1	Screening Tool Results for the Substation	16
3.2	Sensitivities of the Studies not Conducted	18
3.3	Site Verification	20
4	SITE VERIFICATION POWERLINE	23
4.1	Screening Tool Results for the Powerline	23
4.2	Sensitivities of the Studies not Conducted	25
4.3	Site Verification	27
5	LAND USE	30
5.1	Current/ Verified Land Use	30
6	CONCLUSION	35

LIST OF FIGURES

Figure 2.1: Map of relative civil aviation (solar PV) theme sensitivity	9
Figure 2.1: Map of relative Civil aviation (solar PV) theme sensitivity	10
Figure 2.3: Map of relative RFI theme sensitivity	12
Figure 2.3: Map of relative RFI theme sensitivity	12
Figure 4.1: Map of relative civil aviation theme sensitivity	26
Figure 4.2: Map of relative defence theme sensitivity	27
Figure 5.1: The site (taken towards the north)	30
Figure 5.2: The site (taken towards the north east)	31
Figure 5.3: The site (taken towards the east)	32
Figure 5.4: The site (taken towards the south)	33
Figure 5.5: The site (taken towards the west)	34

LIST OF TABLES

Table 2.1: Specialist studies identified by the DFFE screening tool for the PV facility and specialist studies conducted	6
Table 2.2: Verification of DFFE screening report sensitivity ratings	13
Table 3.1: Specialist studies identified by the DFFE screening tool for the substation and specialist studies conducted.....	16
Table 3.2: Verification of DFFE screening report sensitivity ratings	21
Table 4.1: Specialist studies identified by the DFFE screening tool for the powerline and specialist studies conducted.....	23
Table 4.2: Verification of DFFE screening report sensitivity ratings	28

1 INTRODUCTION

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 Reports (Appendix B of the Scoping Report) identified the following specialist assessments to be included in the S&EIR processes:

1. Agricultural Impact Assessment
2. Terrestrial, Animal and Plant Report
3. Aquatic Biodiversity Impact Assessment
4. Archaeological and Cultural Heritage Impact Assessment
5. Avian Impact Assessment
6. Civil Aviation Assessment
7. Defense Assessment
8. Landscape/Visual Impact Assessment
9. Paleontology Impact Assessment
10. RFI Assessment
11. Terrestrial Biodiversity Impact Assessment

The tables included below provides an indication of the specialist studies identified by the DFFE Screening Tool Report for the various applicable categories, 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.

2 SITE VERIFICATION PV FACILITY

2.1 Screening Tool Results for the PV Facility

Table 2.1: Specialist studies identified by the DFFE screening tool for the PV facility and specialist studies conducted

Study identified in the DFFE Screening Tool and sensitivity	Study included?	Appendix
Agricultural Impact Assessment Sensitivity: High	Yes	An Agricultural Compliance Statement is included in Appendix E5 of the Scoping Report.
Animal Species Assessment Sensitivity: High	No	A Terrestrial, Animal and Plant Report and Avifaunal Assessment will be undertaken during the EIA phase of the project once the required site inspections are undertaken.
Aquatic Biodiversity Impact Assessment Sensitivity: Very High	Yes	An Aquatic Ecological Impact Assessment is included in Appendix E1. This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.
Archaeological and Cultural Heritage Impact Assessment Sensitivity: Low	Yes	A Heritage Impact Assessment is included in Appendix E6 of the Scoping Report, as per the requirements of the National Heritage Resources Act.
Avian Impact Assessment Sensitivity: High	Yes	An Avifaunal scoping report is included in Appendix E3 as the site is located within 20 km of known Cape Vulture restuarants sites.
Civil Aviation Assessment	No	The identification of the site as low sensitivity considering civil aviation is agreed to by the EAP. This is

Sensitivity: Low		<p>based on the current land use of the site being used for agricultural grazing purposes.</p> <p>The Civil Aviation Authority has been consulted regarding the development of the project since the commencement of the S&EIR 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.</p>
Defence Theme Sensitivity: Low	No	<p>The affected property is confirmed to be used for agricultural grazing purposes and therefore the development will not have any impact on defence installations.</p> <p>The sensitivity for the entire extent of the site is low and therefore no assessment has been included.</p> <p>The South African National Defence Force has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date regarding the project. The project is also not located within an area considered to be of a high sensitivity.</p>
Palaeontological Impact Assessment Sensitivity: Very High	Yes	A Palaeontological Impact Assessment is included in Appendix E7 of the Scoping Report, as per the requirements of the National Heritage Resources Act.
Plant species Assessment Sensitivity: Medium	No	A Terrestrial, Animal and Plant Report will be undertaken during the EIA phase of the project once

		the required site inspections are undertaken.
RFI Assessment Sensitivity: Low	No	The RFI theme sensitivity is low for the entire extent of the project. The South African Radio Astronomy Observatory (SARAO) has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date by the SARAO regarding the project.
Terrestrial Biodiversity Impact Assessment Sensitivity: Very High	Yes	A terrestrial and aquatic ecological screening report has been undertaken and is included as Appendix E2. A full assessment will be undertaken during the EIA phase.
Geotechnical Assessment Sensitivity: Not indicated	Yes	The detailed Geotechnical Assessment will be conducted before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern. A Desktop Geotechnical Assessment is included in Appendix E10.
Socio-Economic Assessment Sensitivity: Not indicated	Yes	A Social Impact Assessment is included in Appendix E8.
Landscape / Visual Impact Assessment Sensitivity: Not indicated	Yes	A Visual Impact Assessment is included in Appendix E4 of the Scoping Report.

