

SITE VERIFICATION REPORT OF THE NDAU SOLAR PV FACILITY AND ASSOCIATED GRID INFRASTRUCTURE

February 2024



Details of Role Players

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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 TOOL REPORT

The DFFE screening tool report identified the following specialist assessments to be included in the Scoping and EIA assessment:

- Agricultural Impact Assessment
- Landscape / Visual Impact Assessment
- Archaeological and Cultural Impact Assessment
- Paleontological Impact Assessment
- Terrestrial Biodiversity Impact Assessment
- Aquatic Biodiversity Assessment
- Civil Aviation Assessment
- Defence Assessment
- RFI Assessment
- Geotechnical Assessment
- Socio-Economic Assessment
- Plant Species Assessment
- Animal Species Assessment

Table 1: Specialist studies identified by the DFFE Screening Tool and steps taken

Study identified in the DFFE Screening Tool and sensitivity	Study included as part of the Environmental Impact Assessment	Motivation
Agricultural Impact Assessment: Screening tool noted Low to High Sensitivity.	Yes	The site is characterised by mostly natural vegetation as it has been utilised for game farming purposes. There is an existing mining area on the south-western portion of the site and some old fields in this area according to the screening tool. During the site verification is could be seen that most of the site is characterised by game farming with hills where the "low" sensitivity" was identified.
Landscape / Visual Impact Assessment: The Screening tool identified High to Very High sensitivities on site.	Yes	During the initial site verification, the high ridges could be seen and the series of hills that are located in the southern portion of the site. The study was included due to the proximity of the Nature Reserves and hills with high ridges on site.
Archaeological and Cultural Impact Assessment: The Screening tool noted a low sensitivity.	Yes	Due to the nature of the project and as per requirement of the National Heritage Resources Act, a Phase 1 Heritage Impact Assessment.

Study identified in the DFFE Screening Tool and sensitivity	Study included as part of the Environmental Impact Assessment	Motivation
Paleontological Impact Assessment: The Screening tool noted Medium Sensitivity.	Yes	As per the desktop study conducted by the specialist the PV array will be very shallow and not disrupt to any fossil beds, thus a compliance statement will form part of the study.
Terrestrial Biodiversity Impact Assessment: The Screening tool noted possible CBA 2 areas within the site footprint and Very High Sensitivity also due to the proximity of the Private Nature Reserves.	Yes	A Terrestrial Biodiversity Impact Assessment has been included as part of the application due to the CBA 2 areas, the hills/ridges on site and the proximity to the Phillippus Private Nature Reserve.
Aquatic Biodiversity Assessment: The Screening tool noted Low sensitivity.	Yes	There is only one drainage line situated in the southern portion of the site and an Aquatic Compliance statement has been commissioned as part of the study.
Civil Aviation Assessment: The Screening tool noted low sensitivity.	No	During the site visit it was confirmed that no aerodromes exist close to the site and low sensitivity is confirmed. The Draft Scoping and other reports will be submitted to the Civil Aviation Authority (CAA) for comment.

Study identified in the DFFE Screening Tool and sensitivity	Study included as part of the Environmental Impact Assessment	Motivation
Defence Assessment: The Screening tool noted low sensitivity.	No	The site verification confirmed that no military operations are located close to the development. The project site is therefore not expected to have an impact on Defence installations.
RFI Assessment The Screening tool noted low sensitivity.	No	No desktop information could be found regarding nearby installations. The site verification concluded that there are no potential RFI nearby. SARAO will be consulted as part of the process.
Geotechnical Assessment: Screening tool did not indicate sensitivity.	Yes	After discussions with the specialist, it was decided that Pre-feasibility assessment be conducted after which a in-depth assessment will be conducted before construction begins.
Socio-Economic Assessment Screening tool did not indicate sensitivity.	Yes	A social impact assessment has been included as part of the specialist assessments.
Plant Species Assessment: Screening tool noted a Low sensitivity	Yes	As the project will entail the clearance of natural vegetation a Plant species compliance statement will

Study identified in the DFFE Screening Tool and sensitivity	Study included as part of the Environmental Impact Assessment	Motivation
		be included due to the Low sensitivity of the site. This was confirmed during an initial site visit.
Animal Species Assessment: Screening tool noted a Medium sensitivity.	Yes	Due to the fact that there are high ridges on site and that most of the site has been utilised for game farming purposes a fauna impact assessment forms part of the specialist studies.
Avian Theme Sensitivity: The Screening tool noted a High Sensitivity due to the proximity of known Cape Vulture Restaurants.	Yes	Due to the nature of the project and the requirements from Birdlife South Africa and the high ridges found in the southern portion of the site a comprehensive Avi-fauna impact assessment has been included.

