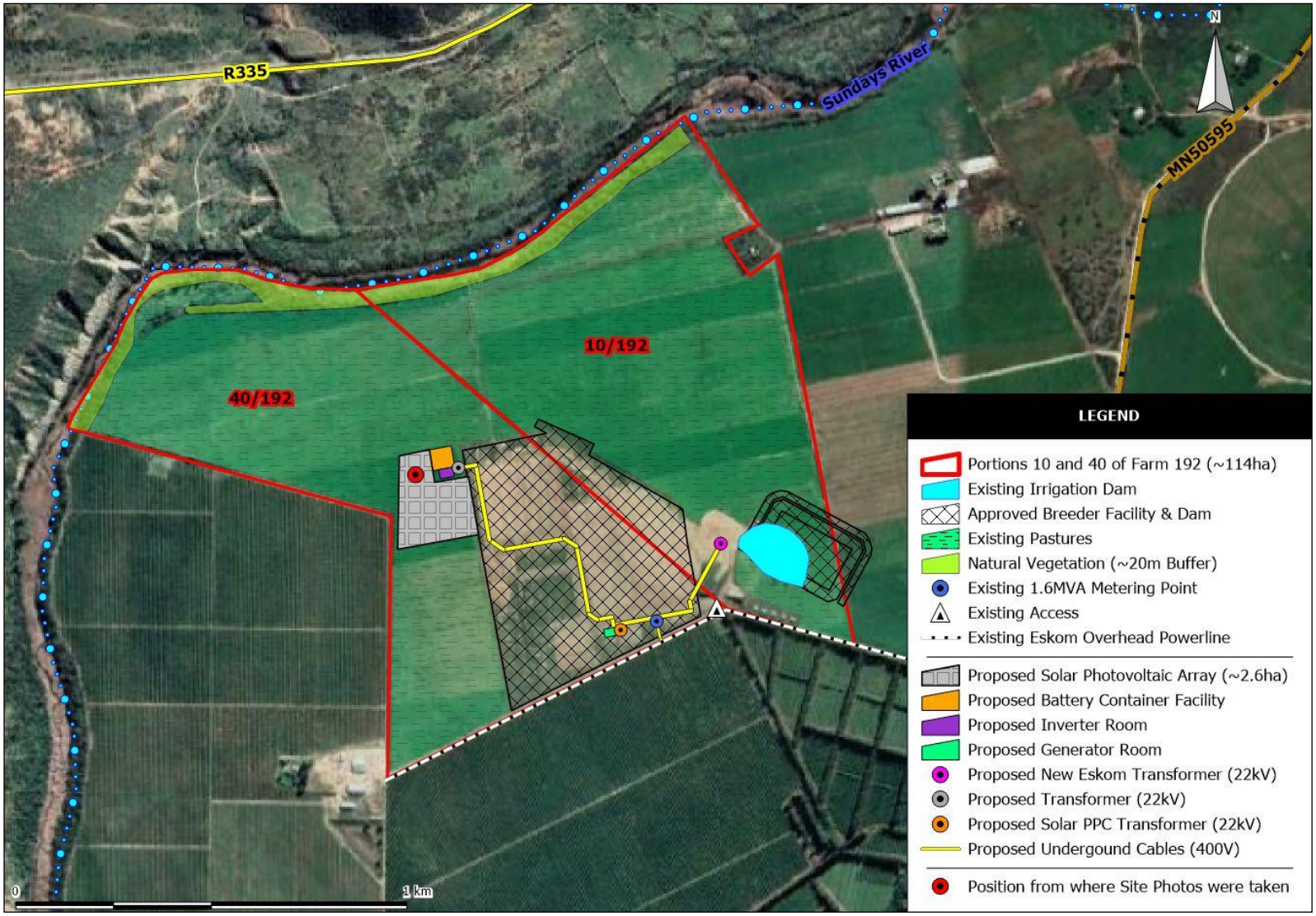
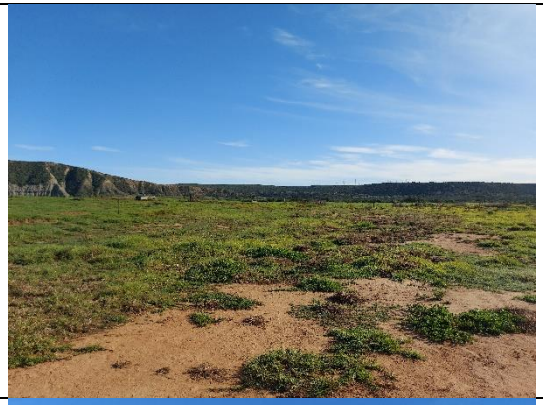
SECTION F: APPENDICES

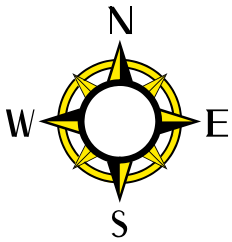
APPENDIX A: SITE PLAN



APPENDIX B: PHOTOGRAPHS TAKEN FROM THE CENTRE OF THE SITE

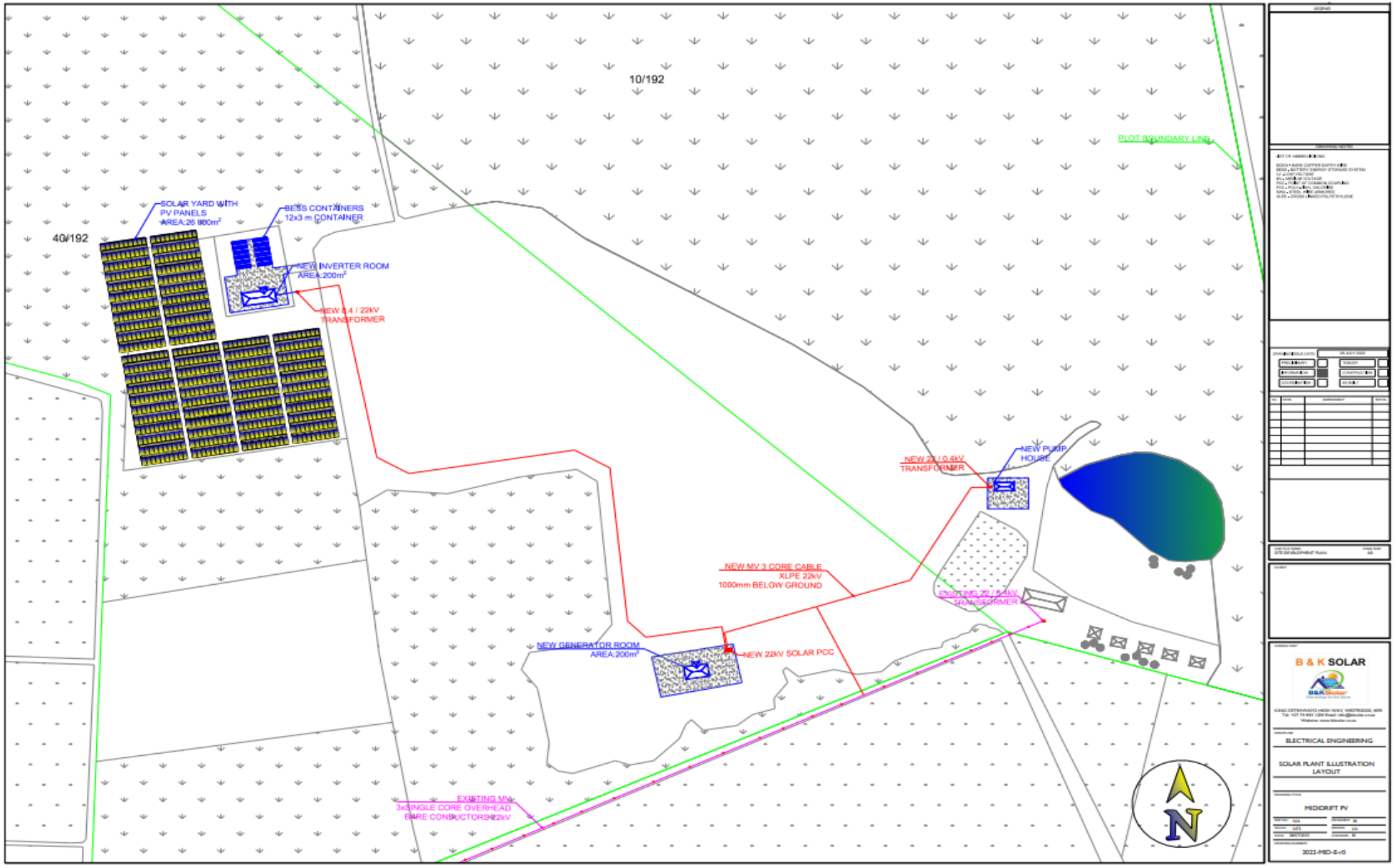









APPENDIX C: FACILITY ILLUSTRATION(S)



Appendix D (i): Aquatic Biodiversity Compliance Statement

Middledrift Solar PV Facility: Proposed Construction and Operation of a Solar Photovoltaic Facility and Associated Infrastructure on a Portion of Portions 10 and 40 of Farm 192, Sundays River Valley Municipality, Eastern Cape

AQUATIC COMPLIANCE STATEMENT

July 2022

Prepared for:
Public Process Consultants
120 Diaz Road,
Adcockvale,
Port Elizabeth,
6001

Prepared by:
Ms Jaclyn Smith
JS Environmental Consulting
P.O. Box 19176,
Tecoma,
East London,
5214

SPECIALIST DETAILS

This report was prepared by Jaclyn Smith. She is an Environmental Consultant with 8 years' experience in undertaking numerous environmental impact assessments and specialist aquatic and wetland impact assessments. She has a BSc in Geology and Environmental Science from Rhodes University and a BSc (Hons) in Geology from Nelson Mandela Metropolitan University. Her honours thesis looked at the sediment disturbance depth over two beaches in the Port Elizabeth area. Jaclyn attended the Tools for Wetland Assessment course at Rhodes University and was certified competent to undertake wetland assessments. Jaclyn is a SACNASP Registered Professional Natural Scientist (No. 120693).

Declaration

- I, Jaclyn Smith, declare that, in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Amended Environmental Impact Assessment Regulations, 2017;
- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this report are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Ms Jaclyn Smith

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1. INTRODUCTION

1.1 Project description and location

The Boeram Venter Trust proposes the development and operation of a Solar Photovoltaic (PV) facility, powerline and associated infrastructure (generator, battery storage, inverter) capable of producing 2.2MW of AC electricity on a portion of Portion 40 and Portion 10 of Farm 192 (Middledrift) in the Sundays River Valley Local Municipality, Eastern Cape (Figure 1.1 and 1.2). The proposed photovoltaic area is approximately 3 hectares in extent.

The photovoltaic facility, powerlines and associated infrastructure (battery container area, inverter and generator room) is located on and follows already transformed and/or developed land with no natural aquatic features visible within the vicinity of the proposed footprint.

The purpose of this report is to provide baseline data, verify sensitivity of aquatic features within and surrounding the proposed development footprint for the Basic Assessment Report (BAR) process being undertaken by Public Process Consultants.

Figure 1.1 Locality map of the study area.

Figure 1.2 Locality map of the site (including overview map).

1.2 Assumptions and Limitations

The following assumptions and limitations are made for this assessment:

- The desktop investigation was undertaken using available literature at the time;
- A site verification exercise was undertaken in winter (23 June 2022); and
- The assessment is based on the project description and information provided by the client.

1.3 Terms of Reference

This report has been undertaken in accordance with the procedures to be followed for the Assessment and Minimum Criteria for Reporting of Identified Environmental Themes in terms of Section 24(5)(a) and (h) of the National Environmental Management Act (1998) when Applying for Environmental Authorisation.

An Aquatic Biodiversity Compliance Statement prepared in terms of these Regulations must contain the following at a minimum:

Requirement	Section
(a) Contact details of the specialist; their SACNASP registration number, their field of expertise and a curriculum vitae;	Specialist details and declaration – Page (i)
(b) a signed statement of independence by the specialist;	Specialist details and declaration – Page (i)
(c) a statement of the duration, date and season of the site inspection and the relevance of the season to the outcome of the	Section 1.2

assessment;	
(d) a baseline profile description of biodiversity and ecosystem of the site;	Section 3
(e) the methodology used to verify the sensitivities of the aquatic biodiversity features on the site including the equipment and modelling used where relevant;	Section 2 and 3
(f) in the case of a linear activity, confirmation from the aquatic biodiversity specialist that, in their opinion, based on the mitigation and remedial measures proposed, the land can be returned to the current state within two years of completion of the construction phase.	Section8
(g) Where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMPr;	Section 7
(h) A description of the assumptions made as well as any uncertainties or gaps in knowledge of data; and	Section 1.2
(i) Any conditions to which this statement is subjected.	Section 8

2. LEGISLATION REQUIREMENTS AND BASE DATA

The following legislation (Acts and Regulations) was consulted and is relevant to this aquatic specialist assessment:

Table 2.1 List of legislation relevant to the project.

Legislation	Description and relevance
National Environmental Management Act (NEMA) (107 of 1998)	NEMA provides for co-operative, environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state and to provide for such matters. This Act requires that prior Environmental Authorisation is obtained before the undertaking of certain activities.
Environmental Impact Assessment (EIA) Regulations (2014, as amended)	The EIA Regulations (2014, as amended) stipulate the process that must be followed when applying for Environmental Authorisation and provides a list of activities (in the form of the 3 Listing Notices; GN 327, GN 325, GN 324) that require prior Environmental Authorisation. All applications for Environmental Authorisation have to be undertaken in accordance with the procedures outlined in the EIA Regulations.
National Water Act (NWA) (36 of 1998)	NWA allows for governance and management of water resources to ensure that the nation's water resources are conserved and protected as well as used and developed in a sustainable manner. NWA requires that all water use activities are in line with the provisions in the Act and the necessary authorisations/licences are obtained for certain water use activities. NWA includes the provision of procedures and requirements for **General Authorisations** and **Water Use Licences** which permit the use of water.
National Environmental Management: Biodiversity Act (NEMBA) (Act 10 of 2004),	NEMBA provides for the management and conservation of South Africa's biodiversity within the framework of NEMBA; the protection of species and ecosystems that warrant national protection; the sustainable use of indigenous biological resources; the fair and equitable sharing of benefits arising from bioprospecting involving indigenous biological resources; the establishment and functions of a South African National Biodiversity Institute. NEMBA provides details regarding the protection of threatened ecosystems, threated or protected species as well as management of alien and invasive species.

Table 2.2 provides a list of baseline data consulted for the assessment:

Table 2.2 Base data used in this assessment

Name of base data	Age (Date)	Description and quality of data
Department of Water and Sanitation (DWS)	2014	The objective of the Present Ecological State/Ecological Importance/Ecological Sensitivity (PES/EI/ES) dataset is to

Name of base data	Age (Date)	Description and quality of data
Desktop Present Ecological State (PES) and Ecological Importance and Sensitivity (EIS) Model.		provide first level desktop level information on ecological issues as it relates to the protection and management of sub-quaternary reaches (SQRs). The PESEIS relates specifically to Rivers (instream and riparian aspects) and limited aspects of valley-bottom wetlands. This data set replaces the 1999 PESEIS assessment by DWS.
DWA Ecoregional classification.	2007	The aim of the DWA Ecoregional classification is to group rivers into Level 1 and Level 2 Ecoregions according to similarities based on a top-down nested hierarchy. The Ecoregions were grouped based on attributes such as climate, rainfall, physiography, geology and natural vegetation. The Level 2 Ecoregion classification will facilitate future more developments into stream classification, geomorphological segments, longitudinal zones and biological habitat segments.
Addo Biodiversity Sector Plan: Biodiversity sector plan for the Sundays River Valley Municipality (Also known as the Sundays River Valley Municipality Biodiversity Sector Plan; SRVM BSP)	2012	This plan provides for critical biodiversity area categories as well as land use guidelines in the Sundays River Valley Municipality. The CBA areas formed an update to the ECBCP (2007) CBA areas.
Eastern Cape Biodiversity Conservation Plan (ECBCP) – Aquatic Critical Biodiversity Areas and Ecological Support Areas	2019	ECBCP (2019) involves the revision of the first ECBCP (2007). ECBCP (2019) includes the incorporation of the latest environmental and biodiversity data, and has been adopted by the competent authority. ECBCP (2019) maps important biodiversity areas and has developed associated land use management guidelines.
National Biodiversity Assessment (NBA) – South African Inventory of Inland Aquatic Ecosystems (SAIIAE)	2018	The aim of SAIIAE is to provide information on the ecosystem types and pressures for wetland and river systems. The SAIIAE builds on and improves spatial data available for the river and wetland systems. It provides the National Wetland Map (NWM) 5 which provides improvements to the NWM 4 from NFEPA.
The National Freshwater Ecosystem Priority Areas (NFEPA) project	2011 - 2014	The aim of the NFEPA project was to identify Freshwater Ecosystem Priority Areas (FEPA's) to meet national biodiversity goals for freshwater ecosystems and develop a basis for enabling effective implementation of measures to protect FEPA's as well as free-flowing rivers. The project involved input and collaboration from numerous stakeholders, scientists and practitioners who contributed knowledge and data to the NFEPA product
National list of	2011	The aim of the listing of threatened ecosystems is to reduce

Name of base data	Age (Date)	Description and quality of data
ecosystems that are threatened and in need of protection (NEMBA)		the rate of ecosystem and species extinction which includes preventing further degradation and loss of structure, function and composition of threatened ecosystems.
Historical aerial imagery – Department of Rural Development and Land Reform	1957	Black and white detailed and accurate aerial photography taken from an aircraft dating back to the 1950's. Allows for the identification and interpretation of site conditions prior to any current or recent developments to the area.

3. APPROACH AND METHODOLOGY

The baseline desktop assessment was undertaken using the following approach:

- Desktop assessment – involves the gathering of baseline desktop data available for the study area including the following:
    - Consulting aerial imagery
    - Review of previous assessments
    - Review of national and local legislation
    - Relevant mapping resources (including ECBCP 2019, SRVM BSP, NFEPA)
- Sensitivity assessment – sensitivity analysis base on desktop findings and site investigation; and
- Impact assessment – assessment of potential impacts and appropriate mitigation measures.

4. DESKTOP SITE ASSESSMENT

A desktop investigation was undertaken using available desktop data.

4.1 Quaternary Catchment, Water Management Area and Strategic Water Source Area

The project area falls within the boundaries of quaternary catchments N40F of the Mzimvubu-Tsitsikamma Water Management Area. The study area does not fall within any Strategic Water Source Areas.

4.2 Ecoregions

The study area falls within Level 1 Ecoregion 20: South Eastern Coastal Belt.

4.2.1 Level 1 Ecoregion

This Level 1 Ecoregion is characterised by closed hills and mountains with a moderate to high relief. Dominant vegetation types include Afromontane Forest and Mesic Succulent Thicket although Fynbos, Renosterveld, Grassland and Thicket vegetation types occur. The Gamtoos, Keurbooms and Swartkops River flow this region. The Level 1 Ecoregion has the following attributes:

- Mean annual precipitation (MAP): Moderate to high.
- Coefficient of variation of annual precipitation: Low to moderate.
- Drainage density: Low to medium.
- Stream frequency: Low/medium to medium/high in limited areas.
- Slopes <5%: >80% but significant areas <20%.
- Median annual simulated runoff: Moderate to very high.
- Mean annual temperature: Moderate to moderately hot.

4.2.2 Level 2 Ecoregion

The Level 2 Ecoregion: South Eastern Coastal Belt 20.01 is characterised by the following main attributes:

Table 4.1 Main Attributes of Level 2 Ecoregion: South Eastern Coastal Belt 20.01

Main Attributes	South Eastern Coastal Belt 20.01
Terrain Morphology: Broad division	Plains; moderate relief, Closed hills, mountains; moderate and high relief, Plains; low relief
Terrain Morphology	Strongly Undulating Plains, Undulating Hills, Moderately Undulating Plains, Slightly Undulating Plains, Hills, Low Mountains.
Vegetation types (dominant types in bold) (Primary)	Mesic Succulent Thicket, Xeric Succulent Thicket, Eastern Thorn Bushveld, Coastal Grassland, Coastal Forest, Valley Thicket, Grassy Fynbos, Dune Thicket, South and South-west Coast Renosterveld, Afromontane Forest.
Altitude (m a.m.s.l.)	0 - 300
MAP (mm).	300 - 700

Main Attributes	South Eastern Coastal Belt 20.01
Coefficient of variation (% of annual precipitation).	20 - 35
Rainfall concentration index.	<15 - 30
Rainfall seasonality.	All year, with peaks in very late summer.
Mean annual temp (°C).	16 - 20
Mean daily max temp (°C) February.	24 - 30
Mean daily max temp (°C) July.	18 - 22
Mean daily min temp (°C) February.	14 - 18
Mean daily min temp (°C) July.	6 - 10

4.3 Rivers

The Sundays River and its associated non-perennial tributaries occur more than 300m north of the study area (Figure 4.1). The Sundays River is unlikely to be affected by the proposed development, however, classification in terms of NFEPA (2011-2014) and NBA (2014) have been included in Table 4.2 below as it does fall within the sub-quaternary catchment and is covered as part of the desktop investigation.

Table 4.2 Classification of rivers within the study area according to NFEPA, NBA and DWS PESEIS data

Data set	Description
NFEPA Classification (2011 – 2014)	There is no classification of the non-perennial rivers and the Sundays River in terms of NFEPA.
NBA Classification (2018) Threat Status	The reach of the Sundays River north of the proposed development site is considered to be Critically Endangered. Critically Endangered ecosystems are ecosystem types that have very little of their original extent left in natural or near-natural condition. Most of the ecosystem type has been heavily, severely or critically modified from its natural state. Any further loss of natural habitat or deterioration in condition of the remaining healthy examples of these ecosystem types must be avoided, and the remaining healthy examples should be the focus of urgent conservation action.

Figure 4.1 Map of the rivers within and surrounding the study area.

4.4 Wetlands

4.4.1 NBA (2018) classification and delineation of wetlands within the study area

According to the NBA (2018), no natural wetlands occur within the site. The Sundays River estuary occurs more than 500m from the site and riverine area associated with the Sundays River occurs more than 300m from the site.

Figure 4.2 NBA (2018) SAIIAE Classification of natural wetlands surrounding the study area.

4.5 Water storage/stock dams

According to NBA (2018), a number of water storage/stock dams occur on surrounding farm lands. Figure 4.3 provides a map of the site and water storage/stock dams identified by NBA (2018). The red squares around water storage/stock dams in Figure 4.3 are water storage/stock dam that have been identified by NBA (2018), however, these are not evident on site. Orchards were identified within these areas. This is likely as a result of NBA (2018) being relatively outdated and not completely accurate (as it is a relatively high-level identification and classification system).

Figure 4.3 Map of water storage/stock dams within and surrounding the development footprint.

4.6 Vegetation

According to the Vegetation Map of South Africa, Lesotho and Swaziland (2018) by SANBI, the study site falls within the Sundays Valley Thicket vegetation type of the Albany Thicket Biome.

Sundays Valley Thicket is characterised by medium-sized to tall dense thicket with a woody tree and shrub component with a well-developed succulent component. No distinct strata are present within the vegetation as the lower and upper canopy of species intertwine, with a wide variety of lianas linking the understorey with the canopy often being present. *Euphorbia* and *Cussonia* species commonly emerge above the canopy. *Portulacaria afra* and other succulent shrubs often occur in abundance. This vegetation type typically occurs on undulating plains, low foothills and mountain slopes within the Eastern Cape Province, primarily in the lower Sundays River Valley from Kleinpoort in the west toward Paterson and Colchester in the east.

However, site observation confirmed that the site proposed of development has been irreversibly modified and no vegetation is present on the site.

4.7 Eastern Cape Biodiversity Conservation Plan (ECBCP) 2019

According to ECBCP (2019) Freshwater mapping resource, the study area traverses an Ecological Support Area (ESA) 1 area (Figure 4.4). These ESA 1 areas are based on modelled wetland areas, stream channels, valley bottoms and a 32m buffer around these areas.

The desired state of ESA 1 areas is functional and the land management objective is to maintain ecological function within the localised and broader landscape. These areas should be maintained in a semi-natural state such that ecological function and ecosystem services are maintained.

It should be noted that the site and general surrounding areas have been transformed into cultivated areas, roads and other infrastructure with the construction of an already authorised Poultry Facility currently being undertaken immediately south-east of the proposed site. The ESA 1 area falling within the site does not follow rivers, streams, wetlands and are not connected to a stream channel. Although, labelled as ESA 1, these areas are not natural in any form or linked to any areas of conservation importance.

Figure 4.4 ECBCP Freshwater CBA Map.

4.8 Addo Biodiversity Sector Plan (2014)

According to the Addo Biodiversity Sector Plan (BSP) (2012), the majority of the site falls within areas classified as "No Natural Areas Remaining" and a small portion of the powerline falls within an ESA 1 area associated with the water storage dam east of the site (Figure 4.5).

The desired management objective for areas classified as No Natural Areas Remaining is sustainable management within general rural land use principles and are considered to be favourable areas for development. The desired management objective for ESA areas is to maintain ecological processes.

Based on aerial imagery and the site investigation, the site falls within already transformed areas (roads and previously cultivated areas).

Figure 4.5 Addo BSP (2012) Critical Biodiversity Areas and Landcover.

5. SITE ASSESSMENT

5.1 Rivers

No rivers occur within the proposed project footprint; however, the Sundays River does occur more than 300m from the site.

The Sundays River north of the site is characterised by a well-developed active channel surrounded by prominent reed beds within the bed and banks of the river.

5.2 Wetlands

No natural wetlands occur within the study area.

5.3 Water storage/stock dams

One water storage/stock dam occurs within the farmlands surrounding the proposed development footprint. This dam is artificial in nature and will be unaffected by the development proposals.

Description	View of water storage/stock dam occurring east of the proposed powerline line.
Location	33°36'0.39"S; 25°39'41.60"E

5.4 Delineation of watercourses within the study area

Figure 5.1 below provides a delineation of watercourses surrounding the study site. The delineation was undertaken using available historical aerial imagery, topographical data and site survey findings. Based on the available data the proposed development does not fall within a river or drainage line.

Figure 5.1 Delineation of watercourses surrounding the study area.

6. SENSITIVITY

6.1 DEA National Environmental Screening Tool

The DEA National Environmental Screening Tool classifies the site as having a *low* sensitivity (Figure 6.1) in terms of aquatic environment given that there are no sensitive aquatic features.

Figure 6.1 DEA National Environmental Screening Tool classification of the aquatic sensitivity of the site.

6.2 Final Site Sensitivity Verification

The final site sensitivity allocation is based on the desktop and site assessment of the water resources within the study area. The site is considered to fall within a low sensitivity area as no sensitive aquatic features are present on site.

Table 6.1 below provides a description of the sensitivity rating assigned to the dam found on site. The table indicates the specific rating and the rationale behind the allocation of the sensitivity rating.

Table 6.1 Sensitivity ratings of watercourses surrounding the site footprint and rational behind the allocation.

Sensitivity rating	Watercourse	Rationale
Low	Low sensitivity is allocated to: • Water storage/stock dams bordering the study site.	No biodiversity value is associated with the water storage/stock dam.

7. RECOMMENDATIONS AND MITIGATION MEASURES

The proposed development is unlikely to have any adverse negative impacts on the surrounding or downstream watercourses as no sensitive watercourses are directly within the site.

Although there are no adverse negative impacts anticipated on surrounding and downstream watercourses, however, the following recommendations should be considered for inclusion in the EMPr:

- An Alien Vegetation Management Plan must be developed and implemented during and post-construction.
- A Rehabilitation Plan must be developed and implemented when required (if applicable).
- Construction activities must be limited to the approved project footprint.
- Bare soil surfaces must be protected against erosion using appropriate erosion control measures.
- Stormwater management to capture and disperse runoff must be implemented during the construction and operation phase.
- Any construction site camp and material stockpile areas must be established in already disturbed areas more than 32m from any watercourses surrounding the site.
- All hazardous substances and hazardous waste must be stored in impermeable structures placed in secondary impermeable bunded structures 110% the volume of the primary structure.
- All hazardous substances and hazardous waste should be placed more than 32m from any watercourses surrounding the site.
- Emergency response plan must be drawn up to deal with any hazardous spillages/accidental leakages.
- A Spill kit must be available on site during the construction phase.
- A drip tray must be used under all generators and any construction vehicles (when on site and not in use).
- All chemical toilets/ablution facilities (for duration of construction period) must be properly secured so that they cannot be windblown, be serviced regularly and should be placed more than 32m from any watercourses surrounding the site and located on the farm property.
- ECO should be appointed for monitoring of conditions in the EMPr.
- Construction must not commence until necessary approvals/permissions have been obtained from the relevant departments.

8. CONCLUSIONS AND RECOMMENDATIONS

The proposed development footprint falls within an existing transformed area considered to be of **LOW** aquatic sensitivity. The only linear activity, the proposed powerline route footprint, is expected to be rehabilitated to current state (already transformed) effectively within two years of completion of construction.

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Appendix A

Curriculum Vitae of Specialist

CURRICULUM VITAE

JACLYN SMITH *Pr.Sci.Nat*

ENVIRONMENTAL CONSULTANT

CONTACT

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5214

EDUCATION

2010-2012
Rhodes University
BSc Geology and Environmental Science

2013-2014
Nelson Mandela University
BSc (Hons) Geology

COURSES

2018
EIA Course
Rhodes University

2018
Tools for Wetland Assessment – Certified Competent
Rhodes University

PROFESSIONAL REGISTRATION

Registered Professional Natural Scientist with South African Council for Natural Scientific Professions (Reg No. 120693)

EXPERTISE

I have seven years' experience in environmental consulting. I have experience in managing and undertaking Environmental Impact Assessments (EIA) and Aquatic and Wetland Assessments as well as extensive experience in the following areas:

Public Participation: Managing and undertaking the public participation process in support of EIA's including public meetings and community and stakeholder engagement.

Water Use Licencing: Undertaking numerous water use licence applications with a Section 21 (a), (b), (c), (e), (f), (g) and (i) component.

Specialist studies: Preparation of reports and field assessments for vegetation impact assessments and waste management assessments.

Auditing: Construction and operation compliance audits for road and infrastructure upgrades as well as housing developments throughout the Eastern Cape.

Permit applications: Preparation of applications for removal of protected plant and tree species to DEDEAT and DAFF as well as demolition permit applications to ECPHRA.

EMPLOYMENT

Terreco Environmental cc Environmental Consultant	2015-2017
CES – Coastal and Environmental Services (Pty) Ltd Environmental Consultant	2017-2019

CONSULTING EXPERIENCE

Environmental Impact Assessments

- Construction of the new Sipetu River Bridge, Eastern Cape. 2014.
  - Basic Assessment Report Process
- Tsomo Bulk Sanitation Upgrade, Eastern Cape. 2014-2016.
  - Basic Assessment Report Process
- Thynk Retail One (Pty) Ltd Road and Services to Portion 9 of Farm 809, Queenera North, East London. 2017-2018.
  - Basic Assessment Report Process
- Rec-Oil Used-Oil Recycling Facility in Wilsonia, East London. 2017 to 2019.
  - Scoping and Environmental Impact Reports in support of Environmental Authorisation and Waste Licence Applications

CONSULTING EXPERIENCE

- Proposed Infrastructure Developments in the SANBI Kwelera National Botanical Garden, Eastern Cape. 2017 to 2019.
  - Basic Assessment Process
- Nottinghill Farm NEMA Section 24G Application, Eastern Cape. 2017 to 2018.
  - Section 24G application

Aquatic and Wetland Impacts Assessments

- Amalinda Downs Development, Amalinda, East London. 2018.
- Villa Rosa Development, Eastern Cape. 2017.
- Hope Village Development, Gauteng. 2018.
- Cambridge West Housing Development, Eastern Cape. 2019.
- Boulders WEF Powerline, Western Cape. 2019.
- Mbhashe Access Roads Upgrade, Mbhashe Local Municipality, Eastern Cape. 2019.
- MBSA Clarkebury Road Upgrade, Eastern Cape. 2019.
- Kei Road Housing Development, Eastern Cape. 2017.
- Tsomo WWTW Upgrade, Eastern Cape. 2019.
- Willowvale and Idutywa Informal Settlement Upgrades. 2020.
- Ventnor Dam, Tarkastad. 2020.
- BCMM Ward 46 Road and Culvert Upgrade. 2020.
- Dordrecht Sports Field Upgrade. 2020.

Water Use Licencing and Risk Assessments

- Alice pipelines and road upgrade, Eastern Cape. 2019.
- Amatolaville Primary School, Stutterheim, Eastern Cape. 2018.
- SKG Properties Bengal Heights Development, Amalinda, East London. 2017.
- Yellowwoods River Sewer Pipeline Crossing, Eastern Cape. 2019.
- Qwabi Bridge Widening, Eastern Cape. 2018.
- Mdantsane Pedestrian Bridges, Eastern Cape. 2019.

Permit applications

- MBSA J-Site, East London, Eastern Cape. 2016.
  - ECPHRA Demolition permit applications
- Mjanyana and Nessie Knight Hospital Upgrades, Eastern Cape. 2014.
  - ECPHRA Demolition permit applications
- Blind River Bridge Repairs, East London, Eastern Cape. 2014.
  - DAFF Protected plant permit application
- SKG Voestalpine Development, ELIDZ, East London, Eastern Cape. 2019.
  - Vegetation assessment and DAFF and DEDEAT plant relocation permits

Construction and Operation Compliance Auditing

- SANRAL Upgrade of the R72 from Openshaw Village to Birah River, Eastern Cape. 2017 to 2019.
- Wavecrest Hotel Expansion, Eastern Cape. 2018 to 2019.
- Kidds Beach Retirement Village, Eastern Cape. 2018.
- Da Gama annual external Water Use Licence Audit, Eastern Cape. 2018.
- Coffee Bay Quarry Works and Rehabilitation, Eastern Cape. 2015-2016.
- Coffee Bay to Zithulele Hospital Road and Bridge Upgrade, Eastern Cape. 2015-2016.
- Clippety Clop Housing Development. Eastern Cape. 2015-2016.
- Fynbos and Ndancama Housing Development, Eastern Cape. 2014-2017.

SACNASP

South African Council for Natural Scientific Professions

herewith certifies that

Jaclyn Jane Smith

Registration Number: 120693

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following fields(s) of practice (Schedule 1 of the Act)

Environmental Science (Professional Natural Scientist)

Effective **13 November 2019** Expires **31 March 2023**

Chairperson

Chief Executive Officer

To verify this certificate scan this code

Appendix D (ii): Terrestrial Biodiversity Compliance Statement

Terrestrial Biodiversity Compliance Statement

Proposed Middledrift PV facility

Date: 18/07/2022
Version: Final Draft
Author: J. Pote

Terrestrial Biodiversity Compliance Statement

Proposed Middledrift PV facility

Compiled by: **Jamie Pote** (Pr. Sci. Nat.)
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Compiled for: **Public Process Consultants**

Date of report: **18/07/2022**

Version: Final Draft

Revisions

Report/Revision Version	Date:	Approved by:
First Draft	17/06/2022	Jamie Pote
Revisions/Comments	30/06/2022	JP Hechter
Final Draft	18/07/2022	Jamie Pote
IAP comments		
Final Version		

Table of Contents

1 Introduction

This compliance statement is compiled as per the requirements of Section 5.3 of the Terrestrial Biodiversity, Plant and Animal Species Protocols.

1.1 Specialist Details

Name: Jamie Pote
Qualification: BSc - Botany & Environmental Science, Rhodes University; BSc (Hons) - Botany, Rhodes University
Professional Membership: SACNASP: Ecological Science (Registration number 115233)
Experience: Jamie Pote has over 18 years professional experience in Biodiversity, Ecological and Vegetation Assessments on over 350 projects in southern, western and central Africa across a wide range of habitats and biomes. This biodiversity experience is tempered by his experience as an environmental assessment practitioner on over 50 projects in the mining, infrastructure, housing and agricultural sectors and environmental monitoring as well as environmental auditing and monitoring on over 50 civil infrastructure and construction projects. Jamie Pote has thus participated in and managed all aspects of projects from inception through to implementation as an individual, specialist and as part of complex multidisciplinary teams, thus developing deep insight not only into the ecological sphere but also developing an overall understanding and insight into the complex socio-environmental-economic of the natural environment. The implementation of this environmental experience is further enhanced through the utilisation and development of Advanced GIS Mapping Tools and Analysis and Biostatistics including community analysis.

SACNASP registration certificate and abbreviated professional profile attached as Appendix C.

1.2 Statement of independence

I, Jamie Pote, as the appointed terrestrial biodiversity specialist, hereby declare/affirm the correctness of the information provided in this compliance statement, and that I:

1. meet the general requirements to be independent and have no business, financial, personal or other interest in the proposed development and that no circumstances have occurred that may have compromised my objectivity; and
2. am aware that a false declaration is an offence in 27 terms of regulation 48 of the EIA Regulations (2014).

Signature

18 July 2022
Date

1.3 Purpose of Report

1.3.1 Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes

The report will be compiled to fulfil the requirement for a **Terrestrial Biodiversity Compliance Statement** as per 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 NEMA (GNR 320), **as gazetted on 20 March 2020.** This report is undertaken as supporting information as part of an environmental

application process and is compliant in terms of the requirements in the above regulations in terms of Terrestrial Biodiversity.

This report also includes the requirements of 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 NEMA, gazetted **on 30 October 2020**, relating specifically to the **Terrestrial Plant and Animal (species) themes**.

The principles that guide this process include protecting and conserving biodiversity, maintaining ecosystem services, and sustainably managing living natural resources which are fundamental to sustainable development.

2 Methodology

2.1 Desktop Study

1. A Screening Tool report was compiled on 16 April 2021, via the national web-based screening tool website (https://screening.environment.gov.za/screeningtool/).
2. Satellite aerial imagery, including historical imagery was interpreted.
3. No data modelling nor other databases other than the national web-based screening tool was required.
4. No habitat mapping was required, as the entire site is considered to be transformed.
5. Relevant databases and bioregional plans that have been assessed include the following

    - National (DEA) Web Based Screening Tool – to generate the sites potential environmental sensitivity.
    - National Vegetation Map 2018 (NVM, 2018), Mucina & Rutherford (2006) and National Biodiversity Assessment (NBA, 2019) – description of vegetation types, species (including endemic) and vegetation unit conservation status.
    - Sub-Tropical Ecosystem Planning (STEP, 2002) – bioregional plan.
    - Eastern Cape Biodiversity Conservation plan (ECBCP, 2019) – critical biodiversity areas.
    - Sundays River Valley Biodiversity Sector Plan SRVM BSP, 2012) – critical biodiversity areas.
    - Botanical Database of Southern Africa (BODATSA) and New Plants of Southern Africa (POSA) – lists of plant species and potential species of concern found in the general area (SANBI.)
    - International Union for Conservation of Nature (IUCN) - Red List of Threatened Species.
    - Animal Demography Unit Virtual Museum (VM) – potential faunal species.
    - Global Biodiversity Information Facility (GBIF) – potential faunal species.
    - Southern African Bird Atlas Project 2 (SABAP2) – for bird species records.
    - National Red Books and Lists - mammals, reptiles, frogs, dragonflies & butterflies.
    - National and Regional Legislation including Provincial Nature Conservation Ordinance (P.N.C.O). NEM:BA Threatened or Protected Species (ToPS).
    - National Freshwater Ecosystem Priority Areas assessment (NFEPA, 2011) - important catchments.
    - National Protected Areas Expansion Strategy (NPAES, 2018) and South Africa Protected Area database (2020) – protected area information.

2.2 Assumptions and Limitations

- It is assumed that all third-party information used, including GIS datasets, screening tool and satellite imagery was correct at the time of generating this report.
- The survey was restricted to a single season (autumn), but it is not considered necessary to perform any additional surveys as the findings were conclusive.
- All areas on site requiring assessment were accessible.

2.3 Site Inspection

A site inspection was conducted on 15 June 2022, with a duration of 2 hours, undertaken during Winter months, supplemented by several other site visits to the affected site in the 2021/2022 period. Due to the completely transformed nature of the site and area of influence, seasonality of the survey is not considered to be an important factor.

2.4 Field Survey

- The specialist investigated the study area on foot due to the small size (less than 5 Ha).
- No sample sites were required due to the small size of the area and obvious transformation, with little to no vegetation cover.
- The habitat was characterised and photographed, and the likelihood of any Terrestrial Biodiversity Priority Areas (BPAs), plant or animal species being present was determined
- All terrestrial ecosystems observed during the site survey were photographed using a Canon 60 EOS 350D with 18–55 mm zoom lens and Samsung Galaxy S22 Ultra smartphone camera.

3 Project Description

3.1 Activity Location and Description

An application is being undertaken by Public Process Consultant's on behalf of the Boeram Venter Trust, (the applicant) for the proposed construction of a Photo Voltaic Solar Facility and associated Infrastructure on Portions 10 and 40 of Farm 192, (Middledrift), which requires an environmental authorisation in order to undertake a listed activity. Refer to BA report for a comprehensive project description.

The combined construction footprint for the solar PV area is approximately 2.8 hectares in extent and overground and underground cabling to connect to the Eskom grid and local transformers as per project description. The proposed footprint for the PV facility will be within a transformed area (pasture) that is comprised of pasture grasses with no natural indigenous vegetation remaining as the site has been cleared of natural vegetation and is immediately adjacent to an under-construction chicken house facility. The overhead power line to connect to the Eskom grid, will pass through the construction footprint of the chicken houses, which is currently devoid of vegetation.

The site is located in the Eastern Cape, outside of urban areas and the nearest terrestrial boundary of the Addo Elephant National Park is 5.3 km west of the development footprint, while the nearest marine boundary of the Park is 4.6km is south-east of the development footprint.

3.2 National Environmental Screening Tool

The National web-based Environmental Screening Tool allows for the generating of a Screening Report referred to in Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended, which is required to accompany any application for Environmental Authorisation. The National Environmental Screening Tool identifies the following Sensitivities on the site, which have relevance to this report:

- Terrestrial Biodiversity - Very High and Low (Figure 1).
- Plant Species sensitivity – Low (Figure 2).
- Animal Species sensitivity – Medium (Figure 3).
- Aquatic Sensitivity - Low (Figure 4).

Figure 1:. Terrestrial Biodiversity Sensitivity.

Figure 2:. Plant Species Sensitivity

Figure 3:. Animal Species Sensitivity

Figure 4:. Aquatic Sensitivity

The key biodiversity features that are indicative of this sensitivity, which will be assessed further in this report, include the following:

Sensitivity	Feature(s)	Affected Project Component/s
Terrestrial Sensitivity		
Very High	Ecological support area 1	A small section of the overhead powerline route
High	None	
Medium	None	
Low	Present	Majority of the PV footprint
Plant Sensitivity		
Very High	None	
High	None	
Medium	None	
Low	Present	Entire development footprint
Animal Sensitivity		
Very High	None	
High	None	
Medium	Sensitive species 7	Potentially within the development footprint
Low	Present	
Aquatic Sensitivity		
Very High	None	
High	None	
Medium	None	
Low	Present	Development footprint – refer to separate Aquatic Specialist Compliance Statement

This compliance statement serves to confirm the presence or absence of such features on the site and area of influence.

3.3 Regional Planning

A screening of Systematic Planning Frameworks for the site was undertaken (summarised in Table 1), that included the following features:

- Critically Endangered and Endangered Ecosystems
- Critical Biodiversity Areas & Ecological Support Areas
- Vulnerable Ecosystems
- River, Estuarine and Wetland Freshwater Ecosystem Priority Areas (FEPAs) and buffers
- Protected Areas (and buffers) and NPAES
- Critical Habitat for listed endemic or protected species.

Table 1: Summary of Regional Planning Biodiversity features.

