

PROPOSED CONSTRUCTION OF SANNASPOS PV PLANT
PHASE 1 (75MW), LOCATED ON PORTION 0 OF FARM
1808 BESEMKOP AND PORTION 0 OF FARM 2962
LEJWE, WITHIN THE MANGAUNG METROPOLITAN
MUNICIPALITY, FREE STATE PROVINCE

Motivation for Amendment of the Environmental
Authorisation (DFFE Ref No.: 14/12/16/3/3/2/360/1)

Final Report

September 2023

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PROJECT DETAILS

Title	:	Proposed construction of Sannaspos Solar PV Plant Phase 1 (75MW), located on Portion 0 of Farm 1808 Besemkop and Portion 0 of Farm 2962 Lejwe, within the Mangaung Metropolitan Municipality, Free State Province
DFFE Reference	:	14/12/16/3/3/2/360/1
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Client	:	Sannaspos Solar PV (Pty) Ltd
Report Status	:	Final Motivation Report for authority review and decision-making

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PURPOSE OF THE REPORT

Sannaspos Solar PV (Pty) Ltd has requested an amendment to an existing Environmental Authorisation (EA) for the authorised Sannaspos PV Facility (DFFE Reference: 14/12/16/3/3/2/360), with various subsequent amendments issued, including a split EA issued in October 2021 (DFFE Reference: 14/12/16/3/3/360/1). The project is located on Portion 0 of Farm 1808 Besemkop and Portion 0 of Farm 2962 Lejwe, within the Mangaung Metropolitan Municipality, Free State Province. A developmental footprint of 150 ha in extent is authorised for the facility and associated infrastructure. The proposed facility will have a contracted capacity of 75MW (90MW installed capacity) and will include the following infrastructure:

- » PV arrays and inverters
- » Cabling between project components, laid underground as far as possible
- » An on-site 132kV Independent Power Producer (IPP) substation to facilitate the grid connection
- » Internal access roads.
- » Guard house
- » Laydown, Campsite, and assembly area.
- » Office and Control centre.

The project is a Preferred Bidder project under Round 5 of REIPPPP and is registered as a Strategic Infrastructure Project.

An application for amendment has been submitted to the Department of Forestry, Fisheries and the Environment (DFFE) on 09 June 2023. The amendment being applied for relates to an extension of the validity of the Environmental Authorisation by an additional 2 years. Additional information has been requested (in terms of Regulation 30(1)(a) of the EIA Regulations, 2014 as amended) for the Department to be able to process the application for amendment. Savannah Environmental, as independent consultant, has prepared this Motivation Report in support of the application for the proposed amendment on behalf of the applicant, and in accordance with the requirements of the DFFE.

This report aims to provide details pertaining to the environmental impacts as a result of the requested amendment in order for interested and affected parties to be informed and submit comments for the competent authority to be able to reach a decision in this regard. This report is supported by specialist site verification and motivation reports to inform the conclusion and recommendations regarding the proposed amendment (refer to **Appendix A-C** of this report). This Site Verification and Motivation Report must be read together with these specialist reports to obtain a complete understanding of the proposed amendment and the implications thereof from an environmental perspective.

This Motivation Report was made available for a 30-day review and comment period in accordance with the requirements of the DFFE from **Thursday 03 August 2023** to **Monday 04 September 2023**. The availability of the Motivation Report for the 30-day comment and review period was communicated via email to all registered I&APs and advertised in the **Volksblad** on **Thursday 03 August 2023**.

The Motivation Report was available for download from Savannah Environmental's website: <https://www.savannahsa.com/public-documents/energy-generation/>. All comments received during the 30-day review and comment period and responses have been included within a Comments and Responses Report (C&RR) and included within this Final Amendment Motivation Report submitted to the DFFE for consideration and decision-making.

1. OVERVIEW OF THE PROJECT

Sannaspos Solar PV (Pty) Ltd received an Environmental Authorisation for the proposed Sannaspos PV Plant Phase 1 and associated infrastructure, located on Portion 0 of Farm 1808 Besemkop and Portion 0 of Farm 2962 Lejwe, within the Mangaung Metropolitan Municipality, Free State Province in May 2013 (DFFE Reference No.: 14/12/16/3/3/2/360/1). The proposed facility will have a contracted capacity of 75MW (90MW installed capacity) and will include the following infrastructure:

- » PV arrays and inverters
- » Cabling between project components, laid underground as far as possible
- » An on-site 132kV Independent Power Producer (IPP) substation to facilitate the grid connection
- » Internal access roads.
- » Guard house
- » Laydown, Campsite, and assembly area.
- » Office and Control centre.

The project is a Preferred Bidder project under Round 5 of REIPPPP and is registered as a Strategic Infrastructure Project.

In order to implement the preferred technology for the project, an additional 50ha is required. This additional area for development was assessed through an EIA process undertaken by Savannah Environmental (DFFE Ref No.: 14/12/16/3/3/2/2126). This assessment included specialist studies which included review of the previous specialist studies undertaken and fieldwork where required, as well as a public participation process. An EA for the additional development area was issued in November 2022.

1.1. Status (baseline) of the Environment assessed through the Environmental Impact Assessment (EIA) Process (EIA report, February 2013)

The findings of the specialist studies undertaken by Savannah Environmental during the EIA assessed both the benefits and potential negative impacts anticipated as a result of the proposed development and concluded that there are no environmental fatal flaws that should prevent the proposed project from proceeding.

Table 1.1 summarises the baseline status of the environment that was assessed through the EIA process for the proposed project.

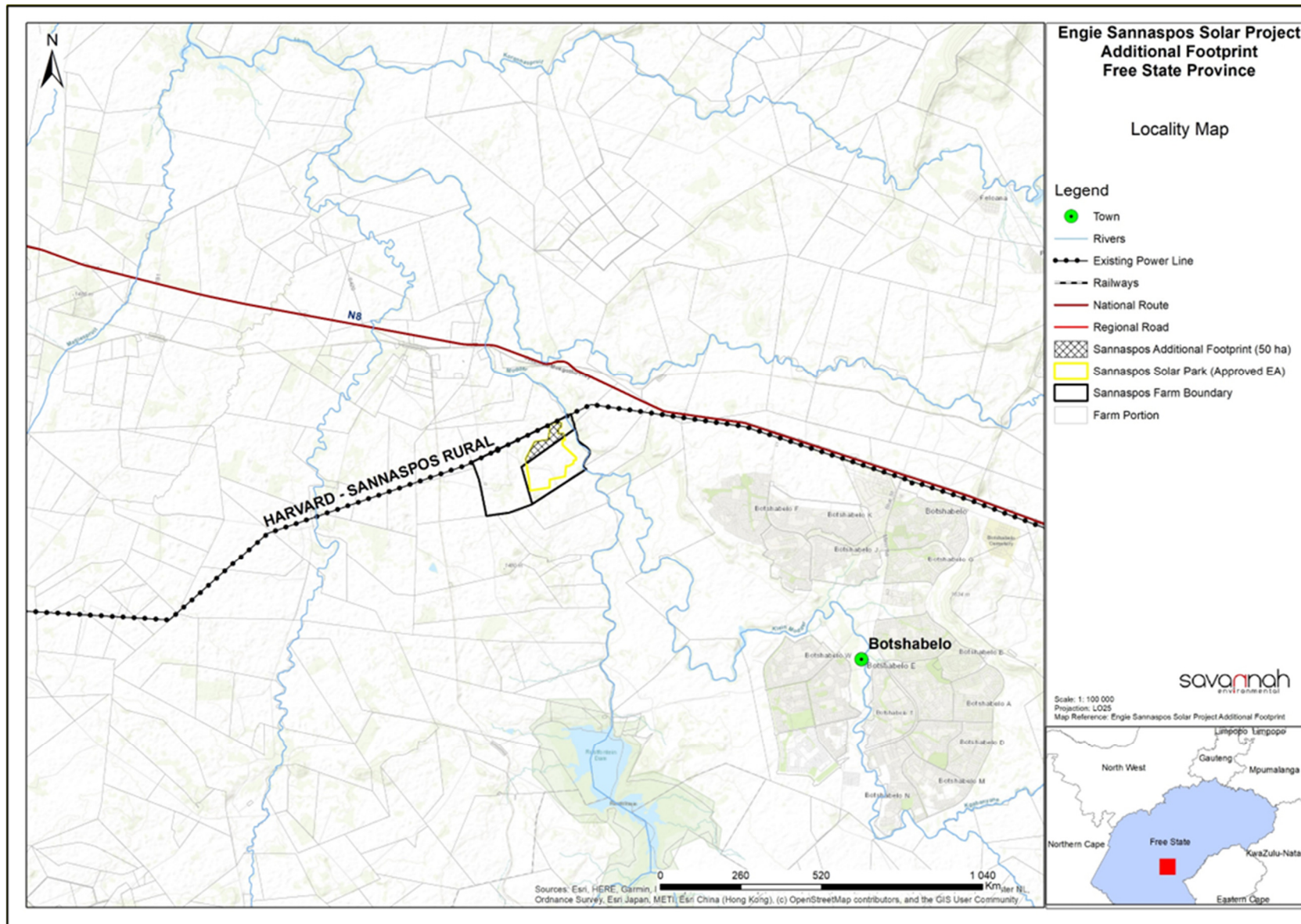


Figure 1.1: Locality map

Table 1.1: Baseline status of the environment assessed through the EIA process.