2.2 Sensitivities of the Studies not Conducted

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

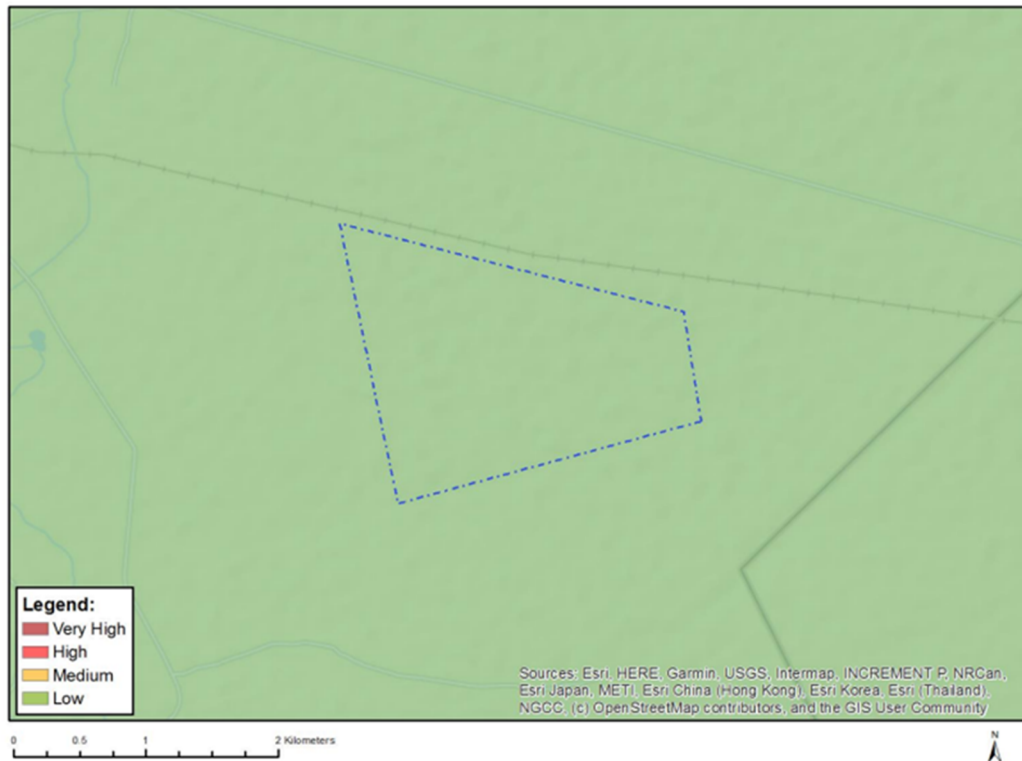
The remaining required specialist studies have been undertaken as part of the Scoping and Environmental Impact Reporting (S&EIR) process as listed in the DFFE Screening Tool Reports. The Plant and Terrestrial, Animal and Plant Report will be undertaken and will form a part of the detailed EIA phase of the project. The only study not considered as relevant is the Geotechnical Assessment which will only be undertaken before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern. However, a desktop geotechnical study has been included as a part of the Final Scoping Report (FSR).

The sensitivities for the Civil Aviation, Defence and RFI themes associated with Rooidraai Solar PV facility are as follows:

2.2.1 Civil Aviation Theme

The site sensitivity is classified as low for the PV facility as no major or other types of civil aviation aerodromes are present. Refer to Figure 2.1.

MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

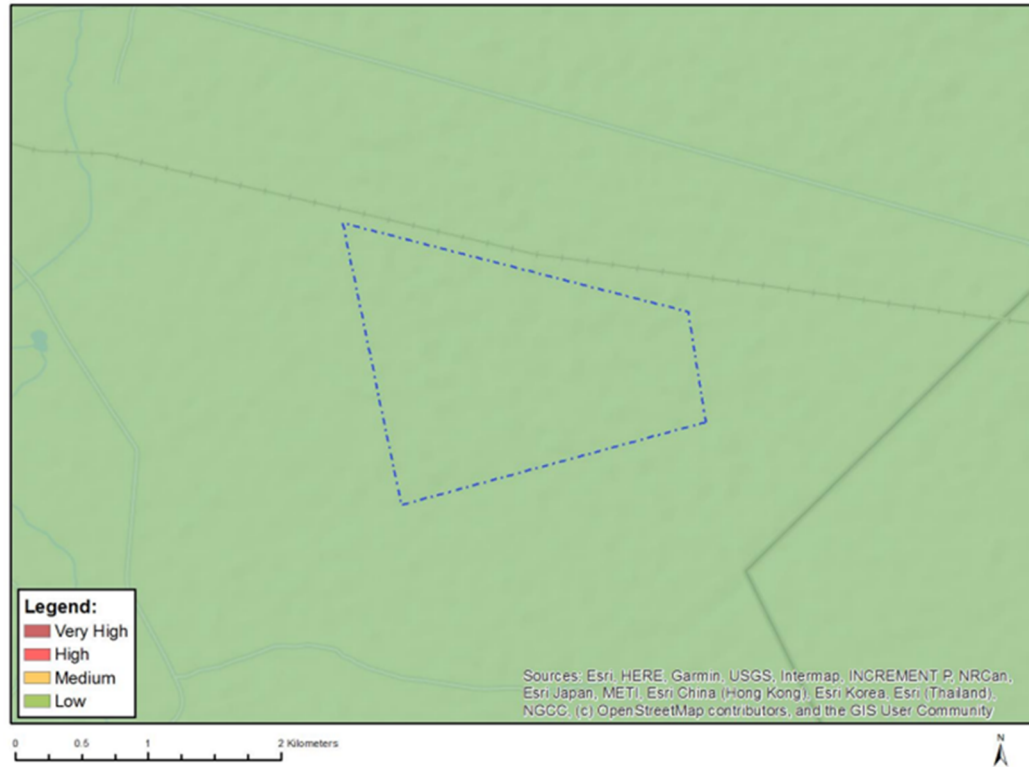
Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes

Figure 2.2: Map of relative Civil aviation (solar PV) theme sensitivity

2.2.2 Defence theme

The defence theme is considered to be low for the proposed project and the presence of a defence site has not been indicated in close proximity of the site. Refer to Figure 2.2 below.

MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

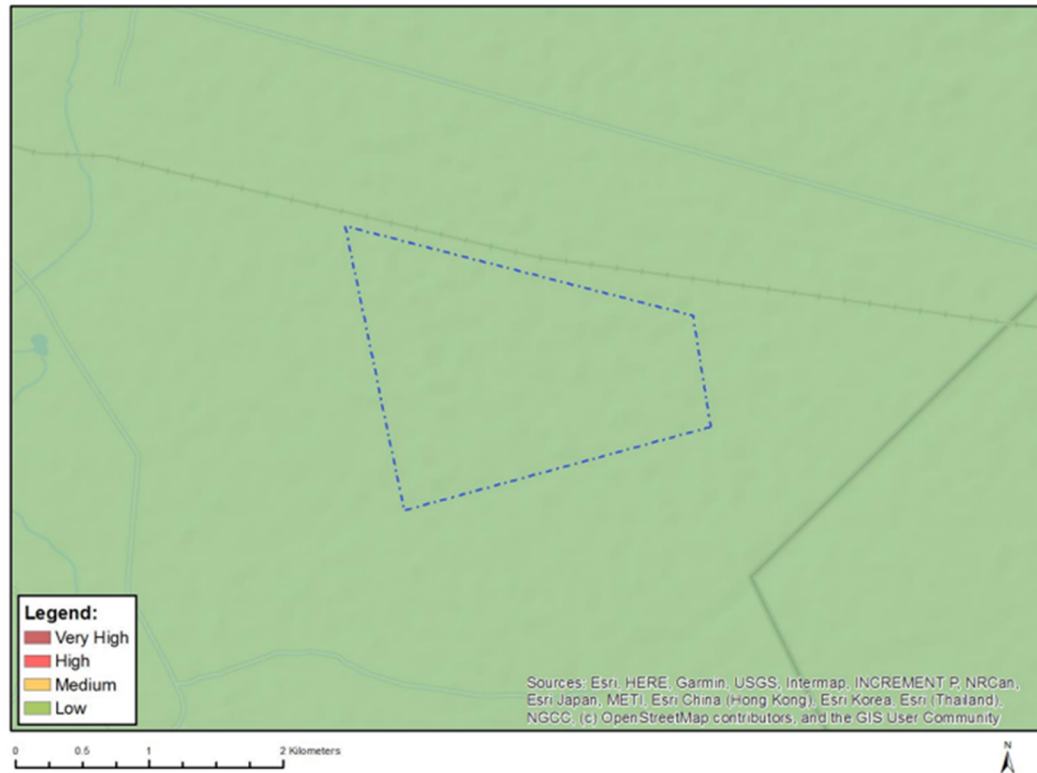
Sensitivity	Feature(s)
Low	Low sensitivity

Figure 2.2: Map of relative defence theme sensitivity

2.2.3 RFI Theme

The sensitivity of the RFI theme for the project is Low. Refer to Figure 1.3 below.

MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

Figure 2.3: Map of relative RFI theme sensitivity

2.3 Site Verification

This section will evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report on studies that were not undertaken and provide feedback from the EAP.

Table 2.2: Verification of DFFE screening report sensitivity ratings

Identified Sensitivity		Comment
Civil Aviation Theme		
<p><u>DFFE Screening Report</u></p> <p>Low</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.</p>	<p><u>EAP Feedback</u></p> <p>Low</p> <p>The proposed development is not expected to have an unacceptable negative impact on civil aviation based on the findings of the site visit and the lack of civil aviation infrastructure within the general area of the proposed project.</p> <p>Based on the above, the EAP is of the opinion that no further assessments are required in terms of the civil aviation theme. 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 were raised.</p>	<p>The identification of the site as low sensitivity considering civil aviation is agreed to by the EAP. This is based on the current land use of the site being used for agricultural (mainly cattle grazing) purposes.</p> <p>The Civil Aviation Authority (CAA) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments from the CAA have been received as part of the public participation process.</p> <p>The CAA has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>
Defence Theme		
<p><u>DFFE Screening Report</u></p> <p>Low</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be</p>	<p><u>EAP Feedback</u></p> <p>Low</p> <p>The proposed development will not have an unacceptable negative impact on defence. Considering the</p>	<p>The affected property is confirmed to be used for agricultural purposes (mainly cattle grazing) and therefore the development will not have any impact on defence theme.</p> <p>The sensitivity for the entire extent of the site is low and therefore no assessment has been included.</p>

<p>based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.</p>	<p>site under assessment and the surrounding defence aspects the sensitivity is confirmed as low.</p> <p>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 were made.</p>	<p>The South African National Defence Force (SANDF) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments have been received as part of the public participation process.</p> <p>The SANDF has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>
<p>RFI (Radio Frequency Interference) Theme</p>		
<p><u>DFFE Screening Report</u></p> <p>Low</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a</p>	<p><u>EAP Feedback</u></p> <p>Low</p> <p>As the theme is of Low sensitivity, no unacceptable impact is expected to occur. I&APs that may be impacted in this regard were consulted during the process and all comments were considered.</p>	<p>The affected property is confirmed to be used for agricultural purposes and therefore the development will not have any impact on defence installations.</p> <p>The sensitivity for the entire extent of the site is low and therefore no assessment has been included.</p> <p>The South African National Defence Force (SANDF) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments from the have been received as part of the public participation process.</p>

specialist assessment is required.		
------------------------------------	--	--

3 SITE VERIFICATION SUBSTATION

3.1 Screening Tool Results for the Substation

Table 3.1: Specialist studies identified by the DFFE screening tool for the substation and specialist studies conducted

