## APPENDIX 3:
## FINAL SITE SENSITIVITY VERIFICATION REPORT

# Appendix 3 - Site Sensitivity Verification Report

*Norm for the Exclusion of the Development and Expansion of Solar Photovoltaic facilities in areas of Low or Medium Environmental Sensitivity*

## Development and operation of a 1.5 MW Solar Photovoltaic facility located on a 1.7 ha area on Portion 16 of Tygerfontein 347, Albertinia, Hessequa Local Municipality

**PURPOSE OF THE REPORT**

This Final Site Sensitivity Verification Report has been prepared by the Environmental Assessment Practitioner (EAP) in support of the registration of the proposed 1.5 MW Solar Photovoltaic Facility in terms of the Norm for the Exclusion of the Development and Expansion of Solar Photovoltaic Facilities in Areas of Low or Medium Environmental Sensitivity.

The report consolidates the findings of the specialist site sensitivity assessments undertaken for the environmental themes requiring verification in terms of the Norm, namely Agricultural Potential, Aquatic Biodiversity, Terrestrial Biodiversity, Plant Species and Animal Species. The relevant specialist reports and compliance statements, prepared and signed by the respective specialists, are included as Appendices 3a to 3c and form the basis of this Final Site Sensitivity Verification Report.

The purpose of this report is to present the verified environmental sensitivities of the proposed development footprint and associated underground electrical reticulation corridor, and to demonstrate compliance with the environmental sensitivity requirements of the Norm.

**INTRODUCTION**

The proposed development comprises a 1.5 MW solar photovoltaic (PV) facility to be developed by Outeniqua Game Farm (Pty) Ltd (OGF) on Portion 16 of Farm Tygerfontein No. 347, Albertinia, Hessequa Local Municipality, Garden Route District Municipality.

The facility is intended to generate renewable electricity for supply to the proposed residential development on the adjacent Portion 15 of Farm Tygerfontein No. 347 (subject to a separate environmental authorisation process) and/or for connection to the Hessequa Local Municipality electricity distribution network.

The proposed solar development footprint occupies approximately 1.7 ha within the north-eastern portion of Portion 16 of Farm Tygerfontein No. 347.

The following infrastructure forms an integral part of the proposed solar PV facility and is required for the generation, storage, transmission and export of electricity:

- Battery Energy Storage System (BESS) to store electricity generated by the solar facility and improve operational flexibility.
- 11 kV mini-substation to facilitate voltage transformation and connection of the facility to the electrical distribution network.
- Underground electrical reticulation installed in sleeves between the solar array, BESS, mini-substation and the proposed point(s) of supply.
- Electrical reticulation installed in sleeves to provide electricity either directly to the proposed Greens residential development on Portion 15, or alternatively to the Hessequa Local Municipality electricity distribution network via the existing electrical connection point on Erf 2282 (29 Mission Street).

- Where electricity is supplied to the Hessequa Local Municipality, the existing electrical connection point on Erf 2282 (29 Mission Street) will be upgraded, as required, to facilitate connection to the municipal electricity distribution network.
- Internal access roads, security fencing, drainage infrastructure and ancillary services necessary for the construction, operation and maintenance of the facility.

The proposed development is being registered in terms of the Norm for the Exclusion of the Development and Expansion of Solar Photovoltaic Facilities in Areas of Low or Medium Environmental Sensitivity.

The Norm, published under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), establishes the requirements under which specified activities associated with the development and expansion of solar photovoltaic facilities, including infrastructure that is integral to the generation, storage, transmission and export of electricity, may be excluded from the requirement to obtain an environmental authorisation prior to commencement, provided that the requirements of the Norm are met.

**SOLAR FACILITY**

The facility has been designed to generate up to 1.5 MW of renewable electricity. Depending on the operational scenario, electricity may either be supplied directly to the proposed Greens residential development on Portion 15 (subject to a separate environmental authorisation process) or supplied to the Hessequa Local Municipality electricity distribution network via the existing electrical connection point on Erf 2282 (29 Mission Street), immediately adjacent to Portion 15 and owned by the proponent. Where electricity is supplied to the municipal network, the existing connection point will be upgraded, as required, to facilitate the connection. Electrical reticulation between the solar facility and the relevant point of supply will comprise underground cables installed in sleeves only, with no overhead powerlines proposed. The reticulation corridor, including the location of the existing connection point and any associated upgrade works, is situated entirely within land owned and controlled by the proponent.