FEATURE	DESCRIPTION	IMPLICATIONS/COMMENT
National Environmental Screening Tool (Terrestrial Biodiversity)	The following sensitivities have been identified for the proposed development footprint: Terrestrial Biodiversity Very High & Low Sensitivity Plant Species Low Sensitivity Animal Species Medium Sensitivity Aquatic Biodiversity Low Sensitivity	The majority of the proposed development footprint falls within an area that has been identified as Low sensitivity, and a small section of the proposed overhead transmission line falls within a Very High Sensitivity area, classified as a Terrestrial Ecological Support Area 1 (ESA 1). However, the proposed development footprint PV site and OHL fall within a completely transformed area, namely, pastures located north, north-west, and south as well as an area for chicken houses currently under construction. Adjacent to the site (north-west, west, and south) are citrus orchards. No significant plant or animal species present or likely to be present due to transformed nature of site.
National Vegetation Map (NVM, 2018)	The area has been mapped as Sundays Valley Thicket (PV & OHL)	Sundays Valley Thick has been classified as Least Concern. No Sundays Valley Thicket was identified within the proposed development footprint, due to the transformed nature of the site
Critically Endangered and Endangered Ecosystems (NBA, 2019)	None	No Critical Endangered or Endangered Ecosystems will be affected.
Vulnerable Ecosystems (NBA, 2019)	None	No Vulnerable ecosystems have been identified on site and thus will not be affected
Eastern Cape Biodiversity Conservation Plan (2019)	Terrestrial ESA 1	The proposed development footprint falls within a completely transformed area, namely, pastures located north, north-west, and south as well as chicken houses currently under construction. Therefore, Ecological Support Systems or connectivity function is limited. A relict ESA, as

FEATURE	DESCRIPTION	IMPLICATIONS/COMMENT
		flagged on the screening tool, it no longer present nor functional, having been historically cultivated. The site is none the less to the north of this flagged feature, and will not be impacted.
Sundays River Valley Municipality Biodiversity Sector Plan (SRVM BSP) – CBA Mapping resources	"No Natural Remaining" NNR.	A site visit confirmed the study area is transformed and no natural vegetation is remaining on site.
Regional Planning: Sub-Tropical Ecosystem Planning (STEP, 2006)	Sundays Spekboom Thicket (OHL)	Sundays Spekboom Thicket is currently NOT Vulnerable. No Sundays Spekboom Thicket was identified within the development footprint, due to the transformed nature of the site.
Protected Areas (SAPAD)	The Addo Elephant National Park (AENP) is located ~5.3 km east of the development footprint.	These protected areas nor any associated ecological processes are likely to be affected by the proposed development.
NPAES	Closest designated NPAES areas are more than 10 km from the development footprint.	No NPAES or Ecological processes associated with the proposed development are likely to be affected.
Strategic Water Source Areas (SWSA)	Not situated within any designated SWSA	No Strategic Water Source Areas will be affected.
Freshwater Ecosystem Priority Areas (FEPA's)	The development footprint is situated approximately 330 m to the south of the perennial Sundays River (CLASS D: HIGHLY MODIFIED). The powerline is within 500 m of the same river.	The development footprint is in proximity to the Sundays River, which is extensively modified and generally surrounded along its banks by intensive agricultural activities. The development activities are unlikely to significantly impact cumulative impacts. Refer to the Aquatic Compliance Statement for further information.
Regional Hotspots & Regions of Endemism	The development footprint is located on the western edge of the Albany Centre of Endemism, being within the Gamtoos-Groot River basin.	Several endemic species are known to form the wider surrounding area; however, none are present on site due to the transformed nature of the area surrounded by citrus orchards and pastures.
Important Bird Areas (IBA's)	The development footprint does not fall within any Important Bird Areas (IBA's). The site is around 18 km from the Alexandria Coastal Belt IBA.	The specific activity will have no impact on the nearby IBA, nor any processes associated with it.
Key Biodiversity Areas (KBA's)	None	No Key Biodiversity Area will be affected.
Marine/Coastal areas	The closest boundary of the Addo Elephant Marine Protected Area is located 4.6 km to south-east of the proposed development footprint	The specific activity will have no impact on the nearby Marine Protected Area, nor any processes associated with it.
RAMSAR sites	None	The proposed development will have no impact on any RAMSAR sites
Within 32 m of Watercourses	Site is not in proximity to non-perennial watercourses.	Unlikely to pose any risk to watercourses.
Within 100 m of Rivers	The closest boundary of the Sundays River is located ~330m from the development footprint	Terrestrial Biodiversity impacts on the Sundays River, associated with the development will be negligible.
Within 500 m of Wetlands	Several man-made dams are present in the surrounding area.	Site is outside of functional zones of these aquatic features and the proposed activity is

FEATURE	DESCRIPTION	IMPLICATIONS/COMMENT
		not anticipated to have any direct or indirect impact of significance.
Forest	None	No forest pockets nor any ecological processes associated with them are affected by the proposed project.
Surrounding Land Uses	Agriculture	High levels of disturbance are present in surrounding landscape associated with the Sundays River Valley, being a high value irrigated agricultural area.
Critical Habitat for listed endemic/ protected species	Transformed Habitat	No threatened or protected or endemic plant or animal species were recorded within the site nor are likely to be present within the area of influence since it is completely transformed.

4 Findings

4.1 Sampling and Observations

Due to the small area and transformed nature of the site (being cleared of natural vegetation), no sampling sites were required. Furthermore, vegetation within the site comprised of a mix of pasture grasses with occasional ruderal or ephemeral herbaceous weeds. The site is adjacent to an area that is currently being prepared for the construction of a chicken breeder facility, through which a section of the powerline will run.

4.2 Terrestrial Biodiversity

No natural vegetation is present on the site. Habitat characteristics indicate the area is transformed and the likelihood of any terrestrial ecosystem BPA's, plant or animal Species of Conservation Concern being found at the site or within the area of influence is negligible (very low to nil).

Being transformed, the PV site is surrounded by pastures on the north-west, north and north-eastern sides, with Citrus orchards on the west, south-west and southern sides. The proposed development footprint is located immediately adjacent to a chicken breeder facility that is currently under construction and was authorised as part of a separate Basic Assessment Process. No remnant indigenous vegetation is presently associated with the Screening tool flagged ESA. The site is thus not considered to be an Ecological Support Area 1 nor is it likely to provide ecological function associated with such features. The actual footprint is also outside of the flagged ESA feature (Figure 5)

The entire site is confirmed to have a **Low** Terrestrial Biodiversity sensitivity; hence a compliance statement is deemed adequate.

Figure 5: Eastern Cape Biodiversity Conservation Plan (2019): Note PV outside of designated ESA 1 area.

4.3 Plant Species

No sensitive plant species were identified by the National Screening Tool, and none were identified on site, confirming the designated **Low** sensitivity of the site.

4.4 Animal Species

Sensitive Species 7 identified by the National Screening Tool, is not found nor likely to be present within the development footprint or site, due to the highly modified nature of the site (cultivated pasture, orchards and a chicken house construction site). In addition, the site, being comprised of transformed habitat, is unlikely to provide suitable habitat for this animal species.

4.5 Aquatic Biodiversity

The proposed activity is unlikely to pose any risk to any terrestrial aspects pertaining to aquatic features. Aquatic Biodiversity and potential impact pertaining to the proposed development will be assessed by a separate Aquatic Biodiversity Compliance Statement.

4.6 Proposed Impact Management Actions

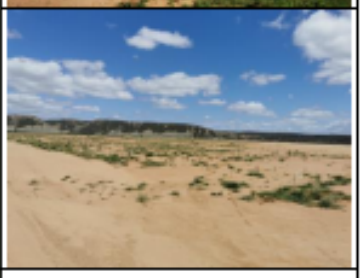
1. No impact management actions are proposed to mitigate impacts on terrestrial biodiversity (plant and animal species impacts) as it is unlikely that there will be any impacts of this nature.
2. Appropriate measures to be implemented in order to manage stormwater runoff from the PV facility.
3. Compliance with duty of care in terms of Section 28 of the National Environmental Management Act (NEMA).

5 Conclusion and Recommendations

1. This compliance statement is applicable only to the study area as described in the BA documentation and shown the map provided in Appendix B.
2. Due to the transformed state of the habitat and confirmed absence of any "very high", "high" or "medium" sensitive features, the PV site is considered to have a "**low**" sensitivity for terrestrial biodiversity, plant species and animal species.
3. The proposed development will not have any impact on terrestrial biodiversity, including Terrestrial Biodiversity Priority Areas (BPAs), Plant and Animal Species of Conservation Concern
4. Sensitive Aquatic Biodiversity features will be assessed separately by an aquatic specialist.

6 Annexures

6.1 Appendix A: Site Photo Record

Site Photo 1 15 June 2022 25.656 S -33.599 E	View of the proposed PV site indicating pastures.	Low Sensitivity	
Site Photo 2 15 June 2022 25.656 S -33.599 E	View of the proposed PV site indicating pastures.	Low Sensitivity	
Site Photo 3 15 June 2022 25.656 S -33.599 E	View of the area prepared for the construction of the chicken houses, immediately adjacent to the proposed PV facility (East).	Low Sensitivity	
Site Photo 4 15 June 2022 25.656 S -33.599 E	Proposed powerline termination point, where the powerline will connect to an ESKOM Transformer	Low Sensitivity	

7 Appendix B: Site Layout Map

8 Appendix C: SACNASP Certificate

SACNASP
South African Council for Natural Scientific Professions

herewith certifies that

Jamie Robert Claude Pote

Registration Number: 115233

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following fields(s) of practice (Schedule 1 of the Act)

Ecological Science (Professional Natural Scientist)

Effective **20 July 2016** Expires **31 March 2023**

Chairperson

Chief Executive Officer

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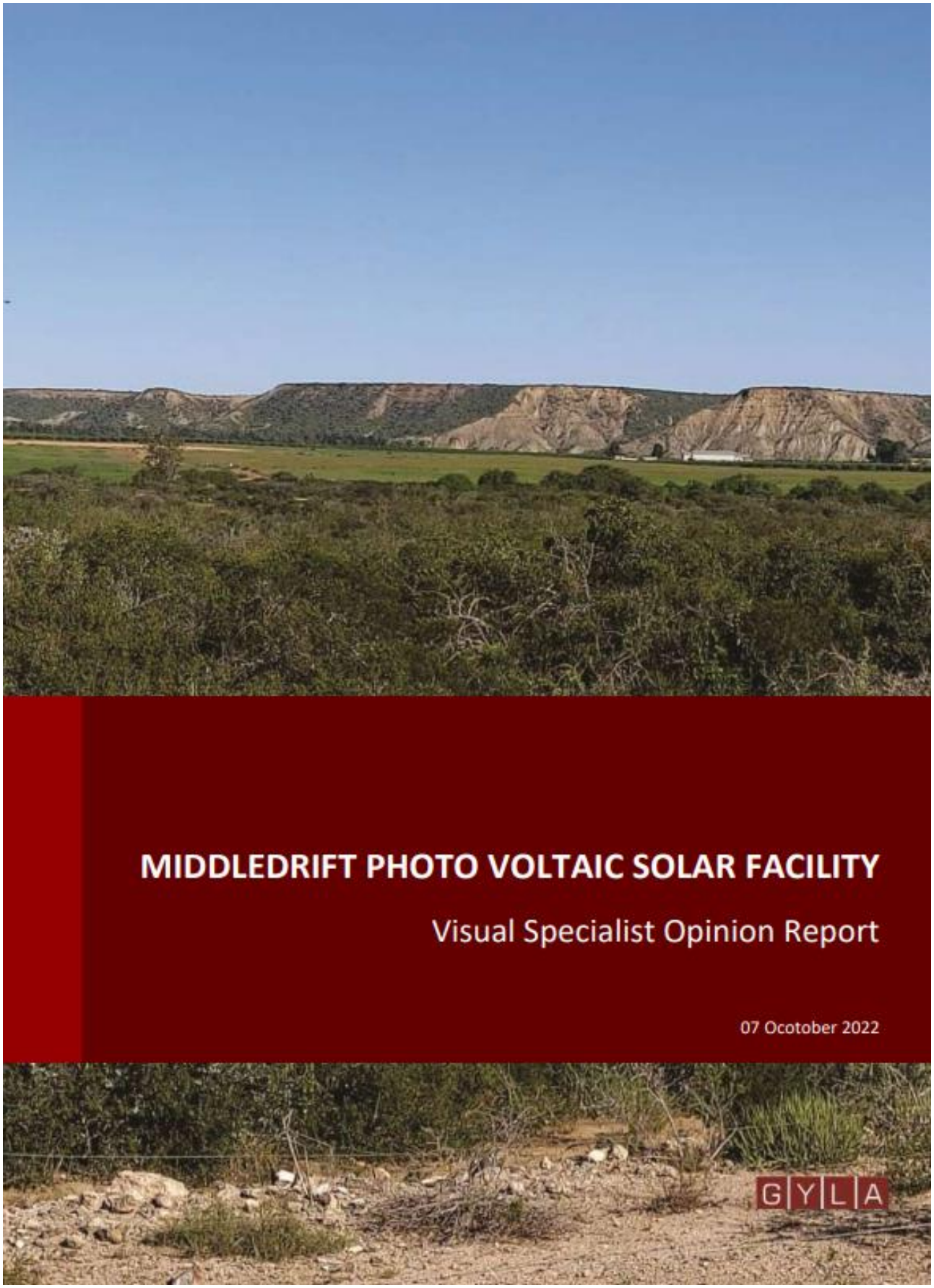
Appendix D (iii): Visual Specialist Opinion Report



VISUAL SPECIALIST OPINION REPORT

MIDDLEDRIFT PHOTO VOLTAIC SOLAR FACILITY, EASTERN CAPE

Submitted to:

Public Process Consultants
PO Box 27688, Greenacres, 6057
Tel: +27 041 374 8426

Prepared by:

GYLA

Graham A Young Landscape Architect

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Report Revision No:	*FINAL*
Date Issued:	07 October 2022
Prepared By:	Graham Young PrLArch, FILASA
Reviewed By:	Graham Young PrLArch, FILASA

Signed:

Reference: 089_2022: Middledrift PV Solar Facility

EXPERTISE OF SPECIALIST

Name:	Graham A Young
Qualification:	BL (Toronto)
Professional Registration:	South African Council for the Landscape Architectural Profession (SACLAP) Fellow Institute of Landscape Architects of South Africa (FILASA)
Experience in Years:	40 years
Experience	Graham is a landscape architect with forty years of experience. He has worked in Southern Africa and Canada and has valuable expertise in the practice of landscape architecture, urban design, and environmental planning. He is also a senior lecturer, teaching urban design and landscape architecture at post and undergraduate levels at the University of Pretoria. A speciality of his is Visual Impact Assessment, for which he was cited with an ILASA Merit Award in 1999. He has completed over 275 specialist reports for projects in South Africa, Canada and other African countries. He was on the panel that developed the *Guideline for Involving Visual and Aesthetic Specialists in EIA Processes* (2005) and produced a research document for Eskom, *The Visual Impacts of Power Lines* (2009). In 2011, he created *'Guidelines for involving visual and aesthetic specialists'* for the Aapravasi Ghat Trust Fund Technical Committee (they manage a World Heritage Site) and the *Visual Impact Assessment Training Module Guideline Document*.

DECLARATION OF INDEPENDENCE

I, Graham Young, declare that –

- I am contracted to produce the Visual Impact Report for the Middledrift Photo Voltaic Solar Facility Project, Eastern Cape.
- I will perform the work relating to the application objectively, even if this results in views and findings that are not favourable to the applicant.
- I declare that there are no circumstances that may compromise my objectivity in performing such work.
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the National Environmental Management Act (Act 107 of 1998), 2014 Environmental Impact Assessment Regulations (as amended on 7 April 2017), and any guidelines that have relevance to the proposed activity.
- I will comply with the Act, regulations, and all other applicable legislation.
- I will consider, to the extent possible, the matters listed in Regulation 13.
- I have no, and will not engage in, conflicting interests in the undertaking of the activity.
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing – any decision to be taken concerning the application by the competent authority; and – the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority.
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 16 (1)(b)(iii).

Graham A. Young FILASA PrLArch Reg. No. 87001

03 June 2022

Acronyms & Abbreviations	
EIA	Environmental Impact Assessment
EMPR	Environmental Management Programme Report
GYLA	Graham A Young Landscape Architect
NEMA	National Environmental Management Act
SACLAP	South African Council for the Landscape Architectural Profession
VAC	Visual Absorption Capacity
VIA	Visual Impact Assessment

Glossary of Terms	
Aesthetic Value	Aesthetic value is the emotional response derived from the experience of the environment with its natural and cultural attributes. The response can be either to visual or non-visual elements and can embrace sound, smell and any other factor having a strong impact on human thoughts, feelings and attitudes (Ramsay, 1993). Thus, aesthetic value encompasses more than the seen view, visual quality or scenery and includes atmosphere, landscape character and sense of place (Schapper, 1993).
Aesthetically significant place	A formally designated place visited by recreationists and others for the express purpose of enjoying its beauty. For example, tens of thousands of people visit Table Mountain on an annual basis. They come from around the country and even from around the world. By these measurements, one can make the case that Table Mountain (a designated National Park) is an aesthetic resource of national significance. Similarly, a resource that is visited by large numbers who come from across the region probably has regional significance. A place visited primarily by people whose place of origin is local is generally of local significance. Unvisited places either have no significance or are "no trespass" places. (after New York, Department of Environment 2000).
Aesthetic impact	Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Mere visibility, even startling visibility of a project proposal, should not be a threshold for decision making. Instead, a project, by its visibility, must interfere with or reduce

	(i.e. visual impact) the public's enjoyment and/or appreciation of the appearance of a valued resource e.g. cooling tower blocks a view from a National Park overlook (after New York, Department of Environment 2000).
Cumulative Effects	The summation of effects that result from changes caused by a development in conjunction with the other past, present, or reasonably foreseeable actions.
Landscape Character	The individual elements that make up the landscape, including prominent or eye-catching features such as hills, valleys, woods, trees, water bodies, buildings, and roads. They are generally quantifiable and can be easily described.
Landscape Impact	Landscape effects derive from changes in the physical landscape, which may give rise to changes in its character and how this is experienced (Institute of Environmental Assessment & The Landscape Institute 1996).
Study area	For this report, the Project Study area refers to the proposed project footprint/project site as well as the 'zone of potential influence' (the area defined as the radius about the centre point of the Project beyond which the visual impact of the most visible features will be insignificant) which is a 3,0km radius from the approximate centre of the proposed project footprint.
Project Footprint / Site	For this report, the Project *site/footprint* refers to the actual layout of the Project as described. Incorporating all alternatives to the Project.
Sense of Place (genius loci)	Sense of place is the unique value that is allocated to a specific place or area through the cognitive experience of the user or viewer. *A genius locus means* 'spirit of the place.'
Sensitive Receptors	Sensitivity of visual receptors (viewers) to a proposed development.
Viewshed analysis	The two-dimensional spatial pattern created by an analysis that defines areas, which contain all possible observation sites from which an object would be visible. The basic assumption for preparing a viewshed analysis is that the observer eye height is 1,8m above ground level.
Visibility	The area from which project components would potentially be visible. Visibility depends upon general topography, aspect, tree cover or other visual obstruction, elevation, and distance.
Visual Exposure	Visibility and visual intrusion qualified with a distance rating to indicate the degree of intrusion and visual acuity, which is also influenced by weather and light conditions.
Visual Impact	Visual effects relate to the changes that arise in the composition of available views because of changes to the landscape, to people's

	responses to the changes, and the overall effects concerning visual amenity.
Visual Intrusion	The nature of intrusion of an object on the visual quality of the environment resulting in its compatibility (absorbed into the landscape elements) or discord (contrasts with the landscape elements) with the landscape and surrounding land uses.
Visual absorption capacity	Visual absorption capacity is defined as the landscape's ability to absorb physical changes without transformation in its visual character and quality. The landscape's ability to absorb change ranges from low-capacity areas, in which the location of an activity is likely to cause a visual change in the character of the area, to high-capacity areas, in which the visual impact of development will be minimal (Amir & Gidalizon 1990).
Worst-case Scenario	Principle applied where the environmental effects may vary, for example, seasonally to ensure the most severe potential effect is assessed.
Zone of Potential Visual Influence	By determining the zone of potential visual influence, it is possible to identify the extent of potential visibility and views which could be affected by the proposed development. Its maximum extent is the radius around an object beyond which the visual impact of its most visible features will be insignificant primarily due to distance.

TABLE OF CONTENT

1. INTRODUCTION

1.1 Project Overview and Background

Graham A Young Landscape Architect (GYLA) was commissioned by Public Process Consultants to conduct a visual Specialist Opinion Report for the proposed Middledrift Photo Voltaic project ("the Project"). The report is part of the Project's Scoping and Environmental Impact Assessment (EIA) process. The project proponent, The Boeram Venter Trust, proposes constructing the facility on Portions 10 and 40 Farm 192 (Middledrift). Refer to Figure 1.

The VIA focuses on the potentially intrusive nature of physical aspects of the proposed Project (form, scale, bulk and sense of space) within its local context. Refer to Figure 2.

1.2 Project Site and Study Area

The project site is within an already transformed agriculture area comprised of cultivated land, namely pastures. Immediately south-east of the PV facility is a poultry breeding facility and its associated infrastructure which is currently under construction (authorised). The total construction footprint is approximately 3ha and occurs in an already disturbed area. The study area[1] is approximately 3km from the centre of the Project site, as illustrated in Figure 2.

1.3 Objective of the Report

The objective of the report is to document the baseline and ensure that the visual/aesthetic consequences of the proposed Project are understood. Therefore, the report confirms land use, landscape sensitivity and sensitive receptors.

1.4 Project Site and Study Area

The following terms of reference were established:

- Data was collected, photographs were taken during a site visit (6 May 2022), and a desktop study using, primarily, Google Earth.
- Identify a study area by means of a viewshed analysis
- Describe the landscape character and quality and assess the visual resource of the receiving environment as contained within the study area.
- Describe the visual characteristics of the components of the Project; and
- Identify potential receptor sensitivities and visual issues that may arise from the proposed Project.
- Identify the potential impacts, if any, on the Addo Elephant National Park, located ~5.2km east of the proposed project footprint.
- Propose mitigation options to reduce the identified potential impact of the Project.

[1] The extent of the study area is determined by the zone of potential influence, which in this study relates to a radius of 3,0km around the Project site. At 3,0km and beyond the development would recede into background views and or be screened by topography, vegetation.

1.5 Assumptions, Limitations and Uncertainties

- The description of project components is limited to what has been supplied to the author before this report's completion date.
- The public participation process had not been completed at the time of writing the report; however, based on the context of the development (within and already disturbed area and immediately adjacent to a poultry breeding facility, it is assumed that sensitivities would be low.

1.6 Legal Requirements and Guidelines

This report adheres to the following guideline document. Western Cape Department of Environmental Affairs & Development Planning: Guideline for Involving Visual and Aesthetic Specialists in EIA Processes Edition 1 (CSIR, 2005). Although the guidelines were compiled for the Province of the Western Cape, they provide guidance elsewhere in the country and are appropriate for any EIA process. The Guideline document also seeks to clarify instances when a visual specialist should get involved in the EIA process.[2]

1.7 Approach

The guideline document determined the scope and approach for specialist involvement in VIA processes. As the Project is expected to have a minimal visual impact on the environment, Level 2 of visual input is recommended (Oberholzer 2005:19). The Level 2 approach is:

- Identification of issues raised in scoping phase, and site visit
- Description of the receiving environment and the proposed Project
- Establishment of view catchment area and receptors; and
- A brief indication of potential visual impacts and possible mitigation measures.

1.8 Zone of Potential Influence

The extent of the study area is determined by the zone of potential influence, which in this study relates to a radius of 3,0km around the Project site. At 3,0km and beyond the development would recede into background views and or be screened by topography, vegetation. The two-dimensional spatial pattern created by an analysis defines areas, which contain all observation sites from which an object would be visible. The basic assumption for preparing a viewshed analysis is that the observer eye height is 1,8m above ground level. However, these types of viewshed investigations (using readily available GIS software and terrain contours only) are limited in their accuracy due to their inability to incorporate vegetation information. To be more accurate at predicting absolute visibility, the analysis would require "a 3D model of a tree/plant and a layer indicating the spatial distribution and density of vegetation on the landscape" (Llobera 2007:799) and buffering all existing buildings, structures and infrastructure. The possibility of indicating both the spatial and density distribution of tree/plants, and the three-dimensional model representing vegetation and all structures, is currently not available to the author. Therefore, on-site observations are critical.

[2] The Western Cape Guidelines are the only official guidelines for visual impact assessment reports in South Africa and can be regarded as best practice throughout the country.

These indicate that although the viewshed as indicated in Figures 6 and 6-1 extend mostly to the east, views from these general areas, as well as from tourist roads within the Addo Elephant National Park (AENP), to the project site would mostly be blocked by vegetation, and /or shade structures. .

Figure 01: **LOCALITY** - Middledrift PV Solar Facility

Figure 02: **CONTEXT**- Middledrift PV Solar Facility

GYLA
Graham A Young Landscape Architect

The Photovoltaic Solar facility will have the capacity to generate 2.2MW AC electricity which will be fed back into the Eskom grid as part of a Wheeling Agreement with the power utility. The following are proposed as part of this project:

- An inverter room approximately 200m² in extent
- A battery container facility with a 2 000m² footprint
- Underground cables will connect the Solar array and associated components of the facility
- An existing ESKOM transmission line runs along the southern boundary of the farm. A new ESKOM line has been installed aboveground from this line for a distance of ~43m, northwards towards an existing upgraded metering point with a capacity of 1.6MVA.
- From the metering point, a new private power line will be installed underground over a distance of ~240m terminating at an existing ESKOM transformer located at the pumphouse adjacent to the approved farm dam. The capacity of this new line is 22kV. The transformer will be relocated in conjunction with the relocation of the pump house after the dam has been expanded (already authorised with the Poultry Facility). The capacity will be 1.2MVA.

Refer to Figure 3, which illustrates the layout of the PV solar facility site within the context of the existing farm and typical PV arrays.

Figure 03: **SITE LAYOUT**- Middledrift PV Solar Facility

GYLA
Graham A Young
Landscape Architects

3.1 Typical Issues

Typical issues associated with solar PV projects:

- Who will be able to see the new development?
- What will it look like, and will it contrast with the receiving environment?
- Will the development affect sensitive views in the area, and if so, how?
- Would the solar PV panels cause glint and glare?
- What will be the impact of the development during the day and at night?
- What will the cumulative impact be?

PPC is conducting the public participation process at the time of writing, and the results are not known. However, it is anticipated that visual issues would not be a significant concern to the public, given the development's context.

3.2 Glint and Glare of Solar PV facilities

In addition to these common issues, the potential of glint and glare can be of concern. PV panel surfaces are designed to absorb the sunlight as much as possible, therefore substantially reducing the potential for glint and glare. The PV modules' glass layer is high transmission tempered glass with an anti-reflective (AR) coating. Consequently, the percentage of the reflected light from PV modules can vary from 2% to 30%, depending on the angle of incidence (PagerPower 2020:24). However, published guidance shows that the intensity of solar reflections from solar panels is equal to or less than those from water. It also indicates that reflections from solar panels are significantly less intense than many other reflective surfaces, which are common in an outdoor environment (PagerPower 2020:24). This amount is low: by comparison, a mirror can reflect a percentage of the incident light above 98% (Tata 2015:3).

However, the panels and other components reflect light that may result in some glinting (but only at minimal angles), and glare depending on panel orientation, sun angle, viewing angle, viewer distance, and other visibility factors (USDI 2013:77). The effect of glint (a sharp focus of light) is not generally associated with PV arrays; however, glare can occur with certain climatic and orientation conditions, as has been illustrated.

The South African Civil Aviation Authority (SACAA) obstacle notice 3/2020[3] Additional Requirements for Solar Project Applications states that a Glint and Glare Assessment would not be required if the solar PV facility is not within a 3km radius of the aerodrome (Part 139.01.30 (3). Therefore, a **Glint and Glare Assessment is not required**. However, glare could occur north of the PV solar arrays because the PV arrays face north.

[3] **Obstacle Notice 3/2020 (Replacement for 17/11/2017): Additional Requirements for Solar Project Applications**
Kindly note that with immediate effect, A Glint & Glare Assessment will be required as soon as the proposed site is located on the extended runway centreline within the ICAO Annex 14 Approach Surface, Take-Off Climb Surface & Departure Surface, and within 3km radius around an Aerodrome/helistop as pe Part 139.01.30 (3).

3.3 Addo Elephant National Park

The impact on the proposed Solar PV facility may be an issue that SANParks are concerned about. The following is and extract from their management plan.

The primary objective of a park zoning plan is to establish a coherent spatial framework in and around a park to guide and co-ordinate conservation, tourism and visitor experience initiatives and activities. A zoning plan plays a key role in minimising conflicts between different users of a park by separating potentially conflicting activities – such as game viewing and day-visitor picnic areas – whilst ensuring that activities which do not conflict with the park's values and objectives (especially the conservation of the protected area's natural systems and its biodiversity) can continue sustainably in appropriate areas.

The zoning of the park was based on an analysis and mapping of the sensitivity and value of a park's biophysical, heritage and scenic resources; an assessment of the regional context; an assessment of the park's current and planned infrastructure and tourist products; and an assessment of the expansion plan for the park and its implication for use zoning – all interpreted in the context of corporate values and park objectives" (SANParks 2015:39)[4].

The project site falls within the Addo Elephant National Park 'Buffer Zone' – Viewshed Protection Areas. "These are areas where development is likely to impact the aesthetic quality of the visitor's experience in a park. Within these areas, any development proposals should be carefully screened to ensure that they do not excessively impact the Park's aesthetics. The areas identified are only broadly indicative of sensitive areas, as, at a fine scale, many areas within this zone would be perfectly suited for development. In addition, major projects with large scale regional impacts may have to be considered even if they are outside the viewshed protection zone" (SANParks 2015:41).

However, it should be noted that the proposed project's development footprint is approximately 7,5km km west of the nearest boundary of the AENP.

Given that land use in the sub-region is dominated by citrus and other agricultural activities, including the extensive occurrence of shade cloth structures, Project activities would not be considered uncharacteristic within this context. Also, at approximately 8,5km from the nearest tourist road in the park (Harvey's Loop), the Project would not be visible (refer also to Figure 6-1) to the naked eye. It should also be noted that the buffer zones with the AENP Management Plan have not yet been gazetted in terms of the National Environmental Management Protected Areas Act, Strategy on Buffer Zones for National Parks.[5] Therefore, it is the opinion of the author that the proposed development will not have a significant impact on the AENP Viewshed Protection Areas.

[4] SANParks. 2015. *Addo Elephant National Park: Management Plan for the period 2015 – 2025.* SANParks. Pretoria.

[5] Public Process Consultants. Chapter 3 Final Amendment Report: Intsomi Citrus. Unpublished Report July 2021.

Apparent colour changes with differing sun angles and viewing geometry at a PV facility. (USDI 2013:78)
Credit: Robert Sullivan, Agganne National Laboratory.

PV panel surfaces are not designed to reflect light and therefore have reduced potential for glint and glare; however, the panels and other components do reflect light that may result in glinting, glare and other visual effects that would vary depending on panel orientation, sun angle, viewing angle, viewer distance, and other visibility factors (USDI 2013:77)

Figure 3-1: **GLINT AND GLARE -** Middledrift PV Solar Facility

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Landscape Architects
082 452 1431

Vegetation on the site has been removed, and no additional intact vegetation is required to be cleared in the solar PV area. The study area's original landscape was covered with Sundays Thicket (Mucina and Rutherford 2006:556) with some riverine vegetation along the Sundays River west of the site. Coega Bontveld vegetation occurs on the higher, undulation plains, immediately west of the Sunday's River, where most of the natural vegetation is relatively intact. However, the lower plains east of the river have been transformed by agricultural activities, cultivated land and citrus production, as illustrated in Figure 2. The proposed Project occurs in this landscape.

Immediately south and east of the proposed PV Facility is a poultry breeding facility. Further south and west are citrus orchards. North of the site is cultivated land and the R335. North again of the R335 is natural land and an associated game farm (Kudu Ridge). The Kudu Ridge Game Lodge is approximately 1,5km from the PV arrays and surrounded by vegetation. Some higher areas of the farm and the lodge site could potentially have views of the PV arrays. These, however, would appear as a small, dark blue strip in the landscape, and be 'absorbed' into the landscape, not unlike the View 1 in Figure 05-1.

The study area divides into two landscape types, natural undulating land west of the Sundays River and agricultural land on a flat plain east of the river. The sense of place for the study area is derived from these two main landscape types and evokes an agriculture/rural/natural character. The panoramas in Figures 05-1 and 05-2 depict these characteristics, and Figure 4 locates the viewing points.

Figure 04: **VIEW SITES** - Middledrift PV Solar Facility

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Graham & Young Landscape Architects

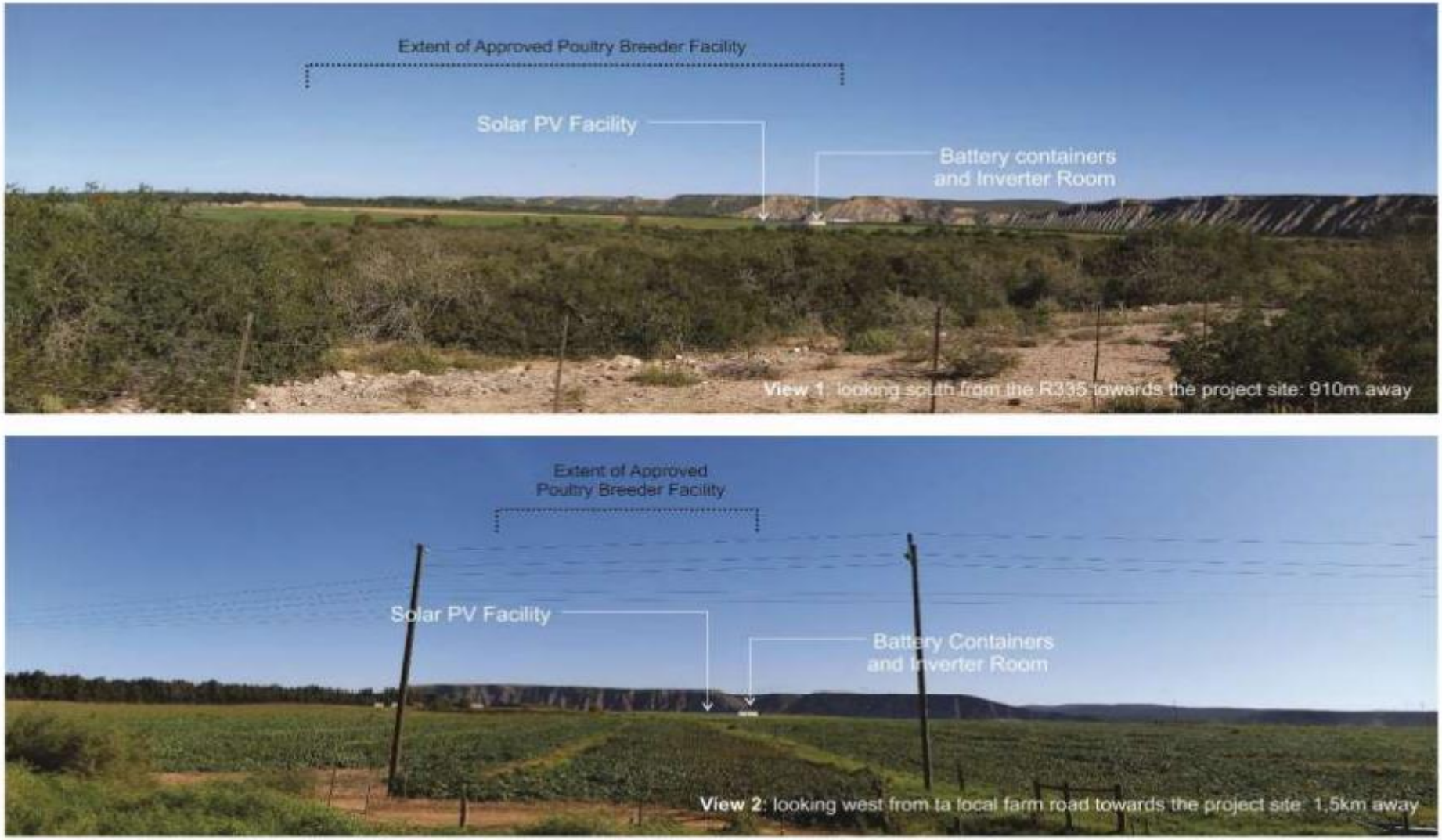

Figure 05-1: **LANDSCAPE CHARACTER - SIMULATION** Middledrift PV Solar Facility

GYLA
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Landscape Architects
082 882 1481

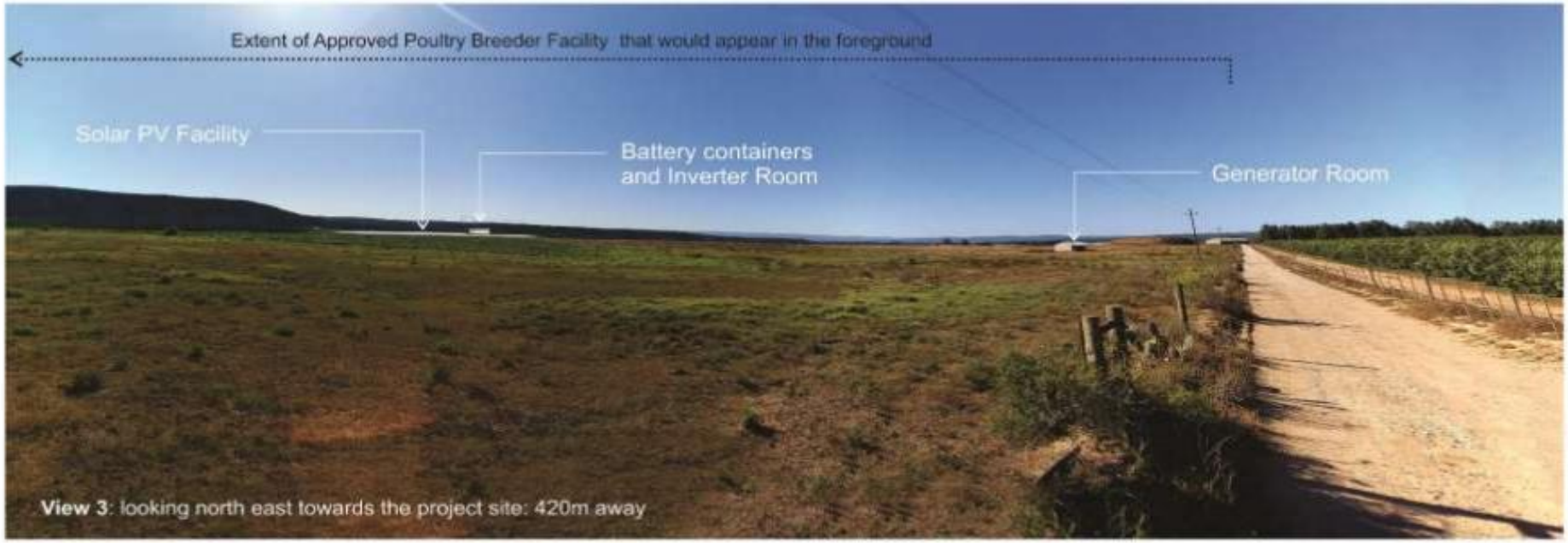

Figure 05-2: **LANDSCAPE CHARACTER - SIMULATION** Middledrift PV Solar Facility

GYLA
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Landscape Architect
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5.1 Landscape Sensitivity

Visual intrusion deals with contextualism, i.e. how well does a project component fit with or disrupt/enhance the ecological and cultural aesthetic of the landscape as a whole? The landscape exhibits evidence of alteration and degradation of the original natural features resulting in an area of mixed character. Therefore, landscape sensitivity to the proposed development is *low*. Also, when the Project is developed, it will be immediately adjacent to a poultry breeding facility which has been authorised and is currently under construction and will not appear isolated in the landscape. The study area's landscape has a moderate visual resource appeal. It is potentially sensitive to change, i.e. the change may be detrimental if inappropriately dealt with, but it may not require special or particular attention to detail.

5.2 Receptor Sensitivity

The viewsheds in Figures 6 and 6-1 illustrate the Project's limited visibility, specifically in the western sector of the study area. It also shows that potential nearby sensitive receptor locations (homesteads and the Kudu Ridge Lodge and Bush Bar) are unlikely to be affected by the development as they fall outside the Project's visible envelope (green areas in Figure 06).

5.3 Glare – R335

A small section of the R335 is exposed to the solar PV arrays, and motorists would have fleeting views of the solar facility. Glare could potentially occur in the early morning and late afternoon as the solar arrays are orientated to the north. It should be noted that the R335 is a rural road and as such has limited traffic flow which would be visually affected by the PC array.

Due to the low angle of the viewer relative to the Project components, a thin line of the PV arrays would be visible in any given view (refer to Figure 5-1), i.e. the full extent of the solar park would never be visible. Also, the time that the PV arrays could glare is limited to times of the day when the sun is low in the sky (either early morning or late afternoon) and on those days when the climatic conditions are aligned to produce glare. However, research in published guidance studies shows that the intensity of solar reflections from solar panels is equal to or less than that of water. It also indicates that reflections from solar panels are significantly less intense than many other reflective surfaces, which are common in an outdoor environment (Appendix A: Pager Power 2020:40).

Given that only a small portion of the PV arrays would be visible (mostly showing a dark blue or blackish colour as indicated in Figure 3-1) and that glare would occur infrequently, the effect of glare on motorists along the R335 is considered *low* and would not contribute significantly to the visual impact of the Project.

5.4 Visual Intrusion

Visual intrusion and receptor sensitivity is *low* as the Project would:

- Have a minimal effect on the visual quality of the landscape
- Contrasts minimally with the patterns that define the structure of the landscape; and

- Be mostly compatible with land use and enclosure patterns (exiting and currently under construction).

The result is minimal change to key and potentially sensitive views.

5.5 Mitigation Measures

As the impact of the Solar PV Facility is low no significant mitigation measures are proposed. However, good housekeeping should be employed on site to minimise negative visual impacts.

5.6 Visual Impact Rating

Nature of Impact	Visual Intrusion in the landscape
Extent	Local
Duration	Permanent
Intensity	Low
Probability	Definite
Degree of Confidence	**High**
Reversibility	**Reversible** – Should the facility not move to the operational phase or be decommissioned; the impact is removed
Irreplaceable Loss of Resources	**Replaceable –** The landscape can be returned to its current state if the facility is decommissioned.
Status and Significance (Without mitigation)	**Low Negative** (-) The impact/risk will result in low alteration of the environment due to the size and the transformed nature of the site.
Mitigation	Employ good housekeeping practices including maintaining the Solar PV panels
Status and Significance (After mitigation)	**Low Negative** (-)

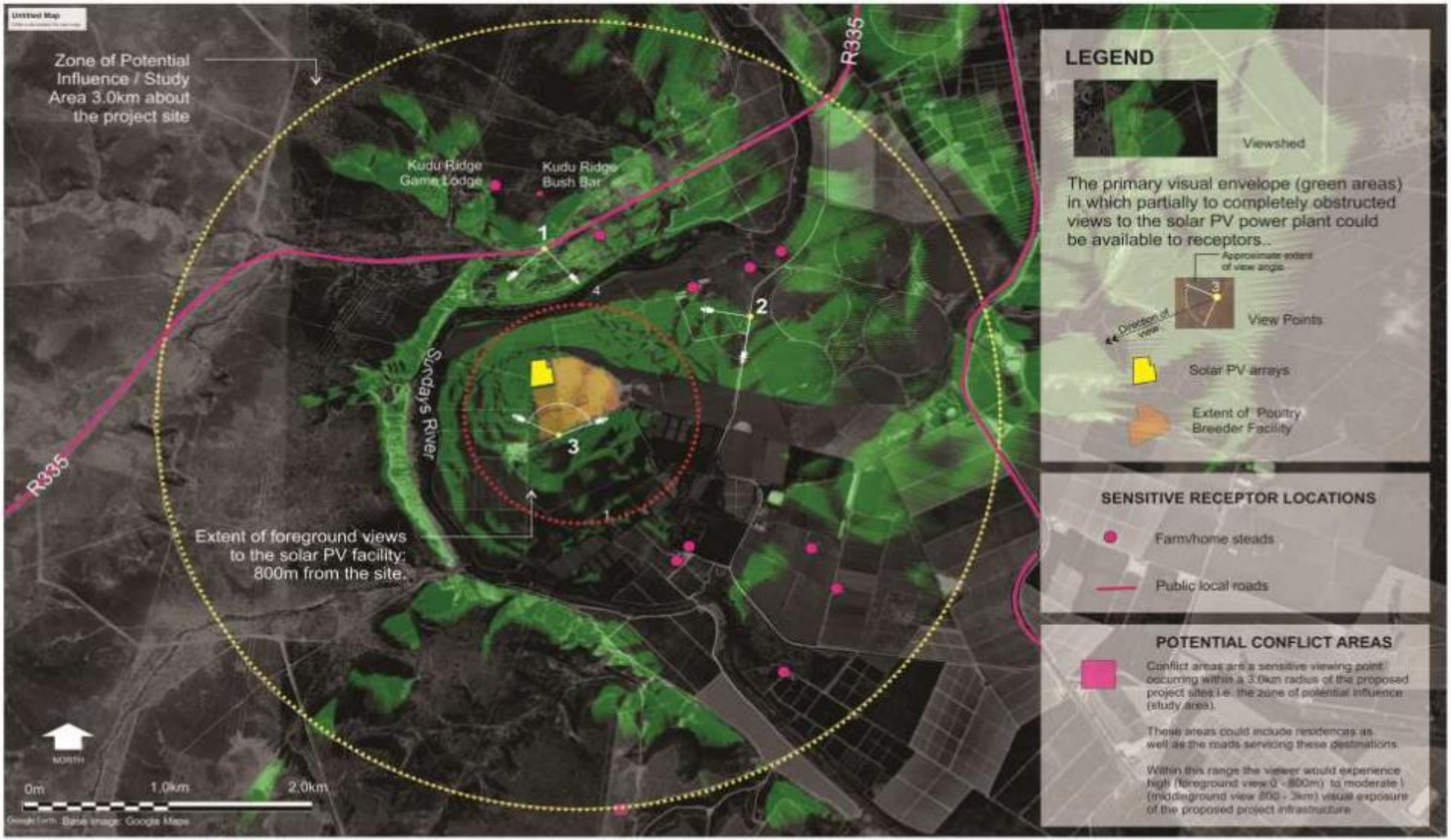

Figure 06: **VIEWSHED** and **RECEPTOR SENSITIVITY** - Middledrift PV Solar Facility

GYLA
Graham A Young
Landscape Architect

Figure 06-1_ **Viewshed_AENP** - Middledrift PV Solar Facility

The Project is mostly not visible from sensitive viewing sites other than a short section of the R335. Due to the nature and adjacency of land uses and the low viewing angle toward the site, the landscape would absorb/screen most visual changes caused by the Project and its associated infrastructure on sensitive viewing sites/areas. Furthermore, the PV solar facility would be compatible with the poultry breeding facility currently under construction and would therefore not be considered out of place. As the visual impact of the proposed Solar PV Facility is low it will not have any visual impacts on the Addo Elephant National Park.

There is a slight chance the PV arrays could cause glare for motorists travelling along the R335 in the early morning or late afternoon.

These factors contribute to a diminished potential for the Project to cause adverse impacts that would significantly change the study area's visual character or sense of place. The assessed intensity of visual impact is negligible because a minor loss or alteration to the visual and aesthetic baseline characteristics would occur. The pre-development landscape, or view, would approximate the 'minimal change' situation.

Author's Opinion

The author believes that the Project would cause a minor change to the visual environment and sensitive receptor locations. The Project should be approved provided that the mitigation/management measures are effectively implemented and managed long-term.

GYLA

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Visual Impact Assessments

Graham is a registered landscape architect with interest and experience in landscape architecture, urban design and environmental planning. He holds a degree in landscape architecture from the University of Toronto and has practiced in Canada and Africa, where he has spent most of his working life. He has served as President of the Institute of Landscape Architects of South Africa (ILASA) and as Vice President of the Board of Control for Landscape Architects.