Study identified in the DFFE Screening Tool and sensitivity	Study included?	Appendix
Agricultural Impact Assessment Sensitivity: High	Yes	An Agricultural Compliance Statement is included in Appendix E5 of the Scoping Report.
Animal Species Assessment Sensitivity: High	No	A Terrestrial, Animal and Plant Report and Avifaunal Assessment will be undertaken during the EIA phase of the project once the required site inspections are undertaken.
Aquatic Biodiversity Impact Assessment Sensitivity: Very High	Yes	An Aquatic Ecological Impact Assessment is included in Appendix E1. This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.
Archaeological and Cultural Heritage Impact Assessment Sensitivity: Low	Yes	A Heritage Impact Assessment is included in Appendix E6 of the Scoping Report, as per the requirements of the National Heritage Resources Act.
Civil Aviation Assessment Sensitivity: Low	No	The identification of the site as low sensitivity considering civil aviation is agreed to by the EAP. This is based on the current land use of the site being used for agricultural grazing purposes.

		<p>The Civil Aviation Authority has been consulted regarding the development of the project since the commencement of the S&EIR 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.</p>
<p>Defence Theme</p> <p>Sensitivity: Low</p>	No	<p>The affected property is confirmed to be used for agricultural grazing purposes and therefore the development will not have any impact on defence installations.</p> <p>The sensitivity for the entire extent of the site is low and therefore no assessment has been included.</p> <p>The South African National Defence Force has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date regarding the project. The project is also not located within an area considered to be of a high sensitivity.</p>
<p>Palaeontological Impact Assessment</p> <p>Sensitivity: Very High</p>	Yes	<p>A Palaeontological Impact Assessment is included in Appendix E7 of the Scoping Report, as per the requirements of the National Heritage Resources Act.</p>
<p>Plant species Assessment</p> <p>Sensitivity: Medium</p>	No	<p>A Terrestrial, Animal and Plant Report will be undertaken during the EIA phase of the project once the required site inspections are undertaken.</p>

Terrestrial Biodiversity Impact Assessment Sensitivity: Very High	Yes	A terrestrial and aquatic ecological screening report has been undertaken and is included as Appendix E2. A full assessment will be undertaken during the EIA phase.
Geotechnical Assessment Sensitivity: Not indicated	Yes	The detailed Geotechnical Assessment will be conducted before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern. A Desktop Geotechnical Assessment is included in Appendix E10.
Socio-Economic Assessment Sensitivity: Not indicated	Yes	A Social Impact Assessment is included in Appendix E8.
Landscape / Visual Impact Assessment Sensitivity: Not indicated	Yes	A Visual Impact Assessment is included in Appendix E4 of the Scoping Report.

3.2 Sensitivities of the Studies not Conducted

This section has been produced specifically to consider the Civil Aviation and Defence themes and addresses the content requirements of (a) and (b) above.

The remaining required specialist studies have been undertaken as part of the Scoping and Environmental Impact Reporting (S&EIR) process as listed in the DFFE Screening Tool Reports. The Plant and Terrestrial, Animal and Plant Report will be undertaken and will form a part of the detailed EIA phase of the project. The only study not considered as relevant is the Geotechnical Assessment which will only be undertaken before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern. However, a desktop geotechnical study has been included as a part of the Final Scoping Report (FSR).

The sensitivities for the Civil Aviation and Defence themes associated with Rooidraai Solar substation facility are as follows:

3.2.1 Civil Aviation Theme

The site sensitivity is classified as low for the substation category. Refer to Figure 3.1 below.