Aspect	Summary
Ecological baseline	<p>The habitat within the proposed development site is described as open plain grassland within the Central Free State Grassland biome. Vegetation of the study area is dominated by a dense grass layer interspersed with low woody, sometimes spiny dwarf shrubs. The dominant species are a combination of <i>Themeda triandra</i>, <i>Digitaria eriantha</i>, <i>Eragrostis</i> species, <i>Chrysocoma ciliata</i>, <i>Felicia</i> species, and <i>Asparagus</i> species. (Savannah, 2012)</p> <p>i. The terrestrial status or baseline of the environment (biophysical) from the original assessments proposed that the ecological sensitivity of the Project Area of Influence (PAOI) was mix of 'Low', 'Medium' and a small area of 'High' sensitivity. The Central Free State Grassland is relatively short grassland. The site is primarily used for livestock farming. While some red listed species were observed previous reports suggest that "several protected and red-data species potentially occur on the site, apart from those already recorded."- (Savannah, 2012).</p> <p>ii. The Study area was mostly comprised of Mispah and Sterkspruit soils. The pedology status (soil, land use and agricultural characteristics) or baseline of the environment (biophysical) from the original assessments proposed that within the PAOI "the agricultural potential of the Mispah and Sterkspruit, soils is considered medium to low under dryland (650mm/y rainfall) and irrigation conditions (>10-15mm/week 33-1,500kPa plant available water)". - (Viljoen & Associates, 2012)</p> <p>iii. The aquatic status at the Sannaspos site was considered important in previous reports. The proposed development area contains areas where water resources are present and falls within a close proximity to a drainage area, however, development within this area is permissible if the relevant mitigation are adhered to. "The proposed photovoltaic facility development on the site may have significant impacts on the ecology of the site and lower-lying wetlands, if mitigation measures are not strictly adhered to". - (Savannah, 2012)</p>
Social baseline	<p>Mangaung Metropolitan Municipality covers an area of 9 886 km² and has three urban centres (Bloemfontein, Botshabelo and Thaba Nchu) and a surrounding rural area with small towns namely, Dewetsdorp, Wepener, Van Stadensrus and Soutpan/Ikgomotseng. The rural area makes up the largest percentage (97.17%) of the entire municipal area and is characterised by extensive commercial farming in the west, mainly mixed crop production and cattle farming. The Metro is characterised by three different land use types including formalised stands in urban areas, small holdings and farms. The Barolong Tribal Authority oversees 37 villages dispersed across the tribal area. 21 villages are located to the north and 16 villages are located to the south of the tribal area. The rural areas in between the villages are characterized by large stretches of communal grazing land and utilized for cattle.</p> <p>A main road (i.e., the N8) services the study area. N8 highway towards Botsabelo linking into a secondary road S417 (gravel) and an existing access road (gravel) on the proposed farm portion, this will be upgraded and used to access the facility site. Other roads are secondary roads linking with one another and with the N8, giving access to the farmsteads and settlements.</p> <p>There are no built-up areas, towns or mining land uses in close proximity to the study area. Infrastructure includes the Harvard Sannaspos Rural 132kV power line (overhead servitude line). The site is characterised by open grassland to uneven surface bisected by a number of shallow drainage basins. Land use in the general area is dominated by low intensity cattle farming.</p>
Land Use	<p>The primary activity in the region is farming. The area for the proposed site is predominantly covered in natural grassland with a small portion used for cultivation (agriculture). The land-use of the site is cattle and sheep farming.</p>

Aspect	Summary
<p>Heritage</p>	<p>The desktop study yielded information about the existence of heritage resources in the Free State regions. This included archaeological, historical and industrial heritage resources. The south-eastern Free State Province region proved, from a desktop search point of view, to be the most saturated region with known archaeological resources. This study area falls directly in the south east of the province, located some 28km south-east of the capital Bloemfontein. However, even though the south-eastern regions of the Free State are known to be saturated in archaeological sites and resources, the proposed area of development yielded insignificant number of such resources as shown on Figure 5.5. Two Middle Stone Age stone artefact scatters were found on the foothill of a Koppie in the Farm Besemkop. The bulk of sites identified within the proposed development area date to the historic period. Inscriptions were located on top of Besemkop Koppie, these inscriptions only date to 41 years ago and can therefore not be considered to be worth of being given a status of rock art using the 100 year rule as stipulated in the NHRA, No. 25 of 1999. The heritage survey only yielded three significant sites within the proposed development area. These sites include two cemeteries and a stone shed located within the Besemkop farmstead which has consist of modern buildings with exception to the shed itself.</p>
<p>Other planned Projects in the area (during EIA Phase)</p>	<p>In the case of the proposed Sannaspos Solar Energy Facility-Phase 1, another solar energy facility is proposed on Farm 2962 Lejwe adjacent to the proposed project by the same applicant. This project is referred to as the Sannaspos Solar Energy Facility-Phase 2 and has a capacity of 10 MW and will be established within a broader area of 20 ha. Another PV solar project is proposed north-west of the project by the same applicant and is referred to as the Proposed PV Solar Plant near Glen Thorne.</p> <p>Based on the findings of the site visit, the potential cumulative impacts are likely to be low. This is due to the fact that the two other solar energy facilities are located in close proximity of the proposed project (refer to Figure 1.2). The impacts are therefore concentrated on one site as opposed to being spread over a number of sites. The overall effect is therefore the establishment of a single, large solar energy facility as opposed to separate facilities. This will result in a consolidation of the solar projects.</p>

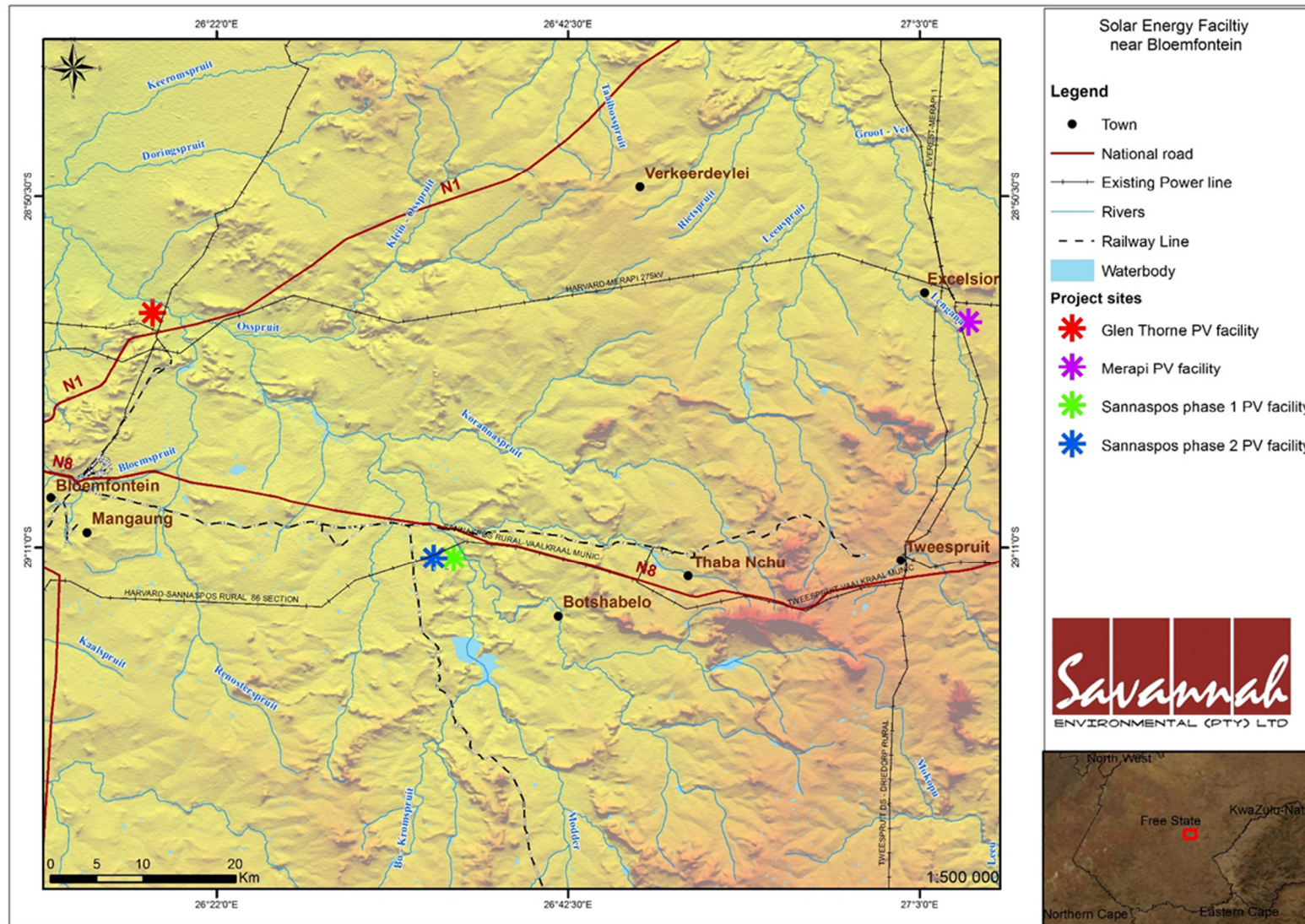


Figure 1.2: The location of the proposed Glen Thorne and Sannaspos phase 2 solar energy facilities relative to the proposed Sannaspos Solar Energy Facility-phase 1

1.2. Summary of potential Environmental Impacts Determined through the Environmental Impact Assessment (EIA) Process

The following environmental impacts relevant to the site and the amendment application were identified and assessed as part of the EIA undertaken by for the project:

- » Ecological
- » Soil and Agricultural Assessment
- » Heritage, Archaeology and Palaeontology
- » Visual
- » Social

The outcome of the assessment are summarised in Table 1.2 overleaf. The EIA concluded the following:

The technical viability of establishing a solar energy facility with a generating capacity of 75 MW (90 installed capacity) on a site located on Portion 0 of Farm 1808 Besemkop and Portion 0 of Farm 2962 Lejwe has been established by SolaireDirect Southern Africa (Pty) Ltd¹. The positive implications of establishing a solar energy facility on the identified site within the Free State include the following:

- » *The potential to harness and utilise solar energy resources within the Free State Province.*
- » *The consolidation of solar facility infrastructure within an area (specifically considering the proximity to both Sannaspos phase 1 and phase 2 solar facilities to be developed).*
- » *The project would assist the South African government in reaching their set targets for renewable energy.*
- » *The project would assist the South African government in the implementation of its green growth strategy and job creation targets.*
- » *The National electricity grid in the Free State Province would benefit from the additional generated power.*
- » *Promotion of clean, renewable energy in South Africa*
- » *Creation of local employment, business opportunities and skills development for the area.*

The findings of the specialist studies undertaken within this EIA to assess both the benefits and potential negative impacts anticipated as a result of the proposed project conclude that there are no environmental fatal flaws that should prevent the proposed project from proceeding, provided that the recommended mitigation and management measures are implemented. The significance levels of the majority of identified negative impacts can be reduced by implementing the recommended mitigation measures. The project is therefore considered to meet the requirements of sustainable development. Environmental specifications for the management of potential impacts are detailed within the draft Environmental Management Programme (EMP) included within Appendix K.