During his 40 years plus career he has received numerous ILASA and other industry awards. He has published widely on landscape architectural issues and has had projects published both locally and internationally in, scientific and design journals and books. He was a founding member of Newtown Landscape Architects (NLA) and was a senior lecturer (now retired), teaching landscape architecture and urban design at post and undergraduate levels, at the University of Pretoria. He has been a visiting studio critic at the University of Witwatersrand and University of Cape Town and in 2011 was invited to the University of Rhode Island, USA as their Distinguished International Scholar for that year. Graham currently practices as a Sole Proprietor.

A niche specialty of his is Visual Impact Assessment for which he was cited with an ILASA Merit Award in 1999. He has completed over 250 specialist reports for projects in South Africa, Canada and other African countries. He was on the panel that developed the *Guideline for Involving Visual and Aesthetic Specialists in EIA Processes* (2005) and produced a research document for Eskom, *The Visual Impacts of Power Lines* (2009). In 2011, he produced '*Guidelines for involving visual and aesthetic specialists'* for the Aapravasi Ghat Trust Fund Technical Committee (they manage a World Heritage Site) along with the *Visual Impact Assessment Training Module Guideline Document.*

*** GYLA ***

1. Basic Assessment and Public Participation Process

COMMENTS RECEIVED DURING THE PROJECT ANNOUNCEMENT AND REGISTRATION PHASE				
NO	**ISSUES RAISED**	**COMMENTATOR**	**DATE**	**RESPONSE**
1.1	Eskom Dx is an affected and interested party in this application.	Howard Blane, ESKOM: Distribution Division: Cape Coastal Cluster - Land and Right Manager	*21 April 2022, Email*	This commentator was proactively registered on the project database as a representative of Eskom, prior to the project announcement and registration phase of this assessment and will remain on the project database for the duration of the Basic Assessment Process. The commentator will be provided with copies of the available information and will be notified of the various opportunities to comment throughout the Basic Assessment Process.
1.2	Receive the attached registration form.	Angelina Shalang, ESKOM Cape Coastal Cluster: Environmental Management Manager	*21 April 2022, Email & Comment Form*	The commentator was cc'ed into the response received form Mr. Blane (see Comment 1.1) and received the Notification of Intention to Commence with the Basic Assessment. A separate request to register on the project database was received from this commentator. This commentator was proactively registered on the project database as a representative of Eskom, prior to the project announcement and registration phase of this assessment and will remain on the project database for the duration of the Basic Assessment Process. The commentator will be provided with copies of the available information and will be notified of the various opportunities to comment throughout the Basic Assessment Process.

1.3	Hello Khulile Please register as an I&AP.	Randall Moore, EC Dept. of Transport: District Roads Engineer	*25 April 2022, Email*	This comment was received from Mr Randall Moore and was addressed to Mr Kulile Siqiti requesting him to register as an I&AP on the database for this project. The EAP was cc'ed in on this correspondence. However, Mr Siqiti was proactively included on the project database at the onset of this BA process and was notified of the Intention to commence with this Basic Assessment process. Mr Siqiti and Mr Moore will remain on the project database for the duration of the assessment process and will be provided with copies of the available project information as and when it becomes available for comment.
1.4	Noted	Khulile Siqiti, Eastern Cape Department of Transport	*25 April 2022, Email*	This comment was received from Mr. Kulile Siqiti in response to an email from Mr Randal Moore, requesting him to register as an I&AP on the database for this project. The EAP was cc'ed in on this correspondence (see Comment 1.3). Mr Siqiti and Mr Moore will remain on the project database and will be provided with copies of the available project information, including a link to the website where project information can be downloaded, and will be notified of the various opportunities to comment during this Assessment Process.
1.5	Please find the attached comments for proposed Disco 2 and Middledrift Solar Photovoltanic facilities.	Gcinile Dumse, Dept. of Agriculture, Land Reform and Rural Development	*3 May 2022, Email & Comment Form*	The comments submitted by this commentator have been included in this Comments and Responses Trail.

1.6	Thank you for copying Forestry this invitation however clearing of natural forest and protected trees requires a license from the Department for future correspondence on Forestry matters please include my new manager his email address is zmtotywa@dffe.gov.za contact number 041 407 4051 cell 063 7504427. His name is Zinzile Mtotywa	Babalwa Layini, Dept. of Forestry, Fisheries and the Environment (Forestry)	*3 May 2022, Email*	As per request from the commentator, Mr Zinzile Mtotywa was subsequently included on the project database and was notified of the Intention to commence with this Basic Assessment process, on the 3 May 2022. Ms Layini and Mr Mtotywa will remain on the project database for the duration of the assessment process and be notified of the various opportunities to comment.
1.7	Please find attached for your kind attention and review. Please refer to “AREAS OF CONCERN” on following page.	Jonathan Cooper; Adjacent Landowner	*25 May 2022, Email, Comment Form & attached comment*	This I&AP was proactively identified prior to the commencement of the assessment process and notified of the commencement of the Basic Assessment Process, via letter1, which included a BID and comment form. The I&AP submitted a registration form and a separate email containing comments, which have been captured in this issues and responses trail below. This I&AP will remain on the database for the duration of the assessment process and be notified of opportunities to comment.
1.8	We, Jonathan and Christopher Cooper represent the adjacent land owner of Portion 5 of Farm 192 The above property is a residential property comprising of the main farm house and residential unit, both situated on approximately one hectare plot of land being Portion 5 of Farm 192. This plot of land is known as "Greenviews" and has been in the Rowe - Cooper family for decades, passed down from generation to generation, and will continue to remain within the family in perpetuity, for generations to come without the possibility of ever being sold outside the family.	Jonathan Cooper, Adjacent Landowner	*25 May 2022, Email & attached Comment*	The attachment to the email is a typed letter which indicates that Jonathan Cooper and Christopher Cooper represent the adjacent landowner of Portion 5 of Farm 192. To date, no separate comment has been received from Christopher Cooper and the attached letter is not signed by either party. However, both Mr Jonathan and Christopher Cooper are on the I&AP database and will be notified of the various stages to comment during the assessment process. The commentator notes that the “*above property is situated in the middle of the land owned where the proposed Solar Photovoltaic Facility is* …”. The

	It is important to understand and be clear that the above property is situated in the middle of the land owned where the proposed Solar Photovoltaic Facility is being considered to be installed.			farm Middledrift is made up of three separate properties, the commentator's property is located on the eastern boundary of Portion 10 of Farm 192. The map contained in the BID excludes this property, namely Portion 5 of Farm 192. The PV facility is located on the western boundary of Portion 40 of Farm 192, approximately 740 meters northeast of the commentator's property. While Portion 5 of Farm 192 may be approximately in the middle of the farm Middledrift it is not in the middle of the proposed PV Facility footprint.
1.9	There are therefore a number of concerns that need to be taken into account and we, the representatives, reserve the right to raise further concerns further along in the process.	Jonathan Cooper, Adjacent Landowner	*25 May 2022, Email & attached Comment*	The comments raised by this I&AP have been included in the comments and responses trail below. A key part of the assessment process is capturing and responding to comments raised by I&APs. A copy of the comments received from this I&AP are included in Appendix G (iv) of this report.
1.10	The Applicant needs to assess all the environmental management impacts associated with the development for the identified listed activities on both listing notice 1 and listing notice 3. It is the requirements of the EIA process for all developments that trigger EIA to consider and assess all alternative sites to the development.	Nelisa Nama, Department of Forestry, Fisheries and the Environment: Control Environmental Officer	*24 May 2022, Comment Form*	Listing Notices that pertain to this proposed project have been identified and assessed in this Basic Assessment. Alternatives are required to be assessed as part of the assessment process. Site alternatives were not assessed in this assessment, but layout alternatives were considered. Site alternatives were not assessed as the project applicant owns the farm under assessment and the PV facility is proposed to provide renewable energy to existing and future farming activities on the site.
1.11	As the Department of Forestry, Fisheries and the Environment Local Support Official responsible for Sarah Baartman District Municipality and its Local Municipalities on their environmental management and planning I have to comment on this EIA process. therefore kindly register myself as an I@AP and be given an opportunity to comment.	Nelisa Nama, Department of Forestry, Fisheries and the Environment: Control Environmental Officer	*24 May 2022, Comment Form*	The commentator was registered on the project database and will be notified of the opportunities to comment during this Basic Assessment Process. The comments raised by this I&AP are included in the comments and responses trail below.
1.12	Please find attached herein is our registration form for the BA process, for the project in question.	Zinzile Mtotywa, Department of Forestry, Fisheries and the Environment: Assistant Director (Forestry)	*24 May 2022, Email & Comment Form*	The commentator was registered on the project database for this project upon request from Ms Babalwa Layini. The commentator will remain registered on the project database for the duration of the assessment.

				The commentator will be notified of the opportunities to comment during the assessment process.
1.13	My apologies for the late reply, I missed your initial e mail completely, yes we are the adjacent land owners Our property “Greenviews” is within the property that we understand Mr Nico Venter purchased Our representatives are myself Jonathan Cooper and my brother Christopher Cooper	Jonathan Cooper, Adjacent Landowner	*23 May 2022, Email*	Both Mr Jonathan and Christopher Cooper were identified as I&APs (adjacent landowners) prior to the commencement of the assessment process and were notified of the initiation of the Basic Assessment process via email which included a Background Information Document with a locality map, Letter 1 to I&APs and a comment form.
1.14	My brother (Christopher Cooper) actually forwarded very recently to me recently the attached documents you also kindly attached, I have not managed to read through in detail as yet but I do note there is a deadline tomorrow to complete and submit what I assume is administrative documentation of all and relevant affected and interested parties… I can confirm that [redacted] is the correct email address, for Mr Christopher Cooper (CC on e mail).	Jonathan Cooper, Adjacent Landowner	*23 May 2022, Email*	Subsequent comments were received from Mr Jonathan Cooper dated the 25 May 2022 and have been included in this comments and responses trail. See sections above and below.

2. Project Detail

COMMENTS RECEIVED DURING PROJECT ANNOUNCEMENT AND REGISTRATION				
NO	**ISSUES RAISED**	**COMMENTATOR**	**DATE**	**RESPONSE**
2.1	While the adjacent land owner of Portion 5 of Farm 192 is in favour in principle of alternative power use and renewable energy the proposed Solar Photovoltaic Facility cannot be erected to the detriment of the current residential home and unit and the future viability of living in close proximity to a potential industrial scale Solar Photovoltaic Facility. The potential close proximity of the proposed Solar Photovoltaic Facility to the current residential home and unit, both of which are situated on Greenviews is a major concern.	Jonathan Cooper, Adjacent Landowner	*25 May 2022, Email & attached Comment*	The proposed facility is not considered "*an industrial scale*" Solar PV facility. The proposed PV facility is for private use for existing and future agricultural activities on the farm Middledrift. It is proposed that a PV facility with the capacity to produce ~2.2MW of AC electricity, is constructed. The proposed PV facility and associated infrastructure (Battery Energy Storage System, Inverter and Generator Room) is anticipated to ~3ha in extent. The facility is proposed to be located on the western boundary of Portion 40 of Farm 192, approximately ~730m north-east of the commentator's property.
2.2	It is strongly suggested that the possibility of situating the proposed Solar Photovoltaic Facility as far away from Greenviews is taken into consideration, and a fair enough distance that will not impose on the privacy, quality of life and living standards of the current land owners of Greenviews.	Jonathan Cooper, Adjacent Landowner	*25 May 2022, Email & attached Comment*	The adjacent property is located ~730m from the nearest boundary of the proposed PV Facility. Layout alternatives have been assessed as part of this Basic Assessment Process. The PV facility is proposed to be a fully fenced in in order to ensure the security of facility. It will be remotely monitored, and maintenance will take place on a needs basis. No full time personal are proposed to be located on the facility and the facility is thus not anticipated to impact on the privacy, quality of life or living standards on the adjacent landowners.
2.3	Additionally more details are required on the extent and scale of the Solar Photovoltaic Facility, the layout and set up, as well as positioning, height, noise considerations etc	Jonathan Cooper, Adjacent Landowner	*25 May 2022, Email, Comment form & attached Comment*	A brief project description was included in the Background Information Document sent to this I&AP at the commencement of the assessment process indicating that the facility is proposed to be 2.2 MW over and area of approximately 3 ha. A detailed project description is contained in *Section A Activity Description* of the Consultation Basic assessment Report, and a proposed facility illustration is contained in Appendix C. The final

				layout and panels to be used is subject to the best available technology at the time of construction and will be finalized by the project engineers during the Pre-construction phase of the development. The panels will face a northerly direction. "*Generally speaking, solar panels don't make any noise. Solar panels are designed to be noise-free, especially at night. They're designed to be quiet. Even solar panels that are equipped with any moving parts are intended to be incredibly quiet when operating.*" https://www.projectsolaruk.com/blog/do-solar-panels-make-noise/ (24 June 2021) While limited noise is anticipated during the operational phase, noise is anticipated during the construction phase, this will however be temporary in nature and limited to weekdays and working hours. The commentator is encouraged to report any noise experience by the solar panels to the project applicant.
2.4	Mention is made of feeding proposed Solar Photovoltaic Facility to the Eskom grid. Is it the intention of the land owner to establish commercial and industrial scale supply of electricity in the future?	Jonathan Cooper, Adjacent Landowner	*25 May 2022, Email & attached Comment*	There is no intention to establish commercial or industrial scale supply of electricity. The proposed facility will be a small-scale Photovoltaic facility capable of producing ~2.2MW of AC electricity, intended for private use in support of existing and future agricultural activites on the farm Middledrift.

2.5	Mention is made of a 1km road as well as the laying out of cables, more details are required on this as the affected land owner and residents residing on Greenviews can only access their residential property by means of servitude road.	Jonathan Cooper, Adjacent Landowner	*25 May 2022, Email & attached Comment*	The servitude road the commentator is referring to is located adjacent to the eastern boundary of Portion 6 of Farm T'Zoetgeneugd No.192, which does not form part of this assessment. Internal roads measuring no more ~4 meters wide are required between the PV arrays for access for maintenance purposes. The total length of these internal roads may exceed 1km in length. A 22 kV underground cable will be installed over a distance of ~950m, from the proposed PV facility to a dam pump house. No cables or roads are proposed within ~630 meters of the commentator's property.

3. Potential Soil Erosion

COMMENTS RECEIVED DURING PROJECT ANNOUNCEMENT AND REGISTRATION				
NO	**ISSUES RAISED**	**COMMENTATOR**	**DATE**	**RESPONSE**
3.1	The top soil must be removed on all area where physical disturbance may occur, kept separate from overburden and stockpiled for later rehabilitation. The soil erosion prevention should be carried out progressively and the area must be rehabilitated after construction activities. A soil erosion plan for monitoring and rehabilitation of erosion events must be in place. The appropriate erosion mitigation measures must form part of this plan to prevent and reduce the risk of any potential erosion.	Gcinile Dumse, Dept. of Agriculture, Land Reform and Rural Development	*Comment Form dated 28 April 2022; Received 3 May 2022, Email*	This comment is noted. Except for the generator room no blanket clearing of vegetation is proposed on site, rather piling of steel or concrete plinths as well as pillars. The potential for soil erosion and appropriate mitigatory measures are included in the draft EMPr. This includes but is not limited to stockpiling of topsoil in a separately demarcated area on site, to be used in rehabilitation, if required. The potential for soil erosion has been rated as low negative without mitigation and very low negative with mitigation. The following mitigatory measures are included in the report. • An erosion protection plan must be developed and implemented on site.

				• The site must be inspected on a regular basis (quarterly and after a heavy rainfall event) for any erosion on site, and any erosion must be rectified immediately through fill and compaction. • The disturbed areas must be revegetated with local grass species to assist with erosion protection

4. Impacts on Human Health and Safety

COMMENTS RECEIVED DURING PROJECT ANNOUNCEMENT AND REGISTRATION				
NO	**ISSUES RAISED**	**COMMENTATOR**	**DATE**	**RESPONSE**
4.1	Potential health and safety implications that could potentially be dire and adverse, together with the relative close proximity of having to live near to the proposed Solar Photovoltaic Facility need to be taken into account.	Jonathan Cooper, Adjacent Landowner	*25 May 2022, Email & attached Comment*	The commentators' property is located ~730m north east from the nearest boundary of the proposed PV Facility. PV Facilities are not known to pose any significant danger to human health, as there is no on-site production of harmful Green House gasses (Sulphur dioxide and nitrogen oxide). Although Photovoltaic Panels do contain harmful materials inside the sealed panel, this is only a hazard upon disposal (broken or end of life cycle). It is not the intention of the applicant to dispose of any panels on site and hazardous materials will immediately be removed by a licensed waste collection service. It is therefore not anticipated that this facility will pose a risk to Human Health and Safety.

5. Potential Impacts on Roads

COMMENTS RECEIVED DURING THE PROJECT ANNOUNCEMENT AND REGISTRATION PHASE				
NO	**ISSUES RAISED**	**COMMENTATOR**	**DATE**	**RESPONSE**
5.1	MN50595 will have to be regravelled for the construction phase	Randall Moore, EC Dept. of Transport: District Roads Engineer	*25 April 2022, Email*	The Consultation BAR has taken note of this comment and with regards to impacts on roads, it is recommended that the MN50595 will have to be regravelled for the construction phase of the project.

6. Potential Impacts on Terrestrial Biodiversity

COMMENTS RECEIVED DURING THE PROJECT ANNOUNCEMENT AND REGISTRATION PHASE				
NO	**ISSUES RAISED**	**COMMENTATOR**	**DATE**	**RESPONSE**
6.1	Thank you for copying Forestry this invitation however clearing of natural forest and protected trees requires a license from the Department for future correspondence on Forestry matters please include my new manager his email address is [redacted] contact number [redacted] His name is Zinzile Mtotywa	Babalwa Layini, Dept. of Forestry, Fisheries and the Environment (Forestry)	*3 May 2022, Email*	It has been confirmed by the Terrestrial Biodiversity Specialist that the site has been transformed and no natural vegetation remains on site. The full Terrestrial Compliance Statement has been included in Appendix D (ii).
6.2	According to the project layout map, the proposed project appears to be planned on a transformed land area and that no forests, or patches there to, exist within the footprint. I must also mention that, the western boundary bordering road R335 remains an area of interest for site inspection. A site visit would therefore be conducted, during the process of consultations (BA) to verify the footprint of the entire site in question, and in particular this part(western boundary/R335).	Zinzile Mtotywa, Department of Forestry, Fisheries and the Environment: Assistant Director (Forestry)	*24 May 2022, Comment Form*	A Terrestrial Biodiversity Specialist Compliance Statement was undertaken as part of this assessment (see Appendix D iii), and confirmed that the site has been transformed and no natural vegetation remains on the site. The area the commentator is referring to on the northern boundary of the site adjacent to the R335 does not fall within the area under assessment but belongs to an adjacent landowner.

	I must also declare upfront that i have no other interest that link me the project in question, except the interest to see the implementation and full compliance to the National Forests Act, Act 84 of 1998 as amended.			In response to this comment the commentator was contacted telephonically by the EAP wherein it was confirmed that the site was transformed. The commentator was emailed a .kmz (google earth image) of the area under assessment. It was agreed that no site visit will be required. No further correspondence has been received on this application.
6.3	The indigenous grass species that already exist on the site must be used in re-vegetation.	Gcinile Dumse, Dept. of Agriculture, Land Reform and Rural Development	*Comment Form dated 28 April 2022; Received 3 May 2022, Email*	Should revegetation be required on site, any indigenous vegetation that may occur on the site will be stockpiled and used in revegetation of disturbed areas. Indigenous grass seed mix, approved by the ECO, should be used to supplement the revegetation, and may include White Buffalo grass (*Panicum maximum)* and Blue Buffalo grass (*Cenchrus cilianris).*
6.4	The weeds control management plan should be developed and maintained to control any declared weeds and invasion alien plants on proposed development site and the immediately surroundings. The control and eradication of declared weeds and invader plants must be done in situ.	Gcinile Dumse, Dept. of Agriculture, Land Reform and Rural Development	*Comment Form dated 28 April 2022; Received 3 May 2022, Email*	An alien invasive plant (AIP) management plan will be developed for the site and implemented during the Construction and Operational Phases of this project. The plan will aim to eradicate and control the spreads of AIP's and should be developed in conjunction with a fire management plan. Any AIP material removed from the site during clearing, will be destroyed and removed from site, so that germination of seeds and reestablishment on site is limited. Herbicides may be required to be utilized for alien invasive plant management. However, should herbicides be used on site it is recommended that these be organic and/ or biodegradable.

7. Potential Impacts on Aquatic Biodiversity

COMMENTS RECEIVED DURING THE PROJECT ANNOUNCEMENT AND REGISTRATION PHASE				
NO	**ISSUES RAISED**	**COMMENTATOR**	**DATE**	**RESPONSE**
7.1	The perennial and seasonal water sources and the associated vegetation including rivers, streams and wetlands must be protected from any sort of disturbance that will destroy the natural agricultural resources.	Gcinile Dumse, Dept. of Agriculture, Land Reform and Rural Development	*Comment Form dated 28 April 2022; Received 3 May 2022, Email*	An Aquatic Biodiversity Specialist Compliance Statement was undertaken as part of this assessment (see Appendix D i) and confirmed that the site is transformed, and no wetlands or drainage lines were identified on site. The proposed development footprint is located ~350m from the banks of the Sundays River and a ~20m buffer of natural vegetation has been retained between the existing pastures and the riverbank as part of a previous assessment process. The proposed development is unlikely to have any adverse negative impacts on the surrounding or downstream watercourses as no sensitive watercourses are directly within the proposed development footprint.

DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME

BASIC ASSESSMENT

Proposed Construction and Operation of a Solar Photovoltaic Facility and Associated Infrastructure and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, known as Middledrift, Sundays River Valley Municipality

December 2022

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Environmental Impact Assessment and Public Participation Management

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ABBREVIATIONS

BA	Basic Assessment
CARA	Conservation of Agricultural Resources Act
CEMPr	Construction Phase Environmental Management Programme
DFFE	Department of Forestry, Fisheries and the Environment
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism
DWS	Department of Water and Sanitation
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
EA	Environmental Authorisation
OEMPr	Operational Phase Environmental Management Programme
SEM	Site Environmental Manager

DEFINITIONS

"EIA Regulations, 2014 (as amended)" - In terms of the NEMA EIA Regulations, 2014 (as amended), published in GN R326, 327, 325 and 324, promulgated under Chapter Five of the National Environmental Management Act (Act 107 of 1998) (NEMAA), and published in Government Gazette 40772 on the 7 April 2017, the project requires a Basic Assessment (BA), because it triggers, amongst others, the following listed activity, in Listing Notice 1 (GN R327):

"1. The development of facilities or infrastructure for the generation of electricity from a renewable resource where—
(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare;"

"The Department/ Competent Authority" - The Department of Economic Development, Environmental Affairs and Tourism, Cacadu Region.
"Commencement" - Any physical activity on site that can be viewed as associated with the clearing and site preparation phase.

1.1 INTRODUCTION AND BACKGROUND

The project applicant, The Boeram Venter Trust, proposes the construction and operation of a 2.2MW Solar Photovoltaic (PV) facility, including associated support and ancillary infrastructure on a portion of Portion 10 and 40 of Farm T`Zoetgeneugd No. 192, known as Middledrift, near Addo in the Sundays River Valley Municipality. It is anticipated that the facility will have a development footprint of approximately 3 ha and will produce 2.2 MW of AC electricity for private use for existing agricultural activities on the farm Middledrift. It is proposed that the PV facility supplements Eskom supply by providing a more regular, reliable, affordable, and clean source of renewable energy on site. The farm portions under assessment measure approximately ~114ha in combined extent and are currently zoned Agriculture 1.

It is proposed that the PV facility is constructed on the western boundary of a portion of Portion 40, with a 100meter length of 22kV cable being installed underground on Portion 10. The PV facility will have a total development footprint of 3 hectares comprising of a ~2.6 ha photovoltaic solar panel array, a ~750m^2 Battery Energy Storage System (BESS), a ~200m^2 inverter room, and ~200m^2 generator room. The generator room is proposed to be constructed on the southern boundary of the site and will include a new Power Plant Controller (PPC) transformer.

To connect the existing electrical infrastructure on site, including connecting to the Eskom grid, a ~950m underground 22kV will be installed from a new transformer adjacent to the inverter room to connect to a transformer at the dam pump house. The PV panels are proposed to be mounted onto metal frames which are usually a combination of aluminium, galvanised steel and concrete foundations. The type of PV panel and BESS installed will be based on the best available technology at the time of construction, however the PV panels will be stationary and have a built-in nonreflective film.

Land-uses on the properties adjacent to Middledrift are predominantly agriculture in nature, namely, citrus orchards and livestock grazing as well as pivot irrigation. The northern and north-western boundary of the site is bound by the Sundays River which is, ~350m north of the nearest boundary of the proposed development footprint. The landscape surrounding Middledrift is characterised by agricultural activities typically associated with the “Sundays River Valley”. Although the proposed construction of a PV facility is not characteristic of the surrounding area, the landscape is characterised by transformed surfaces associated with packhouses, sorting sheds, farm sheds, dairies and more recently shade cloth. The PV facility is being constructed to provide renewable energy to newly authorised, proposed and existing agricultural activities.

The proposed Solar Photovoltaic (PV) Facility can be divided into the following phases, namely:

- Preconstruction Phase
- Construction Phase
- Operational Phase

The activities associated with each phase are discussed in more detail in Section 1.1.1 below.

The proposed BA Process has been undertaken in terms of the NEMA EIA Regulations 2014 (as amended). **This Draft EMPr** has been prepared in line with the amendments to the NEMA EIA Regulations, 2014. In terms of the NEMA EIA Regulations, 2014 (as amended), the project requires a BA, prior to the commencement of any activities on the site.

1.1.1 Activities and Regulations for which Application has been made:

Applicant

The Boeram Venter Trust

Location of Activity

Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, known as Middledrift, Sundays River Valley Municipality

Activity Description

Subject to the outcome of the specialist assessments and decision-making process, as well as input received during the consultation process the project will entail the construction and operation of a new Solar Photovoltaic (PV) Facility. The electricity produced by the PV Facility will for consumption by the Poultry Facility and excess electricity will be fed into the Eskom grid.

As it is proposed that the facility and associated components will be constructed in an area which has already been transformed it is not anticipated that any additional indigenous vegetation will be cleared.

SITE OVERVIEW

Portions 10 and 40 of Farm 192, measures ~114ha in combined extent and are zoned Agriculture 1. The majority of the farm has been modified to pastures for domestic livestock grazing with no natural vegetation remaining. A ~20m buffer of vegetation associated with the Sundays River has been retained between the existing pastures and the riverbank. A ~ 20ha portion of the site has been partially cleared of pastures associated with an authorised Poultry Breeder facility.

Existing access to the farm is located on the southern boundary of Portion 10, which provides access to both Portions 10 and 40 of Middledrift. An existing workshop/ tool shed and six staff houses are located east of the farm access point, on the southern boundary of Portion 10. An existing Eskom overhead powerline runs along the southern boundary of Portion 10 and Portion 40 and an existing 1.6MVA metring point is located ~37m north of the southern boundary of the farm.

PROJECT OVERVIEW

It is the intention of the applicant to construct and operate a 2.2MW PV facility, including associated supporting and ancillary infrastructure, on ~3 ha of portion of Portion 40 and 10 of Farm 192. The PV Facility will consist of the following:

- A 2.6ha stationary solar PV array with internal roads approximately ~4 meters wide
- A ~750m^2 BESS area
- A ~200m^2 inverter room and 22kV transformer
- A ~200m^2 generator room, including a solar PPC transformer
- A new 22kV underground cable to be installed over a distance of approximately 950 meters, with the eastern 100 meters being on Portion 10 to connect into a 22kV transformer located adjacent to the pump house

Pre-Construction Phase

During the detailed project design phase, micro-siting and positioning of the individual mounts within the PV array will be confirmed by the technical team based on the results of soil tests undertaken. Micro-siting will also be informed by detailed information climatic conditions, topographic features, soil stability, and hydrology of the site. The panels are however proposed to be erected facing a northerly direction. The type of PV panels and BESS to be installed will be based on the best available technology at the time of construction and site-specific requirements.

Construction Phase

Associated with the construction and operation of the proposed PV Facility are the following project activities:

- In order to limit windblown dust, which increases the need for maintenance, blanket clearing for the PV array area is not proposed.
- Clearing and levelling of the area for the establishment of a concrete slab for the generator and associated transformer will be required.
- During the detailed design phase of the project soil tests will be undertaken and based on the results of these tests either concrete pillars or piling of steel will be use for the PV mounts.
- The BESS and Inverter room will require the construction of concrete plinths the laying down of and collection of BESS containers. Thus, no blanket clearing of vegetation is proposed.
- Establishment of a project laydown area for equipment.
- Clearing of pastures and levelling of areas for the establishment of internal access roads for construction and operational purposes.
- Transportation and installation of the solar PV panels and BESS.
- Removal of topsoil for the installation of the new 22kV underground cable.
- Erection of the perimeter fence.

Operational Phase
Once the PV facility and associated infrastructure has been installed, the facility will become operational and start producing 2.2MW of renewable energy. The facility will function as a hybrid system meaning the facility will operate from battery storage and will directly be connected to the Poultry Facility during power outages.

See Section A of the Basic Assessment Report for more information on the proposed project.

1.1.1.1 Listed activities according to GN R327, 325 and 324 requiring Environmental Authorisation in terms of the NEMA EIA Regulations 2014 (as amended).

EIA Regulations (2014), as amended	Project Component
GN R327 (Listing Notice 1)	
"1. The development of facilities or infrastructure for the generation of electricity from a renewable resource where— *(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare;*	It is anticipated that the proposed development footprint of the Solar PV Facility and associated infrastructure (i.e., battery storage area, inverter room, generator and power cables) for a total proposed development footprint of ~3ha in extent and will have the capacity to produce 2.2MW of AC electricity from a renewable resource. **This listed activity will require Environmental Authorisation**
"28. Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: *(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;"*	The PV facility is proposed to be grid-tied as part of a Wheeling Agreement with Eskom and will provide electricity security for existing and future commercial agricultural activities on the farm. The farm currently operates a commercial diary and received authorisation for the construction and operation of 6 breeder houses. The Solar PV Facility is considered an Agri-"industrial" development. The farm falls outside of an urban area, and the combined development footprint is anticipated to be larger than 1 hectare (~3ha) in extent. **This listed activity will require Environmental Authorisation.**
GN R324 (Listing Notice 3)	

"18. The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre. ***a. Eastern Cape*** *i. Outside urban areas:* *(gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;*	The PV Facility will require internal roads in order to gain access to the project components and solar panels for maintenance and cleaning purposes. The proposed development falls within in the Eastern Cape, outside of an urban area and is located within 10 kilometers, ~5km from the nearest boundary of the Addo Elephant National Park. **Thus, this listed activity requires Environmental Authorisation**

1.2 DURATION OF AUTHORISATION

Should an EA be issued in respect of the project, the duration of the authorisation will be indicated in said document.

1.3 ENVIRONMENTAL MANAGEMENT PROGRAMMES

Environmental Management Programmes (EMPr), or Environmental Management Frameworks (EMF), serve to ensure that environmental impacts associated with particular activities are monitored, minimised and mitigated for the duration of the project. The practical management measures that should be employed to achieve monitoring and mitigation targets are detailed in the EMPr (DEAT 2004). The EMPr is a dynamic document which should be updated and reviewed on a regular basis so that it may be adapted to changing management styles, and to include improved impact mitigation technology, as well as unforeseen environmental impacts. The EMPr should also be adapted if any changes are made to the project. If such changes will result in significant environmental impacts, which differ from those for which DEDEAT has granted authorisation, such changes must be submitted to the DEDEAT for approval before they are implemented.

This EMPr includes, but is not limited to, the environmental impacts identified in the BA Report and the proposed mitigation measures that must be employed to minimise the harmful effects that those impacts may have on the environment.

The BA Report contains a comprehensive description of the project and the receiving environment and should be read in conjunction with this EMPr. The lead author of the EMPr is Sandy Wren of Public Process Consultants. A CV outlining the experience and key competencies of the lead author is included in Appendix G (v) of the BA Report.

In addition to a summary of the impacts, this EMPr contains more detailed information on the following:

- The manner in which mitigation will be implemented
- The scheduling of the implementation of mitigation
- Responsibility and accountability for mitigation actions
- Monitoring and reporting procedures

The life of the Solar PV Facility can be broadly divided into three phases:

A **Construction Phase** - which includes all the surveying, land clearing/ levelling of the site, and construction activities associated with the construction of the proposed Solar PV Facility and associated infrastructure.

An **Operational Phase** - which constitutes the day-to-day utilisation of the Solar PV Facility for the duration of its lifetime, until it is discontinued/ decommissioned.

A **Decommissioning Phase** - which includes all the activities associated with the cessation of the described activity at the site. At present, it is not anticipated that the development will be decommissioned. However, should the development be decommissioned, the relevant legislation at the time would apply.

Environmental impacts, management practices and mitigation measures may differ for different phases of the development. However, some impacts will be present in all phases of the development, resulting in some repetition in the EMPr.

The EMPr must be read in conjunction with the BA Report and EA, as these documents may contain additional, detailed information not included in the EMPr.

1.4 LEGAL REQUIREMENTS

This EMPr does not include all the legislative and regulatory requirements applicable to this development. The representative appointed by the applicant to manage the operation, and the persons responsible for the implementation of the EMPr, must also familiarise themselves with the specific legal requirements applicable to the described activities on site. These may include, but are not limited to:

- Applicable Environmental Law
- Atmospheric Pollution Prevention Act 45 of 1965
- Conditions of Employment Act, 75 of 1997
- Conservation of Agricultural Resources Act 43 of 1983
- Constitution of South Africa No 108 of 1996
- Environment Conservation Act 73 of 1989
- Extension of Security of Tenure Act 62 of 1997
- Hazardous Substances Act 15 of 1973
- Health Act No 63 of 1977
- Labour Relations Act 66 of 1995
- Land Reform (Labour Tenants) Act 3 of 1996
- National Building Regulations and Building Standards Act 103 of 1977
- National Environmental Management: Biodiversity Act 10 of 2004
- National Environmental Management Act 107 of 1998
- National Environmental Management: Air Quality Act 39 of 2004
- National Heritage Resources Act 25 of 1999
- National Road Traffic Act 93 of 1996 – GNR 225 of 17 May 2000
- National Veld and Forest Fire Act 101 of 1998
- National Water Act 36 of 1998
- Nature Conservation Ordinance Act 19 of 1974
- Noise Control Regulations GN R 154 in Government Gazette No. 13717 of 10 January 1992
- Occupational Health and Safety Act of 1994
- The Hazardous Substances Act 115 of 1973
- Local bylaws
- Provincial legislation

PART A: CONSTRUCTION PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME (CEMPr)

BASIC ASSESSMENT

Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure and Associated Infrastructure, on Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, known as Middledrift, Sundays River Valley Municipality

December 2022

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Part A CONSTRUCTION PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME (CEMPr)

During the Construction Phase, land will be prepared (levelled, erosion measures and stormwater management implemented) for the construction of the proposed Solar PV Facility, as well as the installation of associated infrastructure (e.g., BESS, inverter room, generator room and power cables). The individual solar panels will be arranged in blocks with multiple rows each, mounted on metal frames. It will further entail the rehabilitation of any disturbed areas on site.

The vegetation clearing, site preparation, levelling and landscaping will be done both by hand and with the aid of suitable earth moving equipment, if needed (excavators, bulldozers, TLBs, etc.).

Environmental impacts associated with the Construction Phase of the development, as well as the appropriate mitigation actions, have been identified using specialist input for the various components of the affected environment provided in the BA Report.

A.1 MANAGEMENT ACTIONS

The management actions outlined below indicate the actions to be taken to minimise the potential negative impacts that this phase may have on the environment, as well as measures to enhance the potential benefits.

Impact	Mitigation
Loss of Pastures	
Establishment of an Ecological inappropriate Fire Regime	• Open fires must not be allowed on site other than in designated areas where vegetation has been cleared (e.g. personnel rest area). • No open fires should be allowed on windy days. • Open fires should not be left unattended.
Loss of pastures for Faunal Habitat	• Clearing should be done in a phased manner, and no blanket clearing should be allowed.
Promotion of colonization and growth of Alien Invasive Species	• In areas disturbed by the construction tasks, as well as surrounding areas adjacent to these, perennial or woody alien species should be periodically removed and destroyed.
Management of Stormwater runoff	• Appropriate measures to be implemented in order to manage stormwater runoff from the PV Facility. • A stormwater management plan must be designed and implemented for the Construction and Operational phases of the project.
Aquatic Biodiversity	
Potential hydrological process impacts on the drainage systems due to increased runoff (erosion and sedimentation)	• Bare soil surfaces must be protected against erosion using appropriate erosion control measures. • Stormwater management to capture and disperse runoff must be implemented during the construction and operation phase.
Promotion of colonization and growth of Alien Invasive Species	• An Alien Vegetation Management Plan must be developed and implemented during and post-construction.
Potential impacts on the surrounding environment	• A Rehabilitation Plan must be developed and implemented when required (if applicable) • Construction activities must be limited to the approved project footprint. • Any construction site camp and material stockpile areas must be established in already disturbed areas more than 32m from any watercourses surrounding the site. • Construction must not commence until necessary approvals/permissions have been obtained from the relevant departments. • ECO should be appointed for monitoring of conditions in the EMPr.

Generation and storage of hazardous substances	• All hazardous substances and hazardous waste must be stored in impermeable structures placed in secondary impermeable bunded structures 110% the volume of the primary structure. • All hazardous substances and hazardous waste should be placed more than 32m from any watercourses surrounding the site. • Emergency response plan must be drawn up to deal with any hazardous spillages/accidental leakages. • A spill kit must be available on site during the construction phase. • A drip tray must be used under all generators and any construction vehicles (when on site and not in use).
Generation of sanitation waste during the construction phase	• All chemical toilets/ ablution facilities (for duration of construction period) must be properly secured so that they cannot be windblown, be serviced regularly and should be placed more than 32m from any watercourses surrounding the site and located on the farm property.
Erosion	
Changes to topography and drainage characteristics due to earth works	• Storm water should be controlled so as to not cause runoff to adjacent areas. • No erosion or sediment should be allowed to end up in drainage lines. • Appropriate erosional measures should be put in place (i.e., erosional stop boards)
Erosion of areas that are denuded or disturbed but not hardened	• The development footprint should clearly be demarcated as no disturbance should occur outside of demarcated areas. • A stormwater management plan must be designed and implemented for the Construction and Operational phases of the project. • The correct use and installation of storm water management structures are essential. • All denuded areas should have backing boards or similar structures to prevent soil erosion. • Furthermore, the growth and coverage of these areas by non-woody indigenous vegetation, such as grasses, should be encouraged, managed, and promoted. • Denuded areas should be monitored regularly during the rainy season, or following heavy rainfall events, for signs of erosion, and these to be addressed if identified. • Erosion control and construction disturbance should be an important monitoring facet falling under the control of an Environmental Control Officer (ECO), who should be appointed to implement the Environmental Management Plans (EMP's) during the construction phase of this project.
Socio-economic	
Dust generation during the construction phase	• Clearing should be done in a phased manner, and no blanket clearing should be allowed • Erosion protection measures must be implemented on disturbed areas. • Vegetation and topsoil must be cleared in a phased manner to avoid large areas of unconsolidated soils. • Topsoil and soil stockpiles must be covered, wetted or otherwise stabilised to prevent wind erosion and dust generation. • A water cart must be employed on windy days to wet soils that would be prone to wind erosion to limit dust generation. • Disturbed areas should be rehabilitated in parallel with construction completion. • Compile and implement an Environmental Management Programme; and audit reporting by an ECO during construction.

Noise and disturbance during the construction phase	• Noise generated as a result of construction activities must, as far as possible, be within the limits to working hours (i.e. 8am-5pm weekdays). • Encourage personnel not to make unnecessary noise. • A complaints register must be kept to document complaints and the corrective action taken.
Temporary employment and skills development opportunities will be created during the construction phase	• Local labour must be sourced from local communities, as far as possible, to maximise the economic benefits for the local community.
Risk to human health and safety due to open excavations and earth moving machinery during the construction phase	• All footprints, excavations, storage areas, materials lay-down areas, stockpile area, and labourers rest areas must be clearly demarcated or fenced off before any construction activities commence on site. • All activities must be limited to the demarcated area. • Open excavations must be kept free of water. • Access to the site must be controlled. • Entry points and access routes to the site must be clearly marked and traffic limited to those areas as far as possible. • Speed travelled by vehicles must be kept to a minimum and speed limits enforced. • Conduct a safety reminder talks with personnel prior to commencement of construction.
Runaway bush fires during the construction phase	• No open fires should be allowed on the site, except on designated areas. • No fires to be left unattended. • Suitable firefighting equipment should be kept on site.
General health and safety risks associated with the construction personnel activities on site	• Construction personnel must not be allowed to light fires on site. • Construction personnel may not stay on site after working hours or set up temporary residences. • Ablution facilities must be provided to construction personnel to prevent ablutions being performed in public. • Litter bins must be provided at the construction footprint for waste generated by construction personnel. • Litter bins must be emptied on a weekly basis at a minimum and waste disposed of at an appropriately licensed waste disposal facility.

Waste	
Generation of waste during the construction phase	• No waste from construction or otherwise may be disposed of on site • No construction waste to be stockpiled on site • All waste may temporarily be stored at site before being suitably disposed of at an appropriately licensed and registered waste disposal facility • Collection of waste to be contracted to an approved contractor and disposed of at an appropriately licensed site. Safe disposal certificate to be obtained and kept as a record. • Adequate litter drums or other suitable containers must be located on site and emptied on a minimum of a weekly basis and waste disposed of at an appropriately licensed waste disposal facility. • Appropriate ablution facilities to be provided on site. If portable toilets are utilised these must be emptied regularly by a registered contractor.
Generation of hazardous waste during the construction phase	• Hazardous waste from construction activities to be separated, classified and stored in acceptable receptacles and disposed to appropriately licensed site. • Machinery must not be serviced on site and measures including drip pans and compacted soil must be used whenever machinery is parked for prolonged periods of time. • Monthly waste disposal record must be kept of all waste disposed. • A spill response kit must be on site during construction • All staff should be trained in the correct handling, storage and disposal of hazardous wastes.
Generation of sanitation waste during the construction phase	• Suitable potable sanitation facilities must be provided and maintained for the labourers during the construction phase. • Ensure weekly maintenance of sanitation facilities. • Enter into a contract agreement with a service provider to regularly collect and dispose of sanitary waste at an authorized sewerage treatment works.
Heritage	
The exposure of significant Archaeological material or artefacts on site	• It is recommended that in the unlikely event that any archaeological materials are exposed during the development, it should be reported immediately to the nearest museum/archaeologist or to the EC Provincial Heritage Resources Authority (ECPHRA) so that a systematic and professional investigation can be undertaken. • If any evidence of archaeological sites or artefact, graves or other heritage resources are found during development or construction, ECPHRA and an accredited professional archaeologist or must be alerted immediately. • If the newly discovered heritage resources prove to be of archaeological significance, a Phase 2 rescue operation might be necessary at the cost of the developer. Sufficient time must be allowed to remove / collect such material. • Site foremen should be informed before vegetation clearing commences on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites: i.e., human skeletal material, stone artefacts, fossil bone, stone features and historical artefacts or features.

Impacts on potential undiscovered Palaeontological material on site	• The ECO responsible for these developments should be alerted to the possibility of important fossil remains being found either on the surface or exposed by fresh excavations during construction. • Should substantial fossil remains be exposed during vegetation clearing and site preparation, the ECO should safeguard these, preferably in situ, and alert EC Provincial Heritage Resources Authority (ECPHRA) and an accredited professional palaeontologist as soon as possible so that appropriate action (e.g., recording, sampling or collection) can be taken by a professional palaeontologist. • The palaeontologist will need to apply beforehand for a collecting permit from ECPHRA for which an approved depository for any fossil material collected will need to be designated (e.g., Albany Museum, Grahamstown). • Sufficient time must be allowed to remove/collect such material.
Traffic	
Impact on District Roads	• Keep construction and earth-moving vehicles on site during construction phase. • The road must be maintained during the construction phase when necessary to mitigate the impact, if any, of additional vehicle traffic. • Hauling vehicles must operate during normal operational times and allow for adequate spacing between trucks to allow for passing motorists. • Vehicles must be in good working order to avoid unnecessary damage to roads. • Appropriate signage should be erected to warn of slow-moving vehicles as well as wide turning vehicles when applicable. • The gravel access roads are to be maintained during the construction phase.
Visual	
Potential impacts on the surrounding environment – Landscape Character	• Development footprints should be demarcated and clearing to occur within demarcated areas.

A.2 ROLES AND RESPONSIBILITIES

The ultimate responsibility for the effective implementation of the EMPr lies with the applicant (holder of Environmental Authorisation (EA), in this case The Boeram Venter Trust. Responsibility may be delegated to Project Managers, Construction Managers or Environmental Officers appointed by the applicant, during any stage of the development. The delegation of environmental responsibility will be determined by the institutional hierarchy of the organisation.

The applicant will appoint a Project Manager for the Construction Phase of the proposed development. The *Project Manager* will be responsible for the *implementation of the EMPr* during the *Construction Phase* of the development.

An independent *Environmental Control Officer (ECO)* should be appointed to oversee the *implementation of the EMPr* during the *Construction Phase* of the project. The ECO will be responsible for overseeing the implementation of, and monitoring compliance with, the conditions set out in the EA, as well as the Construction Environmental Management Programme (CEMPr). This monitoring role may be supplemented by an internal Site Environmental Officer (SEM) or Site Officer, that will remain on site during the Construction Phase.

Table 1. Hierarchy of responsibility in the implementation of the EMPr.