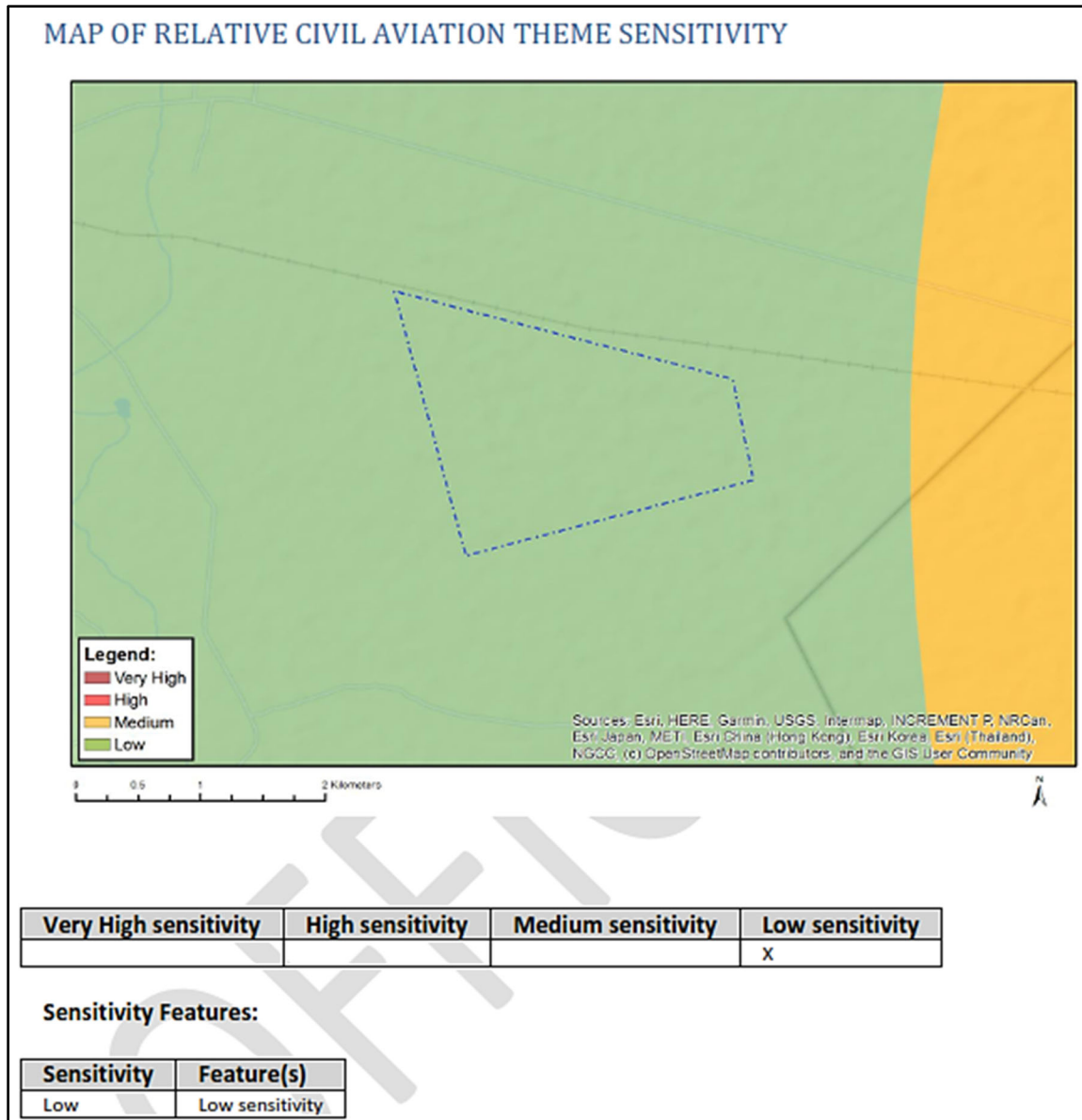


Figure 3.1: Map of relative civil aviation theme sensitivity

3.2.2 Defence Theme

The site sensitivity is classified as low for the substation as no defence base has been identified in close proximity to the site. Refer to Figure 3.2.