With reference to the information available at this planning approval stage in the project cycle, the confidence in the environmental assessment undertaken is regarded as acceptable.

¹ This refers to the original Applicant name, which has subsequently changed to Sannaspos Solar PV (Pty) Ltd.

Table 1.2: Summary of Impact Assessment for the Sannaspos PV Facility and associated infrastructure

Aspect	Summary
Local Site-specific Impacts	<p>The construction of the Sannaspos Solar Energy Facility-Phase 1 will lead to permanent disturbance of an area of < 150 ha in extent. Permanently affected areas include the area for the PV panels and associated infrastructure, as well as the internal power line route. From the specialist investigations undertaken for the proposed solar energy facility development site, it was determined that the majority of the site is in a natural state, but degraded due to continued heavy grazing. Areas of sensitivity within the proposed development site were identified through the EIA process. These relate to the local ecology (sensitive and protected vegetation, habitat for fauna, and man-made wetlands (degraded) that occurs in the centre of the site.</p> <p>Areas of high sensitivity include rocky outcrops, ridges, and small koppies which are a habitat for several protected species found near the sites. Once these habitats have been physically altered, they cannot be recreated or returned to their former diversity and functionality therefore should be treated as no-go areas. Other sensitive ecological areas include dense vegetation of the riparian areas fringing the drainage channels which is essential in keeping the drainage channel intact and protects it from erosion as well as man-made wetlands on site. These areas should be avoided as far as possible, and where not possible to avoid, impacts on such sites should be minimised to reduce impacts to acceptable levels.</p>
Visual Impacts	<p>Due to its proximity to the site, the S417 is the only observation point located in the foreground of the project. Most of the potential impacts therefore relate to the middle- and background zone of visual influence. The visual analysis and assessment from all of the observation points used within the impact assessment found that portions of the proposed activity are potentially visible and recognisable from Key Observation Points along the N8 and S417. The results of the Visual Impact Assessment for the proposed Sannaspos Solar Energy Facility-phase 1 found that the proposed activity will have a medium to low impact from Key Observation Areas identified in the middle and background (>3km).</p> <p>Another solar energy facility is proposed next to the proposed Sannaspos Solar Energy Facility-Phase 1 which is the subject of a separate environmental process. Based on the findings of the specialist studies undertaken, the potential cumulative visual impacts are likely to be low. This is due to the fact that both solar energy facilities are located next to each other as shown on Figure 7.3 below. The impacts are therefore concentrated on one site as opposed to being spread over a number of sites. The overall effect is therefore the establishment of a single, large solar energy facility in an area as opposed to two separate facilities spread across the region. The potential cumulative impact on the area's sense of place is also mitigated by the existing infrastructure on the site, i.e. existing Eskom substation and power lines.</p>
Impacts on the Social Environment	<p>Impacts on the social environment are expected during both the construction phase and the operational phase of the solar energy facility. Impacts are expected at both a local and regional scale. Impacts on the social</p>

Aspect	Summary
	<p>environment as a result of the construction of the solar energy facility can be mitigated to impacts of low significance or can be enhanced to be of positive significance to the region. Construction crew camps may be established on the site, and if required construction workers may also be housed in the nearest towns or other available/existing accommodation. Construction activities on the site will be largely restricted to daylight hours, and the construction phase is anticipated to extend for a minimum period of 18-months. Negative impacts during construction relate mainly to impacts due to the presence of construction workers and visual impact imposed by the facility on the local environment. The findings of the SIA undertaken for the proposed project indicate that the development will create employment and business opportunities for locals during both the construction and operational phase of the project. This will be a positive impact due to the high unemployment levels in the area. The positive impact due to employment creation will be lower during operation as there will be a limited number of staff required compared to the construction phase.</p>
<p>Impacts on Heritage Resources</p>	<ul style="list-style-type: none"> » From an archaeological perspective, the only sign of sites of heritage potential were the limited scatterings of surface stone tools outside the study area. » Should archaeological sites or graves be exposed during construction work, work in the area must be stopped and the find must immediately be reported to a suitably qualified heritage practitioner such that an investigation and evaluation of the finds can be made.

2. DESCRIPTION OF REQUESTED AMENDMENT

This section of the Motivation Report details the amendments considered within this report and by the specialist site verification investigations (refer to **Appendix A -C**).

2.1. Amendment 1: Extension of the validity of the Environmental Authorisation

Condition 6 of the original EA (Page 5) dated 26 June 2013 (DFFE Reference:14/12/16/3/3/2/360) states that the proposed activity must commence within a period of three (3) years from the date of issue. Thereafter, subsequent amendment applications have been completed and further validity period extensions granted. The current authorised validity period expires on 26 June 2023 (refer to Condition 6 on page 5 of the Amendment EA dated 20 October 2021 (DFFE Reference:14/12/16/3/3/2/360/AM5/1). The amendment therefore requests that the validity period be extended by an additional 2 years until 26 June 2025.

3. MOTIVATION FOR THE REQUESTED AMENDMENT

3.1. Extension of the validity of the Environmental Authorisation

The Sannaspos PV project has been granted a preferred bidder project under Round 5 of the REIPPPP in the Department of Mineral Resources and Energy Renewable Energy Power Producer Procurement Programme (REIPPPP). The Applicant is working towards Financial Close (which was recently extended by the IPP Office to 30 November 2023). However, due to certain delays that are beyond the control of the Applicant, construction will not commence before the EA validity expires. The applicant, Sannaspos Solar PV (Pty) Ltd, therefore requires the validity of the EA to be extended by an additional 2 years to ensure that the project can be implemented and all benefits to be realised.

It should be noted that an EIA for an additional area required for the development of this project was undertaken in 2022 (DFFE Ref No.: 14/12/16/3/3/2/2126). It was confirmed through this process that the status of the affected environment has not changed since the undertaking of the original EIA process for the project.

4. CONSIDERATIONS IN TERMS OF THE REQUIREMENTS OF THE EIA REGULATIONS AND DFFE

In terms of Condition 6 of the EA dated 20 March 2013 and Regulation 29 of the EIA Regulations 2014, as amended, it is possible for an applicant to apply, in writing, to the competent authority for an amendment of the environmental authorisation if the amendment will not change the scope of a valid environmental authorisation nor increase the level or nature of the impact. The amendment to extend the EA validity will not increase the level, nature or significance of impacts which were initially assessed, and the amendment will take place within the authorised development footprint therefore not impacting on any additional stakeholders. An application in this regard has been submitted to the DFFE who have confirmed that the application falls within the ambit of a Part 1 amendment process.

Further to the receipt of the application, the DFFE have requested additional information be provided in the way of a site verification and motivation report, and that a public participation process is required to be undertaken in support of the application.

The results of the review of all specialist studies undertaken in the EIA completed by Savannah Environmental, information from the EIA process completed for the additional area adjacent to the PV facility in 2022, and a current assessment, including a site verification evaluation providing an indication of the status of the receiving environment (by the relative specialists) is included in **Section 5**.

The requirements of the DFFE and where these have been addressed in this report are detailed in Table 4.1.

Table 4.1: Requirements of the DFFE and where these have been addressed in this report

Requirements of the Department	Reference to Report section where this is addressed
A detailed motivation as to why the Department should extend the commencement period of the authorised development, including the advantages and disadvantages associated with the approval or refusal to the request for extension	Sections 5 and 6
The status (baseline) of the environment (social and biophysical) that was assessed during the initial assessment (by the relative specialist, if applicable)	Section 1.1
The current status of the assessed environment (social and biophysical) (by the relative specialist, if applicable)	Section 5.1
A review of all specialist studies undertaken, and a detailed assessment, including a site verification report providing an indication of the status of the receiving environment (by the relative specialist, if applicable);	Section 5 Appendix A-D
The terms of reference for the specialist reports and declaration of interest of each specialist must be provided	Section 5 Appendix A-D Appendix G
The report mentioned above, must indicate if the impact rating as provided in the initial assessment remains valid; if the mitigation measures provided in the initial assessment are still applicable; or if there are any new mitigation measures which need to be included into the EA, should the request to extend the commencement period be granted by the Department	Section 5 Appendix A-D

Requirements of the Department	Reference to Report section where this is addressed
An indication if there are any new assessments/guidelines which are now relevant to the authorised development which were not undertaken as part of the initial assessment, must be taken into consideration and addressed in the report;	Section 5 Appendix A-D
A description and an assessment of any changes to the environment (social and biophysical) that has occurred since the initial EA was issued;	Section 5 Appendix A-D
<p>A description and an assessment of the surrounding environment, in relation to new developments or changes in land use which might impact on the authorised project, the assessment must consider the following:</p> <ul style="list-style-type: none"> o similar developments within a 30km radius; o Identified cumulative impacts must be clearly defined, and where possible the size of the identified impact must be quantified and indicated, i.e., hectares of cumulatively transformed land. o Detailed process flow and proof must be provided, to indicate how the specialist's recommendations, mitigation measures and conclusions from the various similar developments in the area were taken into consideration in the assessment of cumulative impacts and when the conclusion and mitigation measures were drafted for this project. o The cumulative impacts significance rating must also inform the need and desirability of the proposed development. • oA cumulative impact environmental statement on whether the proposed development must proceed. 	Section 5 Appendix A-D
Consent from all affected landowners (where applicable)	Included in the application form
The Public Participation Process must be conducted in terms of Chapter 6 of the EIA Regulations, 2014 as amended	Detailed in Section 7 and the CRR (Appendix E5)
A comments and response report.	Appendix E5

4.1. Details of Environmental Assessment Practitioner and Expertise to conduct the Amendment Process

In accordance with Regulation 12 of the 2014 EIA Regulations (GNR 326), the applicant, the applicant has appointed Savannah Environmental (Pty) Ltd as the independent environmental consultant responsible for managing the Application for Amendment; inclusive of the required independent specialist studies and public participation process.