The design of the proposed solar facility has been prepared by Lourens du Preez of Pro-Plan Drawing Office (January 2026). The facility will comprise the following components:

- Twelve (12) modular Battery Energy Storage System (BESS) power stacks, each rated at 125 kW.
- Twelve (12) inverters, each rated at 125 kW, providing a total installed generating capacity of 1.5 MW.
- One (1) 11 kV mini-substation.
- Electrical distribution cabinet.
- Electrical control room with a smooth steel-trowelled cement screed floor.
- Trench with a steel cover between two rows of power stacks.
- Six (6) LED tube lights.
- Day/night switch.
- One (1) 15-amp wall plug.
- External wall light.
- Four-way Ring Main Unit (RMU) incorporating bulk metering for the safe switching, protection and metering of the 11 kV distribution network.
- Underground electrical reticulation (installed within protective sleeves) extending from the solar facility either:
    - directly to the proposed Greens residential development on Portion 15 (anticipated demand of approximately 1.3 MW), subject to a separate environmental authorisation process; or
    - to the existing electrical connection point on Erf 2282 (29 Mission Street), owned by Outeniqua Game Farm (Pty) Ltd, which will be upgraded as required to facilitate connection to the Hessequa Local Municipality electricity distribution network.

Each solar structure will have the following specifications:

- Height: 4.0 m
- Width: 5.5 m, with a 0.6 m shoulder on either side (overall width of 6.7 m)
- Length: 20.6 m
- Foundation blocks: 0.6 $m^3$
- 100 × 100 mm square tube columns
- Fifty-four (54) solar panels per structure. The solar panels will be positioned in accordance with the manufacturer's specifications and the applicable SANS 1307, SANS 10106 and engineering standards.

The underground electrical reticulation will be installed within a narrow trench and will include:

- Installation within a defined corridor;
- Cabling placed within protective sleeves;
- Trench dimensions as specified by the electrical engineer;
- Backfilling and reinstatement of disturbed areas following installation;
- No overhead powerlines or pylons; and
- No establishment of new servitudes or use of road reserves.

The major components of the solar facility will be manufactured off site and assembled on site. The solar support structures will be installed directly onto the existing compacted brick-making surface, which provides a stable foundation. Consequently, only limited excavation will be required for the foundation blocks, underground cable trenches and associated electrical infrastructure. As confirmed by the Site Sensitivity Verification Report, the solar facility footprint, underground reticulation corridor and associated electrical infrastructure are all located within areas of Low environmental sensitivity.

The site development plans are included in Appendix 10-1 of this registration form.
The Engineering Services Report: Bulk Supply for Erf 2282, Albertinia is included in Appendix 10-2 of this Registration Form.

**SCREENING TOOL REPORT**

A Screening Tool has been developed by the Department of Forestry, Fisheries and the Environment (DFFE) to identify the environmental sensitivities associated with a proposed development footprint and any associated linear infrastructure.
A Screening Report, as contemplated in Regulation 16(1)(v) of the EIA Regulations, 2014, was generated for the proposed solar photovoltaic facility. The Screening Tool identified the following environmental sensitivities within the proposed development footprint:

- Agricultural potential is Very High
- Terrestrial Biodiversity is Very High
- Plant species sensitivity is Medium
- Animal Species sensitivity is Medium
- Aquatic Sensitivity is Low
- Palaeontology is low
- Archaeology and heritage is Low

**VERIFICATION OF SENSITIVITIES**

In accordance with paragraph 2.1.2 of the Norm, specialist site sensitivity verification was undertaken for the following environmental themes:

- Agricultural Potential;
- Terrestrial Biodiversity;
- Plant Species;
- Animal Species; and
- Aquatic Biodiversity.