1.2 DFFE SCREENING TOOL SENSITIVITIES FOR STUDIES TO BE UNDERTAKEN

1.2.1 Agricultural Theme

The figure below indicates that most of the site is Medium to High Sensitivity.

Medium Sensitivity with Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate.

High Sensitivity with Old Fields; Land capability;09. Moderate-High/10. Moderate-High.

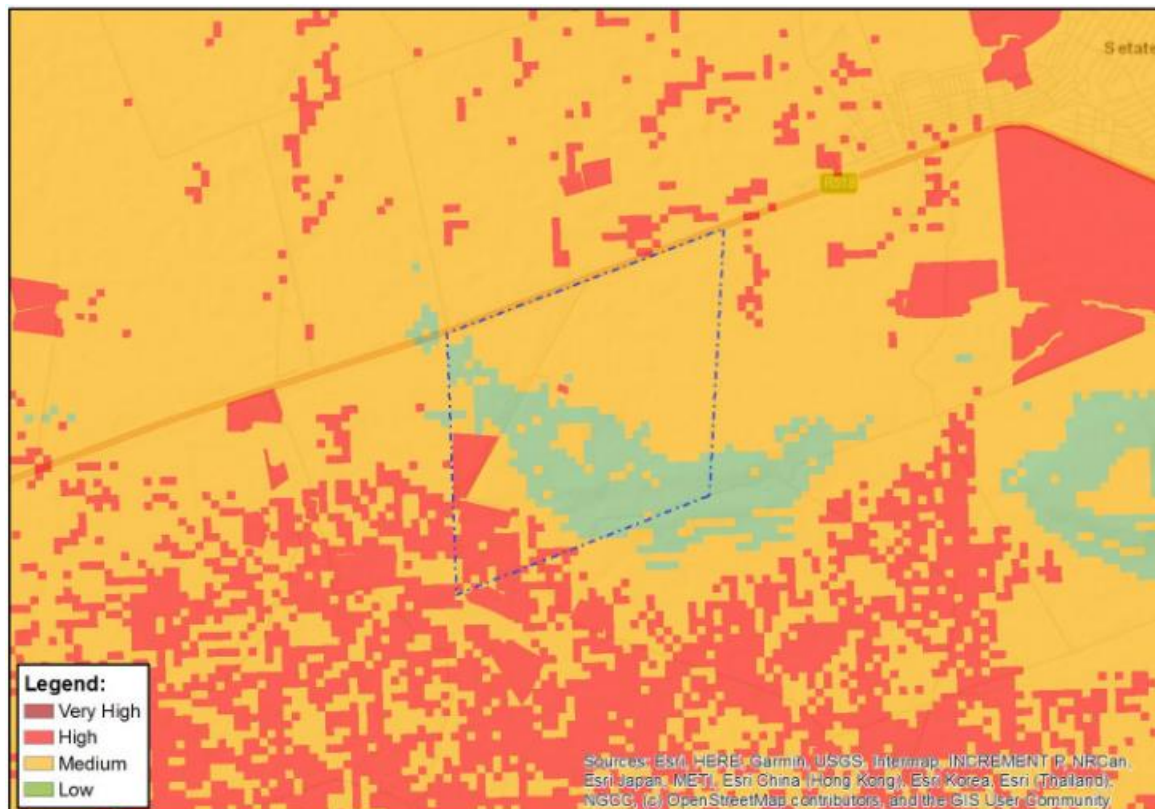


Figure 1: Agricultural Sensitivity as indicated by the DFFE Screening Tool Report

1.2.2 Animal Species Theme

The site footprint is classified as Medium Sensitivity due to the potential occurrence of Aves-*Aquila rapax* and Mammalia-*Dasymys robertsii*.