Neither Savannah Environmental nor any of its specialists are subsidiaries or are affiliated to the applicant. Furthermore, Savannah Environmental does not have any interests in secondary developments that may arise out of the authorisation of the proposed facility.

Savannah Environmental is a specialist environmental consulting company providing a holistic environmental management service, including environmental assessment, and planning to ensure compliance and evaluate the risk of development, and the development and implementation of environmental management tools. Savannah Environmental benefits from the pooled resources, diverse skills and experience in the environmental field held by its team. The Savannah Environmental team for this project includes:

- » **Jo-Anne Thomas**, the principle EAP on this Project, is a registered EAP with the Environmental Assessment Practitioners Association of South Africa (EAPASA - 2019/726). She provides technical input for projects in

the environmental management field, specialising in Strategic Environmental Advice, Environmental Impact Assessment studies, environmental auditing and monitoring, environmental permitting, public participation, Environmental Management Plans and Programmes, environmental policy, strategy and guideline formulation, and integrated environmental management. Her key focus is on integration of the specialist environmental studies and findings into larger engineering-based projects, strategic assessment, and providing practical and achievable environmental management solutions and mitigation measures. Responsibilities for environmental studies include project management (including client and authority liaison and management of specialist teams); review and manipulation of data; identification and assessment of potential negative environmental impacts and benefits; review of specialist studies; and the identification of mitigation measures.

- » **Cornelius Holtzhausen** is registered with the International Association for Public Participation (IAP2SA145), South Africa and holds an MSocSci in Cultural Anthropology as well as a postgraduate degree in Social Impact Assessment and Public Participation. He has produced a growing list of social impact reports for a wide range of projects and is currently employed as a Social and Public Participation Consultant at Savannah Environmental.

CVs of the Savannah Environmental project team are included in **Appendix F**.

5. POTENTIAL FOR CHANGE IN THE SIGNIFICANCE OF IMPACTS AS ASSESSED IN THE EIA AS A RESULT OF THE REQUESTED AMENDMENT

The DFFE in reference to Regulation 30(1)(a) requires assessment of the impacts related to the proposed amendments. Understanding the nature of the proposed amendments and the impacts associated with the project (as assessed within the EIA), the following has been considered:

- » Ecology (including flora and fauna, avifauna, freshwater and soils)
- » Heritage, Archaeology and Palaeontology
- » Visual
- » Social

The potential for change in the significance and/or nature of impacts based on the proposed amendment as described within the site verifications undertaken by the various specialists and this Motivation Report is discussed below and detailed in the specialist's assessment reports (conducted in 2023) contained in **Appendix A - D**². These reports consider both the PV facility and the grid connection infrastructure. This section of the Motivation Report must be read together with the specialist reports contained in **Appendix A - D** in order for the reader to obtain a complete understanding of the proposed amendments and the implications thereof.

5.1. Current State of the Environment

Table 5.1 summarises the current status of the project environment.

Table 5.1: Current status of the environment

Aspect	Summary
Ecology (including fauna, vegetation, soils and agriculture, and freshwater)	<p>Based on the most recent available reports (TBC, 2022 - 1/2) the current status of the assessed environment (biophysical) was largely confirmatory of the original 2012 reports, suggesting that little to no change has occurred within the PAOI between 2012 to present.</p> <p>i. The POAI overlaps with "sensitive habitats and other areas of high biodiversity potential". "One threatened species of avifauna were observed to occur and utilise the habitats within the assessment area during the survey period. <i>Sagittarius serpentarius</i> (Secretarybird) possess high priority scores indicating that they are particularly susceptible to collisions with powerlines." "The mitigations, management and associated monitoring regarding these operational impacts will be the most important factor of this project and must be considered by the issuing authority." - (TBC, 2022-1)</p> <p>ii. "In total four (4) water resources were identified and delineated for the project. These included both natural and artificial systems, with the artificial systems comprising of impoundments and drainage features. Three (3) natural wetland hydrogeomorphic (HGM) units belonging to three HGM types (unchanneled valley bottom, depression and seepage) were identified within the 500 m regulated area." "A 30 m buffer width was recommended for the project. All identified natural wetland units and the Modder River were classified as having a High sensitivity". With regards to aquatics, "the significance of all post-mitigation risks was determined to be low" - (TBC, 2022-1).</p>

² It must be noted that the original specialists who undertook the EIA studies and subsequent amendments have been used for these assessments as far as possible. However, where the original specialists were not available for whatever reason, suitably qualified and experienced specialists have been used to provide an assessment of the proposed amendments.

Aspect	Summary															
	<p>iii. With regards to agricultural potential "only 'Low' sensitivities were determined throughout the project area by means of baseline findings." As such "the proposed activities will have an acceptable impact on soil resources and that the proposed activities should proceed as have been planned."- (TBC, 2022-2).</p> <p>No changes to the environment (biophysical) since the initial EA was issued were detected or noted based on the available reports and information.</p>															
Heritage	Archaeological and palaeontological heritage resources reflect the environments of the past and are unlikely to change drastically in as short a geological time span as 10 years. Some changes to the visible heritage resources may take place through processes of erosion and deposition but these finds tend to represent heavily disturbed contexts.															
Visual	<p>The description of the affected environment, as described in the original VIA report remains unchanged. There have been no change in land use for the proposed development site, no new developments have been constructed on or near the development site, and the land use zonation (agriculture) remains the same.</p> <p>The above conclusion was verified through consultation with the project proponent and the current land owner(s), as well as the observation of satellite imagery of the study area taken during 2012 and 2023.</p>															
Social	Archaeological and palaeontological heritage resources reflect the environments of the past and are unlikely to change drastically in as short a geological time span as 10 years. Some changes to the visible heritage resources may take place through processes of erosion and deposition but these finds tend to represent heavily disturbed contexts															
Other planned Projects in the area (during EIA Phase)	<p>The following project are proposed within a 30km radius of the project site (refer to Figure 5.1)³:</p> <table border="1"> <thead> <tr> <th>Project Name</th> <th>Distance from the proposed site</th> <th>Project Status</th> </tr> </thead> <tbody> <tr> <td>Sannaspos Solar PV (Pty) Ltd PV Phase 1 (DFFE reference number (DFFE Reference No.: 14/12/16/3/3/2/360/1).</td> <td>Located within the project site and adjacent to the additional footprint</td> <td>Environmental Authorisation issued</td> </tr> <tr> <td>Pulida Solar Farm (Pty) Ltd on The Remainder of The Farm Klipdrift 20, Letsemeng Local Municipality, Xhariep District Municipality, Free State Province (DFFE reference No. 14/12/16/3/3/2/391)</td> <td>12 km South</td> <td>Project operational</td> </tr> <tr> <td>Terra Works Proposed Establishment of a Photovoltaic Solar Plant in Batshabelo, Mangaung Local Municipality, Free State. (DFFE reference number: 12/12/20/2514)</td> <td>8.44 Km East</td> <td>Environmental Authorisation issued</td> </tr> <tr> <td>Serurubele Solar Power Plant (Pty) Ltd proposed Serurubele Photovoltaic Solar Energy Facility Near Bloemfontein within Mangaung Metropolitan in Free State Province. (DFFE reference number: 14/12/16/3/3/2/675)</td> <td>23.68 km West</td> <td>Environmental Authorisation issued</td> </tr> </tbody> </table>	Project Name	Distance from the proposed site	Project Status	Sannaspos Solar PV (Pty) Ltd PV Phase 1 (DFFE reference number (DFFE Reference No.: 14/12/16/3/3/2/360/1).	Located within the project site and adjacent to the additional footprint	Environmental Authorisation issued	Pulida Solar Farm (Pty) Ltd on The Remainder of The Farm Klipdrift 20, Letsemeng Local Municipality, Xhariep District Municipality, Free State Province (DFFE reference No. 14/12/16/3/3/2/391)	12 km South	Project operational	Terra Works Proposed Establishment of a Photovoltaic Solar Plant in Batshabelo, Mangaung Local Municipality, Free State. (DFFE reference number: 12/12/20/2514)	8.44 Km East	Environmental Authorisation issued	Serurubele Solar Power Plant (Pty) Ltd proposed Serurubele Photovoltaic Solar Energy Facility Near Bloemfontein within Mangaung Metropolitan in Free State Province. (DFFE reference number: 14/12/16/3/3/2/675)	23.68 km West	Environmental Authorisation issued
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³ Source: The DFFE's Environment Geographic Information Systems (EGIS) website (<https://egis.environment.gov.za/>).