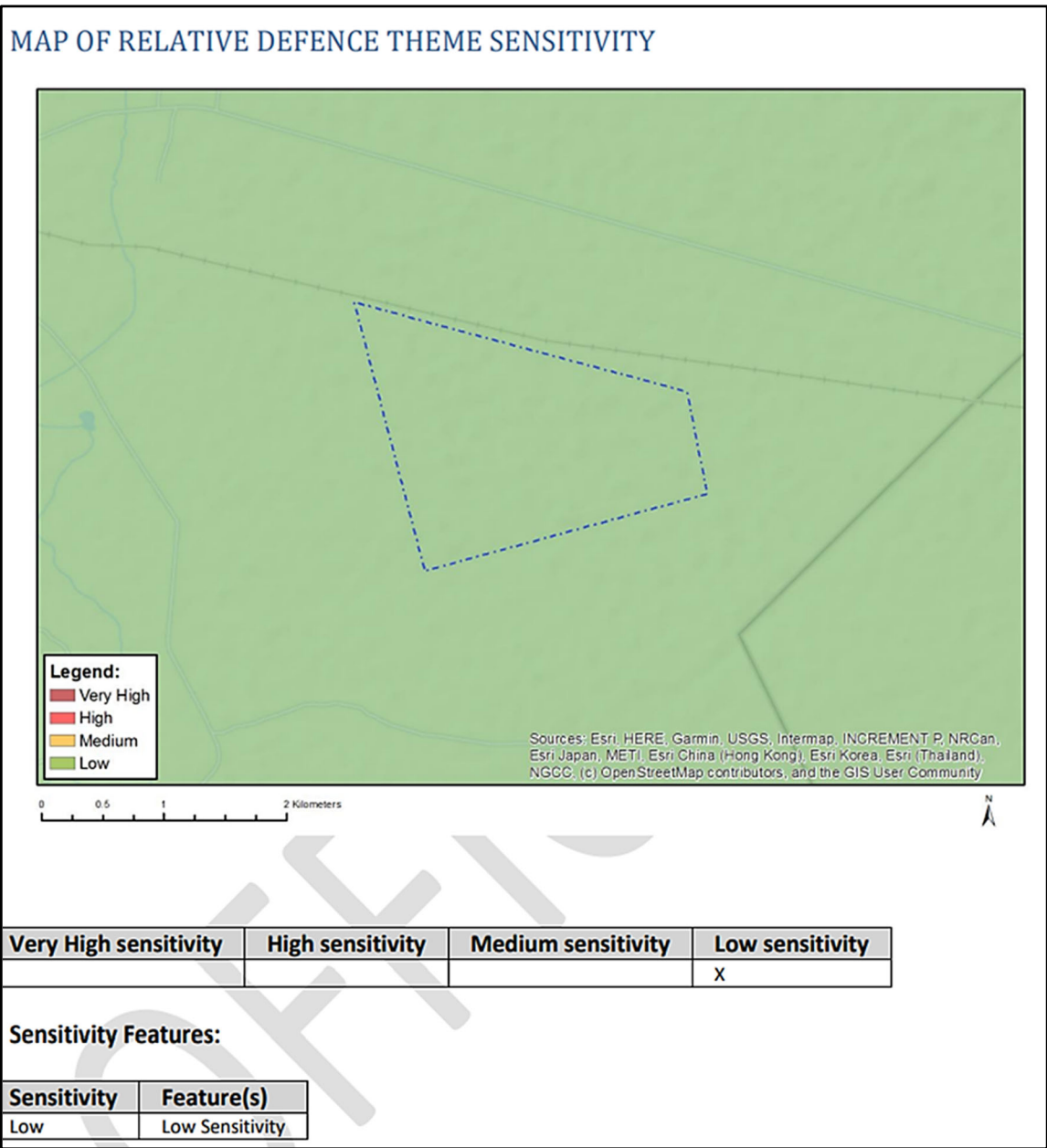


Figure 3.2: Map of relative Defence theme sensitivity

3.3 Site Verification

This section will evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report on studies that were not undertaken and provide feedback from the EAP.

Table 3.2: Verification of DFFE screening report sensitivity ratings

Identified Sensitivity		Comment
Civil Aviation Theme		
<p><u>DFFE Screening Report</u></p> <p>Low</p> <p>There is low potential for negative impacts on the civil aviation, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts may not be required.</p>	<p><u>EAP Feedback</u></p> <p>Low</p> <p>The proposed development is not expected to have an unacceptable negative impact on civil aviation based on the findings of the site visit and the lack of civil aviation infrastructure within the general area of the proposed project.</p> <p>Based on the above, the EAP is of the opinion that no further assessments are required in terms of the civil aviation theme. 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 were raised.</p>	<p>The Civil Aviation Authority (CAA) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments from the CAA have been received as part of the public participation process.</p> <p>The CAA has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>
Defence Theme		
<p><u>DFFE Screening Report</u></p> <p>Low</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be</p>	<p><u>EAP Feedback</u></p> <p>Low</p> <p>The proposed development will not have an unacceptable negative impact on defence theme.</p>	<p>The affected property is confirmed to be used for agricultural purposes (mainly cattle grazing) and therefore the development will not have any impact on defence theme.</p> <p>The sensitivity for the entire extent of the site is low and therefore no assessment has been included.</p>

<p>based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.</p>	<p>Considering the site under assessment and the surrounding defence aspects the sensitivity is confirmed as low.</p> <p>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 were made.</p>	<p>The South African National Defence Force (SANDF) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments have been received as part of the public participation process.</p> <p>The SANDF has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>
---	--	--

4 SITE VERIFICATION POWERLINE

4.1 Screening Tool Results for the Powerline

Table 4.1: Specialist studies identified by the DFFE screening tool for the powerline and specialist studies conducted

Study identified in the DFFE Screening Tool and sensitivity	Study included?	Appendix
Agricultural Impact Assessment Sensitivity: High	Yes	An Agricultural Compliance Statement is included in Appendix E5 of the Scoping Report.
Animal Species Assessment Sensitivity: High	No	A Terrestrial, Animal and Plant Report and Avifaunal Assessment will be undertaken during the EIA phase of the project once the required site inspections are undertaken.
Aquatic Biodiversity Impact Assessment Sensitivity: Very High	Yes	An Aquatic Ecological Impact Assessment is included in Appendix E1. This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.
Archaeological and Cultural Heritage Impact Assessment Sensitivity: Low	Yes	A Heritage Impact Assessment is included in Appendix E6 of the Scoping Report, as per the requirements of the National Heritage Resources Act.
Civil Aviation Assessment Sensitivity: Low	No	The identification of the site as low sensitivity considering civil aviation is agreed to by the EAP. This is based on the current land use of the site being used for agricultural grazing purposes.

		<p>The Civil Aviation Authority has been consulted regarding the development of the project since the commencement of the S&EIR 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.</p>
<p>Defence Theme</p> <p>Sensitivity: Low</p>	No	<p>The affected property is confirmed to be used for agricultural grazing purposes and therefore the development will not have any impact on defence installations.</p> <p>The sensitivity for the entire extent of the site is low and therefore no assessment has been included.</p> <p>The South African National Defence Force has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date regarding the project. The project is also not located within an area considered to be of a high sensitivity.</p>
<p>Palaeontological Impact Assessment</p> <p>Sensitivity: Very High</p>	Yes	<p>A Palaeontological Impact Assessment is included in Appendix E7 of the Scoping Report, as per the requirements of the National Heritage Resources Act.</p>
<p>Plant species Assessment</p> <p>Sensitivity: Medium</p>	No	<p>A Terrestrial, Animal and Plant Report will be undertaken during the EIA phase of the project once the required site inspections are undertaken.</p>

Terrestrial Biodiversity Impact Assessment Sensitivity: Very High	Yes	A terrestrial and aquatic ecological screening report has been undertaken and is included as Appendix E2. A full assessment will be undertaken during the EIA phase.
Geotechnical Assessment Sensitivity: Not indicated	Yes	The detailed Geotechnical Assessment will be conducted before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern. A Desktop Geotechnical Assessment is included in Appendix E10.
Socio-Economic Assessment Sensitivity: Not indicated	Yes	A Social Impact Assessment is included in Appendix E8.
Landscape / Visual Impact Assessment Sensitivity: Not indicated	Yes	A Visual Impact Assessment is included in Appendix E4 of the Scoping Report.

4.2 Sensitivities of the Studies not Conducted

This section has been produced specifically to consider the Civil Aviation and Defence themes and addresses the content requirements of (a) and (b) above.