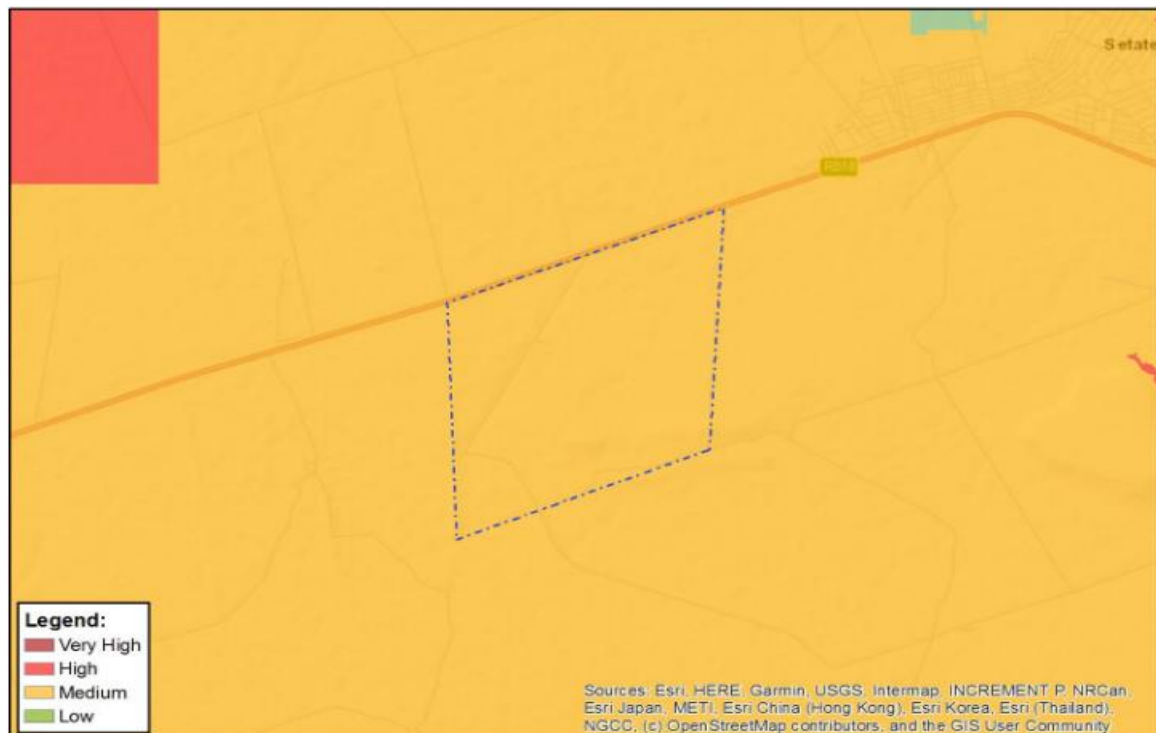


Figure 2: Animal Species Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.3 Aquatic Biodiversity Theme

The site is classified as Low sensitivity and only one non-perennial drainage line was located in the south-western portion of the site.



Figure 3: Aquatic Biodiversity Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.4 Archaeological and Cultural Heritage Theme

The site is classified as low sensitivity as indicated below in Figure 4.



Figure 4: Archaeological and Cultural Heritage Theme

1.2.5 Avian Theme Sensitivity

The site sensitivity is classified as high as indicated in Figure 5 below.



Figure 5: Avian Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.6 Paleontological Theme Sensitivity

The Screening tool indicated a sensitivity classified as Medium due to the potential to have features with Medium Paleontological sensitivity.