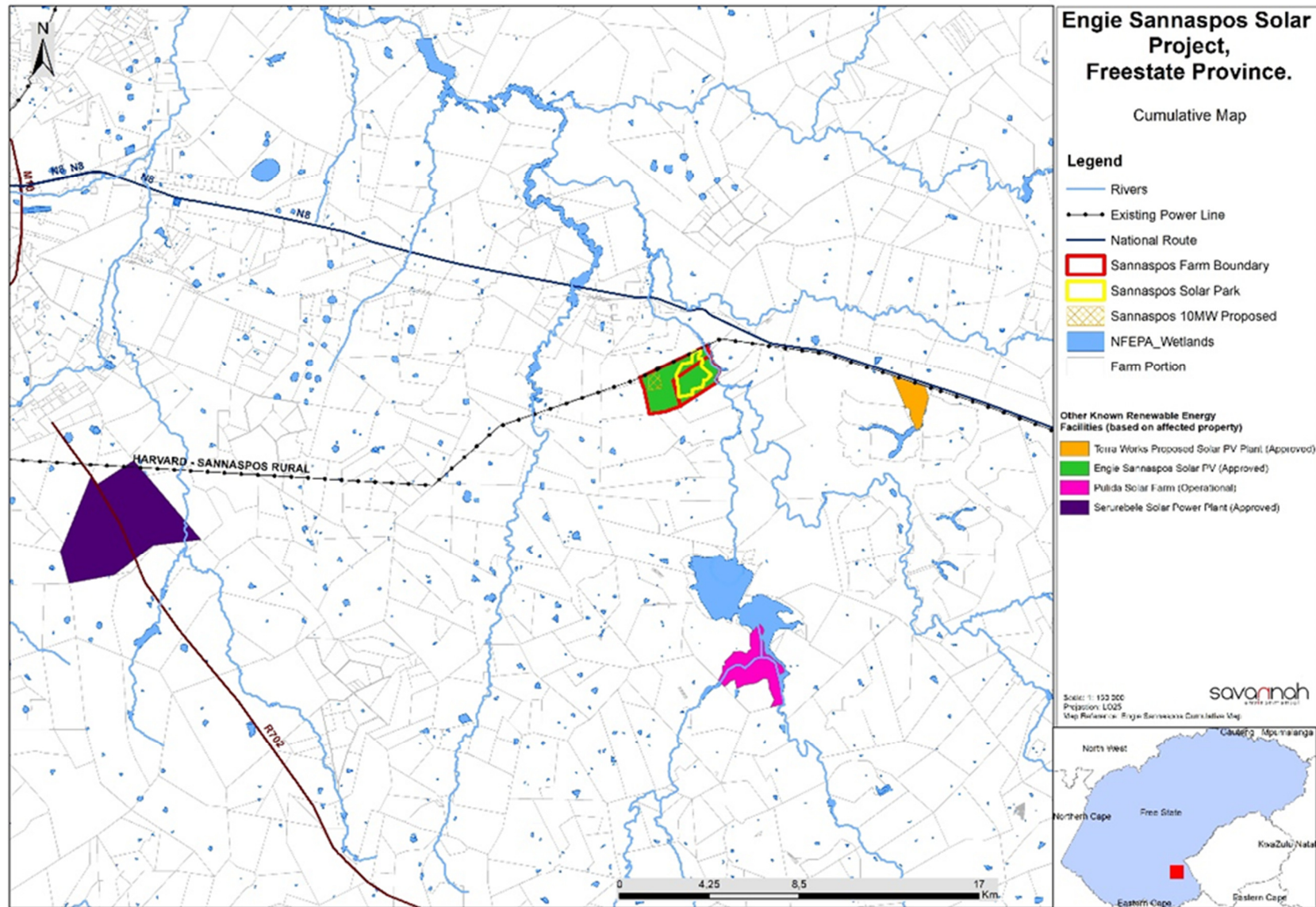


Figure 5.1: Cumulative map illustrating other approved and/or constructed PV facilities located within the vicinity of the Sannaspos PV site

5.2. Impacts on Ecology (including fauna, vegetation, soils and agriculture, and freshwater)

The Biodiversity Company was appointed to provide specialist inputs regarding ecological aspects for this Amendment Application. The Site Sensitivity Verification (**Appendix A**) for the Sannapos PV site does not include a full impact assessment and associated tables due to its nature as a Site Sensitivity Verification.

The conclusions of the Site Sensitivity Verification for the Sannaspos site are as follows:

- » The Project Area was identified with the Environmental Screening Tool as possessing a of 'Very High' sensitivity within a Terrestrial Biodiversity Theme. The Very High sensitivity was due to overlap with Ecological Support Areas and a National Protected Area Expansion Strategy;
- » The Project Area was identified with the Environmental Screening Tool as possessing a Medium sensitivity within the Animal Theme. The designation of a medium sensitivity was due to the presence of Ludwig's Bustard *Neotis ludwigii*;
- » The Project Area was identified with the Environmental Screening Tool as possessing a mosaic of 'Low', 'Medium' and 'High' sensitivity within the Agricultural Theme. The 'High' sensitivity was due to the presence of "annual crop cultivation/Planted pasture rotation";
- » The Project Area was identified with the Environmental Screening Tool as possessing a 'Low' sensitivity within the Aquatic Biodiversity Theme; and
- » The Project Area was identified with the Environmental Screening Tool as possessing a 'Low' sensitivity within the Avian Sensitivity Theme.

Table 5.2: Summary of the Screening Tool Sensitivity versus the Specialist assigned Site Ecological Importance (SEI) for the proposed Solar Power Plant (SPP) Project Area

Screening Tool Theme	Screening Tool	Specialist	Tool Validated or Disputed by Specialist - Reasoning
Animal Theme	Medium	Medium	Validated
Aquatic theme	Low	High	Disputed – "wetlands may be directly impacted on by the proposed development"
Avian Theme	Low	Medium	Disputed – confirmation of SCC on site, but more related to wind farm development than solar PV.
Terrestrial Theme	Very High	Very High	Validated
Agricultural theme	Medium-High	Low	Disputed – Previous findings suggest that Low' sensitivities were determined throughout the project area

The Site Ecological Importance (SEI) as provided by the Species Environmental Assessment Guidelines (SANBI, 2020) was determined for the Project Area. This will provide the most appropriate and up to date sensitivity information. A multi-taxon approach was considered for the SEI determination.

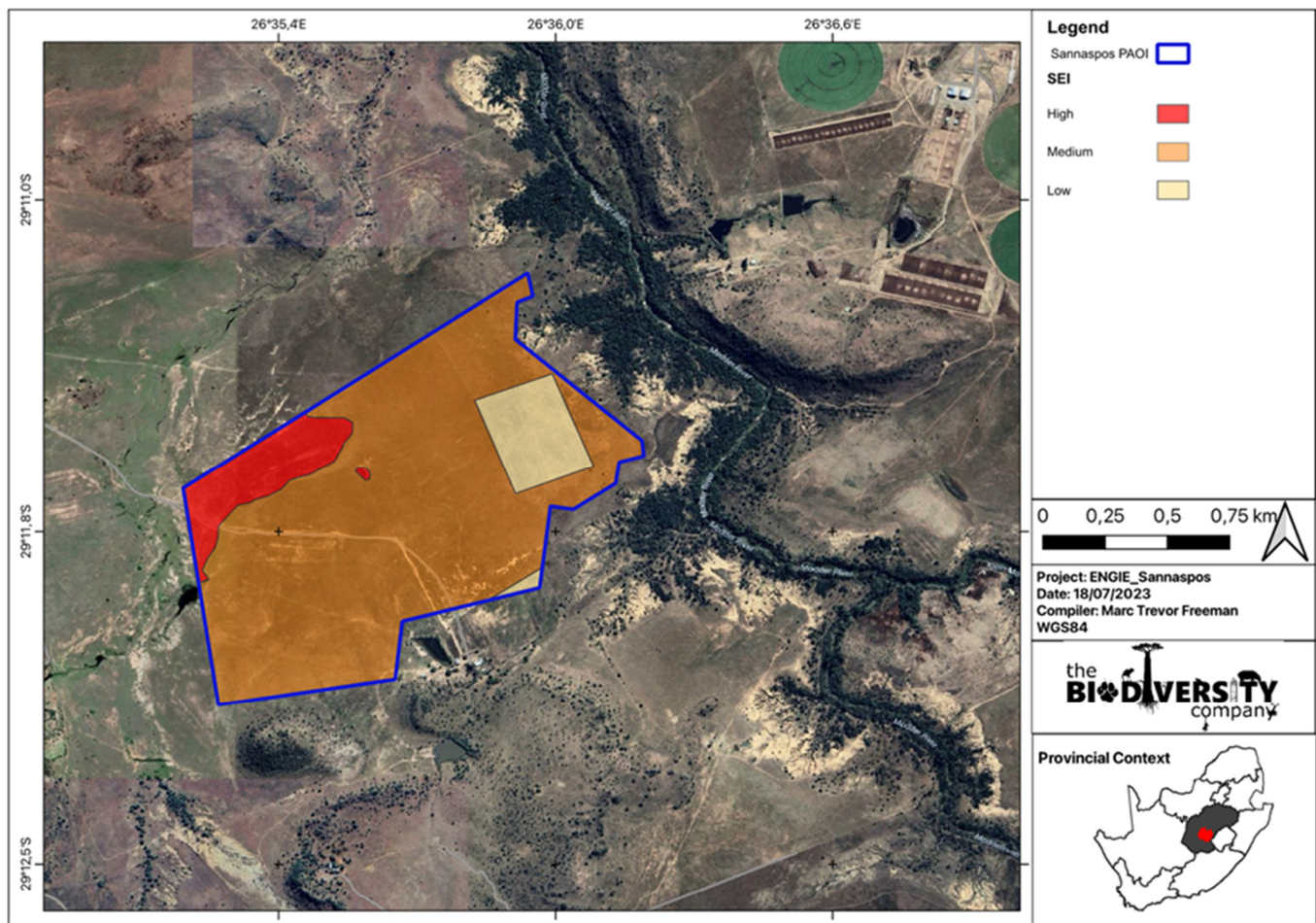


Figure 5.2: Map illustrating the Site Ecological Importance (SEI) for the proposed Project Area

Based on the layout design, there is overlap of infrastructure with 'High', 'Medium' and 'Low' SEI areas. Appropriate mitigation measures would be to minimise the footprints of these as much as possible and rehabilitation of degraded areas.