Project manager Name: Contact number:	• Overall responsibility for management of the development. • Is familiar with the contents of the BA Report, EMPr and the conditions of the EA. • Ensures that policy, legislative and relevant environmental documentation is available to the Construction Manager. • Liaises with Construction/ Site Manager on a regular basis to address any environmental issues (compliance, mitigation, disciplinary action) that may arise.
Construction/ Site Manager Name: Contact number:	• Selects and appoints contractors. • Is familiar with the institutional environmental policies and Codes of Practice. • Is familiar with the BA Report, EMPr, EA, and relevant legislation. • Ensures that the information in the BA Report, EMPr, EA, and relevant legislation is communicated to contractors. • Ensures that contractors are familiar with institutional Codes of Conduct for contractors. • Ensure that environmental policies, legislation and guidelines are adhered to. • Monitor implementation of the EMPr by conducting regular site visits and meetings.
Environmental Control Officer Name: Contact number:	• Responsible for *overseeing and monitoring* the *implementation of the EMPr* during the Construction Phase. • Is familiar with the BA Report, EMPr, EA, and relevant legislation. • Monitors compliance with the EMPr during the operational phase through regular environmental audits. • Report non-compliance or appropriate remedial action.

Site Manager /Site Environmental Officer Name: Contact number:	• Is familiar with the BA Report, EMPr, EA, and relevant legislative requirements. • Ensures compliance with the EMPr and EA conditions. • Is familiar with and ensure compliance with the relevant internal institutional policy, and procedural guidelines. • Ensures compliance with the relevant institutional policy, and procedural guidelines. • Ensures compliance with the legislative requirements. • Implements the EMPr during the operational phase of the development by employing prescribed mitigation and management measures. • Conducts environmental monitoring protocols at the facility. • Conducts regular inspections of the facility in order to monitor compliance with the EMPr. • Takes remedial or disciplinary action where required.

Should ownership of the project change, any EA granted in respect of the development must be transferred to the new owner, upon notification of the Department (DEDEAT). The EMPr, EA and Conditions of Approval remain binding on the new owner/ operator of the development.

A.3 ENVIRONMENTAL PERFORMANCE MONITORING

Environmental Performance Monitoring has been defined as the activities implemented to measure environmental changes resulting from a particular development or activity (Davy & Paradine 1996). These include anticipated and unexpected changes in the environment. Any change from baseline conditions must initiate remedial action, or a change in mitigation or management approach. Performance monitoring could include both the collection of physical data, as well as input from potentially affected neighbours or Interested and Affected Parties (I&APs).

A.3.1 Baseline data

Environmental Performance Monitoring includes the gathering of baseline data with which the future environmental conditions can be compared. It should be noted that the development footprint falls within already modified (i.e., existing pastures) areas.

The following baseline information, where currently not available, must be obtained before vegetation clearing and site preparation commences:

- Extent and location of alien invasive plants on site.
- Extent and location of erosion features on site.

Collection of baseline information will ultimately be the responsibility of the applicant. However, these tasks can be delegated to the Site Environmental Manager (SEM) or Site Officer.

A.3.2 Interested and affected parties

Neighbours and parties affected by the development must be afforded opportunity to comment on problems and impacts that they may experience as a result of the development, during the Construction Phase of the project. A complaints register must be kept which details such comments, as well as the intervention initiated to address the comment or complaint, where appropriate. These comments will be used to adapt and improve existing mitigation measures.

A.3.3 Monitoring

During the construction phase the following must be monitored:

- Monitoring of the compliance with the conditions of approval as given in the EA, as well as the recommendations contained in the EMPr. Timeframes for monitoring will comply with the relevant condition in the EA, should authorisation for the activity be granted.
- Monthly monitoring of the extent and location of alien invasive plants on the site.
- Weekly monitoring of the extent and location of erosion and possible water leaks around the development footprints.
- Weekly conducting of environmental awareness training sessions with the construction personnel.
- Daily monitoring of fresh bedrock for significant fossil material and of excavated material for any archaeological material.

Information gathered during monitoring exercises, as well as the action taken, or operational adjustments made; must be recorded and these reports made available at the request of the DEDEAT.

A.4 LEGAL ENFORCEABILITY

This EMPr is likely to be a condition of the EA, should authorisation for the activity be granted. As such it is a legally binding agreement between the applicant, as well as all his/ her sub-contractors, and the DEDEAT. The EMPr must be included in the contracts (tender documents or otherwise) entered into by the owner/ developer and any subcontractors. This will ensure that sub-contractors have a legal obligation to abide by the conditions set out in the EMPr. Should it be found that additional codes of conduct for contractors need to be included in this EMPr, this must be done at the first review opportunity.

A.5 IMPLEMENTATION SCHEDULE AND REPORTING

The management measures outlined for the Construction Phase of the development will take effect as soon as vegetation clearing and earthworks on the site is initiated, while the collection of baseline monitoring information must start prior to the commencement of construction activities.

Erosion and possible water leak monitoring, heritage monitoring, alien plant management and stakeholder input reports will be kept as outlined in Section A.3.3 above and be made available at the request of the DEDEAT.

Environmental audit reports, as well as reviewed amended EMPr reports will be kept up to date so that they can be made available at the request of the DEDEAT.

A.6 AUDIT PROCEDURE AND EMPR REVIEW SCHEDULE

The environmental audit is systematic, objective investigation of the environmental information of a development to determine to what extent they conform to the environmental standards set out in the EMPr and EA.

During the Construction Phase, the audit reports, as produced by the ECO after periodic site visits, will serve as the auditing mechanism. A schedule for site audits in the Construction Phase must be agreed upon during the appointment of the ECO and comply with any relevant conditions within the EA. The ECO must comment on environmental impacts that are not adequately mitigated, as well as mitigation measures that are not effective, and suggest appropriate further management actions.

These comments must be included in an amended CEMPr (Construction Phase EMPr) that must be made available to the DEDEAT on request.

A.7 ENVIRONMENTAL EDUCATION

Environmental education must be provided as part of the environmental induction process for the labourers that will be employed on site, prior to the commencement of the vegetation clearing and site preparation phase. The key requirements of the BA Report, EMPr and EA will be included in the material which is presented to personnel during the formal environmental induction process.

- Environmental induction will be facilitated by the SEM, or Site Manager/ Farm Manager if no SEM is appointed for the site.
- No personnel will be allowed to work at the site without having passed through the environmental induction process.
- Labourers will be updated continually on pertinent environmental and safety issues during weekly Toolbox Talks by the SEM or Site Manager/ Farm Manager.
- Appropriate signage will be used to inform personnel of environmental conduct in specific areas.

Environmental induction training must include at a minimum:

- Designation of workers rest areas and sanitation facilities.
- Clarification of the meanings of warning signage used at the site.
- Appropriate sanitation and waste disposal practices.
- Procedures to be followed if heritage artefacts are discovered.

A.8 REFERENCES

DEAT (2004) Environmental Management Plans, Integrated Environmental Management, Information Series 12, Department of Environmental Affairs and Tourism (DEAT), Pretoria.

Davy, A. & Paradine, P. 1996. Environmental Performance Monitoring and Supervision. Environmental Assessment Source Book – Update. World Bank Environment Department. Pp. 8.

PART B: OPERATION PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME (OEMPR)

BASIC ASSESSMENT

Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure and Associated Infrastructure, on Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, known as Middledrift, Sundays River Valley Municipality

December 2022

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Part B OPERATIONAL PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME (OEMPr)

During its Operational Phase, the Solar PV Facility will continue its intended purpose of providing electricity to the Poultry Breeder Facility.

Potential negative impacts associated with the Operational Phase are limited mainly to impacts on the local resources and infrastructure associated therewith, as well as the natural resources (hydrological).

Environmental impacts associated with the Operational Phase of the development, as well as the appropriate mitigation actions, have been identified using specialist input for the various components of the affected environment provided in the BA Report.

B.1 MANAGEMENT ACTIONS

The management actions outlined below, indicate the actions to be taken to minimise the potential negative impacts that the operation of the development may have on the environment, as well as measures to enhance the potential benefits.

Impact	Mitigation
Loss of Agricultural Land	
Promotion of colonization and growth of Alien Invasive Species	• In areas disturbed by the construction tasks, as well as surrounding areas adjacent to these, perennial or woody alien species should be periodically removed and destroyed. • Monitoring is suggested on an annual basis and clearing to be done as required.
Changes to topography and drainage characteristics due to earth works	• Appropriate measures to be implemented in order to manage stormwater runoff from the PV Facility. • Limit disturbance outside of the development footprint
Aquatic Biodiversity	
Changes to the local hydrological regime, with possible increases in surface flows during the operational phase	• No run-off should be allowed to leave the site directly. These areas should be contained using berms/ swales or ponds as part of a stormwater management plan. These areas will then attenuate the flows, while reducing the creation of any surface water flows presently not found within the site. • Sediment traps and stilling basins should also be included into the Stormwater Management Plan where steep areas that are susceptible to erosion encountered. • Stormwater management to capture and disperse runoff must be implemented during the construction and operation phase.
Promotion of colonization and growth of Alien Invasive Species	• An Alien Vegetation Management Plan must be developed and implemented during and post-construction.
Erosion	
Erosion on site on cleared areas	• An erosion protection plan must be developed and implemented on site. • The site must be inspected on a regular basis (quarterly and after a heavy rainfall event) for any erosion on site, and any erosion must be rectified immediately through fill and compaction. • The disturbed areas must be revegetated with local grass species to assist with erosion protection.
Socio-Economic	
Employment opportunities for the local community	• Local labour must be sourced from local communities (i.e., Addo, Kirkwood and Motherwell), as far as possible, to maximise the economic benefits for the local community
Visual	
Visual Intrusion in the landscape	• Employ good housekeeping practices including maintaining the Solar PV panels.

B.2 ROLES AND RESPONSIBILITIES

The ultimate responsibility for the effective implementation of the EMPr lies with the applicant (owner/ developer) of the property at the time of the initiation of development, who, in this case would be the Boeram Venter Trust. Responsibility may be delegated to Environmental Officers, or Farm/ Project Managers, representing contractors or the applicant on the site during any stage of the development. The delegation of environmental responsibility will be determined by the institutional hierarchy of the organisation.

During the Operational Phase of the development the implementation of the Operational Phase Environmental Management Programme (OEMPr) and the conditions of the EA, as well as environmental compliance monitoring, will be the responsibility of an internal Environmental Officer or a Site/ Farm Manager appointed by the Boeram Venter Trust. ***Should ownership of the project change, any EA granted in respect of the development must be transferred to the new owner, upon notification of the Department (DEDEAT). The EMPr, EA and Conditions of Approval remain binding on the new owner/ operator of the development.***

B.3 ENVIRONMENTAL PERFORMANCE MONITORING

Environmental Performance Monitoring has been defined as, the activities implemented to measure environmental changes resulting from a particular development or activity (Davy & Paradine 1996). These include anticipated and unexpected changes in the environment. Any change from baseline conditions must initiate remedial action, or a change in mitigation or management approach. Performance monitoring could include both the collection of physical data, as well as input from potentially affected neighbours or affected parties.

B.3.1 Baseline data

Environmental Performance Monitoring includes the gathering of baseline data with which the future environmental conditions can be compared.

Baseline data gathered prior to commencement of the Construction Phase, will be used to compare environmental conditions on the site during the Operational Phase of the development, to past (pre-development) conditions. It should be noted that the development footprint falls within already modified areas (i.e., existing pastures).

B.3.2 Interested and Affected parties

Neighbours and parties affected by the development must be afforded opportunity to comment on problems and impacts that they may experience as a result of the development, during the Operational Phase of the project. A complaints register must be kept which details such comments, as well as the intervention initiated to address the comment or complaint, where appropriate. These comments will be used to adapt and improve existing mitigation measures.

B.3.3 Monitoring

Once the facility becomes operational the following must be monitored:

- Annual monitoring of the extent and location of alien invasive plants.
- Quarterly monitoring of the extent and location of erosion features, as well as possible water leaks around the development footprint (or after heavy rainfall events).

Information gathered during monitoring exercises, as well as the action taken, or operational adjustments made; must be recorded and these reports made available at the request of the DEDEAT.

It is anticipated that the person responsible for the implementation of the OEMPr will also be responsible for environmental monitoring and record keeping for the duration of the project lifetime.

B.4 LEGAL ENFORCEABILITY

This EMPr is likely to be a condition of the EA, should authorisation for the activity be granted. As such it is a legally binding agreement between the applicant, as well as all his/ her sub-contractors, and the DEDEAT. The EMPr must be included in the contracts (tender documents or otherwise) entered into by the owner/ developer and any subcontractors. This will ensure that subcontractors have a legal obligation to abide by the conditions set out in the EMPr. Should it be found that additional codes of conduct for contractors need to be included in this EMPr, this must be done at the first review opportunity.

B.5 IMPLEMENTATION SCHEDULE AND REPORTING

The management measures outlined for the Operational Phase of the development will take effect as soon as the facility becomes operational (i.e., once the Solar PV Facility has been constructed and associated infrastructure installed).

Erosion, Alien plant management and stakeholder input reports will be kept as outlined in Section B.3.3 above and be made available at the request of the DEDEAT.

Environmental audit reports, as well as reviewed amended EMPr reports will be kept up to date so that they can be made available at the request of the DEDEAT.

B.6 AUDIT PROCEDURE AND EMPR REVIEW SCHEDULE

Once the Solar PV Facility is operational, the landowner must comply with all statutory legislation, as well as all of the recommendations as set out in the BA Report. An annual audit must be conducted by a suitably qualified independent ECO, appointed by the proponent during the Operational Phase. These audits must assess the effectiveness of existing management and mitigation measures, and compliance with the OEMPr and conditions of the EA. The findings of the audit reports must feed into the EMPr ensuring that management and mitigation measures are adjusted and updated to ensure that impacts are managed effectively and efficiently. Audit reports must be made available to DEDEAT, upon request.

B.7 ENVIRONMENTAL EDUCATION

Environmental education must be provided as part of the environmental induction process for the labourers that will be employed on site during the Operational Phase of the development.

- Environmental induction will be facilitated by the SEM or Site Manager if no SEM is appointed for the site.

Environmental induction training must include the relevant requirements of the BA Report, EMPr and EA, and must include at a minimum:

- Quarterly erosion and water leak monitoring.
- Annual alien invasive species inspection and removal.

Weekly toolbox talks must comment on environmental issues on which non-compliance has been noted during periodic audits.

B.8 REFERENCES

DEAT (2004) Environmental Management Plans, Integrated Environmental Management, Information Series 12, Department of Environmental Affairs and Tourism (DEAT), Pretoria.

Davy, A. & Paradine, P. 1996. Environmental Performance Monitoring and Supervision. Environmental Assessment Source Book – Update. World Bank Environment Department. Pp. 8.

Human Skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general human remains are buried in a flexed position on their side, but are also found buried in a sitting position with a flat stone capping. Developers are requested to be on alert for the possibility of uncovering such remains.

Freshwater mussel middens

Freshwater mussels are found in the muddy banks of rivers and streams and were collected by people in the past as a food resource. Freshwater mussel shell middens are accumulations of mussel shell and are usually found close to rivers and streams. These shell middens frequently contain stone tools, pottery, bone, and occasionally human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds 1 m^2 in extent, should be reported to an archaeologist.

Large stone cairns

They come in different forms and sizes, but are easy to identify. The most common are roughly circular stone walls (mostly collapsed) and may represent stock enclosures, remains of wind breaks or cooking shelters. Others consist of large piles of stones of different sizes and heights and are known as *isisivane*. They are usually near river and mountain crossings. Their purpose and meaning is not fully understood, however, some are thought to represent burial cairns while others may have symbolic value.

Stone artefacts

These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

Fossil bone

Fossil bones may be found embedded in geological deposits. Any concentrations of bones, whether fossilized or not, should be reported.

Historical artefacts or features

These are easy to identify and include foundations of buildings or other construction features and items from domestic and military activities.

APPENDIX G: OTHER INFORMATION

APPENDIX G (i): SITE NOTICE BOARD AND NEWSPAPER ADVERTISEMENT

The site notice board placed at the intersection of the MN50595 and the existing gravel access road for Middledrift (33°36'10.38"S; 25°40'7.79"E).

Close-up of the site notice board placed at the entrance to the site, near the existing dam proposed to be expanded.

The Herald

Thursday 21 April 2022

classifieds

LEGAL NOTICES

NOTICE OF BASIC ASSESSMENT PROCESS

—

The proponent, The Boeram Venter Trust, proposes the construction and operation of a Solar Photovoltaic (PV) Facility capable of producing 2.2MW of AC electricity, on Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, also known as Middledrift, near Addo in the Sundays River Valley Municipality. The proposed PV Facility will consist of a solar array, measuring ~2.4ha in extent, as well as associated infrastructure (battery container facility, inverter room and power cables), totalling a combined development footprint of ~2.8ha. The PV Facility is proposed to be constructed immediately south-west of the Middledrift Poultry Breeder facility which has already received Environmental Authorisation and is currently under construction. The exact footprint size and location of the various project components will be confirmed through this assessment process.

promulgated under Chapter Five of the National Environmental Management Act (Act 107 of 1998) (NEMAA), and published in Government Gazette 40772 on the 7 April 2017, the project requires a Basic Assessment, because it triggers, amongst others, the following listed activities, in Listing Notice 1 (GN R327):

"1. The development of facilities or infrastructure for the generation of electricity from a renewable resource where—

(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare;..."

Other listed activities potentially triggered by the project are:

GN R327 – Listing Notice 1: Activities 24. (ii) (c); 27.; 28. (ii) and 56. (ii)

GN R324 – Listing Notice 3: Activities 4. a. i. (gg) and 18. a. i. (gg)

Public Process Consultants has been appointed as the independent Environmental Assessment Practitioner (EAP) to undertake the Basic Assessment for this project. Information on the project can be accessed on the website www.publicprocess.co.za. Should you consider yourself an interested and/ or affected party (I&AP), you are required to register your interest with the consultant indicated below during the comment period, which extends from 21 April 2022 to 24 May 2022. Please provide your full name, full postal address, phone numbers, email and state your interest in the matter and/ or area of concern and submit to: Sandy Wren, Public Process Consultants, PO Box 27688, Greenacres, 6057. Phone: 041-374 8426;

Newspaper advertisement placed in "The Herald"

of 21 April 2022

APPENDIX G (ii): DATABASE OF I&APS

THE I&AP DATABASE HAS BEEN SENT DIRECTLY TO THE COMPETENT AUTHORITY AND WILL NOT BE INCLUDED IN THIS REPORT IN ORDER TO COMPLY WITH THE PROTECTION OF PERSONAL INFORMATION ACT (ACT NO. 14 OF 2013) (POPIA)

PROJECT ANNOUNCEMENT AND REGISTRATION PHASE

- **EMAIL: NOTICE OF INTENTION TO COMMENCE WITH BA PROCESS TO DEDEAT**

From: Emily Whitfield
Sent: Thursday, April 21, 2022 1:25 PM
To: Andries.Struwig@dedea.gov.za
Cc: Sandra Wren; Dayalan Govender; Charmaine Struwig; JP Hechter
Subject: RE: NOTICE OF INTENTION TO COMMENCE WITH A BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE ON A PORTION OF PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD, NO 192, KNOWN AS MIDDLEDRIFT, SRVM
Attachments: Middledrift PV - DEDEAT - BAR Notification - final - 21April2022.pdf; Middledrift PV - Comment Form - final - 21April2022.pdf; Middledrift PV - BID - final - 21Apr2022.pdf; Middledrift PV - Locality Map - Final 13Apr2022.jpg

PO Box 27688 Greenacres 6057
120 Diaz Road Adcockvale, PE 6001
Phone 041-3748426 VOIP 087 147 2451
Email sandy@publicprocess.co.za
Ck 97/32984/23 VAT 44601 68273

21 April 2022

Attention: Mr Andries Struwig
Department of Economic Development, Environmental Affairs and Tourism
Private Bag X 5001
Greenacres
6057

Dear Sir,

RE: NOTICE OF INTENTION TO COMMENCE WITH A BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE ON A PORTION OF PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD, NO 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

In terms of the NEMA EIA Regulations, 2014 (as amended), published in GN R326, 327, 325 and 324, promulgated under Chapter Five of the National Environmental Management Act (Act 107 of 1998) (NEMAA), and published in Government Gazette 40772 on the 7 April 2017, this serves as notification to the competent authority, in this case the Provincial Department of Economic Development, Environmental Affairs and Tourism, Sarah Baartman Region, that a Basic Assessment Process is being conducted on behalf of The Boeram Venter Trust (the project proponent), for the proposed construction of a new Solar Photovoltaic Facility on Farm T'Zoetgeneugd No. 192, known as Middledrift, Sundays River Valley Municipality.

PROJECT PROPONENT

The Boeram Venter Trust

PROJECT NAME

Middledrift Solar Photovoltaic Facility: Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd, No. 192, known as Middledrift, near Addo in the Sundays River Valley Municipality.

PROJECT LOCALITY

The farm portions under assessment are located ~4.6km south of Addo/ Valentia (as the crow flies). The site can be accessed via the gravel road (MN50595) which intersects with the R335, ~2km north of the north-eastern boundary of Portion 10 of Farm 192. At this point, there is an existing gravel access road which provides access onto Portion 10 & 40, ~730m in a westerly direction. The nearest boundary of the Addo Elephant National Park is located ~5km east of the area proposed for development. The locality map attached provides an overview of the location of the proposed development.

BRIEF PROJECT DESCRIPTION

The proponent, The Boeram Venter Trust, proposes the construction and operation of a new Solar Photovoltaic (PV) Facilty, including associated infrastructure, capable of producing 2.2MW of AC electricity on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, also known as Middledrift, Sundays River Valley Municipality. The Farm Portions under assessment measure ~114ha in extent and are currently zoned Agriculture 1. The PV facility will consist of a solar panel array, measuring approximately 2.4ha in extent, as well as associated infrastructure (battery container facility, inverter room and power cables), totalling a combined development footprint of 2.8ha. The PV facility and associated infrastructure is proposed to be constructed in an area which has already been cleared immediately south-west of the Middledrift Poultry Breeder Facility, which has received Environmental Authorisation and is currently under construction (DEDEAT Ref: EC06/C/LN1&3/M/19-2019). The PV facility will be grid tied meaning electricity produced at the facility will be fed into the Eskom grid as part of a Wheeling Agreement with the electricity utility. Underground cables will connect the various components of the facility. In addition, a private 22kV underground powerline will be installed from an existing 1.6MVA metering point on Portion 40, over a distance of ~500m, in order to convey electricity to an existing Eskom transformer located adjacent to the Middledrift dam. The exact footprint size and location of the various project components will be confirmed through this assessment process. For more detail on the proposed development, please see the accompanying Background Information Document.

APPLICABLE LEGISLATION

The Basic Assessment process is being undertaken in terms of the NEMA EIA Regulations, 2014 (as amended): GN R326, 327, 325 and 324, promulgated under Chapter Five of the National Environmental Management Act (Act 107 of 1998) (NEMAA), and published in Government Gazette 40772 on the 7 April 2017. The need for a Basic Assessment is triggered by, amongst others, the inclusion of activities listed in Listing Notice 1 (GN R327), namely:

"1. The development of facilities or infrastructure for the generation of electricity from a renewable resource where—
(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare;…"

Other listed activities potentially triggered by the project are:
GN R327 – Listing Notice 1: Activity 24. (ii). (c); 27.; 28. (ii) and 56 (ii)
GN R324 – Listing Notice 3: Activities 4. a. i. (gg) and 18. a. i. (gg)

Public Process Consultants has been appointed by The Boeram Venter Trust (the proponent), as the Environmental Assessment Practitioner to undertake the Basic Assessment, including Public Participation. The purpose of this letter is to notify the competent authority of the intention to submit an application for Environmental Authorisation in respect of the above project, as well as commence with the Basic Assessment process for the proposed project.

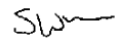
Please find attached with this correspondence the following documentation:

- An electronic copy of the Background Information Document
- Locality Map
- Comment Form

All I&APs and affected/ Juristic Organs of State and State Departments registered on the project database for the above project will be informed of the intention to commence with a Basic Assessment process and the legislated 30-day comment period.

We trust that you will find the above in order. Please do not hesitate to contact Sandy, JP or Emily at the contact details above should you have any comments or queries with regards to this submission.

Regards,



Sandy Wren
Environmental Assessment Project Leader

Regards,
Emily Whitfield (BSc Hons)

Public Process Consultants
120 Diaz Road
Adcockvale
Gqeberha
Phone: 041 374 8426 / Cell: 083 233 5612
VOIP - 0871 472 451
Website: www.publicprocess.co.za

- **EMAIL TO I&APS – LETTER 1: NOTICE OF BASIC ASSESSMENT**

RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN ...

EW Emily Whitfield

To

Cc Sandra Wren

Bcc [redacted]

Reply | Reply All | Forward

Thu 4/21/2022 1:32 PM

You forwarded this message on 5/3/2022 4:04 PM.

Middledrift PV - Locality Map - Final 13Apr2022.jpg
.jpg File

Middledrift PV - BID - final - 21Apr2022.pdf
.pdf File

Middledrift PV - Comment Form - final - 21April2022.pdf
.pdf File

Middledrift PV - Let1 - final - 21April2022.pdf
.pdf File

PO Box 27688 Greenacres 6057
120 Diaz Road Adcockvale, PE 6001
Phone 041 374 8426 VOIP: 087 1472 451
Email sandy@publicprocess.co.za
Ck 97/32884/23 VAT 44601 88273

21 April 2022

Dear Interested and Affected Party / Organ of State / State Department

RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

In terms of the NEMA EIA Regulations, 2014 (as amended), published in GN R326, 327, 325 and 324, promulgated under Chapter Five of the National Environmental Management Act (as amended), you have been identified as an Interested and/ or Affected Party (I&AP) for the above proposed project. The project proponent, The Boeram Venter Trust, proposes the construction and operation of a Solar Photovoltaic (PV) Facility, including associated infrastructure, capable of producing 2.2MW of AC electricity, on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, also known as Middledrift, near Addo in the Sundays River Valley Municipality.

In terms of the NEMA EIA Regulations, 2014 (as amended), published in GN R326, 327, 325 and 324, promulgated under Chapter Five of the National Environmental Management Act (Act 107 of 1998) (NEMAA), and published in Government Gazette 40772 on the 7 April 2017, the project requires a Basic Assessment (BA), because it triggers, amongst others, the following listed activity, in Listing Notice 1 (GN R327):

"1. The development of facilities or infrastructure for the generation of electricity from a renewable resource where—
(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare;..."

A comprehensive list of the listed activities which may be triggered by the proposed development and which require Environmental Authorisation are contained in the accompanying Background Information Document (BID). Public Process Consultants has been appointed as the independent Environmental Assessment Practitioner (EAP) to undertake this Basic Assessment Report process for this project. In order to ensure that any issues and/ or concerns you may have, are included in the **Consultation Basic Assessment Report**, you are kindly requested to submit your comments to the Environmental Assessment Practitioner indicated above, during the comment period, which extends from the **21 April 2022 to 24 May 2022.**

Availability of Information

To assist you with the submission of any comments you may have, please find attached to this correspondence, a **Background Information Document**, a **Comment Form** and a **Locality Map**. If at any stage your contact details change it is the responsibility of the I&AP to notify the EAP of such changes. Available information can also be accessed via the following link: https://publicprocess.co.za/active-projects/35-middledrift-pv-facility

Please refer to the accompanying BID for an explanation of how compliance with the requirements of the Protection of Personal Information Act 4 of 2013 (POPIA) is being ensured.

We look forward to your input and participation in this process. Should you have any comments or queries regarding the above please do not hesitate to contact Sandy Wren, JP Hechter or Emily Whitfield using the contact details provided above.

Yours sincerely

SANDY WREN
EIA PROJECT LEADER

Regards,
Emily Whitfield (BSc Hons)

Public Process Consultants
120 Diaz Road
Adcockvale
Gqeberha
Phone: 041 374 8426 / Cell: 083 233 5612
VOIP - 0871 472 451
Website: www.publicprocess.co.za

Public Process Consultants
Environmental Impact Assessment and Public Participation Management

- **COMMENT FORM MAILED WITH LETTER 1**

BASIC ASSESSMENT PROCESS

Pre-Application Comment and Registration Form

Proponent:	The Boeram Venter Trust
Project Name:	Middledrift Solar Photovoltaic facility
Project Description:	Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd No.192 known as Middledrift, Sundays River Valley Municipality.
Primary Listed Activity:	GN R327 (Listing Notice 1) Activity No. 1(ii)

Return Completed Reply Form to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426, VOIP 087 147 2451 or Email: sandy@publicprocess.co.za

Complete all Relevant Sections Below and Return by: 24 May 2022

Please provide your full contact details:

FIRST NAME:	*SURNAME:*
ORGANISATION:	*TITLE/ POSITION:*
POSTAL ADDRESS:	
CODE:	
PHONE:	*FAX:*
CELL:	*EMAIL:*

Would you like to register as an interested and affected party? (please tick the appropriate box)

YES	
NO	

NOTE:

- You are required to register as an I&AP in order to receive further correspondence regarding the EIA Process.
- Please refer to the accompanying Background Information Document for a detailed explanation of how compliance with the requirements of the Protection of Personal Information Act 4 of 2013 (POPIA) is being ensured.

Please clearly state any interest you may have in the project and/ or list issues, comments, or questions you may have (use additional pages if required).

- **BACKGROUND INFORMATION DOCUMENT MAILED WITH LETTER 1**

BASIC ASSESSMENT PROCESS

Middledrift Solar Photovoltaic Facility: *Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T`Zoetgeneugd No.192, known as Middledrift, Sundays River Valley Municipality.*

Public Process Consultants
Environmental Impact Assessment and Public Participation Management

BACKGROUND INFORMATION DOCUMENT, April 2022

INTRODUCTION

The project proponent, The Boeram Venter Trust, proposes the construction and operation of a Solar Photovoltaic (PV) Facility, including associated infrastructure, capable of producing 2.2MW of AC electricity, on a portion of Portions 10 & 40 of Farm T`Zoetgeneugd No. 192, also known as Middledrift, near Addo in the Sundays River Valley Municipality. The Farm Portions under assessment measure ~114ha in combined extent and are currently zoned Agriculture 1.

The proposed PV facility will consist of a solar panel array, measuring approximately 2.4ha in extent, as well as associated infrastructure (battery container facility, inverter room and power cables), totalling a combined development footprint of 2.8ha. The PV facility is proposed to be constructed immediately south-west of the Middledrift Poultry Breeder facility, which has received Environmental Authorisation and is currently under construction (DEDEAT Ref: EC06/C/LN1&3/M/19-2019). The PV facility will be grid tied meaning electricity produced at the facility will be fed into the Eskom grid as part of a Wheeling Agreement with the electricity utility. The PV facility will be grid tied meaning, electricity produced at the facility will be fed into the Eskom grid as part of a Wheeling Agreement with the electricity utility. The PV Facility is proposed to be constructed within an area that has already been transformed, and therefore it is anticipated that no intact indigenous vegetation will be required to be cleared.

Underground cables will connect the various components of the facility. In addition, a private 22kV underground powerline will be installed from an existing 1.6MVA metering point on Portion 40, over a distance of ~500m, in order to convey electricity to an existing Eskom transformer located adjacent to the Middledrift dam. The exact footprint size and location of the various project components will be confirmed through this assessment process.

In terms of the NEMA EIA Regulations, 2014 (as amended), published in GN R326, 327, 325 and 324, promulgated under Chapter Five of the National Environmental Management Act (Act 107 of 1998) (NEMAA), and published in Government Gazette 40772 on the 7 April 2017, the project requires a Basic Assessment Report (BAR). The proponent has appointed Public Process Consultants as the independent Environmental Assessment Practitioner (EAP) to undertake this BAR assessment, including public participation for this project.

PROJECT LOCALITY

The Farm portions under assessment are located ~4.6km south of Addo/ Valentia (as the crow flies). The site can be accessed via the gravel road (MN50595) which intersects with the R335, ~2km north of the north-eastern boundary of Portion 10 of Farm 192. At this point, there is an existing gravel access road which provides access onto Portion 10 & 40, ~730m in a westerly direction. The nearest boundary of the Addo Elephant National Park is located ~5km east of the area proposed for development. The locality map attached provides an overview of the location of the proposed development.

HOW CAN I PARTICIPATE IN THIS ENVIRONMENTAL ASSESSMENT PROCESS?

In terms of regulation 42(b) of Government Notice R326, Interested and Affected Parties (I&APs) are to request in writing, that their names be placed on the register of I&APs. To register on the database, complete the comment and registration form included with this correspondence or submit your contact details (via email), stating your full name, address and contact numbers, to the consultant indicated in this documentation. In terms of regulation 43(1), a registered I&AP is entitled to comment in writing on all reports and plans submitted as part of the Public Participation Process and raise any issues which may be of significance to the consideration of the application. Additionally, I&APs are required to disclose any direct business, financial, personal or other interest which they may have in the approval or refusal of the application. By registering on the project database, you will be notified as and when information on the project is available for I&AP review and comment.

Compliance with the Protection of Personal Information Act 4 of 2013

The Protection of Personal Information Act 4 of 2013 (POPIA) was enacted to give effect to the constitutional right to privacy by safeguarding personal information processed by a responsible party. You have been identified as a potential Interested and Affected Party (I&AP) for this assessment process. As required by Regulation 42 of the NEMA EIA Regulations, 2014 (as amended), your name and interest in this assessment process, as well as your contact information (e.g., telephone number, email address and postal address) will be placed on a register of I&APs for the duration of the assessment process, which must be submitted to the competent authority, DEDEAT (Sarah Baartman Region). The I&AP register will not be included in the reports which will be released for public review, nor will it be provided to any

other third parties without your explicit consent. However, please be aware that, in terms of Regulation 4 (1) of the National Appeal Regulations, 2014, the I&AP register must be supplied to any individual who lodges an appeal against an Environmental Authorisation. Therefore, if an individual appeals the Environmental Authorisation, should one be granted, Public Process Consultants will be required, by law, to supply the appellant with the I&AP register, including your contact information, as outlined above. Should you not want your name to be included in the I&AP register, please specifically request to be de-registered. In which case you will no longer receive correspondence regarding this assessment process. In compliance with Regulation 44 of the EIA Regulations, any information contained in comments made during the assessment process must be included in the reports that are made available for public review. However, this will not include your personal contact information. Therefore, please note that should you wish to remain on the register and / or make comments during the assessment process it will be accepted that **you have given consent for your name and interest in the assessment to be included in reports and for your contact information to be provided to DEDEAT as well as an appellant, should an appeal be lodged.**

WHAT DOES THIS DOCUMENT TELL YOU?

This document provides you, as an I&AP, with background information on the proposed Solar Photovoltaic Facility development, as well as the Basic Assessment and Public Participation Process. It indicates how you can become involved in the assessment process, receive information and raise issues that may interest and/ or concern you. The sharing of information forms an important component of the Public Participation Process and provides you with the opportunity to become actively involved in the EIA Process from the outset. The input received from I&APs together with scientific and technical investigations assists the competent authority, in this instance the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), Sarah Baartman Region, with their decision-making.

WHAT DOES THE PROJECT ENTAIL?

It is the intention of the proponent to construct and operate a 2.2MW solar Photovoltaic (PV) facility, including associated infrastructure, on a portion of Portion 10 & 40 of Farm T`Zoetgeneugd No.192, also known as Middledrift. The PV facility will consist of a solar panel array, with an anticipated footprint of ~2.4ha, and an additional ~0.4ha for associated infrastructure (i.e., battery room, inverter room, and power cables). Underground cables will connect the solar panels with the inverter and battery rooms as well as the existing generator room. The total anticipated footprint for the proposed PV facilty is ~2.8ha. A new private 22kV underground powerline will be required to be installed in order to convey electricity from the PV facility to the Eskom grid via an existing transformer adjacent to the Middledrift dam. The existing transformer will be relocated in conjunction with the expansion of the Middledrift dam, which expansion has received environmental authorisation (DEDEAT Ref: EC06/C/LN1&3/M/19-2019).

Associated with the proposed PV Facility are the following project activities:

- Preparation of the site, levelling, runoff control measures, and stormwater management
- Installation of the solar Photovoltaic array (panels) (~2.4ha)
- Construction of inverter room (~375m^2)
- Establishment of battery container facility (1 625m^2)
- Installation of underground cables connecting the above components of the PV facility (2000m^2)
- Relocation of the existing Eskom transformer in conjunction with the Middledrift farm dam expansion.
- Establishment of 22kV underground private powerline (~500m) connecting the PV facility with the relocated Eskom transformer
- Establishment/ expansion of internal access roads
- Securing the facility including erection of a fence

The location and size of the preferred development footprints will be determined through specialist and technical input, authority consultation, as well as consultation with I&APs. However, it is proposed that the facility and associated components will be constructed within a portion of the farm that has already been transformed, and therefore it is anticipated that no additional indigenous vegetation will be cleared in order to accommodate the various components described above.

ALTERNATIVES AND SITE SELECTION

A key component of the EIA Process is the identification and assessment of reasonable and feasible alternatives. The following alternatives have been identified and will be considered in the assessment process:

- No-go alternative
- Layout/ footprint alternatives
- Alternatives as identified by I&APs

Reasonable and feasible alternatives as raised by I&APs, specialists and the technical team will be considered in the assessment process.

OVERVIEW OF THE SCOPING AND ENVIRONMENTAL IMPACT ASSSESSMENT PROCESS

In terms of the NEMA EIA Regulations 2014 (as amended), published in GN R326, 327, 325 and 324, promulgated under Chapter Five of the National Environmental Management Act (Act 107 of 1998) (NEMAA), and published in Government Gazette 40772 on the 7 April 2017, the project requires a Basic Assessment, and Environmental Authorisation is required prior to the commencement of any activities on site. The table below lists potential listed activities in GN R327, 325 and 324, which trigger the need for a Basic Assessment. A cautious approach has been adopted towards the identification of listed activities. Where there is currently uncertainty with regards to the applicability of a listed activity, it has been included in the table below.

EIA Regulations (2014), as amended	Project Component
GN R327 (Listing Notice 1)	
"1. The development of facilities or infrastructure for the generation of electricity from a renewable resource where— *(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare;*	It is proposed that a solar photovoltaic plant is constructed with a capacity to produce ~2.2 megawatts. The footprint of the PV array area is anticipated to be ~2.4ha with an additional ~0.4ha for associated infrastructure (battery container facility, inverter room and power cables), totalling an anticipated combined development footprint of ~2.8ha. **This listed activity will require Environmental Authorisation**
"24. The development of a road— *(ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;* *but excluding a road—* *(c) which is 1 kilometre or shorter."*	It is anticipated that the PV facility will require internal roads in order to gain access to the project components and solar panels for maintenance and cleaning purposes. The internal access roads required are anticipated to range between 4 and 8 meters in width and may have a combined length that could exceed 1 kilometer. The exact dimensions of internal roads will be confirmed through the assessment process. **This listed activity may require Environmental Authorisation.**
"27. The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— "	The total development footprint for the PV facility, including associated infrastructure, is estimated to be ~2.8ha. The PV facility is proposed to be constructed on a portion of Portions 10 & 40 of Farm 192, adjacent to the southern boundary of the farm within existing cleared areas. Therefore, it is not anticipated that additional indigenous vegetation will be required to be cleared for the development, however, this will be confirmed by the terrestrial biodiversity specialist. **The applicability of this listed activity will be determined through this assessment process**
"28. Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: *(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;*	The PV facility will be grid-tied as part of a wheeling agreement with Eskom,and will provide electricity security for existing operations on the farm. The farm is currently utilized for agriculture (grazing, and a Poultry Breeder Facility) and the solar PV facility might be considered to be an industrial" development. The farm falls outside of an urban area. The combined development footprint is proposed to be bigger than 1 hectare (~2.8ha). **The applicability of this listed activity will be determined through the assessment process.**
"56. The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre— *(ii) where no reserve exists, where the existing road is wider than 8 metres;* *excluding where widening or lengthening occur inside urban areas."*	It is anticipated that the PV facility will require internal roads in order to gain access to the project components and solar panels for maintenance and cleaning purposes. These may tie in with existing internal access roads provided for the Poultry Breeder Facility. Therefore, existing internal access roads for the breeder facility may be widened or lengthened to connect to the PV facility, and the combined length may exceed 1 kilometer in length. The exact dimensions of internal roads for the PV facility will be confirmed through the assessment process.

	The applicability of this listed activity will be determined through the assessment process.
GN R324 (Listing Notice 3)	
"4. The development of a road wider than 4 metres with a reserve less than 13,5 metres. ***a. Eastern Cape*** *i. Outside urban areas:* *(gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas;*	It is anticipated that the PV facility will require internal roads in order to gain access to the project components and solar panels for maintenance and cleaning purposes. It is expected that the internal roads will range between 4 and 8 meters in width. The area proposed for development is in the Eastern Cape, falls outside of an urban area and within 10 kilometers of the nearest boundary of the Addo Elephant National Park. **The applicability of this listed activity will be determined through the assessment process.**
"18. The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre. ***a. Eastern Cape*** *i. Outside urban areas:* *(gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;*	It is anticipated that the PV facility will require internal roads in order to gain access to the project components and solar panels for maintenance and cleaning purposes. These may tie in with existing internal access roads provided for the Poultry Breeder Facility. Therefore, existing internal access roads for the breeder facility may be expanded to connect to the PV facility, and the combined length may exceed 1 kilometer in length. The area proposed for development is in the Eastern Cape, falls outside of an urban area and within 10 kilometers of the nearest boundary of the Addo Elephant National Park. The exact dimensions of internal roads will be confirmed through the assessment process. **The applicability of this listed activity will be determined through the assessment process.**

The applicability of all the listed activities indicated above will be determined through the assessment process. The listed activities require Environmental Authorisation from the DEDEAT, prior to the commencement of any activities on the site.

The Basic Assessment Process (BA) needs to show the competent authority, DEDEAT, and the project proponent, what the consequences of their choices will be in biophysical, social and economic terms. Public involvement forms an important component of this process, by assisting in the identification of issues and alternatives to be evaluated. The Basic Assessment Process being implemented can be divided into the following phases, namely:

- **Pre-Application Phase**
  - Notification To DEDEAT
  - Project Announcement and Registration of I&APs (30 days) (**We Are Here**)
  - Preliminary Specialist input
- **Application and Basic Assessment Phase**
  - Submission of Application Form for Environmental Authorisation to the DEDEAT
  - Consultation Basic Assessment Report Review (30 days)
  - Submission of Final Basic Assessment Report to the DEDEAT
- **Decision Making and Appeal Period**
  - Notice to I&APs of decision and appeal period

To meet the timeframes as prescribed in the EIA Regulations 2014 (as amended), specialist studies to be included as part of this assessment process will commence in parallel to the application phase. The following specialist studies are proposed to be undertaken for this assessment:

- Terrestrial Biodiversity Compliance Statement
- Aquatic Biodiversity Compliance Statement
- Desktop Visual Impact Assessment

PHASE 1: PRE-APPLICATION PHASE (*CURRENT STAGE*)

- Project Announcement and Registration of I&APs

The first stage in the process entails notification to the DEDEAT, as well as interested and affected parties (I&APs) of the intention to proceed with The Basic Assessment Process. Identified I&APs are provided with a Background Information Document (BID) on the project, a locality map and a comment form. An advertisement will be placed in a local newspaper and a site notice board will be erected at the site. I&APs are required to register their interest in the project to receive further project information. I&APs will be provided with a **30-day** period in which to register their interest on the project database and raise any issues for inclusion in the Consultation Basic Assessment Report (CBAR).

In terms of the NEMA EIA Regulations, 2014 (as amended), the objective of the Basic Assessment Report is to amongst others, through a conservative process:

- Determine policies and legislation relevant to the activity
- Identify alternatives considered
- Describe the needs and desirability of the proposed alternatives
- Undertake an impact and risk assessment process focussing on the geographical, physical, biological, social, economic, heritage, and cultural sensitivity of the site
- Based on the impact assessment determine the preferred alternative, identify suitable mitigatory measures and any residual risks that need to be managed or monitored

PHASE 2: APPLICATION AND BASIC ASSESSMENT PHASE

- **Application form and Consultation Basic Assessment Report**

In parallel with the compilation of and submission of the Application Form, the CBAR will be compiled, which will include a Comments and Responses Trial – Indicating the issues and concerns raised by I&APs during the 30-day project announcement period (PHASE 1: Pre-Application Phase).

Subsequent to the submission of the Application Form to the competent authority, the CBAR will be released for a minimum, legislated 30-day comment period. All registered I&APs will be notified in writing of the opportunity to comment. In order to assist I&APs with their understanding of the project and to facilitate the identification of issues for inclusion in the Final Basic Assessment Report (FBAR), I&APs will be provided with an executive summary of the CBAR, as well as a comment form. Copies of the report will also be made available on the project website www.publicprocess.co.za.

- Final Basic Assessment Report submission

The FBAR, including the Comments and Responses Trail as well as the EMPr, will be compiled for submission to the competent authority (DEDEAT: Sarah Baartman District) for their consideration. In terms of the NEMA EIA regulations, 2014 (as amended) where a BA is applied to an application, *the applicant must within 90 days of receipt of the application by the competent authority, submit to the competent authority a BA Report, inclusive of specialist studies, which have been subjected to a 30-day Public Participation Process.* This BA Report should include all comments received during the 30-day comment period. All I&APs on the project database will be notified in writing of the submission of the FBAR.