The remaining required specialist studies have been undertaken as part of the Scoping and Environmental Impact Reporting (S&EIR) process as listed in the DFFE Screening Tool Reports. The Plant and Terrestrial, Animal and Plant Report will be undertaken and will form a part of the detailed EIA phase of the project. The only study not considered as relevant is the Geotechnical Assessment which will only be undertaken before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern. However, a desktop geotechnical study has been included as a part of the Final Scoping Report (FSR).

The sensitivities for the Civil Aviation and Defence themes associated with Rooidraai Solar powerline are as follows:

4.2.1 Civil Aviation Theme

The site sensitivity is classified as low for the powerline category. Refer to Figure 4.1.

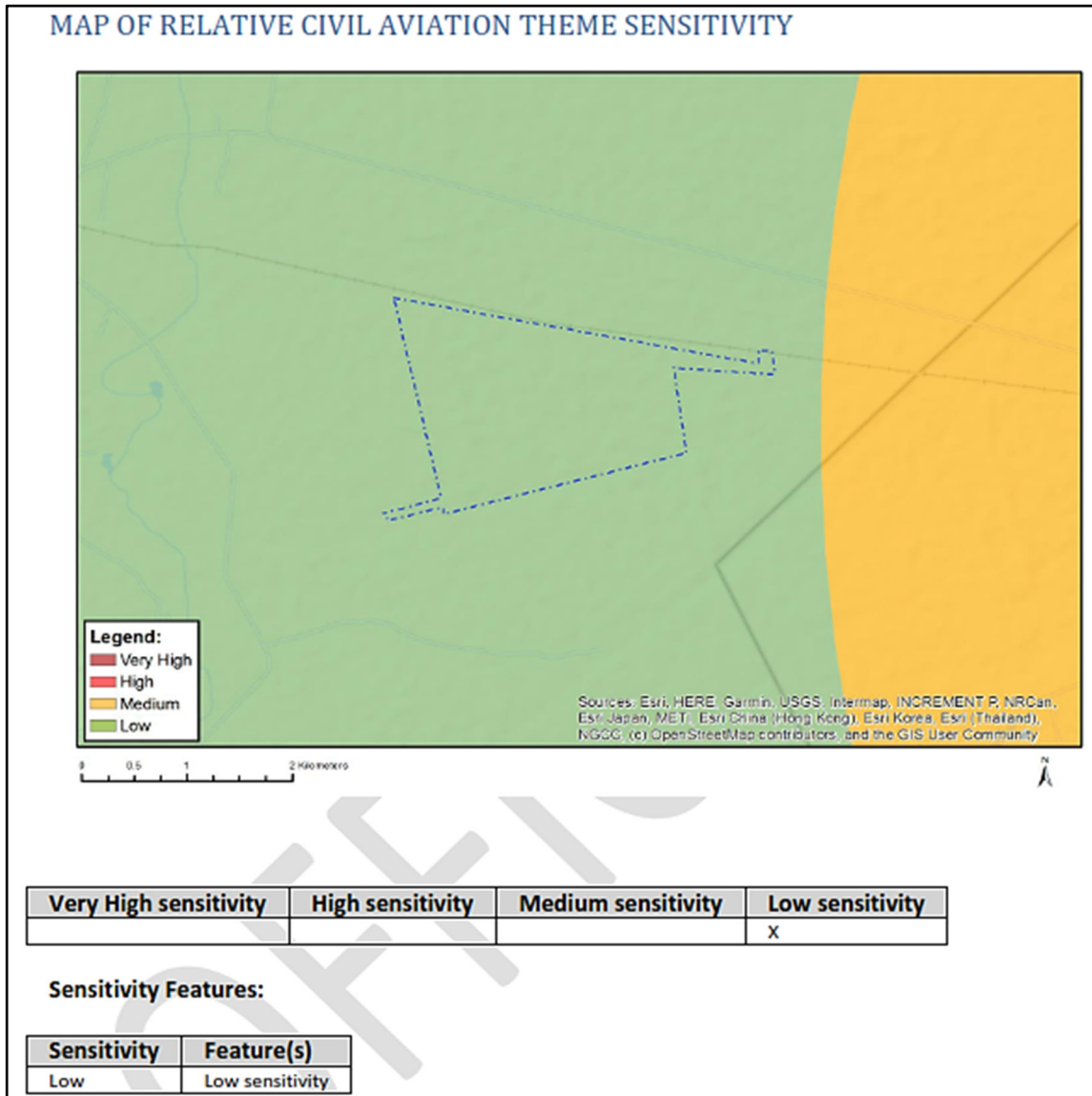


Figure 4.1: Map of relative civil aviation theme sensitivity

4.2.2 Defence Theme

The site sensitivity is classified as low for the powerline category as no defence base has been identified in close proximity to the site. Refer to Figure 4.2.