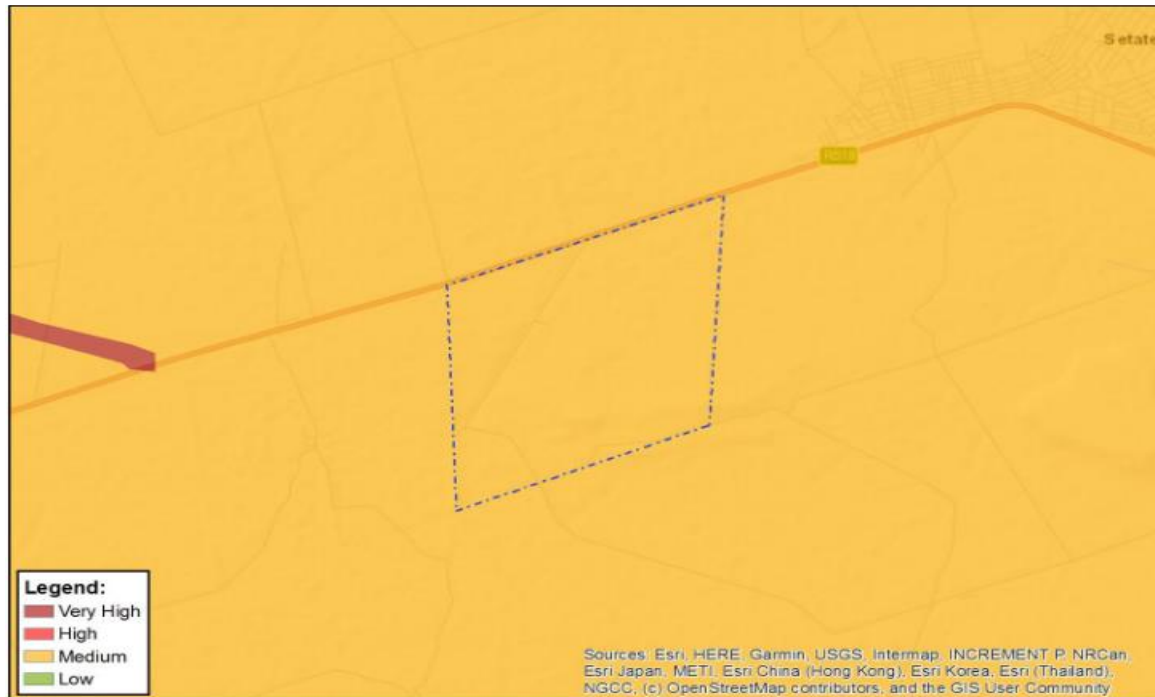


Figure 6: Paleontological Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.7 Plant Species Theme Sensitivity

The Screening Tool indicated a low sensitivity, and this was confirmed during the initial site visit and desktop assessment by the botanist.



Figure 7: Plant Species Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.8 Terrestrial Biodiversity Theme Sensitivity

The site sensitivity is classified as Very High due to the presence of Critical Biodiversity Areas 2 and the proximity to Nature Reserves.



Figure 8: Terrestrial Biodiversity Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.3 CURRENT VERIFIED LAND-USE

Portion 0 of the Farm Bains Hoff 483 LR is currently utilized for game farming purposes with some mining activities in the south-western portion of the site.

There is a farmhouse with adjoining infrastructure situated to the north of the farm portion.



Figure 9: Some game farming infrastructure located to the centre of site farm.



Figure 10: The vegetation on site was found to be mostly uniform bushveld vegetation.



Figure 11: One of the wider roads located near the mining area.



Figure 12: General conditions on site.

2 SITE VERIFICATION

This section is to evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report and provide insights from the EAP.

2.1 AGRICULTURAL THEME

It was depicted that most of the site was Medium Sensitivity with Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate and High Sensitivity with Old Fields; Land capability;09. Moderate-High/10. Moderate-High situated in the west of the site.

Table 2: Verification of DFFE Screening report sensitivity ratings for the Agricultural Theme.

Identified Sensitivity		Comments
DFFE Screening Report Medium to High Agricultural Impact Assessment must be conducted by a soil scientist or agricultural specialist registered with SACNASP.	EAP Feedback Medium to High	The proposed site is utilised for Game farming purposes with some old fields located in the south-western portion of the site. An agricultural Impact assessment has been included in the application process.

2.2 LANDSCAPE / VISUAL THEME

The Screening Tool identified that a specialist study is required as the site is rated as High to Very High due to the proximity of the Nature Reserves and hills with high ridges on site.

Table 3: Verification of DFFE Screening report sensitivity ratings for the Landscape / Visual Theme

Identified Sensitivity		Comments
DFFE Screening Report High to Very High As no specific assessment protocol has been prescribed, the required level of assessment must be	EAP Feedback Very High	Due to the close proximity of Natures Reserves and the high ridges that were confirmed during the site assessment a Visual Impact assessment has been commissioned as part of the application process.

Identified Sensitivity		Comments
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.		

2.3 ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME

Table 4: Verification of DFFE Screening report sensitivity ratings for the Archaeological and Cultural Heritage Theme.

Identified Sensitivity		Comments
DFFE Screening Report Low 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	EAP Feedback Low	The identification of the site as low sensitivity considering Archaeological and Cultural Heritage is agreed to by the EAP. This is based on a desktop assessment and site inspection. A Heritage Impact Assessment will be conducted to ensure that

Identified Sensitivity		Comments
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.		no Cultural or Heritage features are missed on site.

2.4 PALEONTOLOGICAL IMPACT ASSESSMENT

Table 5: Verification of DFFE Screening report sensitivity ratings for the Paleontological Theme.