PHASE 3: DECISION MAKING AND APPEAL PERIOD

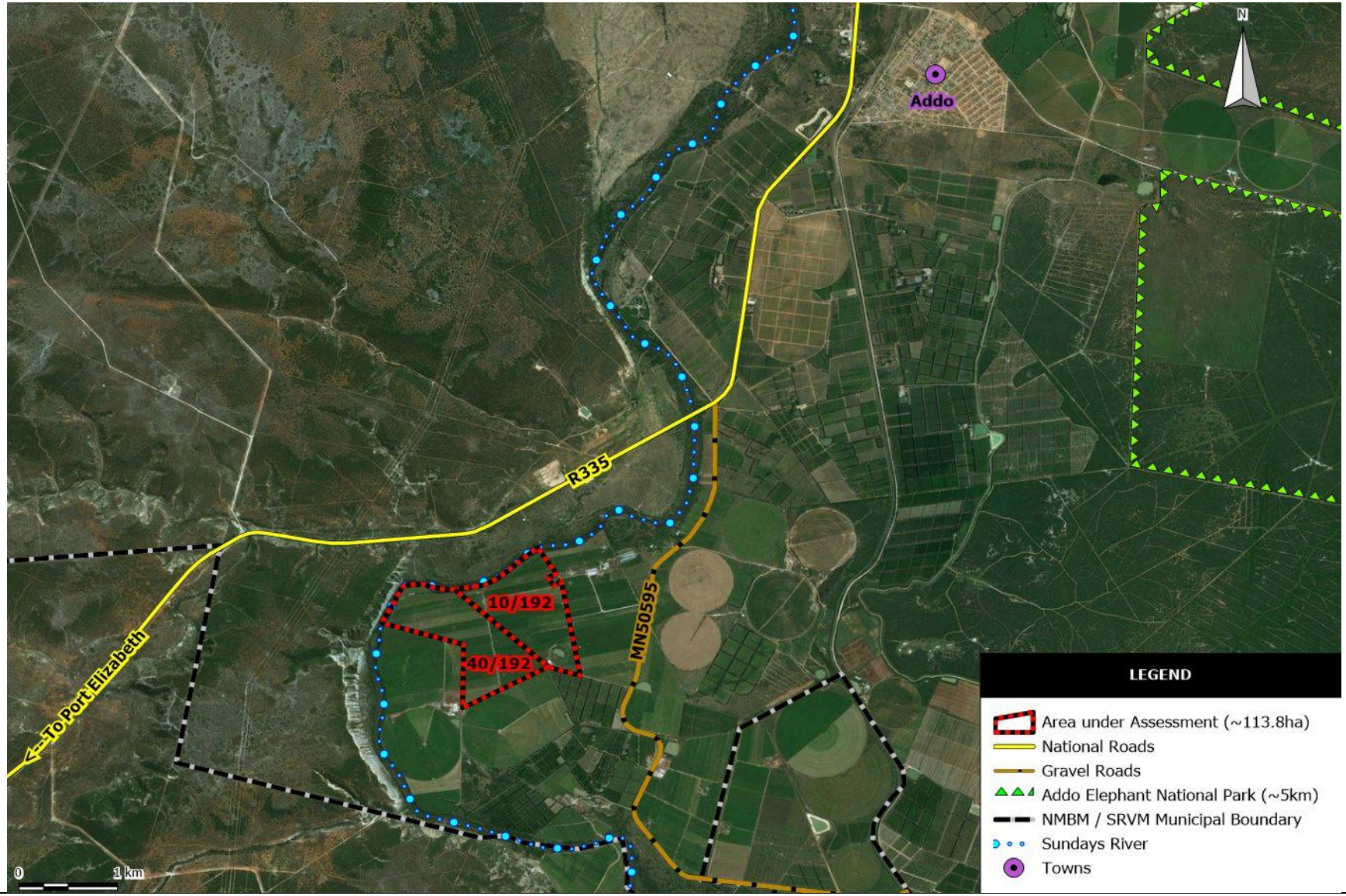
The competent authority must, within 107 days of receipt of the BA Report, grant or refuse Environmental Authorisation. The applicant must, within 14 days of the date of the decision, notify all registered I&APs of the decision and provide them access to the decision and reasons for the decision, as well as indicate the manner of appeal.

WHAT IS YOUR ROLE AS AN I&AP?

1. I&APs are required to respond to the letters of notification and/ or newspaper advertisements and register their interest on the project database.
   - By emailing or mailing a comment form to the Environmental Assessment Practitioner (EAP) indicated below.
   - By registering your interest in the project, you will be kept informed throughout the Basic Assessment Process and will be notified of any opportunities to comment.
2. I&APs are required to state their area of interest and/ or concern in the matter.
   - By emailing or mailing a comment form to the EAP indicated below.
   - By telephonically contacting the EAP if you have a query, comment, or require further project information.
   - By reviewing the Consultation Reports and submitting any comments/ issues within the specified comment periods.

WHO SHOULD YOU CONTACT?

Sandy Wren,
Public Process Consultants
PO Box 27688,
Greenacres, 6057.
Phone 041-374 8426; VOIP: 0871 472 451
Email: sandy@publicprocess.co.za
Information on the project can be downloaded from the following website: www.publicprocess.co.za



Locality of Portion 10 & 40 of Farm T`Zoetgeneugd No. 192, known as Middledrift, in relation to major roads, municipal boundaries and towns, in the Sundays River Valley Municipality.

PROJECT ANNOUNCEMENT AND REGISTRATION PHASE

- **CORRESPONDENCE RECEIVED FROM ORGANS OF STATE/ STATE DEPARTMENTS**

From: Emily Whitfield
Sent: Tuesday, April 26, 2022 9:53 AM
To: 'Howard Blane'
Subject: RE: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNIC...

Hi Howard,

We acknowledge receipt of your request to register. Eskom will be kept on the I&AP database for this assessment and will be notified of all opportunities to comment on reports made available for public review throughout the assessment process.

Regards,
Emily

From: Howard Blane <[redacted]>
Sent: Thursday, April 21, 2022 1:54 PM
To: Emily Whitfield <emily@publicprocess.co.za>
Cc: Sandra Wren <sandy@publicprocess.co.za>; Angelina Shalang <[redacted]>
Subject: RE: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNIC...

Dear Emily

Eskom Dx is an affected and interested party in this application.

Thanks

Howard Blane
Land & Rights Manager

From: Emily Whitfield
Sent: Thursday, April 21, 2022 3:18 PM
To: Angelina Shalang; Howard Blane
Cc: Sandra Wren
Subject: RE: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNIC...

Dear Angelina,

We acknowledge receipt of your comment form and request to register. You will be kept on the I&AP database for this assessment and will be notified of all opportunities to comment on reports made available for public review throughout the assessment process.

Regards,
Emily

From: Angelina Shalang <[redacted]>
Sent: Thursday, April 21, 2022 2:00 PM
To: Howard Blane <[redacted]>; Emily Whitfield <emily@publicprocess.co.za>
Cc: Sandra Wren <sandy@publicprocess.co.za>
Subject: RE: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNIC...

Good day,

Receive the attached registration form.

Regards,
Angelina

From: Howard Blane <[redacted]>
Sent: Thursday, 21 April 2022 13:54
To: Emily Whitfield <emily@publicprocess.co.za>
Cc: Sandra Wren <sandy@publicprocess.co.za>; Angelina Shalang <[redacted]>
Subject: RE: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNIC...

Dear Emily

Eskom Dx is an affected and interested party in this application.

Thanks

Howard Blane
Land & Rights Manager

BASIC ASSESSMENT PROCESS

Pre-Application Comment and Registration Form

Proponent:	The Venter Wildlife Trust
Project Name:	Disco 2 Solar Photovoltaic Facility
Project Description:	Proposed Construction of a new Solar Photovoltaic Facility on a portion of Farm 713, also known as Hopefield, Sundays River Valley Municipality.
Primary Listed Activity:	GN R327 (Listing Notice 1) Activity No. 1(ii)

Return Completed Reply Form to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426, VOIP 087 147 2451 or Email sandy@publicprocess.co.za

Complete all Relevant Sections Below and Return by: 24 May 2022

Please provide your full contact details:

FIRST NAME: Angelina	*SURNAME:* Shalang
ORGANISATION: Eskom Distribution- Cape Coastal Cluster	*TITLE/ POSITION:* Environmental Manager
POSTAL ADDRESS: [redacted]	
CODE:	
PHONE: [redacted]	*FAX:* [redacted]
CELL: [redacted]	*EMAIL:* [redacted]

Would you like to register as an interested and affected party? (please tick the appropriate box)

YES	X
NO	

NOTE:

- You are required to register as an I&AP in order to receive further correspondence regarding the EIA Process.
- Please refer to the accompanying Background Information Document for an explanation of how compliance with the requirements of the Protection of Personal Information Act 4 of 2013 (POPIA) is being ensured.

Please clearly state any interest you may have in the project and/ or list issues, comments, or questions you may have (use additional pages if required).

From: Emily Whitfield
Sent: Tuesday, May 3, 2022 11:23 AM
To: 'Siqiti, Khulile'; 'Moore, Randall'
Cc: Sandra Wren
Subject: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Hi Randall,

Your comment regarding the road is acknowledged and will be included in the respective Basic Assessment Reports for submission to DEDEAT for their decision making.
Please note that a Traffic Impact Statement will not be conducted.

Regards,
Emily Whitfield

From: Emily Whitfield
Sent: Tuesday, May 3, 2022 10:17 AM
To: Siqiti, Khulile <[redacted]>; Moore, Randall <[redacted]>
Cc: Sandra Wren <sandy@publicprocess.co.za>
Subject: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Hi Randall,

Thank you for your email. Khulile Siqiti is currently registered on the I&AP database for this project and will remain registered for the duration of the assessment process. You and Khulile will be notified of various opportunities to comment throughout the assessment process.

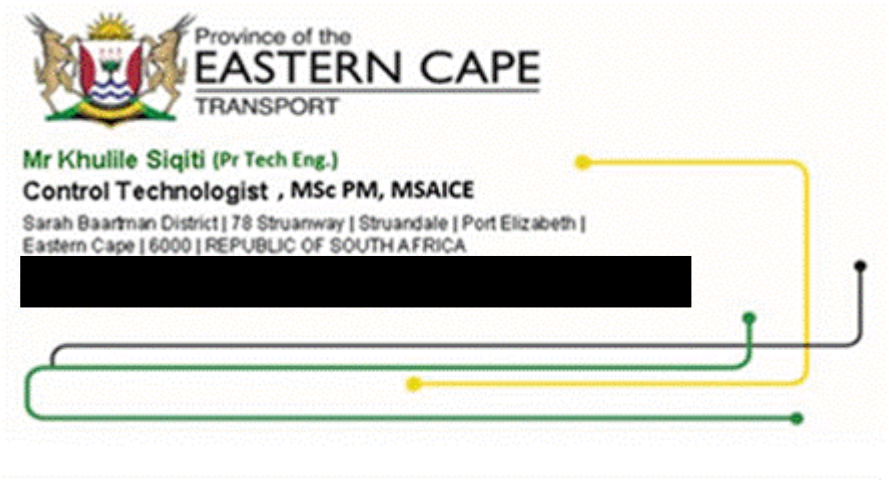
Regards,
Emily Whitfield

From: Siqiti, Khulile <[redacted]>
Sent: Monday, April 25, 2022 10:22 AM
To: Moore, Randall <[redacted]>
Cc: Emily Whitfield <emily@publicprocess.co.za>; Sandra Wren <sandy@publicprocess.co.za>
Subject: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Hello Mr. Moore,

Noted

Thanks.



From: Moore, Randall <[redacted]>
Sent: Monday, April 25, 2022 9:00 AM
To: Siqiti, Khulile <[redacted]>
Cc: Emily Whitfield <emily@publicprocess.co.za>; sandy@publicprocess.co.za
Subject: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Hello Khulile

Please register as an I&AP. MN50595 will have to be regravelled for the construction phase

Randall Moore
District Roads Engineer
SARAH BAARTMAN DISTRICT

From: Emily Whitfield
Sent: Tuesday, May 3, 2022 3:52 PM
To: Babalwa Layini
Subject: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Thank you very much.

Regards,
Emily

From: Babalwa Layini <[redacted]>
Sent: Tuesday, May 3, 2022 3:20 PM
To: Emily Whitfield <emily@publicprocess.co.za>
Subject: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Good Afternoon Emily

His name is Zinzile Mtotywa

Kind Regards
Babalwa

From: Emily Whitfield <emily@publicprocess.co.za>
Sent: Tuesday, 03 May 2022 11:39
To: Babalwa Layini <[redacted]>
Cc: Sandra Wren <sandy@publicprocess.co.za>; JP Hechter <jp@publicprocess.co.za>
Subject: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Hi Babalwa,

Thank you very much for your email. Can you please confirm the name and surname of your new manager so that we can register him on all of our I&AP databases to ensure that future correspondence is sent to the correct individuals within the Department of Forestry.

Please note however, in this instance the proposed development will not require the clearance of forest or any protected tree species.

Regards,
Emily Whitfield

From: Babalwa Layini <[redacted]>
Sent: Tuesday, May 3, 2022 10:55 AM
To: Emily Whitfield <emily@publicprocess.co.za>
Subject: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Good Morning Emily

Thank you for copying Forestry this invitation however clearing of natural forest and protected trees requires a license from the Department for future correspondence on Forestry matters please include my new manager his email address is [redacted] contact number [redacted] cell [redacted]

Kind Regards
Babalwa

From: Sandra Wren
Sent: 03 May 2022 10:59 AM
To: Gcinile Dumse
Cc: JP Hechter; Emily Whitfield
Subject: RE: DLSM COMMENTS PROPOSED SOLAR PHOTOVOLTANIC FACILITIES

Hi Dumse

We acknowledge receipt of your request to register for both projects, Middledrift PV and Disco 2 PV and confirm you will remain on the database for the duration of the assessment process.

The comments you have submitted will be included in the respective reports for submission to DEDEAT for their decision making.

Regards

Sandy Wren (*BA Honours: Development Theory*)
Registered Environmental Assessment Practitioner (No: 2019/1242)
Public Process Consultants
120 Diaz Road, Adcockvale, PE, 6001
PO Box 27688, Greenacres, 6057
Phone - 041 374 8426
VOIP - 0871 472 451
Cell - 082 4909 828
sandy@publicprocess.co.za
www.publicprocess.co.za

From: Gcinile Dumse <[redacted]>
Sent: 03 May 2022 09:55 AM
To: Sandra Wren <sandy@publicprocess.co.za>
Subject: DLSM COMMENTS PROPOSED SOLAR PHOTOVOLTANIC FACILITIES

Good Morning Sandy

Please find the attached comments for proposed Disco 2 and Middledrift Solar Photovoltanic facilities.

Regards

Gcinile P. Dumse
Designation: Resource Auditor (Umphicothi)
District: Nelson Mandela Metro & Sara Baartman DM
Agriculture, Land Reform & Rural Development
Directorate: Land & Soil Management
[redacted]

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The information contained in this e-mail may be confidential, legally privileged and protected by law. Access by the intended recipient only is authorised. If you are not the intended recipient, kindly notify the sender immediately. Unauthorised use, copying or dissemination hereof is strictly prohibited. Save for bona fide departmental purposes, the Department of Agriculture, Land Reform and Rural Development does not accept responsibility for the contents or opinions expressed in this e-mail, nor does it warrant this communication to be free from errors, contamination, interference or interception.

BASIC ASSESSMENT PROCESS

Pre-Application Comment and Registration Form

Proponent:	The Boeram Venter Trust
Project Name:	Middledrift Solar Photovoltaic facility
Project Description:	Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd No.192 known as Middledrift, Sundays River Valley Municipality.
Primary Listed Activity:	GN R327 (Listing Notice 1) Activity No. 1(ii)

Return Completed Reply Form to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426, VOIP 087 147 2451 or Email: sandy@publicprocess.co.za

Complete all Relevant Sections Below and Return by: 24 May 2022

Please provide your full contact details:

FIRST NAME: SCINILE	*SURNAME:* DUMSE
ORGANISATION: DALRD	*TITLE/ POSITION:* Resource Auditor
POSTAL ADDRESS: P/BAG X4, TEOMA	
CODE: 5714	
PHONE: [redacted]	*FAX:*
CELL: [redacted]	*EMAIL:* [redacted]

Would you like to register as an interested and affected party? (please tick the appropriate box)

YES	X
NO	

NOTE:

- You are required to register as an I&AP in order to receive further correspondence regarding the EIA Process.
- Please refer to the accompanying Background Information Document for a detailed explanation of how compliance with the requirements of the Protection of Personal Information Act 4 of 2013 (POPIA) is being ensured.

Please clearly state any interest you may have in the project and/ or list issues, comments, or questions you may have (use additional pages if required).

agriculture, land reform & rural development
Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

Directorate: Land and Soil Management
***Postal Address*: Private Bag X 04, TECOMA, East London, 5214** ***Physical Address*: 9 Arundel Crescent, Stirling, East London, 5214**
[redacted]

Enquiries: G. P. Dumse **Ref:** 13.10.6.2/T'Zoetgeneugd **Date:** 28 April 2022

Public Process Consultants
PO Box 27688
Greenacres
6057

Proponent: Boeram Venter Trust

Email: sandy@publicprocess.co.za

Dear Ms S. Wren

BASIC ASSESSMENT PROCESS, PROPOSED CONSTRUCTION OF MIDDLEDRIFT SOLAR PHOTOVOLTANIC FACILITY ON A PORTION OF PORTION 10 & 40 FARM NO 192 T'ZOETGENEUGD, SUNDAYS RIVER VALLEY MUNICIPALITY, EASTERN CAPE

The top soil must be removed on all area where physical disturbance may occur, kept separate from the overburden and stockpiled for later rehabilitation. The indigenous grass species that already exist on the site must be used in re-vegetation.

The soil erosion prevention should be carried out progressively and the area must be rehabilitated after the construction activities. A soil erosion plan for monitoring and rehabilitation of erosion events must be in place. The appropriate erosion mitigation measures must form part of this plan to prevent and reduce the risk of any potential erosion.

The weeds control management plan should be developed and maintained to control any declared weeds and invasive alien plants on proposed development site and the immediately surroundings. The control and eradication of declared weeds and invader plants must be done in situ.

From: Sandra Wren
Sent: 25 May 2022 11:00 AM
To: Nelisa Nama
Subject: RE: Middledrift Solar Photovoltaic facility: Comment and Registration Form

Hi Nelisa

We acknowledge receipt of your comments and will ensure you are registered as an I&AP on the project database and are notified of the various stages to comment during the assessment process. The comments you have submitted will be included and responded to the Basic Assessment Report.

Regards

Sandy Wren (*BA Honours: Development Theory*)
Registered Environmental Assessment Practitioner (No: 2019/1242)
Public Process Consultants
120 Diaz Road, Adcockvale, PE, 6001
PO Box 27688, Greenacres, 6057
Phone - 041 374 8426
VOIP - 0871 472 451
Cell - 082 4909 828
sandy@publicprocess.co.za
www.publicprocess.co.za

From: Nelisa Nama <[redacted]>
Sent: 24 May 2022 01:40 PM
To: Sandra Wren <sandy@publicprocess.co.za>
Subject: Middledrift Solar Photovoltaic facility: Comment and Registration Form

fyi

NELISA NAMA
DFFE : LGE (SBDM)

Sarah Baartman DISTRICT MUNICIPALITY
Province of the Eastern Cape
progress through development

32 GOVAN MBEKI AVENUE, PO BOX 318, PORT ELIZABETH, 6000, SOUTH AFRICA
[redacted]

BASIC ASSESSMENT PROCESS

Pre-Application Comment and Registration Form

Proponent: The Boeram Venter Trust

Project Name: Middledrift Solar Photovoltaic facility

Project Description: Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd No.192 known as Middledrift, Sundays River Valley Municipality.

Primary Listed Activity: GN R327 (Listing Notice 1) Activity No. 1(ii)

Return Completed Reply Form to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426, VOIP 087 147 2451 or Email: sandy@publicprocess.co.za

Complete all Relevant Sections Below and Return by: 24 May 2022

Please provide your full contact details:

FIRST NAME:	Nelisa	*SURNAME:*	Nama
ORGANISATION:	Dept of Forestry, Fisheries and the Environment	*TITLE/ POSITION:*	Control Environmental Officer
POSTAL ADDRESS:	Sarah Baartman District Municipality; 32Govan Mbeki Avenue; Port Elizabeth		
CODE:	6001		
PHONE:	[redacted]	*FAX:*	N/A
CELL:		*EMAIL:*	[redacted]

Would you like to register as an interested and affected party? (please tick the appropriate box)

YES	X
NO	

NOTE:

- You are required to register as an I&AP in order to receive further correspondence regarding the EIA Process.
- Please refer to the accompanying Background Information Document for a detailed explanation of how compliance with the requirements of the Protection of Personal Information Act 4 of 2013 (POPIA) is being ensured.

Please clearly state any interest you may have in the project and/ or list issues, comments, or questions you may have (use additional pages if required).

The Applicant needs to assess all the environmental management impacts associated with the development for the identified listed activities on both listing notice 1 and listing notice 3. It is the requirements of the EIA process for all developments that trigger EIA to consider and assess all alternative sites to the development.

As the Department of Forestry, Fisheries and the Environment Local Support Official responsible for Sarah Baartman District Municipality and its Local Municipalities on their environmental management and planning I have to comment on this EIA process. therefore kindly register myself as an I@AP and be given an opportunity to comment.

From:	Sandra Wren
Sent:	25 May 2022 10:53 AM
To:	Zinzile Mtotywa
Cc:	Emily Whitfield; Babalwa Layini; JP Hechter
Subject:	RE: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY
Attachments:	Middledrift PVs - Solar & Ass. Infrastructure - 25May2022.kmz

Hi Zinzile

We acknowledge receipt of your comment below and ensure these will be included in the Basic Assessment Report for submission to Environmental Affairs for their decision making.

As per our discussion of this morning, I have attached a .kmz google earth image of the site, which indicates the boundary of the site and the proposed footprint for the PV facility. It will also give you a good idea of the condition of the site. As mentioned telephonically the R335 lies to the north of the site (not west) and does not border the site, the Sundays River forms the northern boundary of the site. The area between the site under assessment and the R335 does not belong to the project applicant, not does it form part of this assessment.

Once you have had a change to look at the mapping we can chat again about a site visit, but as noted we would not be able to access the area between the site and the R335 as it does not form part of this assessment or belong to the project applicant.

I trust this makes things a bit more clear. Please don't hesitate to call me if you require additional information.

Regards

Sandy Wren (*BA Honours: Development Theory*)
Registered Environmental Assessment Practitioner (No: 2019/1242)
Public Process Consultants
120 Diaz Road, Adcockvale, PE, 6001
PO Box 27688, Greenacres, 6057
Phone - 041 374 8426
VOIP - 0871 472 451
Cell - 082 4909 828
sandy@publicprocess.co.za
www.publicprocess.co.za

From: Zinzile Mtotywa <[redacted]>
Sent: 24 May 2022 02:10 PM
To: Sandra Wren <sandy@publicprocess.co.za>
Cc: Emily Whitfield <emily@publicprocess.co.za>; Babalwa Layini <[redacted]>
Subject: RE: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Good afternoon Ms. Wren,

Please find attached herein is our registration form for the BA process, for the project in question.

Kind regards

Zinzile Mtotywa
Tel: 041-407 4050
Cell: 063 750 4427

From: Emily Whitfield <emily@publicprocess.co.za>
Sent: Tuesday, 03 May 2022 16:05
To: Zinzile Mtotywa <[redacted]>; Babalwa Layini <[redacted]>
Cc: Sandra Wren <sandy@publicprocess.co.za>
Subject: FW: RE: NOTICE OF BASIC ASSESSMENT PROCESS: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO. 192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY

Dear Mr. Zinzile Mtotywa,

We have been informed by Ms. Layini that you should be registered on our I&AP databases as the representative for the Department of Forestry. Please see below for the email correspondence sent on 21 April 2022 notifying all I&APs of the Basic Assessment Process being conducted on behalf of the Boeram Venter Trust for the proposed Solar PV facility on Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, known as Middledrift, Sundays River Valley Municipality.
The project announcement and registration period extends from 21 April 2022 to 24 May 2022.

Regards,
Emily Whitfield (BSc Hons)

Public Process Consultants
120 Diaz Road
Adcockvale
Gqeberha
Phone: 041 374 8426 / Cell: 083 233 5612
VOIP - 0871 472 451
Website: www.publicprocess.co.za

BASIC ASSESSMENT PROCESS

Pre-Application Comment and Registration Form

Proponent: The Boeram Venter Trust

Project Name: Middledrift Solar Photovoltaic facility

Project Description: Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd No.192 known as Middledrift, Sundays River Valley Municipality.

Primary Listed Activity: GN R327 (Listing Notice 1) Activity No. 1(ii)

Return Completed Reply Form to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426, VOIP 087 147 2451 or Email: sandy@publicprocess.co.za

Complete all Relevant Sections Below and Return by: 24 May 2022

Please provide your full contact details:

FIRST NAME: Zinzile	*SURNAME:* Mtotywa
ORGANISATION: DFFE (Forestry)	*TITLE/ POSITION:* Assistant Director
POSTAL ADDRESS: 54 Parterson road, North End , Port Elizabeth/Gqeberha	
CODE: 6001	
PHONE: [redacted]	*FAX:* n/a
CELL: [redacted]	*EMAIL:* [redacted]

Would you like to register as an interested and affected party? (please tick the appropriate box)

YES	X
NO	

NOTE:

- You are required to register as an I&AP in order to receive further correspondence regarding the EIA Process.
- Please refer to the accompanying Background Information Document for a detailed explanation of how compliance with the requirements of the Protection of Personal Information Act 4 of 2013 (POPIA) is being ensured.

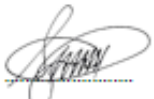
Please clearly state any interest you may have in the project and/ or list issues, comments, or questions you may have (use additional pages if required).

According to the project layout map, the proposed project appears to be planned on a transformed land area and that no forests, or patches there to, exist within the footprint.
I must also mention that, the western boundary boardering road R335 remains an area of interest for site inspection. A site visit would therefore be conducted, during the process of consultations (BA) to verify the footprint of the entire site in question, and in particular this part(western boundary/R335).

I must also declare upfront that i have no other interest that link me the project in question, except the interest to see the implementation and full compliance to the National Forests Act, Act 84 of 1998 as amended.

Regards

Zinzile Mtotywa



Signature

Date: 24/05/2022

- **CORRESPONDENCE RECEIVED FROM I&APS**

From: Jonathan Cooper <[redacted]>
Sent: Monday, 23 May 2022 16:24
To: JP Hechter; [redacted]
Cc: Emily Whitfield
Subject: RE: Adjacent landowner confirmation - [redacted]

Many thanks JP

Yes contact details listed below are correct.

My brother (Christopher Cooper) actually forwarded very recently to me recently the attached documents you also kindly attached, I have not managed to read through in detail as yet but I do note there is a deadline tomorrow to complete and submit what I assume is administrative documentation of all and relevant affected and interested parties…

I can confirm that [redacted] is the correct email address, for Mr Christopher Cooper (CC on e mail).

Many thanks

Kind rgds

Jonathan Cooper CA(SA) | Treasury Finance
[redacted]
Johannesburg Corporate Office
[redacted]
www.bidvestbank.co.za

From: JP Hechter <jp@publicprocess.co.za>
Sent: Monday, May 23, 2022 4:18 PM
To: Jonathan Cooper
[redacted]>; [redacted]
Cc: Emily Whitfield <emily@publicprocess.co.za>
Subject: RE: Adjacent landowner confirmation - [redacted]

Good Day Mr Cooper

Thank you for returning the email.

We have proactively included you on the project database as the landowner representative. Can you please confirm that the following email address, [redacted] is the correct email address to which all future correspondence will be send?

We will update the project database to include Mr Christopher Cooper as a landowner representative. Can you also please confirm that [redacted] is the correct email address, for Mr Christopher Cooper.

Please note: the Notification of Intention to Commencement with a Basic Assessment Process for the Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, Known as Middledrift, SRVM, was sent to all I&APs on the 21 April 2022. Can you please confirm that you have received such notification email?

For ease of reference, please find attached to this email the Background Information Document (BID), Comment Form and letter sent to all I&APs.

All available information for the project can be downloaded from our website www.publicprocess.co.za.

Please feel free to contract me should you require any more information.

Regards

From: Jonathan Cooper <[redacted]>
Sent: Monday, 23 May 2022 15:39
To: JP Hechter <jp@publicprocess.co.za>; [redacted]
Cc: Emily Whitfield <emily@publicprocess.co.za>
Subject: RE: Adjacent landowner confirmation - [redacted]

Good day JP

My apologies for the late reply, I missed your initial e mail completely, yes we are the adjacent land owners

Our property "[redacted]" is within the property that we understand Mr Nico Venter purchased

Our representatives are myself Jonathan Cooper and my brother Christopher Cooper

My direct contact details are as shown below

Please feel free to contact me should you need

Many thanks

Kind rgds

Jonathan
Jonathan Cooper CA(SA) | Treasury Finance
[redacted]
Johannesburg Corporate Office
[redacted]
www.bidvestbank.co.za

From: JP Hechter <jp@publicprocess.co.za>
Sent: Thursday, April 14, 2022 8:41 AM
To: Jonathan Cooper
<[redacted]
Cc: Emily Whitfield <emily@publicprocess.co.za>
Subject: Adjacent landowner confirmation - [redacted]
Importance: High

Good day Mr Cooper

Several attempts have been made to contact you telephonically, but none were successful.

We are the appointed Environmental Consultants for Mr Nico Venter to undertake and Assessment for a proposed Solar Photovoltaic Facility on a portion of Portions 10 & 40 of T`Zoetgeneugd No. 192, known as Middledrift, near Addo, in the Sundays River Valley Municipality.

We have identified you as the **adjacent landowner representative for [redacted].** As you might be aware, we are legally obligated to inform all adjacent landowners, landowner representatives and tenants of a pending EIA process that is undertaken. Contact information will be placed on the project database, in order to forward any available information during the I&AP review periods, that will assist you in submitting comments on the project.

Can you kindly confirm your contact details below, and also indicate any representatives you deem necessary to be included.

Portion 5/192	Jonathan Cooper	011 407 3341 / 078 521 5395	87 Udwin's Close	jonathan.cooper@bidvestbank.co.za; ccooper753@gmail.com; joncooper02@gmail.com

Please note that we are complying with the POPI Act, see below:

Compliance with the Protection of Personal Information Act 4 of 2013
The Protection of Personal Information Act 4 of 2013 (POPIA) was enacted to give effect to the constitutional right to privacy by safeguarding personal information processed by a responsible party. You have been identified as a potential Interested and Affected Party (I&AP) for this assessment process. As required by Regulation 42 of the NEMA EIA Regulations, 2014 (as amended), your name and interest in this assessment process, as well as your contact information (e.g., telephone number, email address and postal address) will be placed on a register of I&APs for the duration of the assessment process, which must be submitted to the competent authority, DEDEAT (Sarah Baartman Region). The I&AP register will not be included in the reports which will be released for public review, nor will it be provided to any other third parties without your explicit consent. However, please be aware that, in terms of Regulation 4 (1) of the National Appeal Regulations, 2014, the I&AP register must be supplied to any individual who lodges an appeal against an Environmental Authorisation. Therefore, if an individual appeals the Environmental Authorisation, should one be granted, Public Process Consultants will be required, by law, to supply the appellant with the I&AP register, including your contact information, as outlined above. Should you not want your name to be included in the I&AP register, please specifically request to be de-registered. In which case you will no longer receive correspondence regarding this assessment process. In compliance with Regulation 44 of the EIA Regulations, any information contained in comments made during the assessment process must be included in the reports that are made available for public review. However, this will not include your personal contact information. Therefore, please note that should you wish to remain on the register and / or make comments during the assessment process it will be accepted that **you have given consent for your name and interest in the assessment to be included in reports and for your contact information to be provided to DEDEAT as well as an appellant, should an appeal be lodged.**

Please feel free to contact me should you have any queries

Regards

JP Hechter **(MSc. Geography)**
Environmental Assessment Practitioner
EAPASA Candidate Ref: 2020/1374
Public Process Consultants
120 Diaz Road
Adcockvale
Port Elizabeth
Phone: 041 374 8426 VOIP: 0871 472 451
Cell: 072 275 4212
Website: www.publicprocess.co.za

From: JP Hechter
Sent: Wednesday, May 25, 2022 8:45 AM
To: Jonathan Cooper
Cc: Chris Cooper; Emily Whitfield
Subject: RE: Portion 5 of Farm 192 known as Greenviews - Areas of concern

Good day Mr Cooper

We acknowledge receipt of your comments. We will ensure that your comments will be appropriately responded to and included in the Comments and Responses trial in the Consultation Basic Assessment Report.

You and Mr Christopher Cooper will be kept on the I&AP database for this assessment and will be notified of all opportunities to comment on reports made available for public review throughout this assessment process.

Regards

From: Jonathan Cooper <[redacted]>
Sent: Wednesday, 25 May 2022 00:12
To: JP Hechter <jp@publicprocess.co.za>
Cc: Chris Cooper <[redacted]>; Emily Whitfield <emily@publicprocess.co.za>
Subject: Portion 5 of Farm 192 known as Greenviews - Areas of concern
Importance: High

Good day JP

Please find attached for your kind attention and review.

Many thanks

Kind rgds

Jonathan

Jonathan Cooper CA(SA) | Treasury Finance
[redacted]
Johannesburg Corporate Office
[redacted]
www.bidvestbank.co.za

BASIC ASSESSMENT PROCESS

Pre-Application Comment and Registration Form

Proponent:	The Boeram Venter Trust
Project Name:	Middledrift Solar Photovoltaic facility
Project Description:	Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T'Zoetgeneugd No.192 known as Middledrift, Sundays River Valley Municipality.
Primary Listed Activity:	GN R327 (Listing Notice 1) Activity No. 1(ii)

Return Completed Reply Form to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 – 374 8426, VOIP 087 147 2451 or Email: sandy@publicprocess.co.za

Complete all Relevant Sections Below and Return by: 24 May 2022

Please provide your full contact details:

FIRST NAME: JONATHAN	SURNAME: COOPER
ORGANISATION: REPRESENTATIVE	TITLE/ POSITION: MR
POSTAL ADDRESS: [redacted]	
CODE: [redacted]	
PHONE: [redacted]	FAX:
CELL: [redacted]	EMAIL: [redacted]

Would you like to register as an interested and affected party? (please tick the appropriate box)

YES	✓
NO	

NOTE:
- You are required to register as an I&AP in order to receive further correspondence regarding the EIA Process.
- Please refer to the accompanying Background Information Document for a detailed explanation of how compliance with the requirements of the Protection of Personal Information Act 4 of 2013 (POPIA) is being ensured.

Please clearly state any interest you may have in the project and/ or list issues, comments, or questions you may have (use additional pages if required).

Please refer to "AREAS OF CONCERN" on following page.

Areas of concern

We, Jonathan and Christopher Cooper represent the adjacent land owner of Portion 5 of Farm 192
The above property is a residential property comprising of the main farm house and residential unit, both situated on approximately one hectre plot of land being Portion 5 of Farm 192.

This plot of land is known as "Greenviews" and has been in the Rowe - Cooper family for decades, passed down from generation to generation, and will continue to remain within the family in perpetuity, for generations to come without the possibility of ever being sold outside the family.
It is important to understand and be clear that the above property is situated in the middle of the land owned where the proposed Solar Photovoltaic Facility is being considered to be installed.
There are therefore a number of concerns that need to be taken into account and we, the representatives, reserve the right to raise further concerns further along in the process. While the adjacent land owner of Portion 5 of Farm 192 is in favour in principle of alternative power use and renewable energy the proposed Solar Photovoltaic Facility cannot be erected to the detriment of the current residential home and unit and the future viability of living in close proximity to a potential industrial scale Solar Photovoltaic Facility.

The potential close proximity of the proposed Solar Photovoltaic Facility to the current residential home and unit, both of which are situated on Greenviews is a major concern.
It is strongly suggested that the possibility of situating the proposed Solar Photovoltaic Facility as far away from Greenviews is taken into consideration, and a fair enough distance that will not impose on the privacy, quality of life and living standards of the current land owners of Greenviews.
Potential health and safety implications that could potentially be dire and adverse, together with the relative close proximity of having to live near to the proposed Solar Photovoltaic Facility need to be taken into account.
Additionally more details are required on the extent and scale of the Solar Photovoltaic Facility, the layout and set up, as well as positioning, height, noise considerations etc
Mention is made of feeding proposed Solar Photovoltaic Facility to the Eskom grid. Is it the intention of the land owner to establish commercial and industrial scale supply of electricity in the future?
Mention is made of a 1km road as well as the laying out of cables, more details are required on this as the affected land owner and residents residing on Greenviews can only access their residential property by means of servitude road.

APPENDIX G (v): EAP'S CV

CURRICULUM VITAE (CV)
SANDRA JANE WREN

Name of Firm:	***Public Process Consultants cc.***
Name of Staff:	**SANDY** Jane Wren
Position:	Sole Member (100% ownership)
Profession:	Public Participation Process Specialist and Environmental Impact Assessment Management
Specialisation:	Public participation process design and management for Strategic Environmental Assessments (SEA), Environmental Impact Assessments (EIA's), Policy Development Processes. Client, community liaison and report writing. Environmental Impact Assessment Management.
Languages:	English, excellent speaking, reading, and writing Afrikaans, good speaking, reading and writing

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KEY QUALIFICATIONS

- Sandy Wren is a BA graduate from the University of Port Elizabeth (UPE) majoring in Political Science, Sociology and Industrial and Organisational Psychology (**1992**).
- Sandy has BA Honours Degree in Development Theory (**2003**) which included courses in Environmental Management and Impact Assessment for which she obtained distinctions.
- Project Management for Local Government co-sponsored by the Economic Development Institute of the World Bank, the Universities of Durban/ Westville, Stellenbosch, The Western Cape and Witwatersrand (**1993**)
- Confident Communication - Mast Training Consultants (**1995**)
- Management by Objectives

PROFESSIONAL EXPERIENCE

From Current

May 1997 to PRESENT Public Process Consultants (Sole Owner/ Manager)

In May 1997, Sandy opened Public Process Consultants, which initially specialised in the management of public participation for Environmental Impact Assessments (EIA's), Strategic Environmental Impact Assessments (SEA's) and Policy Development for Local, Provincial as well as National Government. Public Process Consultants is a balanced team offering extensive experience in the design and management of Environmental Impact Assessments coupled with expertise in and sensitivity towards the biophysical environment as well as the need for social and economic development. Public Process Consultants offer above average report writing and administration skills. As the sole owner and Manager of Public Process Consultants, Sandy is responsible for the following with regards to Environmental Impact Assessments:

- Client liaison, review of project description in order to determine relevant listed activities for Basic Assessment and/ or Environmental Impact Assessment as well as integrated applications (Waste License)
- Review of relevant biodiversity planning frameworks, site review and identification of relevant specialist assessments for EIA
- Develop a detailed project description in consultation with the client in order to determine and identify relevant listed activities requiring environmental authorisation.
- Review of relevant legislation applicable to an Assessment
- Develop terms of reference for specialist consultants and appointment of specialists
- Compile Scoping and EIA Report as well as Basic Assessments, including public participation
- Review of relevant specialist assessments
- Review of EMPr

- Liaison and consultation with relevant competent authority for decision making
- Plan, manage and coordinate public participation process for Environmental Assessments
    - Identify I&APS
    - Liaison with I&APs
    - Record keeping of all communication with I&APs

May 2000 to June 2004 Sandy & Mazizi Consulting cc. (50% Owner/ Manager)

In order to meet the requirements for Black Economic Empowerment Sandy Wren established Sandy and Mazizi Consulting with her former employee Mazizi Msutu. This provided Mr Msutu with a 50% equal shareholding in the business. The services formerly provided by Public Process Consultants continued to be provided by Sandy and Mazizi Consulting cc. The main focus of the company was in the area of social involvement in the various stages of development with its majority expertise in public participation in EIA's, SEA's, and policy development processes. During this period Sandy developed experience and expertise in the management of Environmental Impact Assessments. The company was closed in 2004 for Mr Msutu to persue further business opportunities.

April 1995 to March 1997 Regional Director, Idasa Eastern Cape

As Regional Director of IDASA Sandy gained extensive experience in project management, co-ordination, training and facilitation of various interest groups, levels of government, community organisations, and other structures within civil society. Sandy while at Idasa covered the following projects:

- *Facilitation of the establishment of non-racial local government structures in the Eastern Cape*
- *Administrative co-ordination of the development of a regional economic development plan*
- *Conference co-ordination*
- *Voter Education Training and Co-ordination*
- *Community Courts Conference co-ordination*
- *Community facilitation for Local Government Structure Plans*
- *Public Participation process design and management*
- *Public participation for the Strategic and Environmental Impact Assessments (SEA) for the Coega IDZ and Ngqura Harbour as well as EMPr for the mining of Coega Kop Quarry*
- *Public Participation for an Integrated Development Plan for Walmer/ Gqebera.*

January 1993 – April 1995 Regional Coordinator, Idasa Eastern Cape
1994 Senior Coordinator, Idasa Eastern Cape

In 1993 I was employed as Regional Coordinator by Idasa (Institute for Democracy in SA). In 1994 I was appointed to the level of Senior Coordinator in the Eastern Cape Office, although my responsibility was that of acting Director. My duties as a regional/ senior coordinator were:

- Coordinate all projects, seminars, workshops, conferences and Township Tours
    - This entailed budgeting, liasing with hotels, guest speakers, flight bookings, programme development, media liaison and participant liaison.
- Manage education and training sessions
- Recruit, induct, train, supervise and coordinate staff activities
- Prepare budget plans and activity plans for all projects undertaken
- Edit and write monthly newsletter as well as brochure

Areas of involvement: Local Government, Housing, Economic Development, Affirmative Action, Poverty Relief, Community Courts and Voter Education

1991 Vehicle Sales, Avis Rent a Car

Responsible for the sale of vehicles to trade and the public as they were retired as rental vehicles

1992 Sales, Pierre's Diamonds, St Thomas, US Virgin Islands, Caribbean

Responsible for the design and sale of precious stones to passing trade.

ENVIRONMENTAL IMPACT ASSESSMENT PRACTITIONER EXPERIENCE

Scoping and Environmental Impact Assessments
As the owner and lead EAP on Environmental Impact Assessments, Sandy has the following responsibilities for the project listed below:

- Review project description in line with relevant EIA regulations to determine if Basic Assessment or Scoping and EIA is to be applied to an application.
- Site visit and review of biodiversity planning frameworks, google earth imagery
- Identify relevant specialist assessments to be undertaken as part of the EIA
- Develop and manage the project budget and request quotations from specialists, for submission to client for approval
- Liaise with all members of the project team, namely, decision making authority, organs of state, I&APs, project applicant, Town Planners, Project Engineers, Technical Team members (Architects, Irrigation Specialists, Planting Plan specialists)
- Include an outline of the public participation process to be followed for assessment
- Appoint all specialists
- Manage and initiate the Scoping Process, draft Scoping Reports
- Public Consultation
    - Identify I&APs
    - Newspaper Advertisements, site notice board
    - Information distribution to I&APs (CD's, hard copies of reports, website, presentations where required)
    - Manage correspondence to and from I&APs
    - Datebase development and maintenance
    - Tracking and responding to issues raised
- Identify legislation relevant to a project application
- Review issues raised in order to determine if additional specialist studies may be required.
- Identify and assess reasonable and feasible alternatives
- Liaison with relevant organs of state (Local, Provincial and National)
- Appointment of specialists, review of specialist assessments, synthesise recommendations into the EMPr, specialist studies include:
    - Aquatic
    - Vegetation
    - Archaeological
    - Palaeontological
    - Visual
    - Bulk Services (domestic water, effluent management, internal roads and stormwater management)
    - Traffic Assessment
    - Soil Suitability
    - Other as identified through the relevant assessment e.g. Security Risk Assessment
- Compile Draft EIA and Final for submission to decision making authority
- Notify I&APs of the appeal period
- Responding to Appeals received, where appropriate

- Service Station at Humerail, Port Elizabeth
- Morton Bay, Humerail, Port Elizabeth, a multi-purpose commercial property development
- Brookes Hill Caravan Park, Humewood Port Elizabeth
- Quarter Mile Oval Racing Track, Schoenmakerskop Sports Centre (stock car racing track)
- Expansion and upgrading of Smart Stone, Victoria Drive, Port Elizabeth
- Construction of a Wedding Venue on the Sardinia Bay Road
- Residential development of Arlington Race Course, Victoria Drive
- Residential development of varying densities, Walmer Heights, Port Elizabeth
- Proposed Amanzi Country Estate (Lifestyle and eco estate) consisting of a golf course, hotel, residential units (approx 900), equestrian facilities, cricket field and various heritage components
- Proposed Coega Ridge Development consisting of low to high density housing as well as light industrial, commercial and retail facilities
- Upgrade of Sewer Pump Station No 1 and construction of a new 1500 meter pipeline, Hankey
- Winterhoek Park Ext, Uitenhage (residential development)

- Zeekoei River residential and mixed use development, Humansdorp
- EIA for a new residential development at Goedemoedsfontein, Seaview, Port Elizabeth
- EIA for a Residential and Mixed Use Development, Erf 325 Fairview Port Elizabeth
- EIA for SA Breweries, Biogas Storage Facility, NMBM
- EIA for a residential development, Willow Tree Country Estate, Sunlands
- EIA for NiRoVe Paint Stripping, Perseverance, NMBM
- EIA for the Weston Waste Water Treatment Works, Weston, Hankey
- EIA for Landrost, clearing of agricultural land for Habata Boerdery
- EIA for Portion 62 of 10, Little Chelsea, residential development
- EIA for Riverbend Citrus, clearing of agricultural land for San Miguel Fruits SA
- EIA for Venter Fert, Composting and Fertiliser Processing Plant for Venter Boerdery
- EIA for Intsomi Citrus, clearing of agricultural land for San Miguel Fruits SA
- EIA for Langbos Citrus, clearing of agricultural land
- EIA for Scheepersvlakte Farms, clearing of agricultural land
- EIA for Falcon Ridge, clearing of agricultural land, Habata Boerdery
- EIA for Sylvania, clearing of agricultural land for San Miguel Fruits SA
- EIA for Ikamva Lethu, clearing of agricultural land for Ikamva Lethu PTY Ltd
- EIA for Dunbrody, clearing of agricultural land for Unifrutti SA
- EIA for Portion 15 of Farm 203, clearing of agricultural land, for Habata Boerdery

Basic Assessments
As the owner and lead EAP on Environmental Impact Assessments, Sandy has the following responsibilities for the project listed below:

- Review project description in line with relevant EIA regulations to determine if Basic Assessment is to be applied to an application.
- Site visit and review of biodiversity planning frameworks, google earth imagery
- Identify relevant specialist assessments to be undertaken as part of the EIA
- Develop and manage the project budget and request quotations from specialists, for submission to client for approval
- Liaise with all members of the project team, namely, decision making authority, organs of state, I&APs, project applicant, Town Planners, Project Engineers, Technical Team members (Architects, Irrigation Specialists, Planting Plan specialists)
- Include an outline of the public participation process to be followed for assessment
- Appoint all specialists
- Manage and initiate the Assessment Process
- Public Consultation
    - Identify I&APs
    - Newspaper Advertisements, site notice board
    - Information distribution to I&APs (CD's, hard copies of reports, website, presentations where required)
    - Manage correspondence to and from I&APs
    - Database development and maintenance
    - Tracking and responding to issues raised
    - Site visit with I&APs and organs of state
- Identify legislation relevant to a project application
- Review issues raised in order to determine if additional specialist studies may be required.
- Identify and assess reasonable and feasible alternatives
- Liaison with relevant organs of state (Local, Provincial and National)
- Appointment of specialists, review of specialist assessments, synthesise recommendations into the EMPr, specialist studies include:
    - Aquatic
    - Vegetation
    - Archaeological
    - Palaeontological
    - Visual
    - Bulk Services (domestic water, effluent management, internal roads and stormwater management)

    - Traffic Assessment
    - Soil Suitability
    - Other as identified through the relevant assessment e.g. Security Risk Assessment
- Compile and review Draft and Final Basic Assessment for submission to decision making authority
- Notify I&APs of the appeal period
- Responding to Appeals received, where appropriate

- Residential Development, Erf 325 Theesecombe, Port Elizabeth
- Installation of additional Nitrogen tanks at Umicore, Port Elizabeth
- Borehole, water pipeline and power line, Glenconnor
- Upgrading of Bulk Stormwater Infrastructure, a Portion of Macon Road Lorraine
- Above Ground Fuel Storage Facilities, Rocklands Factory, Uitenhage
- Community Centre, Nomathamsanqua, Addo
- Residential and mixed use development of Erf 1846, Perridgevale
- Borehole, water pipeline and power line, Glenconnor
- Installation of additional Nitrogen tanks at Umicore, Port Elizabeth
- Theesecombe erf 325, new residential development
- Theesecombe erf 722, new residential development
- Theesecombe erf 2377, new residential development
- the Upgrading of Bulk Stormwater Infrastructure, a Portion of Macon Road Lorraine
- Upgrading of Bulk Stormwater Infrastructure, Summerstrand, NMBM
- Installation of minor stormwater infrastructure, Cluster H, Kwanobuhle, Uitenhage, Cluster B, Kuyga, Cluster A, Wells Estate and Khayamnandi, installation of stormwater infrastrucutre.
- Citrus Packhouse, Blinkwater, Fort Beauford
- Above Ground Fuel Storage Facilities, Rocklands Factory, Uitenhage
- Various Basic Assessments for the establishment of new Broiler House facilities for Rocklands Poultry (Loerie, Nooidgedacht, Kirkwood, Boshfontein, Accurate, Lakeside and Altona)
- Residential Development, Arcadia, Humansdorp, Kouga Municipality
- Residential Development, Weston, Hankey, Kouga Municipality
- Photovoltaic Solar Energy Project, Graff Reinet
- Installation of Water Supply, Glenconner
- New Agricultural Development for Habata Boerdery,
    - Oliphantskop
    - Logan Braes
    - Falcon Ridge
    - Badlands (Portion 8, Portion 16 and Portion 17)
- Establishment of a Technical High School, Jeffreys Bay, Kouga Municipality
- Municipal Housing Development, Alicedale, Makana Local Municipality
- Erf 3231 Fairview, new residential Development
- New Agricultural development, Nooidgedacht Citrus
- New Broiler House Facilities, Venter Boedery
- New Agricultural Development, Luthando Farm
- Farm Dam Expansion, Kuduskloof, Venter Boerdery
- Ponders Packhouse Expansion, San Miguel Fruits SA
- Stormwater Upgrade, Summerstrand for the NMBM

Special Public Participation Experience
Sandy has been responsible for the management of the public participation component for the Strategic and Environmental Impact Assessment listed below. This has entailed primary responsibility for all components relating to the public participation process and co-authoring, where relevant, the applicable assessment, the has entailed.