There are no new considerations or guidelines that need to be incorporated for this Part 2 amendment for the proposed Sannaspos PV development.

The initial impact ratings for terrestrial, pedology and aquatics sections of the project provided in the original reports remain valid. As such mitigation measures prescribed by each of the reviewed specialist reports remain applicable and must be adhered to. An assessment of the surrounding environment, in relation to new developments or changes in land use which might impact on the authorised project was conducted through cumulative impacts. Cumulative impacts were assessed as part of the initial studies and are again assessed as part of the Sensitivity Verification Report. The total area within the 30 km buffer around the project area amounts to 295,721 ha, but when considering the transformation (71,074 ha) that has taken place within this radius, 224,647 ha of intact habitat remains, according to the 2018 National Biodiversity Assessment. Therefore, the area within 30 km of the project has experienced approximately 24,03% loss in natural habitat. The proposed solar developments will result in a further cumulative loss of approximately 1,05% from only similar developments (Solar, approved and in process) in the area, as such the cumulative impact from the proposed development is rated as medium. This means that the careful spatial

management and planning of the entire region must be a priority, and existing large infrastructure projects must be carefully monitored over the long term.

All prescribed mitigation measures and supporting recommendations presented will help to achieve an acceptable residual impact. These measures and recommendations will remain applicable for the requested extension of the EA. In order to manage the impacts effectively, additional best practice mitigation management is recommended for the general impacts associated with flora and fauna.

5.2.1. Conclusion

It is the opinion of the specialist that based on the observations made from the desktop studies, available information and the findings of the previous reports, that the ecological (terrestrial, pedology and aquatic) status of the site has not decreased or changed since the original report in 2012. In consideration that the project has been previously authorised the proposed development may proceed, under the condition that all mitigation measures provided in this report and previous reports are adhered to

5.3. Heritage Impacts

CTS Heritage was appointed to provide specialist inputs regarding heritage aspects for this Amendment Application (**Appendix B**).

The area proposed for the Sannaspos PV Facility was thoroughly assessed for impacts to heritage resources in a Heritage Impact Assessment conducted by Tomose (2013) and a Palaeontological Impact Assessment by Bamford (2021). The heritage resources identified have been appropriately mitigated through the recommendations in the HIA (Tomose, 2013) as well as the subsequent assessments by CTS Heritage as well as the completed Heritage Management Plan (2021).

No additional heritage cumulative impacts were identified by the specialist as a result of the proposed extension. Therefore, the cumulative impacts identified by the Heritage Impact Assessment (2013) remain unchanged and would be applicable for the proposed extension.

5.3.1. Conclusion

It is the opinion of this specialist that additional heritage resources are unlikely to have revealed themselves since the assessment completed in 2013.

5.4. Visual Impacts

LOGIS was appointed to provide specialist inputs regarding visual aspects for this Amendment Application (**Appendix C**).

Three dominant *view corridors* were identified (in the VIA report) within the region, namely:

- » **N8.** The main movement corridor between Bloemfontein and Maseru and also the alignment of various tourism and heritage routes.
- » **S417.** A secondary road between the N8 in the north and the Rustfontein Dam in the south.

- » **S418.** A secondary road between Sannaspos in the north and the R702 in the south.

Additional (or selected) *Key Observation Points* (KOPs) included as **Annexure 2** to the VIA report included:

- » KOP 1. Located along the N8 highway approximately 3.2km east of the project site.
- » KOP 6. Located at the intersection of the S417 and the N8 north of the project site.
- » KOP 7. Located at the entrance to the Sannaspos railway station of the N8.
- » KOP 10. Located adjacent to the project site along the S417.

The visual impact analysis of the **original VIA** and *assessment from the relevant observation points in the foreground and middle ground* is summarised as follows:

- » Visibility: Medium to low
- » Visual exposure: Medium
- » Visual absorption capacity: Medium to high
- » Visual sensitivity of receptors: Medium
- » Visual intrusion: Low
- » Significance of impact: Low

Additional potential sensitive visual receptors (and potential magnitude of the impact) identified during **this Visual Assessment** include:

Potentially **very high** magnitude (receptors located within 1km of the proposed development):

- » 1 – S417 Secondary Road (as per the original VIA report)
- » 2 – Mamend Homestead

Potentially **high** magnitude (receptors located within 1 - 3km of the proposed development):

- » 3 - N8 National Road (as per the original VIA report)

Potentially **moderate** magnitude (receptors located within 3 - 5km of the proposed development):

- » 4 – Rasanna Homestead
- » 5 - Sannaspos Station and Dwellings (as per the original VIA report)
- » 6 - Likharlong Homestead
- » 7 - Unknown Homestead 1
- » 8 - Unknown Homestead 2

Potentially **low** magnitude (receptors located beyond 5km of the proposed development):

- » 9 - Klipkraal Homestead
- » 10 - Rampaii Homestead
- » 11 - Omega Homestead
- » 12 - Lower Malika Homestead

The visual impact index and the receptors mentioned above are indicated on **Figures 5.3 and 5.4** below.

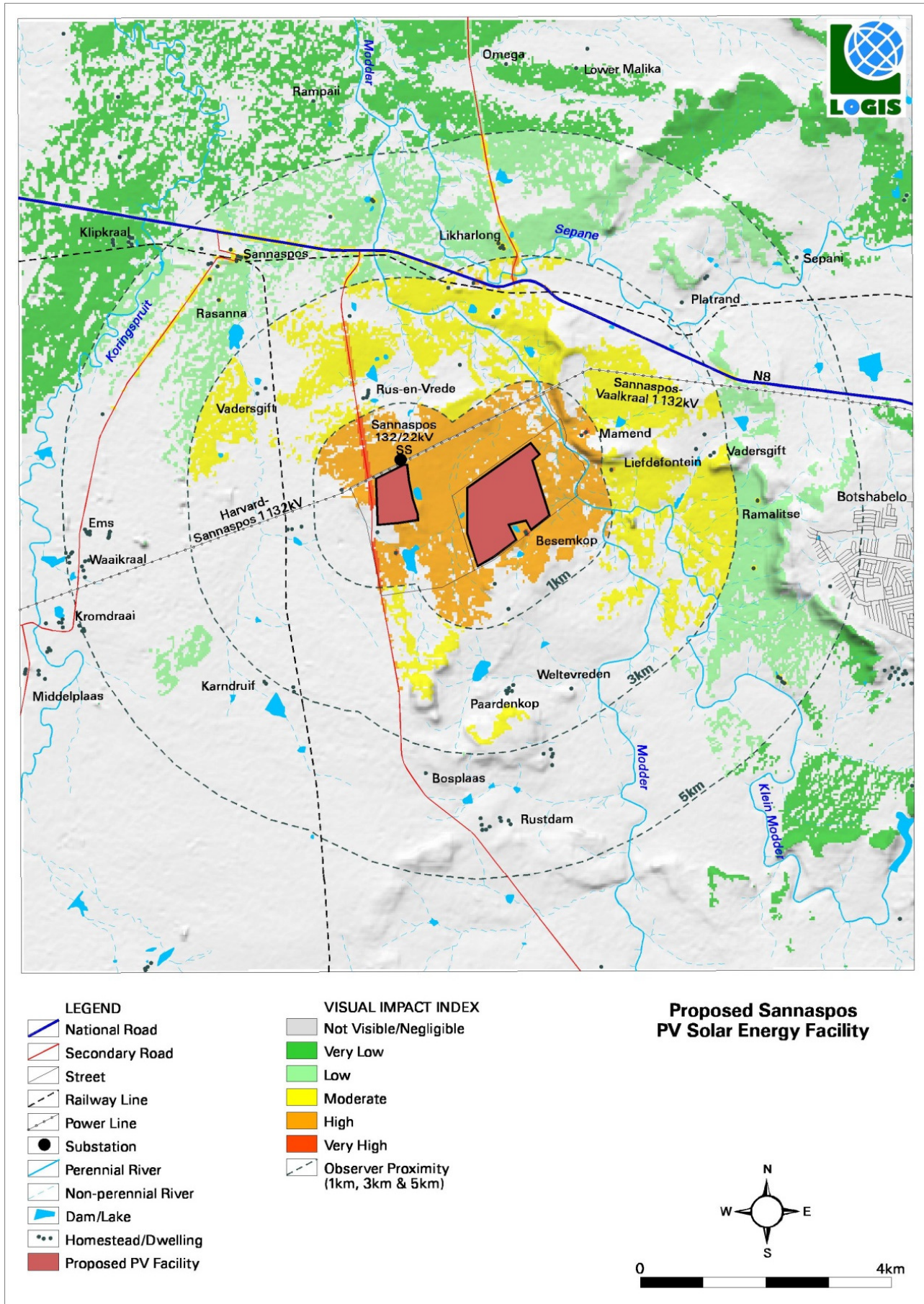


Figure 5.3: Visual impact index.