Identified Sensitivity		Comments
DFFE Screening Report Medium 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	EAP Feedback Medium	The palaeontological specialist conducted a desktop assessment and stated the PV array will be very shallow and not disrupt to any fossil beds, thus a compliance statement will form part of the study.

Identified Sensitivity		Comments
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.		

2.5 TERRESTRIAL BIODIVERSITY IMPACT ASSESSMENT

The site sensitivity has been classified as Very High due to the presence of CBA 2 areas and the close proximity to a private nature reserve.

Table 6: Verification of DFFE Screening report sensitivity ratings for the Terrestrial Biodiversity Theme

Identified Sensitivity		Comments
DFFE Screening Report Very High Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020.	EAP Feedback Very High	The identification is not disputed by the EAP as the high ridges and hills could create habitat for sensitive species. A Terrestrial Biodiversity assessment does form part of the studies to be conducted in accordance with the Protocols (G. NR 320).

2.6 AQUATIC BIODIVERSITY THEME SENSITIVITY

The Screening tool noted Low sensitivity rating.

Table 7: Verification of DFFE Screening report sensitivity ratings for the Aquatic Biodiversity Theme

Identified Sensitivity		Comments
DFFE Screening Report Low Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020.	EAP Feedback Low	One drainage line was found while conducting a desktop assessment as part of the verification process. No other aquatic features were found on site during the site visit and thus an Aquatic compliance statement will form part of the assessment.

2.7 ANIMAL SPECIES THEME

The Screening tool indicated Medium sensitivity due to the possible presence of certain bird species, and a rodent species – Mammalia-Dasymys Robertsii. The wild dog is also listed as part of the species possibilities.

Table 8: Verification of DFFE Screening report sensitivity ratings for the Animal Species Theme

Identified Sensitivity		Comments
DFFE Screening Report Medium Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on	EAP Feedback Medium	As the site is currently utilised for game farming purposes a wide variety of animals were seen during the initial site verification. A fauna impact assessment will form part of the

Identified Sensitivity		Comments
identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020 (i.e. protocols for terrestrial plant and animal species.		specialist assessment to be conducted.

2.8 AVIAN THEME SENSITIVITY

The Screening tool noted a High sensitivity rating due to the proximity of known Cape Vulture restaurants.

Table 9: Verification of DFFE Screening report sensitivity ratings for the Avian Theme

Identified Sensitivity		Comments
DFFE Screening Report High Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in	EAP Feedback High	During the site visit the series of hills and high ridges in the southern portion of the farm was confirmed and due to the habitat that these hills and ridges could provide to raptors and the known proximity of Vulture restaurants a in-depth Avi-fauna assessment has been commissioned.

Identified Sensitivity		Comments
Government Notice No. 1150 of 30 October 2020.		

2.9 PLANT SPECIES THEME SENSITIVITY

Table 10: Verification of DFFE Screening report sensitivity ratings for the Plant Species Theme

Identified Sensitivity		Comments
DFFE Screening Report Low Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020.	EAP Feedback Low	Desktop Assessment indicated that the vegetation type is characterised as Least Concern. A Terrestrial Plant Species Compliance Statement have been commissioned in accordance with the Protocols (G. NR 1150).

3 CONCLUSION

The DFFE Screening Tool Report identified 13 specialist studies to be conducted as listed on page 6 of this report. Based on the outcomes of this sensitivity verification the following studies were identified as being require:

- Agricultural Impact Assessment
- Landscape / Visual Assessment
- Archaeological Assessment (Phase 1 HIA)
- Palaeontological Compliance Statement
- Terrestrial Biodiversity Assessment
- Aquatic Compliance Statement

- Geotechnical Assessment (Pre-Feasibility)
- Socio-Economic Assessment
- Plant Species Compliance Statement
- Animal Species Assessment (Including Avi-fauna assessment according to guidelines for Solar PV facilities).
- Stormwater Management Plan.

All sensitivities have been considered within this report and the EAP confirms all sensitivities as per the Screening tool results. All the required assessments as listed above have been commissioned as part of the EIA process.

The low sensitivity ratings for the Civil Aviation, Defence and RFI theme is confirmed by the site verification report. No specialist studies have been commissioned for these themes as the project will not have unacceptable negative impacts on any of the identified themes. The stakeholders of these themes will be consulted as part of the EIA process.