- Development of an appropriate public participation process, to include, where relevant community consultation, determine if public meetings are required

- Develop and manage the project budget for the PPP
- Identification of an initial database of I&APs
- Notification to I&APs through all stages of the assessment process, including distribution of hard copies of the reports, CD's, uploading files to the project website
- Site notice board and newspaper advertisements
- Develop presentations to synthesise the findings of the PP input received for presentation to e.g. Coega ELC, NMBM and other state departments
- Develop presentations to present the findings of an assessment process to I&APs
- Responding to and tracking of issues raised by IA&Ps
- Documenting and report writing for the public participation process
- Identification of issues raised by I&APs which may require additional specialist assessment, inclusion in a specialist assessment and / or project amendment and bring these to the attention of the EAP

- SEA for the Coega Industrial Development Zone and Harbour (1997)
- EIA for the proposed IDZ and Harbour, East London
- EIA EC Incinerators (Medical Waste Incinerator)
- Closure and Rehabilitation of Ibhayi Waste Disposal Site
- License Application for Arlington Waste Disposal Site
- EIA Proposed Regional General and Hazardous Waste Processing Facility, Eastern Cape
- EIA Identification of a new 400kV Powerline from Poseidon Substation to Grassridge Substation
- EIA for the Rezoning of the Core Development Area, Coega IDZ
- EIA for the Port of Nggura
- EMPR for the Mining of Coega Kop Quarry
- SEA for the expansion of the Greater Addo Elephant National Park
- EIA for the N2 Wild Coast Toll Road Project from East London to Durban
- EIA for the proposed Pechiney Aluminium Smelter at the Coega IDZ
- EIA for the proposed Madiba Bay Leisure Park
- EIA for the proposed Liquid Natural Gas (LNG) to Power Project, Coega
- EIA for the proposed extension of the Port of Nggura.
- Public Facilitation of the Addo, Wilderness and Tsitsikamma Management Plans for SANParks
- Proposed establishment of a Marine Protected Area for Addo
- EIA for the Mainstream Wind Energy Project Jeffreys Bay
- EIA for the Ubuntu Wind Energy Project, Jeffreys Bay
- EIA for the Banna ba Pifhu Wind Energy Project, Humansdorp
- EIA for the Electrawinds Wind Energy Project, Coega Industrial Development Zone
- EIA for the Marine Pipeline Servitude in the Coega Industrial Development Zone
- EIA for the Bulk Liquid and Storage Handling Facility Coega Industrial Development Zone
- EIA for the Ngura Manganese Terminal
- Basic Assessment for Landside Infrastructure Port of Nqura
- Public Participation for an Air Quality Management Plan for the Eastern Cape Province

Amendment Applications

- Residential Development, Erf 2686 Parsonsvlei
- Residential Development, Erf 2687Parsonsvlei
- Agni Steels SA, Steel Recycling Plant, Coega Industrial Development Zone
- Erf 325 Fairview, Residential Development, Fairview Suburban Estates Company Ltd

Section 24 G Applications

- Portion 8 of Farm 203, expansion of an existing farm dam
- Portion 23 of Farm 104 Swanepoels Kraal and the Remainder of Farm 650, Kirkwood, SRVM, clearing of vegetation

- **EAPASA Registration Certificate:**

Environmental Assessment Practitioners Association of South Africa

Registration No. 2019/1242

Herewith certifies that

Sandra Jane Wren

is registered as an

Environmental Assessment Practitioner

Registered in accordance with the prescribed criteria of Regulation 15. (1) of the Section 24H Registration Authority Regulations (Regulation No. 849, Gazette No. 40154 of 22 July 2016, of the National Environmental Management Act (NEMA), Act No. 107 of 1998, as amended).

Effective: 01 March 2022

Expires: 28 February 2023

Chairperson

Registrar

SAQA

APPENDIX G (vi): AUTHORITY CONTACT DETAILS

THE DATABASE CONTAINING THE CONTACT DETAILS OF RELEVANT AUTHORITIES HAS BEEN SENT TO THE COMPETENT AUTHORITY DIRECTLY AND WILL NOT BE INCLUDED IN THE BASIC ASSESSMENT REPORT IN ORDER TO COMPLY WITH THE PROTECTION OF PERSONAL INFORMATION ACT (ACT NO. 14 OF 2013) (POPIA)

APPENDIX G (vii): PROOF OF NOTIFICATION TO LANDOWNER

THE APPLICANT OF THE PROPOSED PROJECT IS THE LANDOWNER.

- **AQUATIC BIODIVERSITY SPECIALIST**

Province of the EASTERN CAPE
ECONOMIC DEVELOPMENT, ENVIRONMENTAL AFFAIRS & TOURISM

DETAILS OF SPECIALIST AND DECLARATION OF INTEREST IN TERMS OF REGULATIONS 12 AND 13 OF THE AMENDMENTS TO THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 AS AMENDED.

	(For official use only)
File Reference Number:	
NEAS Reference Number:	
Date Received:	

Application for environmental authorization in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Amendments to the Environmental Impact Assessment Regulations, 2014. This form is valid as of 6 January 2021.

PROJECT TITLE

MIDDLEDRIFT SOLAR PHOTOVOLTAIC FACILITY: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON A PORTION OF PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO.192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY.

SPECIALIST [1]	JS Environmental Consulting		
Contact person:	Ms Jaclyn Smith		
Postal address:	P.O Box 19176, Tecoma, East London		
Postal code:	5214	Cell:	072 555 0464
Telephone:		Fax:	
E-mail:	info@jsenvironmental.co.za		
Professional affiliation(s) (if any)	SACNASP Professional Natural Scientist (Reg No. 120693)		

Project Consultant:	Public Process Consultant		
Contact person:	Sandy Wren		
Postal address:	PO Box 27688, Greenacres		
Postal code:	6057	Cell:	082 490 9828
Telephone:	041 374 8426 / 087 1472 451	Fax:	
E-mail:	sandy@publicprocess.co.za		

[1] Curriculum Vitae (CV) attached

Version 2 January 15 2021

4.2 The SPECIALIST

I, **Jaclyn Smith** , declare that –

General declaration:

- I act as the independent Specialist in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Amendments to Environmental Impact Assessment Regulations, 2014 as amended.
- ~~I have a vested interest in the proposed activity proceeding, such vested interest being:~~

Signature of the specialist

JS Environmental (Pty) Ltd
Name of company

13/10/2022
Date

Signature of the Commissioner of Oaths

13/10/2022
Date

CA(SA)
Designation

Official stamp (below)

COMMISSIONER OF OATHS
Ref: 9/1/82
MARK J. VORSTER
CHARTERED ACCOUNTANT
Membership No. 08077382
Date 13/10/2022
Certified A True Copy Of The Original

Annexure 1

CV

CURRICULUM VITAE

JACLYN SMITH *Pr.Sci.Nat*

ENVIRONMENTAL CONSULTANT

CONTACT

Cell:
072 555 0464

Email:
info@jsenvironmental.co.za

Postal address:
P.O. Box 19176
Tecoma
East London
5214

EDUCATION

2010-2012
Rhodes University
BSc Geology and
Environmental Science

2013-2014
Nelson Mandela University
BSc (Hons) Geology

COURSES

2018
EIA Course
Rhodes University

2018
Tools for Wetland Assessment
– Certified Competent
Rhodes University

PROFESSIONAL REGISTRATION

Registered Professional Natural Scientist with South African Council for Natural Scientific Professions (Reg No. 120693)

EXPERTISE

I have seven years' experience in environmental consulting. I have experience in managing and undertaking Environmental Impact Assessments (EIA) and Aquatic and Wetland Assessments as well as extensive experience in the following areas:

Public Participation: Managing and undertaking the public participation process in support of EIA's including public meetings and community and stakeholder engagement.

Water Use Licencing: Undertaking numerous water use licence applications with a Section 21 (a), (b), (c), (e), (f), (g) and (i) component.

Specialist studies: Preparation of reports and field assessments for vegetation impact assessments and waste management assessments.

Auditing: Construction and operation compliance audits for road and infrastructure upgrades as well as housing developments throughout the Eastern Cape.

Permit applications: Preparation of applications for removal of protected plant and tree species to DEDEAT and DAFF as well as demolition permit applications to ECPHRA.

EMPLOYMENT

Terreco Environmental cc Environmental Consultant	2015-2017
CES – Coastal and Environmental Services (Pty) Ltd Environmental Consultant	2017-2019

CONSULTING EXPERIENCE

Environmental Impact Assessments

- Construction of the new Sipetu River Bridge, Eastern Cape. 2014.
  - Basic Assessment Report Process
- Tsomo Bulk Sanitation Upgrade, Eastern Cape. 2014-2016.
  - Basic Assessment Report Process
- Thynk Retail One (Pty) Ltd Road and Services to Portion 9 of Farm 809, Quenera North, East London. 2017-2018.
  - Basic Assessment Report Process
- Rec-Oil Used-Oil Recycling Facility in Wilsonia, East London. 2017 to 2019.
  - Scoping and Environmental Impact Reports in support of Environmental Authorisation and Waste Licence Applications

CONSULTING EXPERIENCE

- Proposed Infrastructure Developments in the SANBI Kwelera National Botanical Garden, Eastern Cape. 2017 to 2019.
  - Basic Assessment Process
- Nottinghill Farm NEMA Section 24G Application, Eastern Cape. 2017 to 2018.
  - Section 24G application

Aquatic and Wetland Impacts Assessments

- Amalinda Downs Development, Amalinda, East London. 2018.
- Villa Rosa Development, Eastern Cape. 2017.
- Hope Village Development, Gauteng. 2018.
- Cambridge West Housing Development, Eastern Cape. 2019.
- Boulders WEF Powerline, Western Cape. 2019.
- Mbhashe Access Roads Upgrade, Mbhashe Local Municipality, Eastern Cape. 2019.
- MBSA Clarkebury Road Upgrade, Eastern Cape. 2019.
- Kei Road Housing Development, Eastern Cape. 2017.
- Tsomo WWTW Upgrade, Eastern Cape. 2019.
- Willowvale and Idutywa Informal Settlement Upgrades. 2020.
- Ventnor Dam, Tarkastad. 2020.
- BCMM Ward 46 Road and Culvert Upgrade. 2020.
- Dordrecht Sports Field Upgrade. 2020.

Water Use Licencing and Risk Assessments

- Alice pipelines and road upgrade, Eastern Cape. 2019.
- Amatolaville Primary School, Stutterheim, Eastern Cape. 2018.
- SKG Properties Bengal Heights Development, Amalinda, East London. 2017.
- Yellowwoods River Sewer Pipeline Crossing, Eastern Cape. 2019.
- Qwabi Bridge Widening, Eastern Cape. 2018.
- Mdantsane Pedestrian Bridges, Eastern Cape. 2019.

Permit applications

- MBSA J-Site, East London, Eastern Cape. 2016.
  - ECPHRA Demolition permit applications
- Mjanyana and Nessie Knight Hospital Upgrades, Eastern Cape. 2014.
  - ECPHRA Demolition permit applications
- Blind River Bridge Repairs, East London, Eastern Cape. 2014.
  - DAFF Protected plant permit application
- SKG Voestalpine Development, ELIDZ, East London, Eastern Cape. 2019.
  - Vegetation assessment and DAFF and DEDEAT plant relocation permits

Construction and Operation Compliance Auditing

- SANRAL Upgrade of the R72 from Openshaw Village to Birah River, Eastern Cape. 2017 to 2019.
- Wavecrest Hotel Expansion, Eastern Cape. 2018 to 2019.
- Kidds Beach Retirement Village, Eastern Cape. 2018.
- Da Gama annual external Water Use Licence Audit, Eastern Cape. 2018.
- Coffee Bay Quarry Works and Rehabilitation, Eastern Cape. 2015-2016.
- Coffee Bay to Zithulele Hospital Road and Bridge Upgrade, Eastern Cape. 2015-2016.
- Clippety Clop Housing Development. Eastern Cape. 2015-2016.
- Fynbos and Ndancama Housing Development, Eastern Cape. 2014-2017.

- **TERRESTRIAL BIODIVERSITY SPECIALIST**

Province of the EASTERN CAPE
ECONOMIC DEVELOPMENT, ENVIRONMENTAL AFFAIRS & TOURISM

DETAILS OF SPECIALIST AND DECLARATION OF INTEREST IN TERMS OF REGULATIONS 12 AND 13 OF THE AMENDMENTS TO THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 AS AMENDED.

	(For official use only)
File Reference Number:	
NEAS Reference Number:	
Date Received:	

Application for environmental authorization in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Amendments to the Environmental Impact Assessment Regulations, 2014. This form is valid as of 6 January 2021.

PROJECT TITLE

MIDDLEDRIFT SOLAR PHOTOVOLTAIC FACILITY: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON A PORTION OF PORTIONS 10 & 40 OF FARM T`ZOETGENEUGD NO.192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY.

SPECIALIST [1]	Jamie Pote		
Contact person:	Mr Jamie Pote		
Postal address:	Postnet Suite 57, Private Bag X13130, Humewood, Port Elizabeth, South Africa		
Postal code:	6013	Cell:	
Telephone:		Fax:	
E-mail:	jamiepote@live.co.za		
Professional affiliation(s) (if any)			

Project Consultant:	Public Process Consultant		
Contact person:	Sandy Wren		
Postal address:	PO Box 27688, Greenacres		
Postal code:	6057	Cell:	082 490 9828
Telephone:	041 374 8426 / 087 1472 451	Fax:	
E-mail:	sandy@publicprocess.co.za		

[1] Curriculum Vitae (CV) attached

4.2 The SPECIALIST

I, **Jamie Pote** , declare that –

General declaration:

- I act as the independent Specialist in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation **8** of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence and is punishable in terms of section 24F of the Act.

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Mr Jamie Pote_____, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

Signature of the Specialist

N/A

Name of Company

20/07/2022

Date

Signature of the Commissioner of Oaths

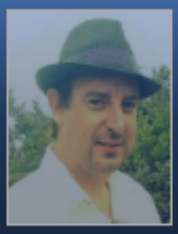
2022. 07. 20

Date

VISPOL ASSEGAAIKANTOOR
2022 -07- 20
VISPOL COMMUNITY SERVICE CENTRE

Annexure 1

CV



Jamie Pote

BIODIVERSITY ADVISOR, ECOLOGIST AND ENVIRONMENTAL SCIENTIST

CONTACT

(+27) 76 888 9890

jamiepote@live.co.za

Port Elizabeth, South Africa

Linkedin.com

Jamiepote

Bluesky-SA

EDUCATION

Bachelor of Science
Rhodes University
2002 (Botany & Environmental Science)

Bachelor of Science (Honours)
Rhodes University
2003 (Botany)

Professional Natural Scientist
SACNASP: 2016 (Ecological Science)

SERVICES

Terrestrial Biodiversity Specialist Assessments
IFC PS6 Biodiversity & Critical Habitat Assessments
Terrestrial Biodiversity Compliance Statements
Geographic Information Systems
Environmental Management Plans & Programmes
Environmental Compliance & Monitoring
Independent Environmental & Ecological reviews
Bioremediation, Restoration & Rehabilitation Plans
Permit and License applications (Flora & Fauna)
Flora Search & Rescue Plans & Relocations
Invasive Alien Plant Control & Management Plans
Environmental & Mining Applications

ABOUT ME

18 years broad professional experience in Biodiversity, Ecological and Vegetation Assessments on over 250 projects in southern, western and central Africa. Environmental Assessment Practitioner on over 50 projects in the mining, infrastructure, housing and agricultural sectors. Environmental monitoring and auditing on over 50 civil infrastructure and construction projects. Have managed all aspects of projects from inception through to implementation. Advanced GIS mapping tools and Analysis.

EXPERIENCE AND CLIENTS

Key Sectors

- *Wind, Solar Energy Facilities*
- *Infrastructure and Housing*
- *Agriculture and Forestry*
- *Mining and Industrial*

Key Projects

- *Over 250 independent Biodiversity/Ecological Assessments throughout southern, western and central Africa.*
- *Basic Assessments, Mining applications and compliance monitoring on over 50 projects for various clients including the Eastern Cape Department of Roads and Public Works, Department of Transport and the South African National Roads Agency (SANRAL) throughout the Eastern Cape, including over 300 individual borrow pits.*
- *South-End Precinct Mixed Use Development for Mandela Bay Development Agency - Environmental application, Ecological assessments and Pre-Construction compliance.*
- *Coega Development Corporation IDZ projects – Ecological assessments, Flora search & rescue and Construction monitoring.*
- *Environmental applications, construction monitoring and auditing for a wide range of projects, including infrastructure and housing clients.*
- *Various agricultural expansion and infrastructure projects.*
- *Various wind and solar energy and associated infrastructure projects.*
- *Numerous infrastructure projects including electrical, water and roads.*
- *Various Environmental Management and Rehabilitation Plans.*

PROJECT EXPERIENCE

PERFORMANCE STANDARD BIODIVERSITY AND CRITICAL HABITAT ASSESSMENTS (IFC PS6)

- DBSA Environmental & Social Safeguards Standards 9: Biodiversity Conservation and Sustainable Management Assessment: The Ilitha Fibre Project, Ethekwini 2021
- Critical Habitat & Biodiversity Assessment - Roggeveld Wind Energy Project 2020
- Biodiversity Assessment for Kalukundi Copper/Cobalt Mine, Democratic Republic of Congo 2008

TERRESTRIAL BIODIVERSITY ASSESSMENTS AND COMPLIANCE STATEMENTS

- Terrestrial Biodiversity Assessment (Addo Offices) 2021
- Terrestrial Biodiversity Assessment (Blaauwater Farms) 2021
- Terrestrial Biodiversity Assessment (Buffelshoek Farm, Loerie) 2021
- Terrestrial Biodiversity & Aquatic Assessment & Review (Falcon Ridge Dam) 2021
- Terrestrial Biodiversity Assessment (Gubenxa Valley Deciduous Fruit) 2021
- Terrestrial Biodiversity Assessment (Little Chelsea Mixed-use) 2021
- Terrestrial Biodiversity Compliance Statement (Maidenhead Farm) 2021
- Terrestrial Biodiversity Review, Mulilo Total Hydra Storage Project Grid Interconnection 2021
- Terrestrial Biodiversity Compliance Statement (Lahlangubo River Bridge) 2021
- Terrestrial Biodiversity Assessment (Mbashe access roads - 3 sites) 2021
- Terrestrial Biodiversity Assessment (Burlington Farm Citrus Development, Cookhouse) 2020
- Terrestrial Biodiversity Compliance Statement: CHDM Cluster 9 Phase 3D Pipeline 2020
- Terrestrial Biodiversity Review, Mulilo Total Hydra Storage Project BESS 2020
- Terrestrial Biodiversity Assessment (Mbashe housing projects, Dutywa & Willowvale) 2020
- Terrestrial Biodiversity Assessment (Helpmekaar Dam, Tarkastad) 2020
- Terrestrial Biodiversity Assessment (Herbertsdale pipeline, Mossel Bay) 2020
- Terrestrial Biodiversity Assessment (Keurbooms Erf 155, Keurboomstrand) 2020
- Terrestrial Biodiversity Assessment (Lowmar Hydroelectric Project, Cradock) 2020
- Terrestrial Biodiversity Assessment (Mossel Bay Gas Power Plant) 2020
- Terrestrial Biodiversity Assessment (Erf 1820, Mthatha) 2020
- Terrestrial Biodiversity Assessment (Newlyn Manganese Terminal, Coega SEZ) 2020
- Terrestrial Biodiversity Assessment Thornhill Phase 2 Sanitation Link 2020

ENERGY PROJECTS (WIND FARM AND PHOTOVOLTAIC INFRASTRUCTURE)

- Preliminary Biodiversity Screening and GIS mapping for Balekani Photovoltaic Solar Project (SZ) 2020
- Preliminary Biodiversity Screening and GIS mapping for Sihhoye Photovoltaic Solar Project (SZ) 2020
- Preliminary Biodiversity Screening and GIS mapping Mpaka Photovoltaic Solar Project (SZ) 2020
- Preliminary Biodiversity Screening and GIS mapping for Chiwelwa Hydroelectric project (ZM) 2020
- Ecological Assessment for Vermaak Boerdery Hydro Turbine (Cookhouse), Eastern Cape 2020
- Ecological Assessment for Windcurrent Wind Farm, Eastern Cape 2012
- Ecological Assessment for Universal Windfarm, NMB (ZA) 2011
- Ecological Assessment for Inca Energy Windfarm, Northern Cape 2011
- Ecological Assessment for Broadlands Photovoltaic Farm, Eastern Cape 2011
- Botanical Assessment for Electrawinds Windfarm Coega, NMB 2010
- Botanical Assessment and Open Space Management Plan for Mainstream WEF Phase 2, Eastern Cape 2010

SPECIALISED ECOLOGICAL REPORTS AND REVIEWS

- Rebels Vlei Riparian delineation 2021
- Buck Kraal Dam Rehabilitation Plan Review 2020

- Rehabilitation Plan for Hitgeheim Farm (Farm 960), Sunland, Eastern Cape 2017
- Green Star Rating Ecological Assessment for SANRAL office, Bay West City, NMBM 2015
- Section 24G Assessment and Rehabilitation Plan for Bingo Farm, Eastern Cape 2014
- Mapping and Ecological services for Congo Agriculture, Republic of Congo 2013
- Rehabilitation Plan for Nieu Bethesda, Eastern Cape 2011
- Mapping of pipeline for Kenton Water Board, Eastern Cape 2010
- Rehabilitation Plan for N2 Upgrade - Coega to Colchester, NMB 2010
- Representative for landowner group for Seaview burial Park, NMB 2010
- Botanical Sensitivity Analysis for LSDF, Greenbushes-Hunters Retreat, NMB 2008
- Forestry Rehabilitation Assessment Report for Amahlathi Forest Rehabilitation, Eastern Cape 2007
- Botanical & Riparian Assessment for Orange River Weirs-Boegoeberg, Douglas Dam and Sendelingsdrif, Northern Cape 2006
- Botanical Assessment for State of the Environment Report for Chris Hani District Municipality SoER, Eastern Cape 2003

ROAD AND RAILWAY INFRASTRUCTURE PROJECTS

- Terrestrial Biodiversity Assessment for Newlyn Mn Terminal & conveyor (CDC IDZ), NMB 2021
- Ecological Assessment for CDC IDZ Mn Terminal, conveyor and railway line, NMB 2013
- Ecological Assessment Review for Penhoek Road widening, Eastern Cape 2012
- Ecological Assessment for R61 road widening, Eastern Cape 2012
- Botanical Assessment for Chelsea RD - Walker Drive Ext., NMB 2010
- Botanical Assessment for Motherwell - Blue Water Bay Road, NMB 2010
- Ecological Assessment for Port St John Road, Eastern Cape 2010
- Botanical Basic Assessment for Bholani Village Rd, Port St Johns, Eastern Cape 2009
- Botanical Report, EMP and Rehab Plan for Coega-Colchester N2 Upgrade, NMB 2009
- Botanical Assessment for Manganese Conveyor Screening Report, NMB 2008
- Ecological Assessment for Road Layout for Whiskey Creek- Kenton, Eastern Cape 2006

MINING PROJECTS

- Ecological Assessment for Bochum Borrow Pits, Limpopo 2013
- Ecological Assessment and Mining and Rehabilitation Plan for Greater Soutpansberg Mining Project, Limpopo (3 proposed Mines) 2013
- Ecological Assessment for Thulwe Road Borrow Pits, Limpopo 2013
- Ecological Assessment and Mining and Rehabilitation Plan for Baghana Mining, Ghana 2010
- Botanical Assessment for Zwartenbosch Quarry, Eastern Cape 2008
- Botanical description & map production for Quarry - Rudman Quarry, Eastern Cape 2008
- Botanical Basic Assessment, Rehab Plan & Maps for Borrow Pit - Rocklands/Patensie, Eastern Cape 2008
- Botanical Assessment & Maps for Sandman Sand Gravel Mine, Eastern Cape 2008
- Botanical Assessment & GIS maps for Shamwari Borrow Pit, Eastern Cape 2008
- Detailed Botanical Assessment, EMP and Rehab Plan for Kalukundi Copper/Cobalt Mine, Democratic Republic of Congo 2008
- Botanical Assessment, Rehab Plan & Maps for Borrow Pit Humansdorp/Oyster Bay, Eastern Cape 2008
- Botanical Assessment, Rehab Plan & Maps for AWRM - Cala, Eastern Cape 2008
- Botanical Assessment, Rehab Plan & Maps for AWRM - Camdeboo, Eastern Cape 2008
- Botanical Assessment, Rehab Plan & Maps for AWRM - Somerset East, Eastern Cape 2008
- Botanical Assessment, Rehab Plan & Maps for AWRM - Nkonkobe, Eastern Cape 2008
- Botanical Assessment, Rehab Plan & Maps for AWRM - Ndlambe, Eastern Cape 2008
- Botanical Assessment, Rehab Plan & Maps for AWRM - Blue Crane Route, Eastern Cape 2008

- Botanical Assessment, EMP and Rehabilitation Plan for AWRM - Cathcart, Eastern Cape 2008
- Botanical Assessment, GIS maps and Rehab Plan for Mthatha Prospecting, Eastern Cape 2008
- Regional Botanical Map for mining prospecting permit, Welkom 2008
- Botanical Assessment for Scoping Report and Detailed Botanical Assessment and Rehab Plan for Elitheni Coal Mine, Eastern Cape 2007
- Botanical Assessment, Rehab Plan & Maps for Borrow Pit - Oyster Bay, Eastern Cape 2007
- Botanical Assessment, Rehab Plan & Maps for Borrow Pit - Bathurst/GHT, Eastern Cape 2007
- Botanical Assessment, Rehab Plan & Maps for Borrow Pit – Jeffreys Bay, Eastern Cape 2007
- Botanical Assessment, Rehab Plan & Maps for Borrow Pit - Storms River/Kareedouw, Eastern Cape 2007
- Biophysical Assessment for Humansdorp Quarry, Eastern Cape 2006
- Botanical Assessment, Rehab Plan & Maps for Quarry-Cathcart & Somerset East, Eastern Cape 2006
- Botanical Assessment, Rehab Plan & Maps for Quarry - Despatch Quarry, NMB 2006
- GIS Mapping & Botanical Assessment and Rehab Plan for Quarry - JBay Crushers, Eastern Cape 2006
- Botanical Assessment, EMP and Rehabilitation Plan for Polokwane Silicon Smelter, Limpopo 2006
- Application for Mining Permit for Bruce Howarth Quarry, Eastern Cape 2006

POWERLINE INFRASTRUCTURE PROJECTS

- Terrestrial Biodiversity Assessment for Paulputs WEF Grid connection, Pofadder, NC (ZA) 2021
- Terrestrial Biodiversity Assessment for Komas WEF Grid connection, Kleinsee, NC (ZA) 2021
- Ecological Assessment: Dieprivier-Karreedouw 132kV Powerline realignment, Kouga LM 2016
- Eskom Ecological Walkdown: Dieprivier-Karreedouw 132 kV Powerline, Kouga LM 2016
- Eskom Solar one Ecological Walkdown: Nieuwehoop 400 kV powerline, NC 2015
- Rehabilitation Plan and Auditing for Grassridge-Poseidon Powerline Rehab, Eastern Cape 2013
- Ecological Assessment for Dieprivier Karreedouw 132kV Powerline, EC 2012
- Flora and Fauna search and Rescue plan for Van Stadens Windfarm Powerline, NMB 2012
- Botanical Assessment for Dedisa-Grassridge Powerline, EC 2010
- Ecological Assessment for Grahamstown-Kowie Powerline, EC 2010
- Species of Special Concern Mapping Transmission Line for San Souci to Nivens Drift 132kV powerline, NMB 2009
- Botanical Assessment for Eskom Powerline - Albany-Kowie, EC 2009
- Botanical Assessment for Eskom 132 kV Dedisa Grassridge Power line-Coega, NMB 2006
- Botanical Assessment for Eskom Power line – Tyalara-Wilo, Eastern Cape 2006
- Botanical Assessment for Steynsburg - Teebus 132 kV powerline, Eastern Cape 2004

PIPELINE INFRASTRUCTURE PROJECTS

- Terrestrial Biodiversity Assessment for Thornhill Phase 2 Sanitation Link, Ndlambe, Eastern Cape 2020
- Botanical Assessment for Ngqamakhwe Regional Water Supply Scheme (Phase 3) 2018
- Ecological Assessment for Butterworth Emergency Bulk Water Supply Scheme 2017
- Ecological Assessment for Karringmelkspruit Emergency Bulk Water Supply (Lady Grey) 2017
- Ecological Assessment for Wanhoop-Willowmore Bulk Water Supply, Eastern Cape 2016
- Ecological Assessment for Steytlerville Bulk Water Supply, Eastern Cape (Phase 4) 2013
- Ecological Assessment for Steytlerville Bulk Water Supply, Eastern Cape (Phase 5) 2013
- Detailed Ecological Assessment for Suikerbos Pipeline, Gauteng 2012
- Basic Botanical Assessment for Wanhoop farm pipeline, Eastern Cape 2010
- Basic Botanical Assessment for Chatty Sewer, NMB 2010
- Species of Special Concern Mapping for Seaview Pipeline, NMB 2009
- Species of Special Concern Mapping for Chelsea Bulk Water Pipeline, NMB 2009
- Map Production for Russell Rd Stormwater, NMB 2008

- Basic Botanical Assessment for Albany Pipeline, Eastern Cape 2008
- Environmental Risk Assessment for Elands River pipeline, Eastern Cape 2007
- Detailed Botanical Assessment for Motherwell Pipeline, NMB 2007
- Detailed Botanical Assessment, GIS maps for Erasmuskloof Pipeline, Eastern Cape 2007
- Botanical & Floristic Report for Hankey pipeline, Eastern Cape 2006
- Detailed Botanical Assessment for Port Alfred water pipeline, Eastern Cape 2004

GENERAL INFRASTRUCTURE DEVELOPMENT PROJECTS

- Ecological Assessment for Amalinda crossing, BCM, Eastern Cape 2019
- Ecological Assessment for Cookhouse Bridge rehabilitation and temporary deviation, Eastern Cape 2019
- Ecological Assessment for Nelson Mandela University Access Road, NMB 2019
- Botanical Assessment for Zachtevlei Dam (Lady Grey), Eastern Cape 2017
- Botanical Assessment for Gcebula River bridge (Peddie), Eastern Cape 2017
- Botanical Assessment for Kouga Dam wall upgrade, Eastern Cape 2012
- Botanical Assessment for Jansenville Cemetery, Eastern Cape 2009
- Botanical Assessment for Radar Mast construction for South African Weather Service – BCM & NMB 2008
- Botanical Assessment and GIS mapping for golf course realignment for East London Golf Course, BCM, Eastern Cape 2007
- Botanical Assessment for PE Airport Extention, NMB 2006
- Botanical Assessment for Kidd's Beach Desalination Plant, BCM, Eastern Cape 2006

HOUSING DEVELOPMENT PROJECTS

- Terrestrial Biodiversity Assessment for Erf 1820 Mthatha, KSDM, Eastern Cape 2020
- Ecological Assessment for Erf 599 Walmer Mixed Use Development, Nelson Mandela Bay 2019
- Ecological Assessment Portion 21-23 and 41 of Farm 807, Gonubie, Buffalo City 2019
- Ecological Assessment for Emerald Sky Housing Project, BCMM 2019
- Ecological Assessment for Erf 14, Kabega, Port Elizabeth 2017
- Ecological Assessment for Fairwest Rental Housing, Port Elizabeth 2017
- Ecological Assessment for Hankey Housing, Kouga District Municipality 2015
- Ecological Assessment for Lebowakgoma Housing, Limpopo 2013
- Ecological Assessment for Giyani Development, Limpopo 2013
- Ecological Assessment for Palmietfontein Development, Limpopo 2013
- Ecological Assessment for Seshego Development, Limpopo 2013
- Botanical Assessment for Sheerness Road, BCM, Eastern Cape 2013
- Ecological Assessment for Ethembeni Housing, NMB 2012
- Ecological Assessment for Pelana Housing, Limpopo 2012
- Flora Search and Rescue Plan for Kwanobuhle Housing, Western Cape 2011
- Botanical Assessment for The Crags 288/03, Western Cape 2010
- Ecological Assessment Revision Report for Fairview Housing, NMB 2010
- Botanical Assessment, EMP and Open Space Management Plan for Hornlee Housing Development, Western Cape 2010
- Botanical Assessment for Little Ladywood, Western Cape 2010
- Botanical Assessment and Open Space Management Plan for Motherwell NU31, NMB 2010
- Botanical Assessment and Open Space Management Plan for Plett 443/07, Western Cape 2010
- Botanical Assessment for Willow Tree Farm, NMB 2010
- Botanical Assessment for Kouga RDP Housing, Eastern Cape 2009
- Botanical Assessment for Fairview Erf 1226 (Wonderwonings), NMB 2009

- Species List Compilation for Zeekoerivier Humansdorp, Eastern Cape 2009
- Botanical Assessment for Woodlands Golf Estate (Farm 858), BCM, Eastern Cape 2009
- Botanical Assessment for Plettenberg Bay - 438/4, Western Cape 2009
- Vegetation Assessment for Kwanokuthula RDP housing project, Western Cape 2008
- Site screening assessment for Greenbushes Site screening, NMB 2008
- Botanical Assessment for Fairfax development, Eastern Cape 2008
- Botanical Assessment for Plettenberg Bay Brakkloof 50&51, Western Cape 2008
- Botanical Assessment, GIS mapping for Theescombe Erf 325, NMB 2008
- Site Screening for Mount Road, NMB 2008
- Botanical Assessment for Greenbushes Farm 40 Swinburne 404, NMB 2008
- Botanical Assessment for Greenbushes 130, NMB 2008
- Botanical Assessment for Greenbushes Kuyga no. 10, NMB 2008
- Botanical Assessment for Plettenberg Bay - 438/24, Western Cape 2007
- Botanical Assessment for Plettenberg Bay - Olive Hills 438/7, Western Cape 2007
- Botanical Assessment for Gonubie Portion 809/9, BCM, Eastern Cape 2006
- Botanical Assessment for Glengariff Farm 723, BCM, Eastern Cape 2006
- Botanical Assessment for Gonubie Portion 809/10, BCM, Eastern Cape 2006
- Botanical Assessment for Gonubie Portion 809/4 & 5, BCM, Eastern Cape 2006
- Botanical Assessment for Plettenberg bay - Ladywood 438/1&3, Western Cape 2006
- Botanical Assessment and Rehab Plan for Winterstrand Desalination Plant, BCM 2006
- Botanical Assessment for Bosch Hoogte, NMB 2006
- Botanical Assessment for Plettenberg bay Farm 444/38, Western Cape 2006
- Botanical Assessment for Plettenberg Bay - 444/27, Western Cape 2006
- Botanical Assessment for Leisure Homes, BCM, Eastern Cape 2006
- Botanical Basic Assessment for Trailees Wetland Assessment, Eastern Cape 2005
- Botanical Assessment and Rehab Plan for Arlington Racecourse - PE, NMB 2005
- Botanical Assessment for Smart Stone, NMB 2005
- Botanical Assessment for Peninsular Farm (Port Alfred), Eastern Cape 2005
- Botanical Assessment for Mount Pleasant - Bathurst, Eastern Cape 2005
- Botanical Assessment and RoD amendments for Colchester Erven 1617 & 1618 (Riverside), NMB 2005
- Basic Botanical Assessment for Parsonsvlei 3/4, Eastern Cape 2005
- Botanical Assessment for Bridgemead – Malabar PE, NMB 2004

AGRICULTURAL PROJECTS

- Preliminary Biodiversity Screening for Chrisdelina Ranch Agricultural Project, Kizenga District 2020
- Ecological Assessment for Vermaak Boerdery Hydro Turbine (Cookhouse)2020 2020
- Thornhill Eggland Specialist Ecological Assessment 2020
- Ecological Assessment for Citrus expansion on Hitgeheim Farm, Sunland, Eastern Cape 2015
- Ecological Assessment for Citrus expansion on farm 960, Patensie (AIN du Preez Boerdery) 2014
- Ecological Assessment for Doornkraal Pivot (Hankey), Eastern Cape 2014
- Ecological Assessment for Tzaneen Chicken Farm, Limpopo 2013
- Botanical Assessment and Open Space Management Plan for Kudukloof, NMB 2010
- Botanical Assessment and Open Space Management Plan for Landros Veeplaats, NMB 2010
- Botanical Assessment and Flora Relocation Plan for Wildemans Plaas, NMB 2006

GOLF ESTATE AND RESORT DEVELOPMENT PROJECTS

- Species List& Comments Report for Kidds Beach Golf Course, BCM, Eastern Cape 2009
- Botanical Assessment for Plettenberg Bay -Farm 288/03, Western Cape 2009
- Botanical Assessment for Rockcliff Golf Course, BCM, Eastern Cape 2008

- Botanical Assessment for Rockcliff Resort Development, BCM, Eastern Cape 2007
- Botanical Assessment, EMP and Rehabilitation Plan for Tiffendel Ski Resort, Eastern Cape 2006

MIXED USE DEVELOPMENT PROJECTS

- Ecological Assessment for South-End Precinct Mixed Use Development, Nelson Mandela Bay 2018
- Botanical Assessment, EMP and Open Space Management Plan for Bay West City, NMB 2010
- Botanical Assessment, GIS maps, Open Space and Rehab Plans for Fairview Erf 1082, NMB 2009
- Botanical Assessment and GIS maps for Utopia Estate PE, NMB 2008
- Botanical Assessment and GIS mapping for Madiba Bay Leisure Park, NMB 2007
- Botanical Assessment and GIS mapping for Madiba Bay Leisure Park, NMB 2007
- Botanical Basic Assessment for Cuyler Manor (Farm 320), Uitenhage, NMB 2007

BUSINESS AND INDUSTRIAL DEVELOPMENT PROJECTS

- Ecological Assessment for Parsonsvlei Erf 984 & 1134 Parsonsvlei, NMB 2020
- Mthatha Retails and Service Center 2020
- Ecological Assessment for Walmer Erf 11667 - Bidfood Warehousing Development, NMB 2020
- Ecological Assessment for Portion 87 of the Farm Little Chelsea No 10, NMB 2020
- Ecological Assessment for Bay West City ENGEN Service Station, NMB 2015
- Ecological Assessment for Green Star grading for SANRAL, NMB 2014
- Ecological Assessment for OTGC Tank Farm, NMB 2012
- Botanical Assessment and Open Space Management Plan for Petro SA Refinery, Coega IDZ, NMB 2010
- Botanical Assessment for Bluewater Bay Erf 805, NMB 2009
- Ecological Assessment for Bay West City, NMB 2007
- Botanical Assessment for Kenton Petrol Station, Eastern Cape 2005
- Botanical Assessment and RoD amendments for Colchester Petrol Station, NMB 2005

ECO-ESTATE DEVELOPMENT PROJECTS

- Botanical Re-Assessment of Swanlake Eco Estate, Aston Bay, Eastern Cape 2018
- Detailed Botanical Assessment and Open Space Management Plan for Olive Hills, Western Cape 2010
- Botanical Assessment and EMP for Zwartenbosch Road, Eastern Cape 2010
- Botanical Assessment - Poultry Farm for Coega Kammaskloof Farm 191, NMB 2008
- Botanical Assessment - Housing development for Coega Ridge, NMB 2008
- Botanical Assessment, Rehabilitation Plan, EMP and GIS maps for Amanzi Estate, NMB, 2008
- Botanical Assessment for Roydon Game farm, Queenstown, Eastern Cape 2007
- Botanical Assessment for Winterstrand Estate (Farm 1008), BCM, Eastern Cape 2007
- Botanical Assessment for Homeleigh Farm 820, BCM, Eastern Cape 2007
- Botanical Basic Assessment, Rehab Plan & Maps for Candlewood, Tsitsikamma, Western Cape 2007
- Botanical Assessment, EMP and Rehab Plan for Carpe Diem Eco development, Eastern Cape 2007
- Botanical Assessment, EMP and Rehabilitation Plan for Seaview Eco-estate, NMB 2006
- Botanical Assessment for Kidd's Beach portion 1076, BCM, Eastern Cape 2006
- Botanical Assessment for Palm Springs, Kidds Beach East London, BCM, Eastern Cape 2006
- Botanical Assessment for Nahoon Farm 29082, BCM, Eastern Cape 2006
- Botanical Assessment for Rosehill Farm, Eastern Cape 2005
- Botanical Assessment for Resolution Game Farm, Eastern Cape 2005
- Botanical Assessment for Gonubie Portion 809/11, BCM, Eastern Cape 2005
- Botanical Assessment for Kidd's Beach portion 1075, BCM, Eastern Cape 2005

FLORA AND FAUNA RELOCATION PLANS, PERMITS AND IMPLEMENTATION

- Flora Search and Rescue for Nelson Mandela University Phase 2 & 3 Residences, Eastern Cape 2020
- Flora Search and Rescue for Fairwest Housing Estate, Nelson Mandela Bay, Eastern Cape 2019
- Flora Search and Rescue for Utopia Estate, Nelson Mandela Bay, Eastern Cape 2019
- Flora Search and Rescue for Citrus expansion on Boschkraal Citrus Farm, Sunland, Eastern Cape 2018
- Flora Search and Rescue for Wanhoop pipeline, Willowmore, Eastern Cape 2018
- Flora Search and Rescue for Wilgekloof pipeline, Willowmore, Eastern Cape 2018
- Flora Search and Rescue for Citrus expansion on Hitgeheim Farm (Farm 960), Sunland, Eastern Cape 2017
- Flora Search and Rescue for Steytlerville Bulk Water Supply, Eastern Cape (Phase 5) 2016
- Flora Search and Rescue for Citrus expansion on Farm 960, Patensie (AIN du Preez Boerdery) 2016
- Flora Search and Rescue for Steytlerville Bulk Water Supply & WTW, Eastern Cape (Phase 4) 2015
- Flora and Fauna Search and Rescue for Riversbend Citrus Farm, NMB 2014
- Flora and Fauna Search and Rescue for Mainstream Windfarm, Eastern Cape 2013
- Flora Search and Rescue for Steytlerville Bulk Water Supply, Eastern Cape (Phase 1, 2 & 3) 2013
- Flora and Fauna Search and Rescue for OTGC Tank Farm, Coega IDZ, NMB 2013
- Flora and Fauna Search and Rescue for Jeffreys Bay School, Eastern Cape 2013
- Flora Search and Rescue Plan for Red Cap Wind Farm, Eastern Cape 2012
- Flora Relocation for Disco Poultry Farm, NMB 2010
- Flora Relocation for Mainstream Windfarm, Eastern Cape 2010