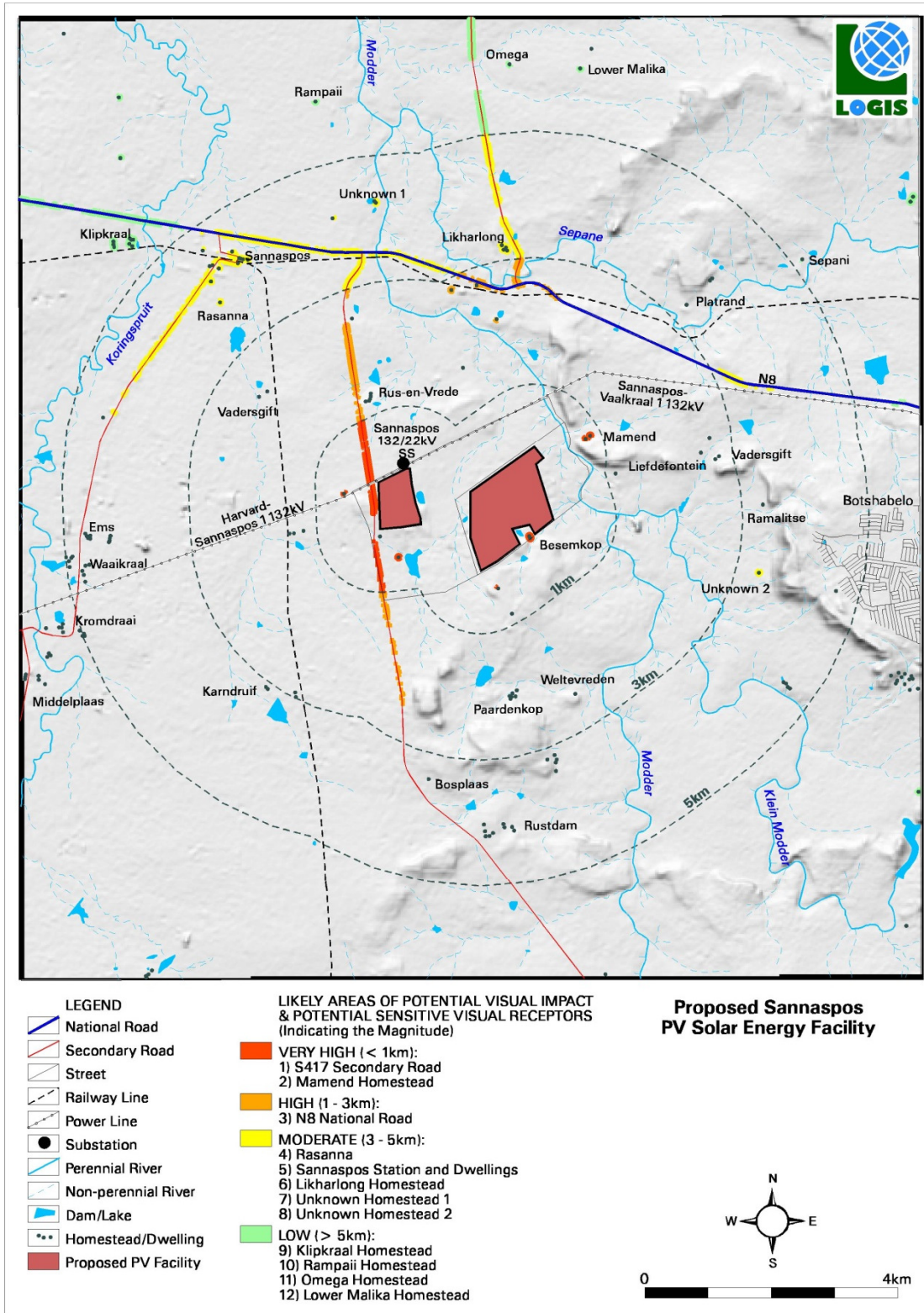


Figure 5.4: Likely areas of potential visual impact and potential sensitive visual receptors.

In spite of the fact that some of the additional receptors sites may experience visual impacts of **very high** to **high** magnitude, these impacts may still only be of **moderate** (medium) significance. This is due to the fact

that none of the recipient sites (e.g. adjacent land owners)⁴ have objected to the proposed development. The likelihood of the impact occurring is therefore low.

The proposed extension of the validity of the EA by an additional ten years is therefore not expected to alter the influence of the project infrastructure on *areas of higher viewer incidence* (observers traveling along the roads within the region) or *potential sensitive visual receptors* (residents of homesteads in closer proximity to the infrastructure).

The proposed amendment to the validity of the EA is consequently not expected to influence the anticipated visual impact, as stated in the original VIA report (i.e. the visual impact is expected to occur regardless of the amendment). This statement relates specifically to the assessment of the visual impact within a 1km (and potentially up to 3km) radius of the SEF structures (potentially low significance), but also generally apply to potentially *low to very low* visual impacts at distances of up to 5km from the structures.

From a visual perspective, the proposed amendment will therefore require no (zero) changes to the significance rating within the original visual impact assessment report that was used to inform the approved EIA. In addition to this, no new mitigation measures are required.

There are no new assessment guidelines which are now relevant to the authorised development which were not undertaken as part of the initial visual impact assessment. Additional to this, and as stated above, there have been no changes to the environment of the region surrounding the proposed development site, or on the farm earmarked for the PV Facility.

Cumulative visual impact

There are three authorised/approved (not yet constructed) solar energy facility developments within a 30km radius of the proposed Sannaspos PV SEF. These include⁵:

- » The Proposed Serurubele Photovoltaic Solar Energy Facility near Bloemfontein within Mangaung Metropolitan in Free State Province
- » The Proposed Establishment of a Photovoltaic Solar Plant in Batshabelo, Mangaung Local Municipality, Free State
- » The Proposed Establishment of a Renewable Energy Facility (Pulida Solar Farm) on the Remainder of the Farm Klipdrift 20, Letsemeng Local Municipality, Xhariep District Municipality, Free State Province

The last facility mentioned above appears to be an error in the REEA_OR_2022_Q3 database, as it is not located in the correct local municipality.

The first two facilities are located respectively 22km south-west and 8.2km east of the proposed Sannaspos PV SEF. None of these facilities (i.e. the Sannaspos, Serurubele or Batshabelo SEFs) would be visible from each other. Further to this, the relatively constrained area of potential visual exposure of the Sannaspos development (and the constrained dimensions of the PV arrays) is unlikely to be of high significance in terms of cumulative visual impacts within the larger region.

⁴ To the specialist's knowledge and according to the Comments and Responses Report.

⁵ The names are provided verbatim from the REEA_OR_2022_Q3 database.

5.4.1. Conclusion

The proposed amendment will require no changes to the impact significance ratings as stated within the original VIA report which was used to inform the approved EIA. In addition to this, no new mitigation measures are required.

It is suggested that the amendment to the validity of the EA be supported, subject to the conditions and recommendations as stipulated in the original EA, and according to the Environmental Management Programme (EMPr) and suggested mitigation measures, as provided in the original VIA report.

5.5. Social Impacts

Cornelius Holtzhausen of Savannah Environmental was appointed to provide specialist inputs regarding social aspects for this Amendment Application (**Appendix D**)⁶.

The EIA and SIA released in 2012 as part of the original EA granted in 2013, identified, assessed and suggested the mitigation/enhancement of the following Socio-Economic Impacts:

Social impacts during the **construction phase**:

Potential positive impacts

- » Creation of employment and business opportunities and opportunity for skills development and on-site training

Potential negative impacts

- » Impacts associated with the presence of construction workers on site
- » Increased risk of stock theft, poaching and damage to farm infrastructure associated with presence of construction workers on the site
- » Increased risk of veld fires associated with construction-related activities
- » Threat to safety and security of farmers associated with the presence of construction workers on site
- » Impact of heavy vehicles, including damage to roads, safety, noise and dust
- » Potential loss of grazing land associated with construction-related activities.

Social impacts during the **operation phase**:

Potential positive impacts

- » Creation of employment and business opportunities.
- » The operational phase will also create opportunities for skills development and training;
- » Benefits associated with the establishment of a Community Trust;
- » The establishment of renewable energy infrastructure.

Potential negative impacts

- » The visual impacts and associated impact on the sense of place;
- » Potential impact on tourism.

Impacts on the social environment are expected during both the construction phase and the operational phase of the solar energy facility. Impacts are expected at both a local and regional scale. Impacts on

⁶ External peer review by Dr Sithandiwe Khoza, a Senior Independent Social Consultant

the social environment as a result of the construction of the solar energy facility can be mitigated to impacts of low significance or can be enhanced to be of positive significance to the region. Construction crew camps may be established on the site, and if required construction workers may also be housed in the nearest towns or other available/existing accommodation. Construction activities on the site will be largely restricted to daylight hours, and the construction phase is anticipated to extend for a minimum period of 18-months. Negative impacts during construction relate mainly to impacts due to the presence of construction workers and visual impact imposed by the facility on the local environment. The findings of the SIA undertaken for the proposed project indicate that the development will create employment and business opportunities for locals during both the construction and operational phase of the project. This will be a positive impact due to the high unemployment levels in the area. The positive impact due to employment creation will be lower during operation as there will be a limited number of staff required compared to the construction phase.

Specialist Opinion on Previously Identified Impacts

Based on the available secondary data sources, the demographics in the area are similar to the early 2010s, and the same can be said about the baseline economic data, service delivery access, and other facets of society. While there have been a few more solar developments in the area, the cumulative effect of these tends to have a positive impact on the environment and the social status of the area.

The author sees no reason to doubt or contradict the findings as laid out in the original DEIA and Scoping Report that formed part of the EA authorized in 2013. The author concurs with the impacts and ratings as identified. The rural nature of the project meant that few of the socio-economic indicators related to the project have significantly changed since the undertaking of the original EA. Similarly, no new communities or other developments have been established close to or on the project site. As such, it is unlikely that new social impacts have arisen, similarly, no changes to the original assessment ratings are likely.