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

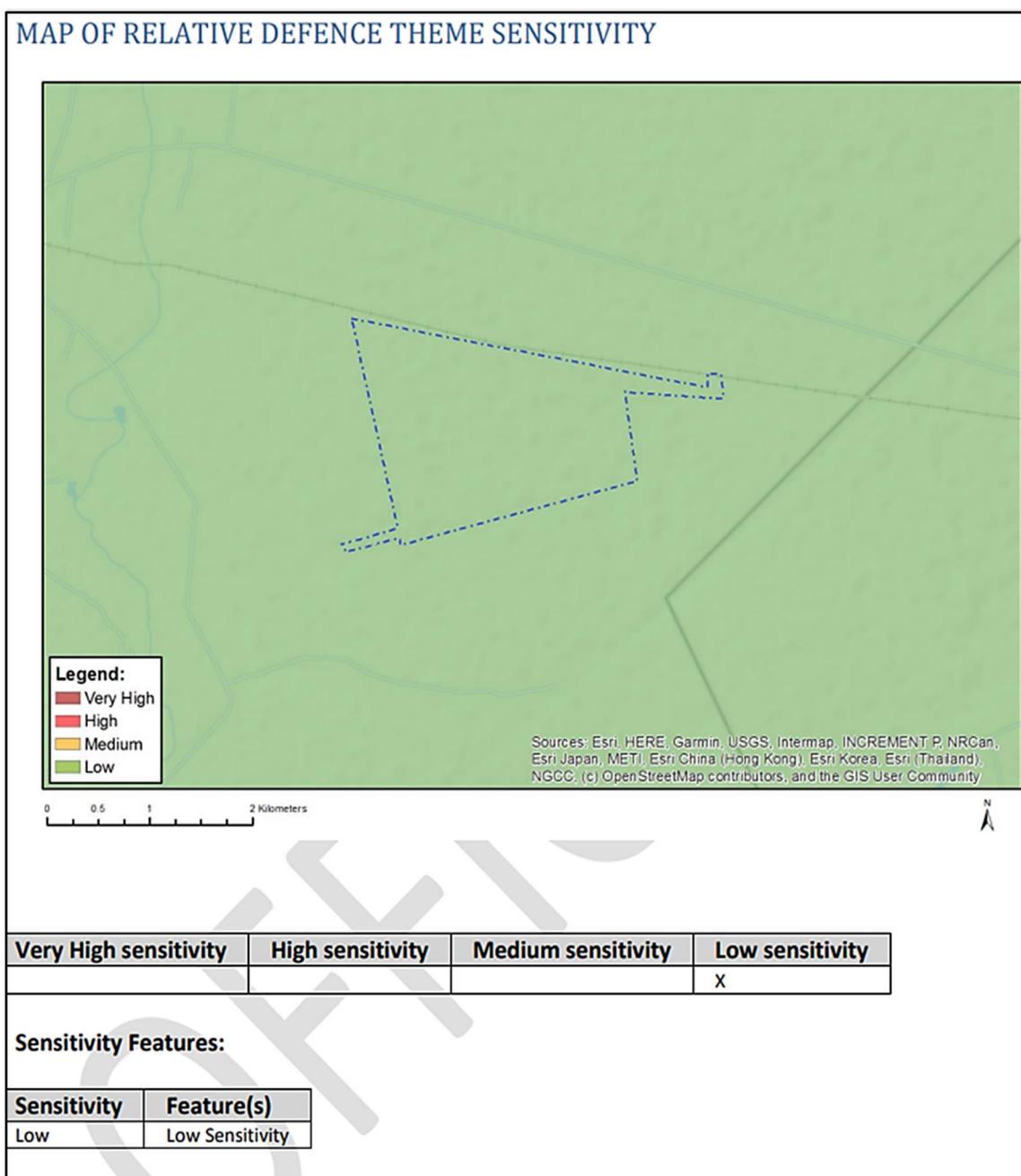


Figure 4.2: Map of relative defence theme sensitivity

4.3 Site Verification

This section will evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report on studies that were not undertaken and provide feedback from the EAP.

Table 4.2: Verification of DFFE screening report sensitivity ratings

Identified Sensitivity		Comment
Civil Aviation Theme		
<u>DFFE Screening Report</u>	<u>EAP Feedback</u>	
Low	Low	
There is low potential for negative impacts on the civil aviation, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts may not be required	The proposed length of the grid corridor lies within low sensitivity. The Civil Aviation Authority has been consulted regarding the development of the project since the commencement of the S&EIR Process. No comment or issues have been raised to date by the CAA regarding the project. Based on the above, the EAP is of the opinion that no further assessments are required in terms of the civil aviation theme. 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 were raised.	The Civil Aviation Authority (CAA) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments from the CAA have been received as part of the public participation process. The CAA has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.
Defence Theme		
<u>DFFE Screening Report</u>	<u>EAP Feedback</u>	
Low	Low	
As no specific assessment protocol	The proposed development will not	The affected property is confirmed to be used for agricultural purposes (mainly cattle grazing) and therefore the development will not have any impact on defence theme.

<p>has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.</p>	<p>have an unacceptable negative impact on defence theme. Considering the site under assessment and the surrounding defence aspects the sensitivity is confirmed as low.</p> <p>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 were made.</p>	<p>The sensitivity for the entire extent of the site is low and therefore no assessment has been included.</p> <p>The South African National Defence Force (SANDF) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments have been received as part of the public participation process.</p> <p>The SANDF has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>
---	---	---

5.1 Current/ Verified Land Use

The current land use of the properties is mainly used for cattle grazing. The town of Carletonville is located approximately 19 km southeast of the proposed development.

Most of the surrounding area has a low number of farmsteads/buildings that are sparsely populated. The area is located within an agricultural region, and the immediate area is presently used for cattle grazing.

Refer to Figures 5.1 – 5.5 for photographs of the site under assessment.



Figure 5.1: The site (taken towards the north)



Figure 5.2: The site (taken towards the north east)



Figure 5.3: The site (taken towards the east)



Figure 5.4: The site (taken towards the south)



Figure 5.5: The site (taken towards the west)

6 CONCLUSION

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, Socio-Economic Impact Assessment, and Terrestrial, Animal and Plant Report.

The sensitivity ratings for the Civil Aviation and Defence theme are confirmed by the site verification. Although the RFI was rated with medium sensitivity, no unacceptable impact is expected to occur. The relevant stakeholders will be consulted as part of the S&EIR process to obtain comment on the proposed development.