ENVIRONMENTAL MANAGEMENT PLANS

- Final Environmental Management Programme (EMPr) and Maintenance Management Plan for South End Precinct Mixed Use Zone, Nelson Mandala Bay Municipality 2020
- Final Environmental Management Programme (EMPr) for Coega Land-Based Aquaculture Development Zone (ADZ), Coega Industrial Development Zone (IDZ), Nelson Mandela Bay Municipality 2019
- Basic Botanical Assessment for Kromensee EMP (Jeffries Bay), Eastern Cape 2010
- Wetland Management Plan for NMB Portnet, NMB 2010
- Baseline Botanical Study, Vegetation mapping and EMP for Local Nature Reserve for Plettenberg Bay Lookout LNA, Western Cape 2009
- Biodiversity & Ecological Processes for Bathurst-Commonage, Eastern Cape 2006
- EMP for Kromensee EMP (Jeffries Bay), Eastern Cape 2006
- Floral Survey for Mbotyi Conservation Assessment, Eastern Cape 2005
- Identifying and Assessment on Aquatic Weeds for Pumba Private Game Reserve, Eastern Cape 2005

BASIC ASSESSMENT APPLICATION PROJECTS (DEDEAT)

- Basic Assessment Application for Parsonsvlei Erf 984 & 1134 Parsonsvlei 2020
- Construction of Deviation and Rehabilitation of Bridge along DR02481 road 2020
- Basic Assessment Application for Vermaak Boerdery Hydro Turbine (Cookhouse) 2020
- Basic Assessment Application for Walmer Erf 11667 Bidfood Warehousing Development 2020
- Basic Assessment Application for Portion 87 of the Farm Little Chelsea No 10 2020
- Basic Assessment Application for Nelson Mandela University Access Road, NMB 2019
- Basic Assessment, WULA and Borrow Pit/Quarry Mining Application, Clarkebury Rd, Idutywa 2019

- Basic Assessment Application for Erf 599 Walmer Mixed Use Development, Nelson Mandela Bay 2019
- Basic Assessment Application for Cookhouse Bridge rehabilitation and temporary deviation 2019
- Basic Assessment Application for Erf 14 Kabega, NMBM 2017

- Basic Assessment Application for Hankey Housing, Kouga District Municipality 2017
- Basic Assessment Application for Fairwest Rental Housing, Nelson Mandela Bay 2017
- Basic Assessment Application for Citrus expansion on Hitgeheim Farm, Sunland, Eastern Cape 2015
- Basic Assessment Application for Hankey Housing, Kouga District Municipality 2015
- Basic Assessment Application for Citrus expansion on farm 960, Patensie (AIN du Preez Boerdery) 2014
- Basic Assessment Application for South-End Precinct Mixed Use Development, Nelson Mandela Bay 2018

MINING PERMIT/ENVIRONMENTAL MANAGEMENT PROGRAMME APPLICATIONS (DMR)

- Mining BAR/EMP's for Blue Crane Route & Camdeboo LM 12 Borrow Pits – (DoT) 2019
- Mining BAR/EMP's for Elundini LM 6 Borrow Pits (DoT)
- Mining BAR/EMP's for Baviaans LM 6 Borrow Pits (DoT)
- Mining BAR/EMP's for Kouga & Koukamma LM 12 Borrow Pits (DoT)
- Mining BAR/EMP's for Sakhisizwe & Engcobo LM 12 Borrow Pits (DoT)
- Mining BAR/EMP's for Senqu LM 12 Borrow Pits (DoT)
- Mining BAR/EMP's for 24 Borrow Pits in 6 districts within the Eastern Cape– (SANRAL) 2018
- Mining BAR/EMP's for Ingquza Hill LM Borrow Pits – (SANRAL) 2017
- Mining BAR/EMP's for Baviaans LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Senqu LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Kouga/Koukamma LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Inkwanca (Enoch Mgijima) LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Kouga/Koukamma LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Sakhisizwe/Engcobo LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Raymond Mahlaba LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Camdeboo LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Elundini LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Emalahleni/Intsika Yethu LM Borrow Pits – (DRPW) 2017
- Mining BAR/EMP's for Nkonkobe LM Borrow Pits – (SANRAL) 2016
- Mining BAR/EMP's for Mbhashe LM Borrow Pits – (SANRAL) 2016
- Mining BAR/EMP's for Mbizana LM Borrow Pits – (SANRAL) 2016
- Mining BAR/EMP's for Senqu LM Borrow Pits – (SANRAL) 2016
- Mining BAR/EMP's for Elundini LM Borrow Pits – (SANRAL) 2016
- Mining BAR/EMP's for Emalahleni LM Borrow Pits – (SANRAL) 2016
- Mining BAR/EMP's for Emalahleni LM Borrow Pits – (DRPW) 2016
- Mining BAR/EMP's for Ikwezi/Baviaans LM Borrow Pits – (DRPW) 2016
- Mining BAR/EMP's for Chris Hani DM Borrow Pits - MR00716 (Tarkastad) (DRPW) 2015
- Mining BAR/EMP's for Chris Hani DM Borrow Pits – Intsika Yethu and Emalahleni (DRPW) 2015
- Mining BAR/EMP's for Joe Gqabi DM Borrow Pits – Senqu (DRPW) 2015
- Mining BAR/EMP's for Makana/Ndlambe LM Borrow Pits – Sarah Baartman (DRPW) 2015
- Mining BAR/EMP's for Amahlathi LM Borrow Pits – Amatole (DRPW) 2015
- Mining BAR/EMP's for Mbashe/Mqume LM Borrow Pits – Amatole (DRPW) 2015
- Mining BAR/EMP's for Sundays River Valley LM Borrow Pits – Sarah Baartman (DRPW) 2015
- Mining BAR/EMP's for Kouga LM Borrow Pits – Sarah Baartman (DRPW) 2015
- Mining BAR/EMP's for Chris Hani DM Borrow Pits - MR00716 (DRPW) 2014
- Mining BAR/EMP's for Chris Hani DM Borrow Pits - DR02581 (DRPW) 2014
- Mining BAR/EMP's for Chris Hani DM Borrow Pits - DR08041, DR08247, DR08248 & DR08504 (DRPW) 2014
- Mining BAR/EMP's for Chris Hani DM Borrow Pits - DR08599, DR08601 & DR08570 (DRPW) 2014
- Mining BAR/EMP's for Chris Hani DM Borrow Pits - DR08235, DR08551 & DR08038 (DRPW) 2014

- Mining BAR/EMP's for Alfred Nzo DM Borrow Pits - DR08092, DR08093 & DR08649 (DRPW) 2014
- Mining BAR/EMP's for Alfred Nzo DM Borrow Pits - DR08090, DR08412, DR08425, DR08129, DR08109, DR08106, DR08104 & DR08099 – Matatiele (DRPW) 2014

ENVIRONMENTAL COMPLIANCE AUDITING

- Environmental Compliance Audit (Habata Boerdery) 2021
- Environmental Compliance Audit (Sontule Farm) 2021

ENVIRONMENTAL MANAGEMENT, AUDITING, COMPLIANCE AND MONITORING PROJECTS

- Environmental Auditing Services Construction (Intsomi Citrus) 2021
- Environmental Auditing Services Pre-construction and Construction (Rocky Coast Farm) 2021
- Environmental Auditing Services (Middledrift Breeder Facility) 2021
- Coega Aquaculture Development Zone Environmental Compliance and Monitoring for Construction (24 Months) 2020
- Construction of NMU West End Student Residences Phases 1 & 3 Environmental Control Office (30 Months) 2020
- Environmental Auditing and construction monitoring for construction of Phase 1 River Park (South End Precinct) 2020
- Waste Management License audit for Bedford Recycling project 2020
- Auditing for Construction of Fairwest Village Housing Project 2019
- Auditing for Construction of Utopia Estate monthly auditing 2019
- ECO for DRPW IRM Road Maintenance projects, Baviaans LM 2019
- ECO for DRPW IRM Road Maintenance projects, Senqu LM 2019
- ECO for DRPW IRM Road Maintenance projects, Kouga/Koukamma LM 2019
- ECO for DRPW IRM Road Maintenance projects, Sakhisizwe/Engcobo LM 2019
- ECO for DRPW IRM Road Maintenance projects, Elundini LM 2019
- ECO for DRPW IRM Road Maintenance projects, Emalahleni/Intsika Yethu LM 2019
- ECO for Construction of Fairwest Village Housing Project 2019
- ECO for Construction of Utopia Estate Mixed Use Project 2019
- ECO for Construction of NMU West End Student Residences Phases 1 & 3 2019
- ECO for Construction of Eco-Pullets pullet rearing facility, Paterson 2018
- ECO for DRPW IRM Road Maintenance projects, Raymond Mahlaba LM 2018
- ECO for DRPW IRM Road Maintenance projects, Inkwanca (Enoch Mgijima) LM 2018
- ECO for Citrus expansion on Farm 960, Patensie (AIN du Preez Boerdery) 2017
- ECO for Citrus expansion on Hitgeheim Farm (Farm 960), Sunland, Eastern Cape 2017
- DEO for improvement of national route R67 section 5 from Whittlesea (km 0.00) to Swart Kei river (km 15.40) – Murray & Roberts 2017
- ECO for SANRAL RRP Road Maintenance projects, Mbizana LM 2017
- ECO and Botanical Specialist for the special maintenance of national route R61 Section 2 from Elinus Farm (km 42.2) to N10 (km 85.0) (SANRAL) 2016
- Environmental Control Officer (ECO): Construction of NSRI Slipway - Port Elizabeth Harbour 2016
- ECO for SANRAL RRP Road Maintenance projects, Mbashe LM 2016
- ECO for SANRAL RRP Road Maintenance projects, Nkonkobe LM 2016
- ECO for SANRAL RRP Road Maintenance projects, Mbizana LM 2016
- ECO for SANRAL RRP Road Maintenance projects, Senqu LM 2016
- ECO for SANRAL RRP Road Maintenance projects, Elundini LM 2016
- ECO and Environmental Management for closure of Bushmans River Landfill site 2016
- ECO for DRPW IRM Road Maintenance projects, Amahlathi Municipality 2015
- ECO for DRPW IRM Road Maintenance projects, Makana/Ndlambe Municipality 2015
- ECO for DRPW IRM Road Maintenance projects, Mbashe/Mqume Municipality 2015

- ECO for DRPW IRM Road Maintenance projects, Port St Johns, Mbizana, Ingquza Hill LM's 2015
- ECO for Riversbend Citrus Farm, NMB 2014
- ECO for Alfred Nzo DM Road resurfacing - DR08071, DR08649, DR08092, DR08418, DR08452, DR08015, DR08085, DR08639 & DR08073, Eastern Cape - MSBA 2014
- ECO Audits for Koukamma Flood Damage Road Repairs – Hatch Goba 2014
- EMP and ECO for Utopia Estate, NMB 2013
- Final EMPr submission for Seaview Garden Estate, NMB 2012
- ECO audits for NMB Road surfacing, NMB (multiple contacts) 2011
- EMPr submission and ECO for Seaview Garden Estate, NMB 2010
- ECO for Mainstream Windfarm wind monitoring mast installation, Eastern Cape 2010
- EMP and ECO for Sinati Golf Estate EMP, BCM, Eastern Cape 2009
- Flora Relocation Plan and Permit application for Wildemans Plaas, NMB 2006

ENVIRONMENTAL SCREENING PROJECTS

- Somerset East Stormwater Environmental Screening Report 2021
- Woodlands Diary Road Upgrade Environmental Screening Report, Kouga LM 2021
- Risk Assessment and Screening for proposed Heatherbank access road, NMB 2020
- Environmental Screening Report for Proposed Life Hospital parking expansion, NMB 2019
- Environmental Screening Report for Erf 984 & 1134 development, Parsonsvlei, NMB 2019
- Environmental Screening Report for proposed Khayalethu School, Buffalo City 2018
- Environmental Screening Report for Proposed Housing Development of Erf 8700, Kabega Park, NMB 2017
- Environmental Screening Report for Proposed Housing Development of Erf 14, Kabega Park, NMB 2017
- Environmental Screening Report for Proposed Fairwest Social Housing project, Fairview, NMB 2016
- Environmental Screening Report for Development of Little Chelsea No 25, NMB 2016
- Terrestrial Vegetation Risk Assessment for proposed Skietnek Citrus Farm development (Kirkwood) 2015
- Preliminary Environmental Risk Assessment: NSRI Slipway Port Elizabeth 2015
- Environmental Screening Report for Proposed Development of a Dwelling on Erf 899, Theescombe 2015
- Environmental Screening Report for Proposed Development on Erf 559, Walmer, Port Elizabeth 2015
- Environmental Screening Report for Proposed Housing Scheme Development of Erf 8709, Wells Estate 2015
- Environmental Screening Report for Development of Portion 10 of Little Chelsea No 87, NMB 2015

SECTION 24G APPLICATIONS

- 12 000 ML Dam constructed on farm 960, Patensie (MGM Trust) 2015
- Illegal clearing of 20 Ha of lands on Hitgeheim Farm, Sunland, Eastern Cape 2015

CONFERENCES AND PUBLICATIONS

- Pote, J., Shackleton, C.M., Cocks, M. & Lubke, R. 2006. *Fuelwood harvesting and selection in Valley Thicket*, South Africa. Journal of Arid Environments, 67: 270-287.
- Pote, J., Cocks, M., Dold, T., Lubke, R.A. and Shackleton, C. 2004. *The homegarden cultivation of indigenous medicinal plants in the Eastern Cape*. Indigenous Plant Use Forum, 5 - 8 July 2004, Augsburg Agricultural School, Clanwilliam, Western Cape.
- Pote, J. & Lubke, R.A. 2003. *The selection of indigenous species suitable for use as fuelwood and building materials as a replacement of invasive species that are currently used by the under-privileged in the*

Grahamstown commonage. Working for Water Inaugural Research Symposium 19 - 21 August 2003, Kirstenbosch. Poster presentation.

- Pote, J. & Lubke, R.A. 2003. *The screening of indigenous pioneer species for use as a substitute cover crop for rehabilitation after removal of woody alien species by WfW in the grassy fynbos biome in the Eastern Cape.* Working for Water Inaugural Research Symposium 19 - 21 August 2003, Kirstenbosch, South Africa.

OTHER RESEARCH EXPERIENCE

- Resource assessment of bark stripped trees in indigenous forests in Weza/Kokstad area (June 2000; Dr C. Geldenhuis & Mr. M. Kaplin).
- Working for Water research project for indigenous trees for woodlots (December 2000/January 2001; Prof R.A. Lubke, Rhodes University).
- Project coordinator and leader of the REFYN project – A BP conservation gold award: Conservation and Restoration of Grassy-Fynbos. A multidisciplinary project focusing on management, restoration and public awareness/education (2001 – 2002).
- Conservation Project Management Training Workshops: Royal Geographical Society, London 2001 – Fieldwork Techniques, Habitat Assessment, Biological Surveys, Project Planning, Public Relations and Communications, Risk Assessment, Conservation Education
- Selection and availability of wood in Crossroads village, Eastern Cape, South Africa. Honours Research Project 2002. Supervisors: Prof. R.A. Lubke & Prof. C. Shackleton.
- Floral Morphology, Pollination and Reproduction in Cyphia (LOBELIACEAE). Honours Research Project 2002. Supervisor: Mr. P. Phillipson.
- Forestry resource assessment of bark-stripped species in Amatola District (December 2002; Prof R.A. Lubke).
- Homegarden Cultivation of Medicinal Plants in the Amathole area. Postgraduate Research Project (2003-2005; Prof R.A. Lubke, Prof C.M. Shackleton and Ms C.M., Cocks).

- **VISUAL SPECIALIST**

Province of the
EASTERN CAPE
ECONOMIC DEVELOPMENT, ENVIRONMENTAL AFFAIRS & TOURISM

DETAILS OF SPECIALIST AND DECLARATION OF INTEREST IN TERMS OF REGULATIONS 12 AND 13 OF THE AMENDMENTS TO THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 AS AMENDED.

	(For official use only)
File Reference Number:	
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Date Received:	

Application for environmental authorization in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Amendments to the Environmental Impact Assessment Regulations, 2014. This form is valid as of 6 January 2021.

PROJECT TITLE

MIDDLEDRIFT SOLAR PHOTOVOLTAIC FACILITY: PROPOSED CONSTRUCTION OF A SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE, ON A PORTION OF PORTIONS 10 & 40 OF FARM T'ZOETGENEUGD NO.192, KNOWN AS MIDDLEDRIFT, SUNDAYS RIVER VALLEY MUNICIPALITY.

SPECIALIST [1]	Graham A Young Landscape Architect		
Contact person:	Mr Graham Young		
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Postal code:	0027	Cell:	082 462 1491
Telephone:		Fax:	
E-mail:	grahamyounglandarch@gmail.com		
Professional affiliation(s) (if any)			

Project Consultant:	Public Process Consultant		
Contact person:	Sandy Wren		
Postal address:	PO Box 27688, Greenacres		
Postal code:	6057	Cell:	082 490 9828
Telephone:	041 374 8426 / 087 1472 451	Fax:	
E-mail:	sandy@publicprocess.co.za		

[1] Curriculum Vitae (CV) attached

4.2 The SPECIALIST

I, **Graham A Young** , declare that –

General declaration:

- I act as the independent Specialist in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Amendments to Environmental Impact Assessment Regulations, 2014 as amended.
- ~~I have a vested interest in the proposed activity proceeding, such vested interest being:~~

Signature of the specialist

GRAHAM YOUNG LANDSCAPE ARCHITECT

Name of company

15 OCT 2022.

Date

Signature of the Commissioner of Oaths

15 oct. 2022.

Date

Member ACC.

Designation

Official stamp (below).

This is to certify that the Minister for Justice and Constitutional Development in terms of section 5 (1) of the Justices of the Peace and Commissioners of Oaths Act, 1963 (Act 16 of 1963), appointed

HEMNO KLAPWIJK

as commissioner of oaths for the Republic of South Africa, while he holds the office as DIRECTOR OF CAVE KLAPWIJK AND ASSOCIATES cc
Reference Number: 911/82 PRETORIA

Signature

15/10/22

Date

GRAHAM A YOUNG
LANDSCAPE ARCHITECT

PO Box 331, Groenkloof, 0027
Cell: 27 82 462 1491
grahamyounglandarch@gmail.com

VISUAL IMPACT ASSESSMENTS

Graham Young is a professionally registered (SACLAP) landscape architect with an interest and experience in landscape architecture, urban design, and environmental planning. He holds degrees in landscape architecture from the Universities of Toronto (BL) and Pretoria (ML). Graham has carried out visual impact assessments in Canada and Africa. He has served as President of the Institute of Landscape Architects of South Africa (ILASA) and as Vice President of the Board of Control for Landscape Architects.

He runs his practice, Graham A Young Landscape Architect (GYLA), which is a Level Four (4) contributor with 100% B-BBEE procurement recognition. The firm focuses on visual impact assessments, for which Graham was awarded an ILASA Merit Award in 1999. This work includes landscape characterization/sensitivity studies, computer modelling and visualization. He has completed over 350 visual impact specialist reports for projects in South Africa, Canada and other African countries and conducted several specialist reports reviews. Graham has been a specialist witness in legal cases involving visual impact issues. He helped develop the *Guideline for Involving Visual and Aesthetic Specialists in EIA Processes* (with Oberholzer 2005) and produced a research document for Eskom, *The Visual Impacts of Power Lines* (2009). In 2011 he wrote the *'Guidelines for involving visual and aesthetic specialists'* for the Aapravasi Ghat Trust Fund Technical Committee, which manages a World Heritage Site in Mauritius, along with the *Visual Impact Assessment Training Module Guideline Document* for the same client.

During his 40+ year career, he has received many ILASA and other international design awards. Graham has written widely and presented on landscape architectural and visual impact issues and has had projects published locally and internationally in design journals and books. He recently retired as a Senior Lecturer from the University of Pretoria, Department of Architecture, where he taught landscape architecture and urban design at post and undergraduate levels.

Graham is a Fellow of ILASA, and in 2022 he was awarded its Lifetime Achievement Award. He is the managing editor of the online journal, the African Journal of Landscape Architecture and the President of the International Federation of Landscape Architects, Africa Region (IFLA Africa).

*** GYLA ***

- **ENGINEERING SPECIALIST – Synthesis Power Solutions**

Province of the EASTERN CAPE
ECONOMIC DEVELOPMENT, ENVIRONMENTAL AFFAIRS & TOURISM

DETAILS OF SPECIALIST AND DECLARATION OF INTEREST IN TERMS OF REGULATIONS 12 AND 13 OF THE AMENDMENTS TO THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 AS AMENDED.

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PROJECT TITLE

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SPECIALIST [1]	Synthesis: Power Solutions		
Contact person:	Mr. Brandon Polley		
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Professional affiliation(s) (if any)			

Project Consultant:	Public Process Consultant		
Contact person:	Sandy Wren		
Postal address:	PO Box 27688, Greenacres		
Postal code:	6057	Cell:	082 490 9828
Telephone:	041 374 8426 / 087 1472 451	Fax:	
E-mail:	sandy@publicprocess.co.za		

[1] Curriculum Vitae (CV) attached

Version 2 January 15 2021

4.2 The SPECIALIST

I, BRANDON POLLEY , declare that –

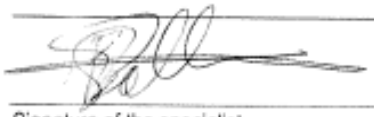
General declaration:

- I act as the independent Specialist in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- ~~I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;~~
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- ~~I have no, and will not engage in, conflicting interests in the undertaking of the activity;~~
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- ~~I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;~~
- ~~I will keep a register of all interested and affected parties that participated in a public participation process; and~~
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- ~~will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and~~
- I realise that a false declaration is an offence and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- ~~I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Amendments to Environmental Impact Assessment Regulations, 2014 as amended.~~
- I have a vested interest in the proposed activity proceeding, such vested interest being:

I am the Director and shareholder in the development company who is responsible for the sourcing and approving the technical design of the PV facility, the appointment of the EPC contractor and the sourcing of funding for the project.



Signature of the specialist

SYNTHESIS POWER SOLUTIONS

Name of company

31 OCTOBER 2022

Date

Signature of the Commissioner of Oaths

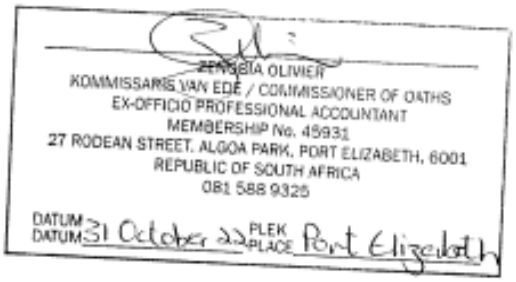
31 OCTOBER 2022

Date

Professional Accountant SA

Designation

Official stamp (below).



Annexure 1

CV

Brandon Polley (Founder and director): After graduating from high-school, Brandon attended Teacher Training Tech, then worked as a game ranger and travelled. He spent two years learning cabinetmaking, then a further three years studying accounting through UNISA. Later, his love of hand-made things led him to start up a weaving factory and a joint-management role at a furniture factory. Brandon then joined JCI as an internal auditor for two and a half years, before becoming a branch accountant at Italtile. Over the next ten years, Brandon became proficient in imports and distribution, while developing the franchise model for CTM. In December 2000, he took over the highly successful CTM franchise store in Port Elizabeth. Since then, he has developed ten (10) Top T home improvement stores across the Eastern Cape while earning a reputation as an accomplished Irrigation, Small Stock and Game farmer. Over the last fourteen years, Brandon's keen interest in renewable energy has resulted in a firm partnership with Demetri Pappadopoulos, developing Electric Fish – a hydroelectric business on the Fish River irrigation scheme – and, more recently, Synthesis Power Solutions – their solar energy business aimed at commercial enterprises looking for affordable and reliable clean energy solutions throughout South Africa.

APPENDIX G (IX): SUPPORTING DOCUMENTATION

- **SPECIALIST IMPACT ASSESSMENT METHODOLOGY**

As per GN R326 Appendix 1, 3. (1) (h) the assessment of impacts must include the alternatives to be assessed within the preferred site, including the option of not proceeding with the activity. The impact assessment methodology has been aligned with the requirements for Basic Assessment Reports, as stipulated in GN R326 Appendix 1, 3. (1) of the 2014 EIA Regulations (as amended), which states the following:

"A basic assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include—

(h) a full description of the process followed to reach the proposed preferred alternative within the site, including—

(v) the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts—

(aa) can be reversed;

(bb) may cause irreplaceable loss of resources; and

(cc) can be avoided, managed or mitigated;

(vi) the methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives;

(vii) positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects;

(viii) the possible mitigation measures that could be applied and level of residual risk;

(ix) the outcome of the site selection matrix;

(i) a full description of the process undertaken to identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity, including—

(i) a description of all environmental issues and risks that were identified during the environmental impact assessment process; and

(ii) an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures;"

As per Guideline Document 5: Assessment of Alternatives and Impacts, the following methodology is to be applied to the prediction and assessment of impacts and risks. Potential impacts should be rated in terms of the direct, indirect and cumulative.

- **Direct** impacts are impacts that are caused directly by the activity and generally occur at the same time and at the place of the activity. These impacts are usually associated with the construction, operation or maintenance of an activity and are generally obvious and quantifiable.
- **Indirect** impacts of an activity are indirect or induced changes that may occur as a result of the activity. These types of impacts include all the potential impacts that do not manifest immediately when the activity is undertaken or which occur at a different place as a result of the activity.
- **Cumulative** impacts are impacts that result from the incremental impact of the proposed activity on a common resource when added to the impacts of other past, present or reasonably foreseeable future activities. Cumulative impacts can occur from the collective impacts of individual minor actions over a period of time and can include both direct and indirect impacts.
- **Spatial extent** – The size of the area that will be affected by the impact/ risk
  - Site specific
  - Local (<2 km from site)
  - Regional (within 30 km of site)
  - National
- **Consequence/ Intensity** –The anticipated severity of the impact/ risk
  - Extreme (extreme alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they permanently cease)

    - High (severe alteration of natural systems, patterns or processes i.e. where environmental functions and processes are altered such that they temporarily or permanently cease)
    - Medium (notable alteration of natural systems, patterns or processes i.e. where the environment continues to function but in a modified manner)
    - Low (negligible alteration of natural systems, patterns or processes i.e. where no natural systems/environmental functions, patterns, or processes are affected)
- **Duration** –The timeframe during which the impact/ risk will be experienced
    - Temporary (less than 1 year)
    - Short term (1 to 6 years)
    - Medium term (6 to 15 years)
    - Long term (the impact will cease after the operational life of the activity)
    - Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient)
- **Reversibility** – The degree to which the potential impacts/ risks can be reversed
    - Reversible
    - Partially Reversible
    - Irreversible
- **Irreplaceable loss of Resources** - The degree to which the impact/ risk may cause irreplaceable loss of resources
    - Replaceable
    - Partially Replaceable
    - Irreplaceable

Using the criteria above, the impacts will further be assessed in terms of the following:

- **Probability** –The probability of the impact/ risk occurring
    - Improbable (little or no chance of occurring)
    - Probable (<50% chance of occurring)
    - Highly probable (50 – 90% chance of occurring)
    - Definite (>90% chance of occurring)
- **Significance** – Will the impact/ risk cause a notable alteration of the environment?
    - Low to very low (the impact/risk may result in minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures, and will not have an influence on decision-making)
    - Medium (the impact /risk will result in moderate alteration of the environment and can be reduced or avoided by implementing the appropriate mitigation measures, and will only have an influence on the decision-making if not mitigated).
    - High (the impact/risk will result in major alteration to the environment even with the implementation of the appropriate mitigation measures and will have an influence on decision-making)
    - Very high (the impact/impact will result in very major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision-making i.e. the project cannot be authorised unless major changes to the engineering design are carried out to reduce the significance rating).
- **Status** - Whether the impact/ risk on the overall environment will be positive, negative or neutral
    - “+” (positive - environment overall will benefit from the impact/risk).
    - “-“ (negative - environment overall will be adversely affected by the impact/risk).
    - “o” (neutral - environment overall will not be affected).
- **Confidence** – The degree of confidence in predictions based on available information and specialist knowledge
    - Low
    - Medium
    - High

Impacts, mitigatory measures and the monitoring of impacts will then be collated into the EMPr and these will include the following:

- Quantifiable standards for measuring and monitoring mitigatory measures and enhancements will be set. This will include a programme for monitoring and reviewing the recommendations to ensure their ongoing effectiveness.
- Identifying negative impacts and prescribing mitigation measures to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated.
- Positive impacts will be identified, and mitigation measures will be identified to potentially enhance positive impacts where possible.

Management Actions and Monitoring of the Impacts:

- Where negative impacts are identified, mitigatory measures will be identified to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated.
- Where positive impacts are identified, mitigatory measures will be identified to potentially enhance positive impacts.

The table below is to be used by specialists for the rating of impacts:

Table 1.1: Rating of impacts.

Nature of the Impact	**This should include a description of the proposed impact to indicate if the impact is a direct, indirect or a cumulative impact.**
Extent	Site specific, local, regional or national
Duration	Temporary, short term, medium term, long term or permanent
Consequence /Intensity	Extreme, High, medium or low
Probability	Improbable, probable, highly probable, definite
Degree of Confidence	Low, medium or High
Reversibility	Reversible, Partially Reversible, Irreversible
Irreplaceable Loss of Resources	Replaceable, Partially Replaceable, Irreplaceable
Status and Significance (without mitigation)	Low, medium or High indicating whether Positive (+), Negative (-) or Neutral (o)
Mitigation	Overview of mitigatory measures to mitigate potentially negative impacts or enhance potential positive impacts indicating how this mitigatory measure impacts on the significance of the impact
Status and Significance (after mitigation)	Low, medium or High indicating whether the status of the impact is Positive (+), Negative (-) or Neutral (o)

- Other aspects to be taken into consideration in the assessment of impact significance are:
- Impacts will be evaluated for the construction and operational phases of the project:
    - **NOTE**: No assessment of impacts during the decommissioning phase of the project is proposed. The relevant guidelines and rehabilitation requirements applicable at that time will need to be applied.
- Impacts will be evaluated with and without mitigation in order to determine the effectiveness of mitigation measures on reducing the significance of a particular impact; and
- The impact evaluation will, where possible, take into consideration the cumulative effects associated with this and other projects which are either developed or in the process of being developed in the local area.

The impact assessment will attempt to quantify the magnitude of potential impacts (direct and cumulative effects) and outline the rationale used. Where appropriate, National standards are to be used as a measure of the level of impact.

- **<u>ARCHAEOLOGICAL IMPACT ASSESSMENT:</u> RECOMMENDATION FOR THE EXEMPTION FOR A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT UNDERTAKEN ON PORTION OF PORTION 6, 10 AND 40 OF FARM T'ZOETGENEUGD NO. 192, INCLUDING THE AREA THAT IS PROPOSED FOR THE PV DEVELOPMENT, SUNDAYS RIVER VALLEY MUNICIPALITY - DR JOHAN BINNEMAN**

A REVISED LETTER OF RECOMMENDATION (WITH CONDITIONS) FOR THE EXEMPTION OF A FULL PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED CONSTRUCTION AND OPERATION OF 6 BREEDER HOUSE FACILITIES ON A PORTION OF PORTION 6, 10 AND 40 OF THE FARM T'ZOETGENEUGD 192 IN THE SUNDAY'S RIVER VALLEY LOCAL MUNICIPALITY OF THE EASTERN CAPE PROVINCE

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Date: January 2019

PROJECT INFORMATION

Type of development

The proposed development will include the construction and operation of six (6) breeder house facilities and associated infrastructure, measuring ~24ha, on a portion of Portion 6, 10 and 40 of the farm T'Zoetgeneugd 192 in the Sunday's River Municipality of the Eastern Cape Province (Maps 1-2).

Applicant

Die Boeram Venter Trust

Consultant

Public Process Consultants
P.O. Box 27688
Greenacres, 6057
Phone 041 374 8426
Fax 041 373 2002
Contact person: Ms Sandy Wren
Email: sand@publicprocess.co.za

Purpose of the study

The original proposal was to conduct a Phase 1 Archaeological Impact Assessment (AIA) of the proposed construction and operation of a poultry breeder house facility on a portion of Portion 6, 10 and 40 of Farm T'Zoetgeneugd 192 in the Sunday's River Municipality of the Eastern Cape Province. In addition, in order to secure water supply for the proposed development it is proposed that an existing irrigation water dam, located immediately east and adjacent to the proposed poultry breeder facility footprint, with a current storage capacity of 19 600m^3(13 370m^2), be expanded by 58 648m^3 (15 225m^2) to have a final development footprint of 39 035m^2 (3.9ha) and a total capacity to store 94 698m^3 of irrigation water. Also, an existing dam, located in the far eastern portion of Portion 6, with a capacity to store 16 450m^3 and a footprint measuring 10 140m^2 (1.01ha), is proposed to be decommissioned.

The purpose for requesting the proposed survey was to establish;

- the range and importance of possible exposed and *in situ* archaeological sites, features and materials,
- the potential impact of the development on these resources and,
- to make recommendations to minimize possible damage to these resources.

Site and Location

The proposed site for development is located within the 1:50 000 topographic reference map 3325DA Addo (Map 1). The property is situated on a portion of Portion 6, 10 and 40 of the farm T'Zoetgeneugd 192 in the Sunday's River Municipality of the Eastern Cape Province, ~4km south of the town of Addo, ~2km east of the R335 main road to Motherwell and about 200m(nearest point) from the Sunday's River (Maps 1-2) (General GPS reading: 33.35.980S; 25.42.501E). The area earmarked for development is situated on a flat floodplain and has been modified by current and historical agricultural activities.

ARCHAEOLOGICAL SCOPING REPORT
Assumptions and predictions

After the proposed project information received from Public Process Consultants was evaluated and a Google Earth image investigation was completed, a decision was made to exempt the proposed development from a full Phase 1 Archaeological Impact Assessment. The reason being that the entire site has already been modified by current and historical agricultural activities (Map 1). Furthermore, the results of several archaeological surveys in the immediate and wider region (for example Booth 2017 (1km from the site), Binneman and Reichert 2017 (3km northwest of the site) 2016a (2km southeast of the site), 2016b (3km southeast of the site) and 2010 (5km east of the site) were also taken into account. The experiences and knowledge gained from these and other investigations in the wider region provided background information to make assumptions and predictions on the potential incidences and the significance of possible pre-colonial archaeological sites/ material which may be located in the area, or which may be covered by soil and vegetation.

It is predicted that a few Middle Stone Age stone tools in secondary context, similar to those observed during other surveys in the area, may be exposed during the proposed construction of breeder house facilities and associated infrastructure. The development will take place near the Sunday's River and there is a possibility that disturbed freshwater shell midden material may be exposed. There are no known graves or buildings older than 60 years on the site, but an informal burial ground was disturbed during the construction of a water channel ~1km west of the proposed development (Booth 2017). However, it is not anticipated that similar remains will be exposed on the site earmarked for development. In general, the area proposed for development appears to be of low cultural sensitivity and it is unlikely that any archaeological remains of any significance will be found *in situ* or exposed during the development.

References

Binneman, J. and Reichert, K. 2017. A phase 1 archaeological impact assessment for the proposed agricultural expansion on the farm Lot De B Penhurst 123 in the Sunday's River Municipality of the Eastern Cape Province. Prepared for I.W. Terblanche & Associates. Stellenbosch. Eastern Cape Heritage Consultants. Jeffreys Bay.

Binneman, J. and Reichert, K. 2016a. A phase 1 archaeological impact assessment for the proposed clearing of natural vegetation to expand the existing agricultural activities on the farm Zoetgenoegd No. 627 in the Sundays River Valley Municipality of the Eastern Cape Province. Prepared for I.W. Terblanche & Associates. Stellenbosch. Eastern Cape Heritage Consultants. Jeffreys Bay.

Binneman, J. and Reichert, K. 2016b. A phase 1 archaeological impact assessment for the proposed agricultural expansion on portion 15 on farm 203 Logan Braes in the Nelson Mandela Bay Municipality of The Eastern Cape Province. Prepared for Public Process Consultants. Greenacres. Eastern Cape Heritage Consultants. Jeffreys Bay.

Binneman, J. 2010. A phase 1 archaeological heritage impact assessment for the proposed development of a leisure estate in the Sundays River Valley Area, Sundays River Municipality, Eastern Cape Province. Prepared for CEN Integrated Environmental Management Unit, Port Elizabeth. Eastern Cape Heritage Consultants. Jeffreys Bay.

Booth, C. 2018. The rescue and reburial of burials from informal burial ground disturbed during construction work in preparation of citrus plantations on the farm Zoetgeneugd 192, near Addo, Sundays Valley Local Municipality, Eastern Cape Province. Prepared for Eastern Cape Provincial Heritage Resources Agency. Department of Archaeology. Albany Museum. Grahamstown.

DISCUSSION AND CONDITIONS

The proposed construction and operation of a poultry breeder house facility on a portion of Portion 6, 10 and 40 of Farm T'Zoetgeneugd 192 and associated infrastructure, including the proposed dam expansion on ~24ha will take place within an already modified environment and it is unlikely that significant heritage remains will be exposed. However, the proposed development will take place near to the Sunday's River in an area where one would expect to find freshwater shell middens. These are important archaeological sites and special care must be taken that these sites are not destroyed during development. Although it is unlikely that any significant archaeological heritage remains will be exposed during the development, there is always a possibility that human remains, and/ or other archaeological and historical material may be uncovered during the development. Should such material be exposed then work must cease in the immediate area of the finds and it must be reported to the archaeologist at the Albany Museum (Tel. 046 6222312) and/ or to the Eastern Cape Provincial Heritage Resources Authority (Tel. 043 7450888) immediately, so that a systematic and professional investigation can be undertaken. All work must stop to allow an archaeologist to conduct a systematic and professional investigation. Sufficient time should be allowed to remove/ collect such material (See Appendix B for a list of possible archaeological sites that maybe found in the area).

LETTER OF RECOMMENDATION

It is recommended that the proposed construction and operation of a poultry breeder house facility and associated infrastructure on ~24ha of Portion 6, 10 and 40 of Farm T'Zoetgeneugd 192 in the Sunday's River Valley Local Municipality of the Eastern Cape Province, is exempted from a full Phase 1 Archaeological Heritage Impact Assessment. The proposed area for development is of low cultural sensitivity and it is unlikely that any significant archaeological heritage remains will be exposed on the property. From an archaeological heritage perspective, he proposed development may proceed as planned. Note: This letter of recommendation only exempts the proposed development from a full Phase 1 Archaeological Heritage Impact Assessment, but not for other heritage impact assessments.

It must also be clear that this letter of recommendation for exemption of a full Phase 1 Archaeological Heritage Impact Assessment will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should give a permit or a formal letter of permission for the destruction of any cultural sites.

The National Heritage Resources Act (Act No. 25 of 1999, section 35) (see Appendix A) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus, any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

GENERAL REMARKS AND CONDITIONS

It must be emphasized that this letter of recommendation for exemption of a full Phase 1 Archaeological Heritage Impact Assessment is based on the visibility of archaeological sites/ material and may not therefore, reflect the true state of affairs. Sites and material may be covered by soil and vegetation and will only be located once this has been removed. In the event of such

finds being uncovered, (during any phase of construction work), it must be reported to the archaeologist at the Albany Museum (Tel. 046 6222312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel. 043 7450888) immediately. The applicant must finance the costs should additional studies be required as outlined above. The *onus* is also on the applicant to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999. The consultant is responsible to forward this report to the relevant Heritage Authority for assessment, unless alternative arrangements have been made with the specialist to submit the report.

APPENDIX A: brief legislative requirements

Parts of sections 35(4), 36(3) and 38(1) (8) of the National Heritage Resources Act 25 of 1999 apply:

Archaeology, palaeontology and meteorites

35 (4) No person may, without a permit issued by the responsible heritage resources authority—

(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
(d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

Burial grounds and graves

36. (3) (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority—

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
(b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

Heritage resources management

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as –

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
(b) the construction of a bridge or similar structure exceeding 50m in length;
(c) any development or other activity which will change the character of the site –

(i) exceeding 5000m^2 in extent, or
(ii) involving three or more erven or subdivisions thereof; or
(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA, or a provincial resources authority;

(d) the re-zoning of a site exceeding 10 000m^2 in extent; or
(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must as the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

APPENDIX B: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM INLAND AREAS: guidelines and procedures for developers

Human Skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general human remains are buried in a flexed position on their side, but are also found buried in a sitting position with a flat stone capping. Developers are requested to be on alert for the possibility of uncovering such remains.

Freshwater mussel middens

Freshwater mussels are found in the muddy banks of rivers and streams and were collected by people in the past as a food resource. Freshwater mussel shell middens are accumulations of mussel shell and are usually found close to rivers and streams. These shell middens frequently contain stone tools, pottery, bone, and occasionally human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds 1 m2 in extent, should be reported to an archaeologist.

Large stone cairns

They come in different forms and sizes, but are easy to identify. The most common are roughly circular stone walls (mostly collapsed) and may represent stock enclosures, remains of wind breaks or cooking shelters. Others consist of large piles of stones of different sizes and heights and are known as isisivane. They are usually near river and mountain crossings. Their purpose and meaning is not fully understood, however, some are thought to represent burial cairns while others may have symbolic value.

Stone artefacts

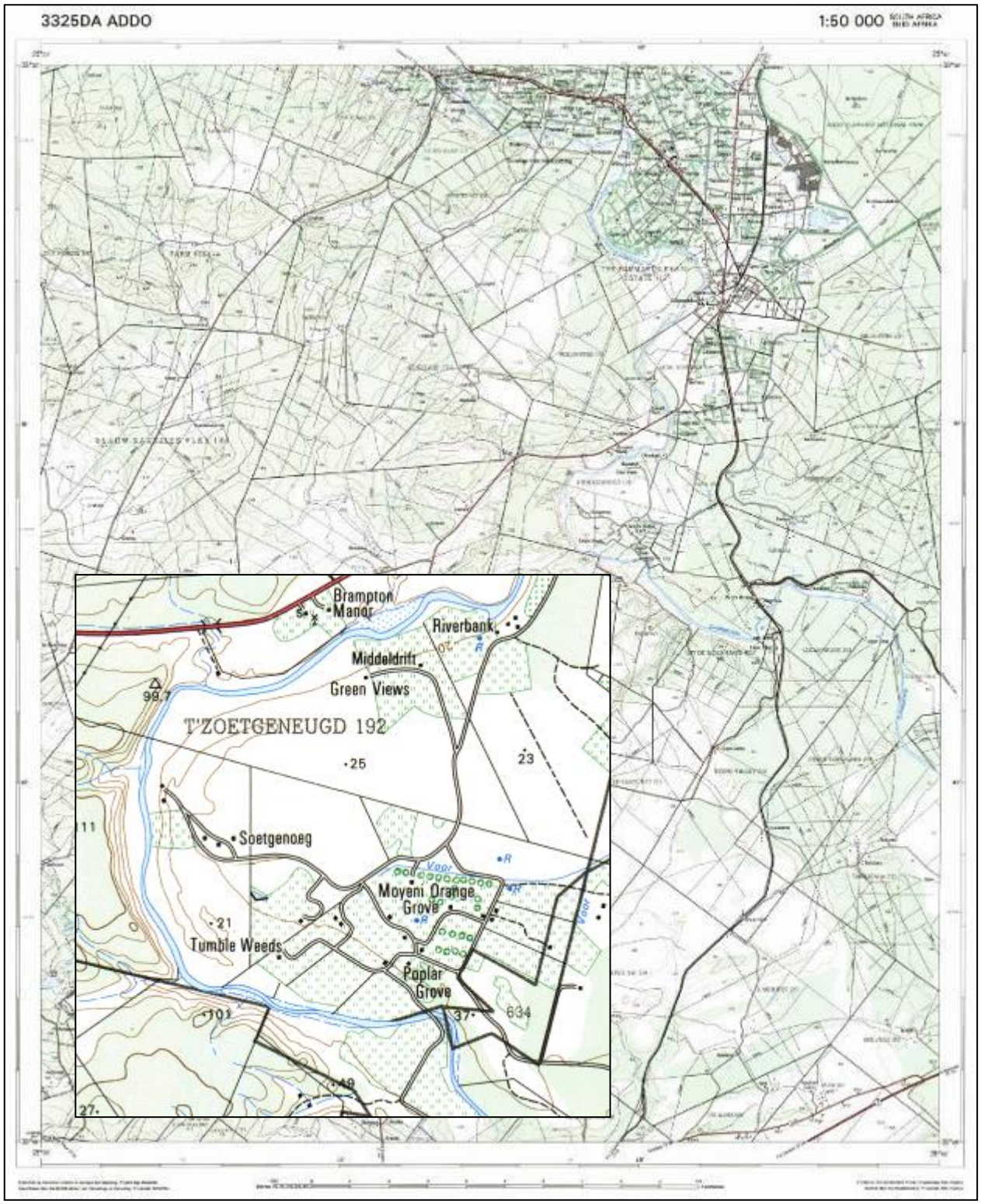
These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

Fossil bone

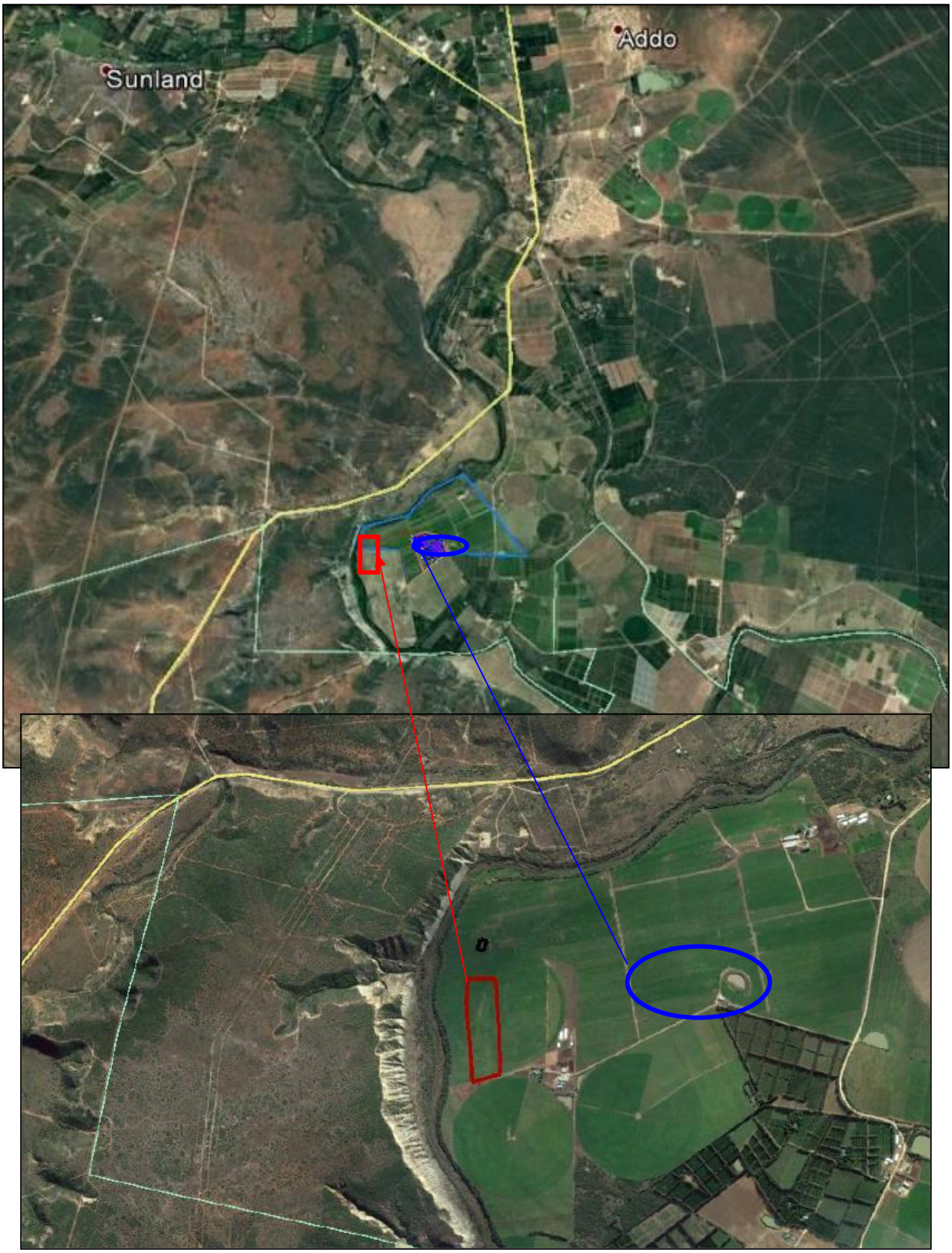
Fossil bones may be found embedded in geological deposits. Any concentrations of bones, whether fossilized or not, should be reported.