The amendment would give the developers more time to bring the project to financial closure and thus for the impacts resulting from the project to occur. The Sannaspos Solar PV project is unlikely to result in permanent damaging social impacts and has the potential to result in significant positive impacts both as a lone project and cumulatively. The project will likely result in a number of socio-economic opportunities for the region, which in turn will result in social benefits. The positive cumulative impacts include the creation of employment, skills development and training opportunities, and downstream business opportunities. The cumulative benefits to the local, and regional economy through employment and procurement of services are more considerable than that of the Sannaspos Solar PV project alone.

5.5.1. Conclusion

To conclude, the specialist assessed the proposed amendments and confirms that there is no significant change to the affected social environment or the scope and nature of the proposed project. Therefore, from a socio-economic perspective, there is no reason why the proposed amendment should not be authorised.

6. CONCLUSION AND MOTIVATION FOR APPROVAL OF THE REQUESTED AMENDMENTS

Sannaspos Solar PV (Pty) Ltd received an Environmental Authorisation for the proposed Sannaspos PV Plant Phase 1 and associated infrastructure, located on Portion 0 of Farm 1808 Besemkop and Portion 0 of Farm 2962 Lejwe, within the Mangaung Metropolitan Municipality, Free State Province in May 2013 (DFFE Reference No.: 14/12/16/3/3/2/360/1). The project has been granted a preferred bidder project under Round 5 of the REIPPPP in the Department of Mineral Resources and Energy Renewable Energy Power Producer Procurement Programme (REIPPP) and is registered as a Strategic Infrastructure Project. The Applicant is working towards achieving Financial Close on 30 November 2023. However, due to certain delays that are beyond the control of the Applicant, construction will not commence before the EA validity expires. The applicant, Sannaspos Solar PV (Pty) Ltd, therefore requires the validity of the EA to be extended by an additional 2 years until 26 June 2025.

The following are the key motivating factors which indicate the advantages to granting the requested amendment:

1. Impacts identified within the original report are still applicable for the proposed project, as concluded by the specialists who provided inputs to this motivation for amendment (refer to Appendix A-D and Table 6.1). **No additional impacts or changes in impact significance will result because of the amendments as the environment has not changed.** Following specialist inputs for the proposed amendment, provided that mitigation measures as documented in the EMPr and as required in the specialist reports are implemented, the recommendation is that the amendment be approved.
2. There is no objection to the proposed amendment by any of the specialist consultants who have completed a site sensitivity verification assessment as part of this amendment application process.
3. The development has the ability to create employment, opportunities for contractors in the region, ownership opportunities for local communities, skills, supplier and enterprise development spend and the implementation of socio-economic development initiatives. As the project is a Preferred Bidder, these benefits will definitely be realised should the amendment be granted.
4. All the potential cumulative impacts associated with the project planned within the area (30km radius) will not change as a result of the proposed amendment due to the limited number of projects proposed within this broader region.

Based on the nature of the requested amendment for the Sannaspos PV Plant and associated infrastructure, the specialist findings confirmed that the environment has not materially changed since the undertaking of the EIA in 2012, the impact ratings as provided in the initial assessment remain valid, and the mitigation measures provided in the initial assessment are still applicable.

Therefore, taking into consideration the conclusions from the specialist site verification and motivation reports (**Appendix A - D**) and the findings of this report, it is concluded that the proposed amendment to the validity of the EA is not expected to result in an increase to the significance ratings for the identified potential impacts, and should accordingly be approved.

Table 6.1: Comparative summary of impact significance from the original EIA and this amendment process

Nature	ORIGINAL EIA	AMENDMENT
	With mitigation	With mitigation
Impacts on Ecology: Upgrading of external Access Road		
Loss of vegetation, increase in runoff and erosion (as the road already exists, no additional impact on terrestrial fauna is expected to arise from the development)	Low (Neutral)	Low (Neutral)
Impacts on Ecology: Fencing area		
Loss of vegetation, loss of micro-habitat, increase in runoff and erosion, window of opportunity for the establishment of alien invasive species, altered topsoil characteristics prone to capping, increased runoff and erosion	Medium (Neutral)	Medium (Neutral)
Impacts on Ecology: Construction and operation of PV panels		
Loss of vegetation, loss of and alteration of microhabitats, altered vegetation cover, altered distribution of rainfall and resultant runoff patterns, increase in runoff and accelerated erosion, loss of faunal habitat and resource availability to terrestrial fauna	Medium (Negative)	Medium (Negative)
Impacts on Ecology: Construction of on-site IPP substation		
Loss of vegetation, increase in runoff and erosion, temporary displacement of terrestrial fauna.	Low (Neutral)	Low (Neutral)
of soils, creation of runoff zone, possible contamination		
Avifauna habitat destruction and disturbance	Low (Negative)	Low (Negative)
Impacts on Ecology: Construction and operation of workshop area and guard houses		
Loss of vegetation, increase in runoff and erosion, pollution, loss of faunal habitat and resource availability to terrestrial fauna	Medium (Neutral)	Medium (Neutral)
Impacts on Soils and Agricultural Potential		
Loss of topsoil due to stripping, handling and placement of soil associated with pre construction land clearing and rehabilitation.	Low (Negative)	Low (Negative)
Change of soil's physical, chemical and biological properties due to loss of topsoil due to erosion, stockpiling, mixing of deep and surface soils during handling, stockpiling and subsequent placement.	Low (Negative)	Low (Negative)
Change of natural surface topography due to reprofiling of surface after stripping.	Low (Negative)	Low (Negative)

Nature	ORIGINAL EIA	AMENDMENT
	With mitigation	With mitigation
Loss of land with high agricultural potential and land capability.	Low (Negative)	Low (Negative)
Potential Impacts on Heritage and Paleontological sites		
During construction of PV facility and infrastructure the identified cemetery may be destroyed, exposing the remains and creating access challenges for the relatives of the deceased.	Medium (Neutral)	Medium (Neutral)
During construction of power line and <u>on-site</u> IPP substation the identified cemetery may be destroyed, exposing the remains and creating access challenges for the relatives of the deceased.	Low (Negative)	Low (Negative)
Destruction of the two MSA stone artefact scatters during construction by either covering the in soil removing them from their current context which is already secondary	Low (Positive)	Low (Positive)
Discovery/destruction of unknown fossil deposits. Paleontological sites could be affected if bedrock was to be disturbed during the excavation activities associated with the construction	Low (Positive)	Low (Positive)
Potential Visual Impacts		
Potential visual impact of reflection of the PV Panels on the sensitive receptors.	Low (Neutral)	Low (Neutral)
Potential visual impact on the intrinsic value and sense of place of the Sannaspos region.	Medium (Negative)	Medium (Negative)
Potential visual impact of artificial lighting as a result of the activity.	Low (Negative)	Low (Negative)
Potential visual impact of reflection of the PV Panels on the sensitive receptors	Low (Neutral)	Low (Neutral)
Potential Social Impacts During Construction		
Creation of employment and business opportunities	Medium (Positive)	Medium (Positive)
Potential impacts on family structures and social networks associated with the presence of construction workers	Low for the community as a whole Moderate-High for specific individuals who may be affected by STDs etc.	Low for the community as a whole Moderate-High for specific individuals who may be affected by STDs etc.
Increased risk of stock theft, poaching and damage to farm infrastructure	Low (Negative)	Low (Negative)
Potential increased incidence of veld fires	Medium (Positive)	Medium (Positive)
Potential noise, dust and safety impacts associated with movement of construction related traffic to and from the site	Low (Negative)	Low (Negative)

Nature	ORIGINAL EIA	AMENDMENT
	With mitigation	With mitigation
Loss of farmlands for future farming activities	Low (Negative)	Low (Negative)
Potential Social Impacts During Operation		
Creation of employment and business opportunities associated with the operational phase	Medium (Positive)	Medium (Positive)
Establishment of a community trust funded by revenue generated from the sale of energy. The revenue can be used to fund local community development	High (Positive)	High (Positive)
Promotion of clean, renewable energy	Medium (Positive)	Medium (Positive)
Visual impact and impact on sense of place	Medium (Negative)	Medium (Negative)
Potential impact of the solar thermal plant on local tourism	Low (Negative)	Low (Negative)
Potential visual impact and impact on sense of place associated with power lines	Low (Negative)	Low (Negative)
Cumulative Impacts		
Social	High (Positive)	High (Positive)
Visual	Low (negative)	Low (negative)
Ecology	Low (negative)	Low (negative)

7. PUBLIC PARTICIPATION

A public participation process was conducted in support of the Application for Amendment, as per the requirements of the DFFE. The Public Participation was undertaken in accordance with the requirement of Chapter 6 of the EIA Regulations of December 2014, as amended. The following key public participation tasks were undertaken:

- » The database/register of I&APs was updated and maintained.
- » Placement of site notices at the site during **July 2023**.
- » Written notifications to registered I&APs as well as Organs of State regarding the availability of the Motivation Report were distributed on **03 August 2023**.
- » Placement of an advertisement in the **Volksblad** newspaper on **Thursday, 03 August 2023** announcing the availability of the Motivation Report for a 30-day review and comment period.
- » The Motivation Report was made available for the 30-day review and comment period from **Thursday, 03 August to Monday, 04 September 2023**. The report was available for download on the Savannah Environmental website: <https://savannahsa.com/public-documents/>.

Comments received during the 30-day review and comment period have been included in the final submission of the Motivation Report to the DFFE for consideration in the decision-making process. Comments are also included and responded to in a Comments and Responses Report, which is included within the Final Motivation Report.