The following has been carried out:

- The EAP has carried out two site visits with the first in July 2025 and the second in December 2025.
- Upstream consulting were appointed to carry out a site visit, verification and compilation of a compliance statement. (Refer to Appendix 3a)
- Jamie Pote was appointed to carried out a site visit, verification of the sensitivities of terrestrial biodiversity features (including fauna and flora) and compilation of terrestrial biodiversity report (Refer to Appendix 3b)
- Gavin Schafer was appointed to carried out a site visit and compile a soil assessment report (Refer to Appendix 3c)

The proposed solar development footprint is located within a previously disturbed brownfield area that has been extensively transformed through historical brick-making, quarrying and grazing activities over approximately the past five decades. The proposed solar array, Battery Energy Storage System (BESS) and mini-substation are located within the previously disturbed area associated with historical brick-making activities. The associated underground electrical reticulation corridor extends from the solar facility through Portion 15 to the proposed point of supply and traverses areas that have been assessed and verified as having Low environmental sensitivity. The electrical reticulation will be installed underground within protective sleeves, with disturbed areas to be backfilled and reinstated following installation.

Based on the specialist investigations, the proposed solar development footprint and associated underground electrical reticulation corridor have been verified as Low sensitivity for the Agricultural Potential, Terrestrial Biodiversity, Plant Species, Animal Species and Aquatic Biodiversity themes.

The verified sensitivities are summarised in Table 1 and confirm that the proposed development complies with the environmental sensitivity requirements of the Norm.

**Table 1: Verification of environmental sensitivity identified in DFFE screening tool report**

| Agricultural potential theme | STR - Very High Sensitivity | Verification - Low sensitivity |
|---|---|---|
| The solar installation area is located on an area which has had all topsoil removed in the past; the original soil cover (low potential Mispah and Catref soil types) was a thin to moderately deep sand or stony, loamy sand, and possibly a clay-rich lower subsoil. This soil has a low potential due to its restricted depth, low water and nutrient holding capacities. This area was utilized for brick making by a previous land owner. Both the stony, sandy soil cover and any clay layers have been removed. The agricultural potential of the solar facility area is verified as low. There are no agriculturally sensitive areas identified on the site and there are no developmental limits identified on the solar facility area. The area has already been modified and considered to be suitable for the location of the solar facility.<br>Refer to Appendix 3c. | | |
| **Animal Species Theme** | **STR - Medium Sensitivity** | **Verification - Low sensitivity** |
| The proposed development footprint is located within a previously disturbed brownfield site that has been extensively modified through historical brick-making, quarrying and agricultural activities. The associated underground electrical reticulation corridor extends beyond the former brick-making area but traverses areas that have been disturbed and modified by existing land uses. The transformed nature of the areas assessed has resulted in the loss or degradation of natural habitat, with remaining vegetation comprising degraded secondary grassland and scattered alien invasive vegetation. The site and associated electrical reticulation corridor are not representative of Albertinia Sand Fynbos and provide limited habitat for fauna Species of Conservation Concern.<br>The DFFE Screening Tool identified *Aneuryphymus montanus* (Mountain Grasshopper), *Afrotis afra* (Southern Black Korhaan) and Sensitive Species 5 as requiring verification. Specialist field surveys confirmed that none of these species were present and that no suitable habitat occurs within the proposed development footprint or associated underground electrical reticulation corridor.<br>No Critically Endangered, Endangered or Vulnerable fauna species, nor any fauna Species of Conservation Concern identified by the DFFE Screening Tool, were recorded during the specialist assessment. Fauna observed were typical of transformed agricultural landscapes and included a small herd of Springbok together with evidence of Cape Dune Mole-rat (*Bathyergus suillus*), neither of which are species of conservation concern. | | |

The specialist concluded that fauna species associated with intact natural vegetation have largely been displaced by historical land-use activities and that the proposed development will not result in impacts on fauna Species of Conservation Concern.
The Animal Species theme is therefore verified as **Low sensitivity**. Refer to Appendix 3b.

| Aquatic Biodiversity Theme | STR - Low sensitivity | Verification - Low sensitivity |
|---|---|---|
| Based on the desktop assessment, site verification, and review of the final development layout, it is confirmed that the proposed 1.5 MW Solar Photovoltaic Facility and associated underground electrical reticulation are located within areas of Low aquatic biodiversity sensitivity. Field verification confirmed that no aquatic features occur within the proposed development footprint or associated underground electrical reticulation corridor. Refer to Appendix 3a. | | |

| Plant Species Theme | STR - Medium sensitivity | Verification - Low sensitivity |
|---|---|---|

The proposed development footprint is located within a previously disturbed brownfield site associated with historical brick-making, quarrying and agricultural activities. The site has been extensively transformed over approximately the past five decades and the solar facility footprint is correctly classified as No Natural Area Remaining (NNAR), as confirmed through analysis of historical aerial imagery, land-cover mapping and Landsat imagery. The associated underground electrical reticulation corridor extends beyond the former brick-making area but traverses areas that have been assessed and verified as having Low plant species sensitivity.

Four broad habitat types were identified during the specialist assessment:

- **Transformed habitat** comprising buildings, roads, hardened surfaces, unvegetated areas and the former brick-making and quarry area. The proposed solar facility is located entirely within this transformed habitat.
- **Alien invaded habitat** comprising dense stands of *Acacia mearnsii* (Black Wattle) and *Acacia cyclops* (Rooikrans), with scattered indigenous shrubs occurring along the margins.
- **Secondary grassland (old agricultural lands)** dominated by *Cynodon dactylon* (Kweek) together with pioneer herbs and scattered shrubs. No species characteristic of Albertinia Sand Fynbos were recorded, confirming that the vegetation represents transformed secondary vegetation rather than natural fynbos.
- **Artificial quarry dam** comprising a man-made waterbody associated with the former quarry, surrounded by alien invasive vegetation and limited riparian species.

Although the site falls within the broader distribution range of several endemic flora species and Species of Conservation Concern, the specialist confirmed that the proposed development footprint contains no suitable habitat for these species owing to the extensive historical transformation of the site. No plant species characteristic of Albertinia Sand Fynbos remain within the proposed development footprint or associated underground electrical reticulation corridor.

Site surveys confirmed that no Critically Endangered, Endangered, Vulnerable or Rare flora species, including any flora Species of Conservation Concern identified by the DFFE Screening Tool, are present within the proposed development footprint or associated underground electrical reticulation corridor. Accordingly, the proposed development will not impact on any flora Species of Conservation Concern.
The specialist therefore verified the Plant Species theme as **Low sensitivity**. Refer to Appendix 3b.

| Terrestrial Biodiversity Theme | STR - Very High Sensitivity | Verification - Low sensitivity |
|---|---|---|

The proposed solar development footprint and associated underground electrical reticulation corridor are located within a previously disturbed brownfield area associated with historical brick-making, quarrying and agricultural activities. Historical disturbance over approximately the past five decades has resulted in the removal of indigenous vegetation across the development footprint, leaving large unvegetated areas together with degraded secondary grassland and scattered alien invasive vegetation.
The terrestrial biodiversity specialist confirmed that the proposed development footprint and associated underground electrical reticulation corridor contain no remaining natural vegetation and are correctly classified as No Natural Area Remaining (NNAR). This conclusion is supported by historical aerial photography, land-cover mapping and Landsat imagery, all of which confirm the long-term transformation of the site.
Although the 2023 Western Cape Biodiversity Spatial Plan (WCBSP) maps portions of Portion 16 as Critical Biodiversity Area (CBA) 1 and CBA 2, specialist field verification confirmed that these mapped biodiversity priorities are not representative of the current on-site conditions within the proposed development footprint and associated underground electrical reticulation corridor. No Albertinia Sand Fynbos remains within the footprint, and the site no longer contributes to the biodiversity objectives for which the CBA was identified. Consequently, the development footprint does not meet the criteria of a Critical Biodiversity Area or Ecological Support Area.
The specialist further concluded that the proposed development will not result in significant impacts on terrestrial biodiversity, ecological processes or ecological corridors, and that cumulative impacts on terrestrial biodiversity are environmentally acceptable following implementation of the recommended mitigation measures.
Accordingly, the terrestrial biodiversity sensitivity of the proposed development footprint and associated underground electrical reticulation corridor is verified as Low, thereby satisfying the requirements of the Norm. Refer to Appendix 3b.