Historical artefacts or features

These are easy to identify and include foundations of buildings or other construction features and items from domestic and military activities.



Map 1. 1:50 000 Maps indicating the approximate location of the proposed development marked by the blue square. The red square marks the area where an informal burial ground was previously disturbed on the adjacent property.



Map 2. Aerial images indicating the location of the proposed development marked by the blue ovals. The red square marks the area where an informal burial ground was previously disturbed on the adjacent property.

- **PALEONTOLOGICAL IMPACT ASSESSMENT: RECOMMENDATION FOR THE EXEMPTION FOR A PHASE 1 PALEONTOLOGICAL IMPACT ASSESSMENT UNDERTAKEN ON PORTION OF PORTION 6, 10 10 AND 40 OF FARM T'ZOETGENEUGD NO. 192, INCLUDING THE AREA THAT IS PROPOSED FOR THE PV DEVELOPMENT, SUNDAYS RIVER VALLEY MUNICIPALITY - DR JOHN E. ALMOND**

PALAEONTOLOGICAL SPECIALIST STUDY: PROPOSED EXEMPTION FROM FURTHER SPECIALIST STUDIES

Proposed Venter Boerdery Middledrift Breeder Facility on a portion of Portions 6, 10 and 40 of Farm T'Zoetgeneugd 192 near Addo, Sundays River Valley Municipality, Eastern Cape

John E. Almond PhD (Cantab.)
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May 2018

EXECUTIVE SUMMARY

The Boeram Venter Trust is proposing to construct a poultry breeder house facilitiy and associated infrastructure on a portion of Portions 6, 10 and 40 of Farm T'Zoetgeneugd 192, situated on the eastern side of the Sundays River, some 9km southwest of Addo, in the Sundays River Valley Municipality, Eastern Cape. The study area is underlain at depth by Early Cretaceous marine sediments of the Sundays River Formation (Uitenhage Group). Several important Cretaceous fossil localities, including marine invertebrates and rare dinosaur remains, have been recorded from the Sundays River beds along the Sundays River nearby (McLachlan and Anderson 1976). However, in the low-lying floodplain areas that are earmarked for the breeder facility and related agricultural developments, the Cretaceous bedrock is entirely mantled by Holocene river sediments of the Kudus Kloof Formation which may be up to several meters thick and are, at most, very sparsely fossiliferous. Given the small footprint of the proposed development, significant impacts on fossil heritage are therefore not anticipated here.

It is concluded that no further palaeontological heritage studies or specialist mitigation are required for this agricultural project, *pending* the discovery or exposure of any substantial fossil remains (*e.g.* vertebrate bones and teeth, shelly invertebrates, large blocks of petrified wood, fossil plant-rich horizons) during the construction phase.

The ECO responsible for these developments should be alerted to the possibility of important fossil remains being found either on the surface or exposed by fresh excavations during construction. Should fossil remains be discovered during construction, these should be safeguarded (preferably *in situ*) and the ECO should alert the Eastern Cape Provincial Heritage Resources Authority (ECPHRA. Contact details: Mr Sello Mokhanya, 74 Alexander Road, King Williams Town 5600; Email: smokhanya@ecphra.org.za) so that appropriate mitigation (*e.g.* recording, sampling or collection) can be taken by a professional palaeontologist. A Chance Fossil Finds protocol is appended to this report.

1. INTRODUCTION & BRIEF

The Boeram Venter Trust is proposing to construct a poultry breeder house facility on a portion of Portions 6, 10 and 40 of Farm T'Zoetgeneugd 192, situated on the eastern side of the Sundays River, some 9km southwest of Addo, in the Sundays River Valley Municipality, Eastern Cape (Figures 1 & 2). The site is currently zoned Agriculture 1 and the area proposed for construction is taken up by cultivated fields / pastures, while the farm is being operated as a dairy farm. The farm portions measure ~196ha in combined extent and the total development footprint, including associated infrastructure, is anticipated to be no more than ~24ha. The portions of the farm not proposed for development and currently planted as lucerne will in future be replaced with citrus orchards. Existing infrastructure associated with the dairy farm (buildings and sheds) will be converted for use in support of the citrus orchards and no additional services infrastructure is required. However, new irrigation pipes will probably have to be installed to provide drip/ micro irrigation to the citrus orchards. The existing gravel access road on the eastern boundary of Portion 6 will be used to access the services infrastructure for the citrus orchards, however, this will be required to be widened in order to provide access to trucks during the operational phase.

The construction phase of the project will entail the clearing and levelling of the cultivated fields for the establishment of the six (6) breeder houses and associated infrastructure. The breeder facility will comprise the following main infrastructure components (Figure 3):

- 6 x breeder houses, measuring 120m x 16m each (1 920m^2 each), excluding concrete slabs for feed silo's and manure collection at the end of each house, as well as 6 x egg collection rooms and associated infrastructure. Three staff houses;
- An upgraded access point is proposed on the south boundary of the site and internal road network for delivery and collection of chicks, feed, and collection of fertilised eggs as well as manure. The width and condition of the existing access roads and road network to the site requires input from a Traffic specialist.Bulk Services, including the expansion of an existing storage dam, with a current capacity of 19 600m^3, located on portions of Portion 6 and 10, installation of water reticulation system for the breeder facilities, as well as for domestic consumption and associated water treatment facility, installation of domestic foul sewer system, installation of stormwater management infrastructure and an internal road network varying in widths from 6 meters to 8 meters, widened at corners to accommodate truck turning paths (~30 meters).
    - The demolition of an existing dam, with a current capacity of 16 450m^3 (10 140m^2), located on Portion 6.

Public Process Consultants (Contact details: Sandy Wren, Public Process Consultants, 120 Diaz Road, Adcockvale, Port Elizabeth. Phone: 041 374 8426. Fax: 041 373 2002. E-mail: sandy@publicprocess.co.za) has been appointed by the applicant as the independent Environmental Assessment Practitioner (EAP) to undertake the Basic Assessment for the proposed poultry breeder facility.

The study area is underlain at depth by potentially fossiliferous sediments of the Sundays River Formation (Uitenhage Group) of Early Cretaceous age, as well as by Quaternary or younger alluvium. In accordance with the National Heritage Resources Act, 1999, a palaeontological heritage assessment is required as part of a Heritage Impact Assessment for this project, since important fossil material (*e.g.* marine shells, dinosaur remains) has previously been recorded from the Kirkwood – Addo area within the Sundays River formation. In view of the very limited exposure of Cretaceous bedrocks within the study area, a basic desktop assessment of the fossil heritage resources in the study region was commissioned by Public Process Consultants

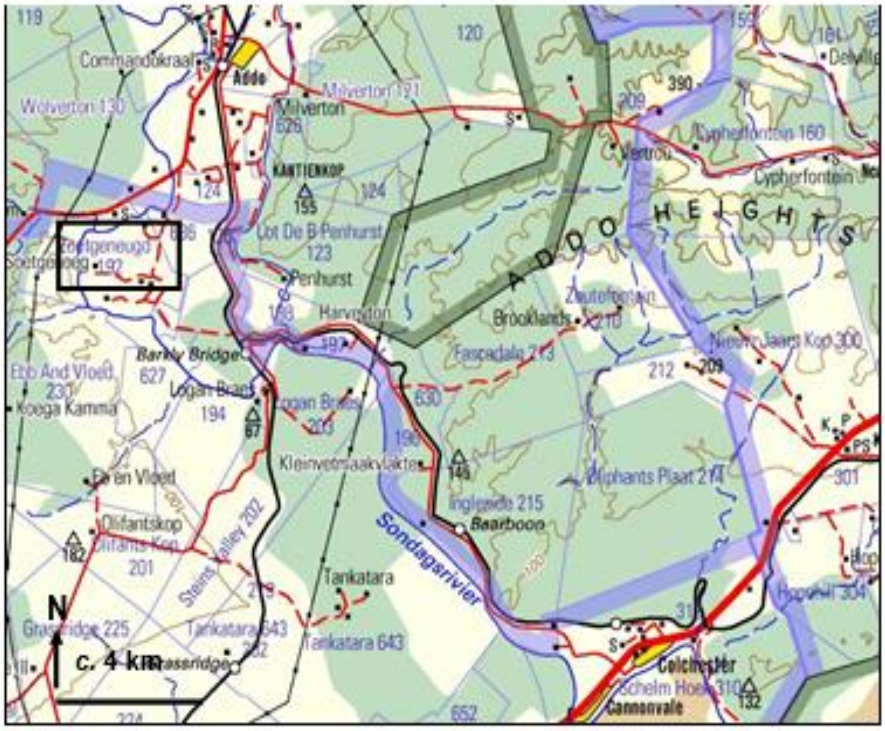

Figure 1: Extract from 1: 250 000 topographical sheet 3324 Port Elizabeth (Courtesy of the Chief Directorate Surveys and Mapping, Mowbray) showing the approximate location of the Middledrift Poultry Breeder Facility study area on a portion of Portions 6, 10 and 40 of Farm T'Zoetgeneugd 192, situated within a bend of the Sundays River near Addo, Sundays River Valley Municipality, Eastern Cape (black rectangle).

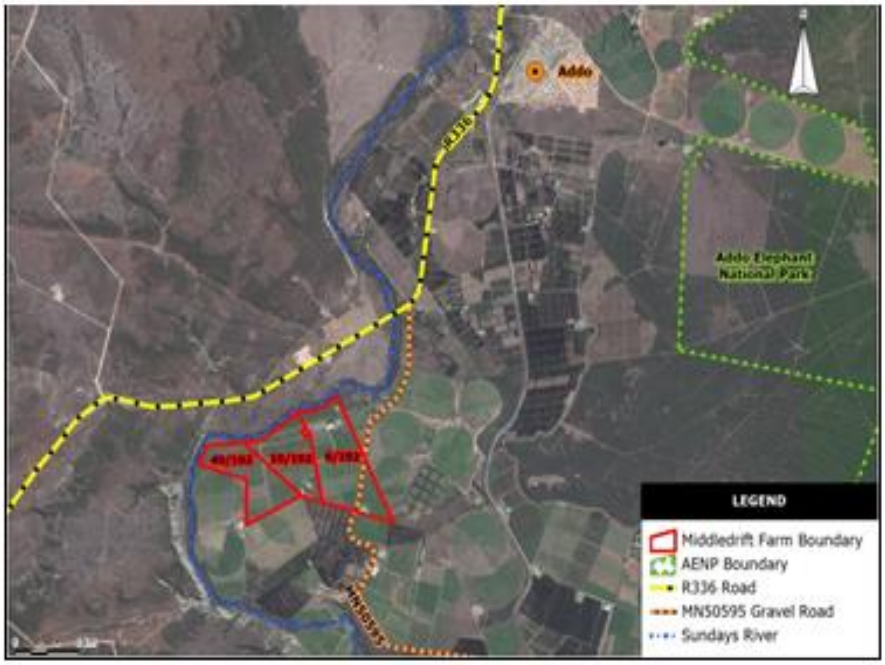

Figure 2: Google Earth® satellite image showing the location of the Middledrift Chicken Breeder Facility study area (red polygons) on the inside of a bend in the Sundays River near Addo (Image supplied by Public Process Consultants).

Figure 3: Google Earth® satellite image showing the location of the Middledrift Chicken Breeder Facility (blue) within cultivated lands adjoining the Sundays River. Gravel road (orange line), enlarged dam (yellow line) and embankment (brown line). Scale bar = 800 m. N towards top of image.

2. GEOLOGICAL CONTEXT

The present study area on a portion of Portions 6, 10 and 40 is situated on gently sloping agricultural lands at ~ 25 – 30m amsl on the inside of a meander or bend, of the Sundays River, near Addo (Figures 1 to 3). The geology of the Addo area is shown on 1: 250 000 geological map 3324 Port Elizabeth (Council for Geoscience, Pretoria; Toerien & Hill 1989) (Figure 4). The Addo region lies within the extensive Algoa Basin that is infilled with a 3.5km - thick succession of alluvial fan, fluvial and estuarine to marine shelf sediments of Late Jurassic to Early Cretaceous age (~ 150-125Ma) that are referred to the **Uitenhage Group** (McLachlan & Anderson 1976, Shone 2006).

The study area is underlain at depth by Early Cretaceous marine sediments of the **Sundays River Formation** (Ks, red in Figure 4) (McLachlan & McMillan 1976, Tankard *et al.* 1982, Dingle *et al.*, 1983 and Shone 2006). Excellent cliff sections through the Sundays River Formation are seen on the western banks of the Sundays River, over 1km west of the breeder facility footprint (Figure 3). However, these recessive-weathering beds are not exposed within the study area itself. The bedrocks here are mantled by a thick succession of Late Caenozoic (probably mainly Holocene) **alluvium** (yellow with "flying bird" symbol in Figure 4) and soil, as expected in an inside-meander setting. Detailed geological mapping of Plio-Pleistocene terrace gravels along the Sundays River by Hattingh (2001) shows that no ancient alluvial deposits are mapped in the present study area (Figure 5). These younger alluvial deposits are mainly composed of unconsolidated, flat-bedded alluvial sand and silt with subordinate coarse sand and gravel horizons showing limited pedogenic modification (Hattingh 1994, 2001, Partridge *et al.* 2006).

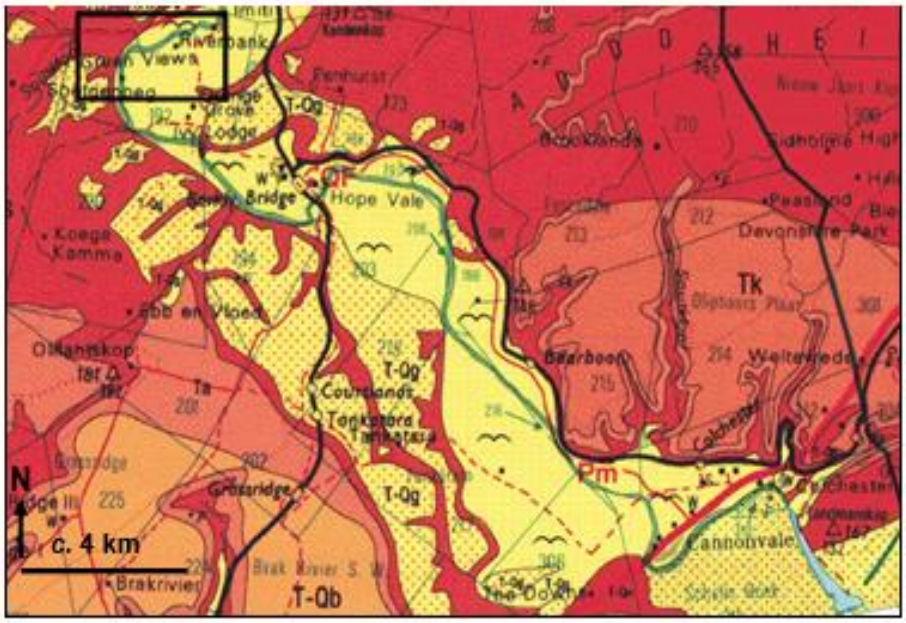

Figure 4: Extract from 1: 250 000 geological map 3324 Port Elizabeth (Council for Geoscience, Pretoria). The Middledrift Chicken Breeder Facility study area on Farm T'Zoetgenenaad 192 some 9km SW of Addo, Eastern Cape (black rectangle), lies within a bend or meander of the Sundays River. It is underlain at depth by Early Cretaceous sediments of the Sundays River Formation (Ks, red) that are entirely mantled here by Holocene alluvium (yellow with flying bird symbol).

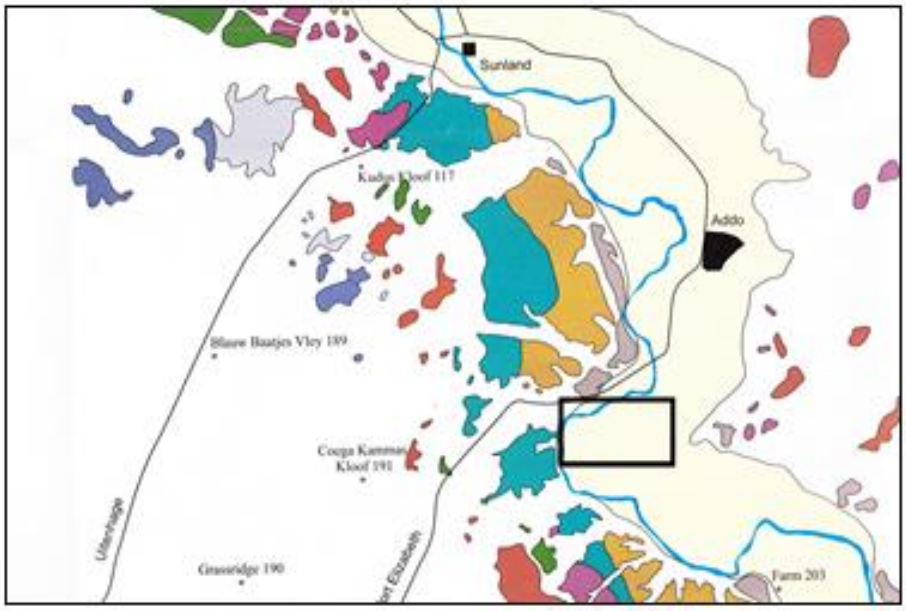

Figure 5: Extract from map of High-Level Terrace Gravels of the Sundays River published by Hattingh (2001, Appendix 2) showing the absence of older, Plio-Pleistocene deposits of the Kudus Kloof Formation within the present study area (black rectangle).

3. PALAEONTOLOGICAL HERITAGE

The Sundays River Formation (Uitenhage Group) contains one of the most prolific and scientifically important marine biotas of Mesozoic age in southern Africa (See brief reviews by MacRae 1999, Almond 2010). A sizeable number of important fossil marine invertebrate sites are located along the riverine cliffs fronting Zoetgeneugd (Figure 6). However, these Early Cretaceous bedrocks are unlikely to be substantially impacted by the proposed small-scale agricultural development which will probably only entail excavations into thick, geologically-young alluvial deposits and soils while the underlying bedrocks, in addition, may well be highly weathered.

Quaternary to Recent alluvial gravel, sand and clay deposits may contain sparse fossil remains of various types. In coarser sediments like river conglomerates these tend to be robust, highly disarticulated and abraded (*e.g.* rolled bones, teeth and horn cores of mammals and other vertebrates). Well-preserved skeletal remains of plants (*e.g.* wood, roots) and invertebrate animals (*e.g.* freshwater molluscs and crustaceans) as well as various trace fossils may also be found within fine-grained alluvium. Embedded human artefacts such as stone tools that can be assigned to a specific interval of the archaeological time scale (*e.g.* Middle Stone Age) can be of value for constraining the age of Pleistocene to Recent drift deposits like alluvial terraces.

It is concluded that the palaeontological sensitivity of the study area on Farm T'Zoetgeneugd 192 is LOW.

4. CONCLUSIONS & RECOMMENDATIONS

The poultry breeder facility study area on a portion of Portions 6, 10 and 40 of the Farm T'Zoetgeneugd 192, ~ 9km SW of Addo in the Sundays River Valley, Eastern Cape, is underlain at depth by Early Cretaceous marine sediments of the Sundays River Formation (Uitenhage Group). This succession has yielded rich fossil assemblages of marine invertebrates (notably molluscs, such as ammonites and bivalves), plant remains (*e.g.* driftwood), as well as very rare vertebrate remains (*e.g.* dinosaurs) from the Algoa Basin of the Eastern Cape. Several important Cretaceous fossil localities – including marine invertebrates and rare dinosaur remains - have been recorded along the Sundays River nearby (McLachlan and Anderson 1976).

However, in the low-lying areas that are earmarked for the poultry breeder facility and associated infrastructure, as well as related agricultural developments, the Sundays River Formation is entirely mantled by Holocene river sediments of the Kudus Kloof Formation which may be up to several meters thick and are, at most, very sparsely fossiliferous. Given the small footprint of the proposed development (~24ha), significant impacts on fossil heritage are therefore not anticipated here.

It is concluded that no further palaeontological heritage studies or specialist mitigation are required for this agricultural project, *pending* the discovery or exposure of any substantial fossil remains (*e.g.* vertebrate bones and teeth, shelly invertebrates, large blocks of petrified wood, fossil plant-rich horizons) during the construction phase.

The ECO responsible for these developments should be alerted to the possibility of important fossil remains being found either on the surface or exposed by fresh excavations during construction. Should fossil remains be discovered during construction, these should be safeguarded (preferably *in situ*) and the ECO should alert the Eastern Cape Provincial Heritage Resources Authority (ECPHRA. Contact details: Mr Sello Mokhanya, 74 Alexander Road, King Williams Town 5600; Email: smokhanya@ecphra.org.zaso) so that appropriate mitigation (*e.g.* recording, sampling or collection) can be taken by a professional palaeontologist. A Chance Fossil Finds protocol is appended to this report.

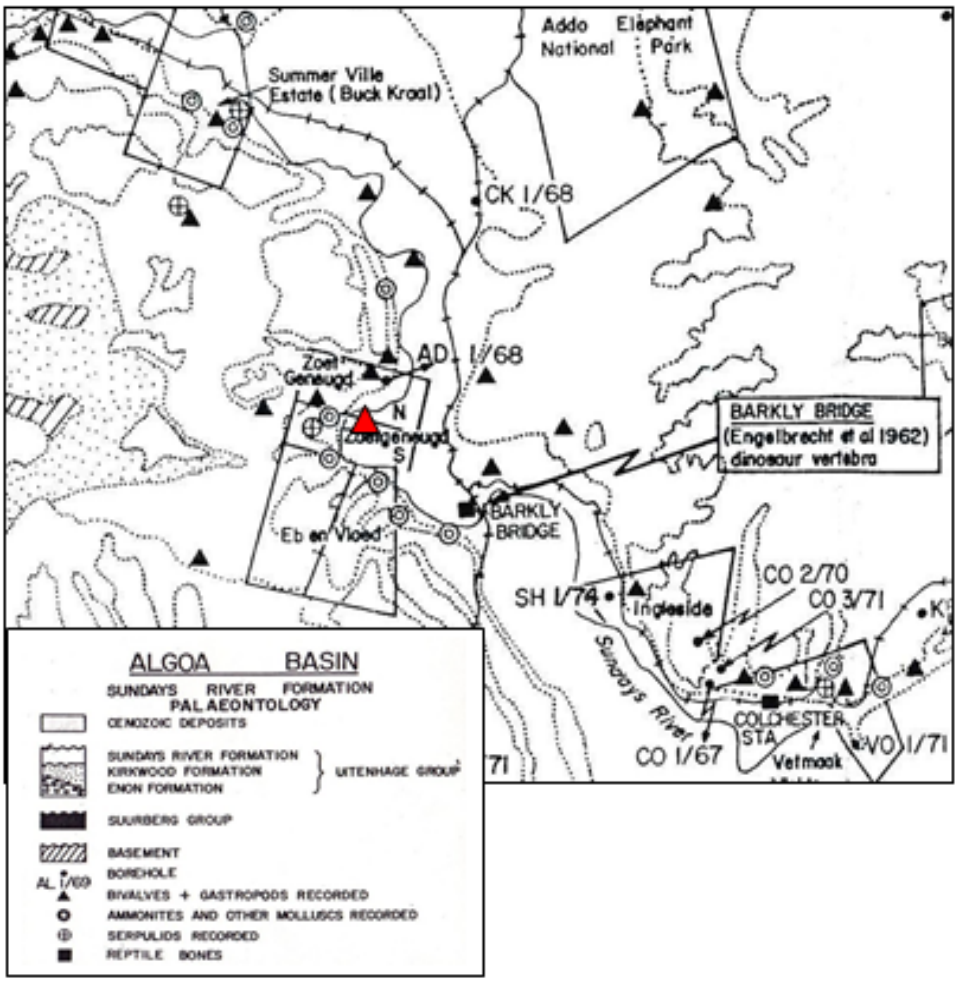

Figure 6: Fossil localities in the Sundays River Formation of the Algoa Basin in the Barkly Bridge – Zoetgeneugd sector of the Sundays River Valley near south of Addo (The Farm T'Zoetgeneugd 192 study area is marked by the red triangle). Several groups of marine invertebrates (crustaceans and molluscs, including bivalves, gastropods, belemnites and ammonites, as well as serpulid worm tubes) are reported from Sundays River Formation beds here, while dinosaur remains are recorded from Barkly Bridge itself (Figure modified from McLachlan & Anderson 1976, their Figure 8).

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6. QUALIFICATIONS & EXPERIENCE OF THE AUTHOR

Dr John Almond has an Honours Degree in Natural Sciences (Zoology) as well as a PhD in Palaeontology from the University of Cambridge, UK. He has been awarded post-doctoral research fellowships at Cambridge University and in Germany, and has carried out palaeontological research in Europe, North America, the Middle East as well as North and South Africa. For eight years he was a scientific officer (palaeontologist) for the Geological Survey / Council for Geoscience in the RSA. His current palaeontological research focuses on fossil record of the Precambrian - Cambrian boundary and the Cape Supergroup of South Africa. He has recently written palaeontological reviews for several 1: 250 000 geological maps published by the Council for Geoscience and has contributed educational material on fossils and evolution for new school textbooks in the RSA.

Since 2002 Dr Almond has also carried out palaeontological impact assessments for developments and conservation areas in the Western, Eastern and Northern Cape, Limpopo, Northwest, Mpumalanga, KwaZulu-Natal and the Free State under the aegis of his Cape Town-based company *Natura Viva* cc. He has served as a long-standing member of the Archaeology, Palaeontology and Meteorites Committee for Heritage Western Cape (HWC) and an advisor on palaeontological conservation and management issues for the Palaeontological Society of South Africa (PSSA), HWC and SAHRA. He is currently compiling technical reports on the provincial palaeontological heritage of Western, Northern and Eastern Cape for SAHRA and HWC. Dr Almond is an accredited member of PSSA and APHP (Association of Professional Heritage Practitioners – Western Cape).

Declaration of Independence

I, John E. Almond, declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed development project, application or appeal in respect of which I was appointed other than fair remuneration for work performed in connection with the activity, application or appeal. There are no circumstances that compromise the objectivity of my performing such work.

Dr John E. Almond
Palaeontologist
***Natura Viva* cc**

<table>
<tr><th colspan="3">CHANCE FOSSIL FINDS PROCEDURE: Middledrift Breeder Facility on Portions 6, 10 & 40 of Farm T'Zoetgeneugd 192 near Addo</th></tr>
<tr><td>Province & region:</td><td colspan="2">EASTERN CAPE, Sundays River Valley Municipality</td></tr>
<tr><td>Responsible Heritage Resources Authority</td><td colspan="2">ECPHRA (Contact details: Mr Sello Mokhanya, 74 Alexander Road, King Williams Town 5600; Email: smokhanya@ecphra.org.za)</td></tr>
<tr><td>Rock unit(s)</td><td colspan="2">Late Caenozoic alluvium including sands and gravels</td></tr>
<tr><td>Potential fossils</td><td colspan="2">Vertebrate bones, teeth and horn cores, mollusc and crustacean remains or plant material such as subfossil wood</td></tr>
<tr><td rowspan="5">ECO protocol</td><td colspan="2">1. Once alerted to fossil occurrence(s): alert site foreman, stop work in area immediately (N.B. safety first!), safeguard site with security tape / fence / sand bags if necessary.</td></tr>
<tr><td colspan="2">2. Record key data while fossil remains are still in situ:
Accurate geographic location – describe and mark on site map / 1: 50 000 map / satellite image / aerial photo
Context – describe position of fossils within stratigraphy (rock layering), depth below surface
Photograph fossil(s) in situ with scale, from different angles, including images showing context (e.g. rock layering)</td></tr>
<tr><td>3. If feasible to leave fossils in situ:
Alert Heritage Resources Authority and project palaeontologist (if any) who will advise on any necessary mitigation
Ensure fossil site remains safeguarded until clearance is given by the Heritage Resources Authority for work to resume</td><td>3. If not feasible to leave fossils in situ (emergency procedure only):
Carefully remove fossils, as far as possible still enclosed within the original sedimentary matrix (e.g. entire block of fossiliferous rock)
Photograph fossils against a plain, level background, with scale
Carefully wrap fossils in several layers of newspaper / tissue paper / plastic bags
Safeguard fossils together with locality and collection data (including collector and date) in a box in a safe place for examination by a palaeontologist
Alert Heritage Resources Authority and project palaeontologist (if any) who will advise on any necessary mitigation</td></tr>
<tr><td colspan="2">4. If required by Heritage Resources Authority, ensure that a suitably-qualified specialist palaeontologist is appointed as soon as possible by the developer.</td></tr>
<tr><td colspan="2">5. Implement any further mitigation measures proposed by the palaeontologist and Heritage Resources Authority</td></tr>
<tr><td>Specialist palaeontologist</td><td colspan="2">Record, describe and judiciously sample fossil remains together with relevant contextual data (stratigraphy / sedimentology / taphonomy). Ensure that fossils are curated in an approved repository (e.g. museum / university / Council for Geoscience collection) together with full collection data. Submit Palaeontological Mitigation report to Heritage Resources Authority. Adhere to best international practice for palaeontological fieldwork and Heritage Resources Authority minimum standards.</td></tr>
</table>

SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED DEVELOPMENT FOOTPRINT ENVIRONMENTAL SENSITIVITY

EIA Reference number: N/A

Project name: Middledrift Photovoltaic Facility

Project title: Proposed Construction and Operation of a Solar Photovoltaic Facility and Associated Infrastructure, on a Portion of Portions 10 & 40 of Farm T'Zoetgeneugd No.192, SRVM

Date screening report generated: 16/09/2022 11:30:03

Applicant: The Boeram Venter Trust

Compiler: Public Process Consultants

Compiler signature: JP Hechter

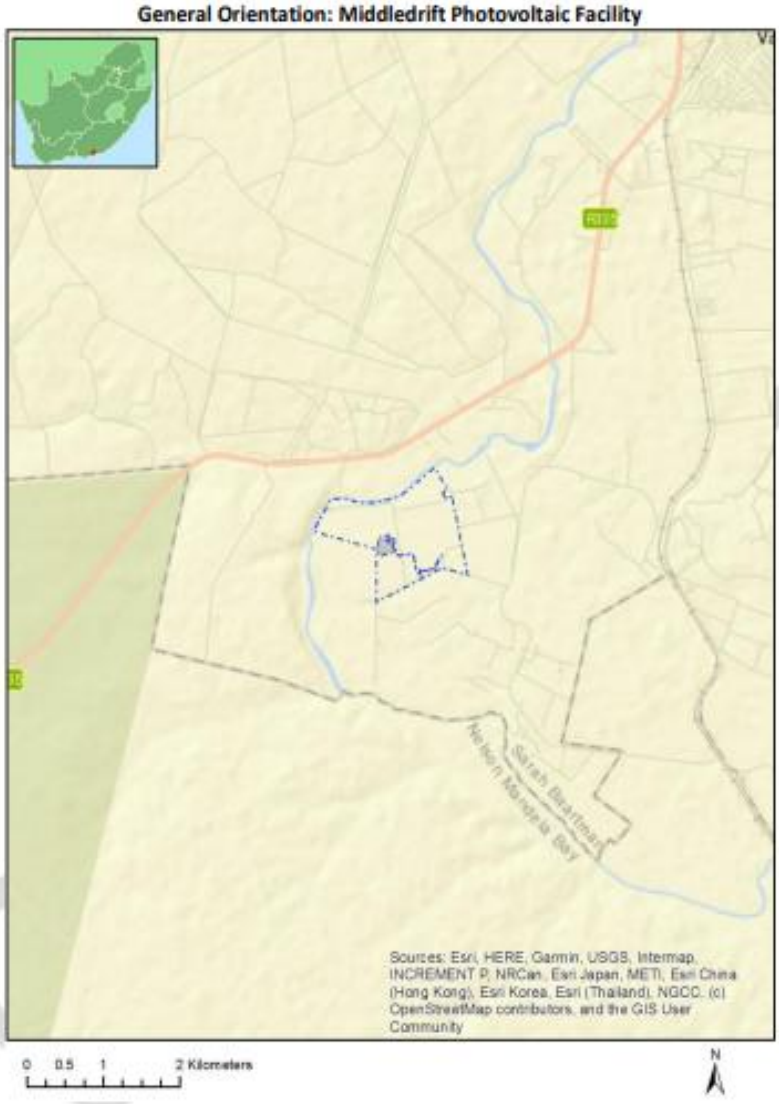
Application Category: Utilities Infrastructure|Electricity|Generation|Renewable|Solar|PV

Table of Contents

Proposed Project Location

Orientation map 1: General location

General Orientation: Middledrift Photovoltaic Facility



Map of proposed site and relevant area(s)

Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
[redacted]						
2	T` ZOETGENEUGD	192	40	33°35'52.46S	25°39'13.36E	Farm Portion
3	T` ZOETGENEUGD	192	59	33°35'51.92S	25°39'24.36E	Farm Portion
[redacted]						

Development footprint[1] vertices:

Footprint	Latitude	Longitude
1	33°35'53.81S	25°39'13.51E
1	33°35'53.13S	25°39'17.83E
1	33°35'54.58S	25°39'18.13E
1	33°35'54.62S	25°39'17.94E
1	33°35'54.62S	25°39'17.96E
1	33°35'55.23S	25°39'18.06E
1	33°35'55.39S	25°39'16.92E

[1] "development footprint", means the area within the site on which the development will take place and incudes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

1	33°35'54.78S	25°39'16.79E
1	33°35'54.84S	25°39'16.31E
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1	33°35'59.24S	25°39'20.16E
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1	33°35'53.81S	25°39'13.51E
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2	33°36'6.2S	25°39'31.48E
2	33°36'6.35S	25°39'30.57E
2	33°36'5.79S	25°39'30.44E
3	33°36'5.86S	25°39'31.33E
3	33°36'5.84S	25°39'31.32E
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3	33°35'54.83S	25°39'17.75E
3	33°35'54.82S	25°39'17.74E
3	33°35'54.8S	25°39'17.72E
3	33°35'54.8S	25°39'17.72E
3	33°35'54.79S	25°39'17.71E

3	33°35'54.78S	25°39'17.71E
3	33°35'54.76S	25°39'17.71E
3	33°35'54.75S	25°39'17.72E
3	33°35'54.75S	25°39'17.72E
3	33°35'54.73S	25°39'17.74E
3	33°35'54.72S	25°39'17.75E
3	33°35'54.72S	25°39'17.76E
3	33°35'54.71S	25°39'17.78E
3	33°35'54.71S	25°39'17.78E
3	33°35'54.39S	25°39'19.85E
3	33°35'54.39S	25°39'19.86E
3	33°35'54.39S	25°39'19.88E
3	33°35'54.39S	25°39'19.9E
3	33°35'54.41S	25°39'19.92E
3	33°35'54.41S	25°39'19.93E
3	33°35'54.42S	25°39'19.93E
3	33°35'54.43S	25°39'19.94E
3	33°35'54.43S	25°39'19.95E
3	33°35'54.43S	25°39'19.95E
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3	33°35'59.47S	25°39'27.18E
3	33°35'59.47S	25°39'27.19E
3	33°35'59.47S	25°39'27.2E
3	33°35'59.47S	25°39'27.22E
3	33°35'59.49S	25°39'27.22E
3	33°35'59.99S	25°39'28.24E
3	33°35'59.99S	25°39'28.24E
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3	33°36'0.04S	25°39'28.27E
3	33°36'0.04S	25°39'28.27E
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3	33°36'4.88S	25°39'31.13E
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3	33°36'4.88S	25°39'31.15E
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3	33°36'5.78S	25°39'31.41E
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3	33°36'5.82S	25°39'31.41E
3	33°36'5.82S	25°39'31.41E
3	33°36'5.83S	25°39'31.39E
3	33°36'5.84S	25°39'31.38E
3	33°36'5.84S	25°39'31.37E
3	33°36'5.84S	25°39'31.36E
3	33°36'5.86S	25°39'31.34E
3	33°36'5.86S	25°39'31.33E
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4	33°35'59.91S	25°39'40.11E
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5	33°36'5.17S	25°39'34.83E
5	33°36'4.95S	25°39'34.8E

5	33°36'4.95S	25°39'34.8E
5	33°36'4.94S	25°39'34.8E
5	33°36'4.92S	25°39'34.8E
5	33°36'4.91S	25°39'34.8E
5	33°36'4.91S	25°39'34.82E
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5	33°36'4.88S	25°39'34.85E
5	33°36'4.88S	25°39'34.87E
5	33°36'4.88S	25°39'34.89E
5	33°36'4.9S	25°39'34.9E
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5	33°36'4.91S	25°39'34.93E
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5	33°36'5.19S	25°39'34.98E
5	33°36'5.2S	25°39'34.98E
5	33°36'5.2S	25°39'34.96E
5	33°36'5.21S	25°39'34.96E
5	33°36'5.21S	25°39'34.94E
5	33°36'5.23S	25°39'34.93E
5	33°36'5.23S	25°39'34.91E

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/1/1172	Solar PV	Approved	27.2
2	12/12/20/2449	Solar PV	Approved	11.6

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development footprint as well as the most environmental sensitive features on the footprint based on the footprint sensitivity screening results for the application classification that was selected. The application classification selected for this report is:
Utilities Infrastructure|Electricity|Generation|Renewable|Solar|PV.

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this footprint are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Eastern Corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Gas Pipeline Corridors-Phase 2: Mossel Bay to Coega	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones

Proposed Development Area Environmental Sensitivity

The following summary of the development footprint environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Animal Species Theme			X	

Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme				X
Avian Theme				X
Civil Aviation (Solar PV) Theme			X	
Defence Theme				X
Landscape (Solar) Theme			X	
Paleontology Theme			X	
Plant Species Theme				X
RFI Theme			X	
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the footprint situation.

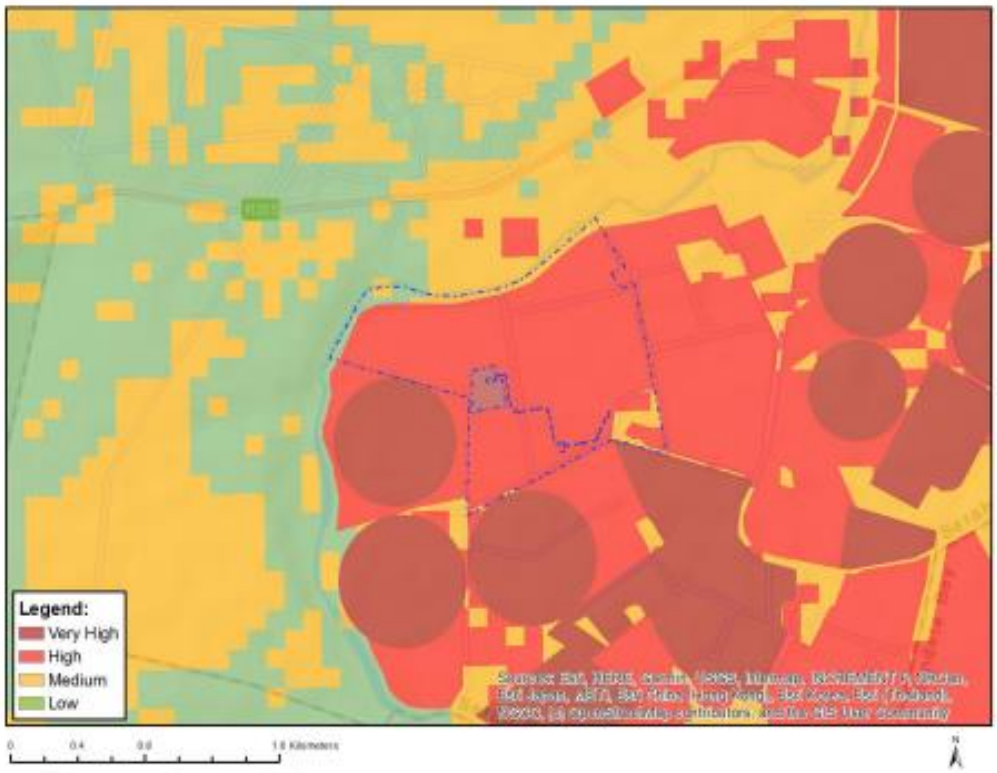
No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf

	Impact Assessment	
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_Assessment_Protocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
13	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed footprint for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

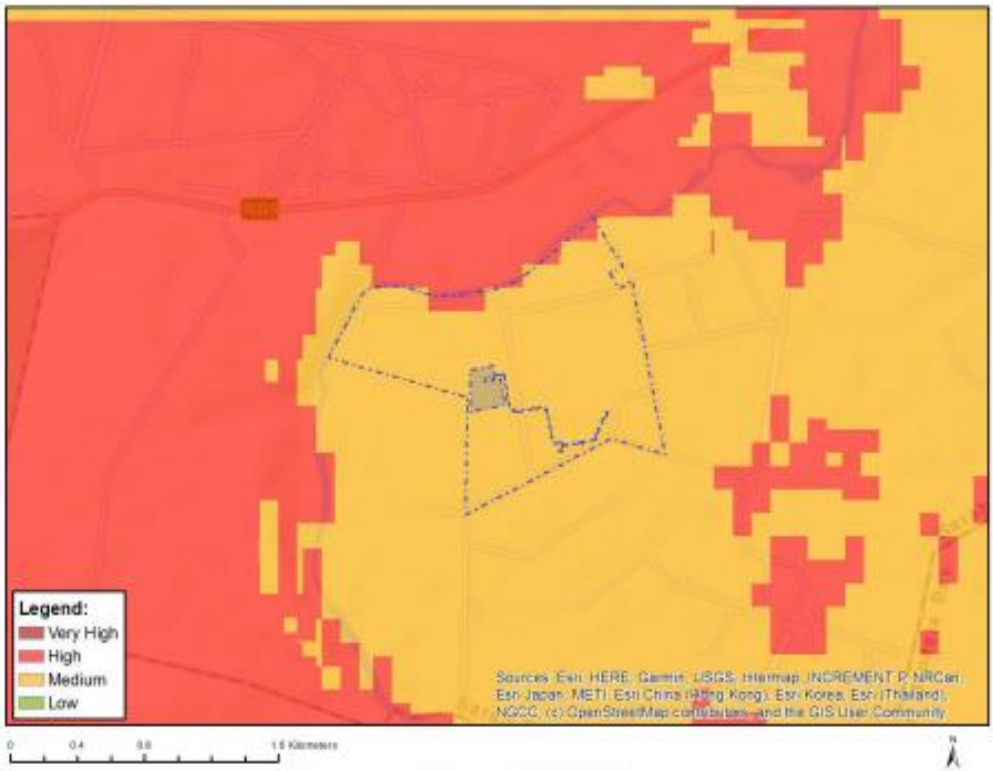


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Annual Crop Cultivation / Planted Pastures Rotation;Land capability;09. Moderate-High/10. Moderate-High
High	Annual Crop Cultivation / Planted Pastures Rotation;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Aves-Stephanoaetus coronatus
Medium	Sensitive species 8
Medium	Invertebrate-Aneuryphymus montanus

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

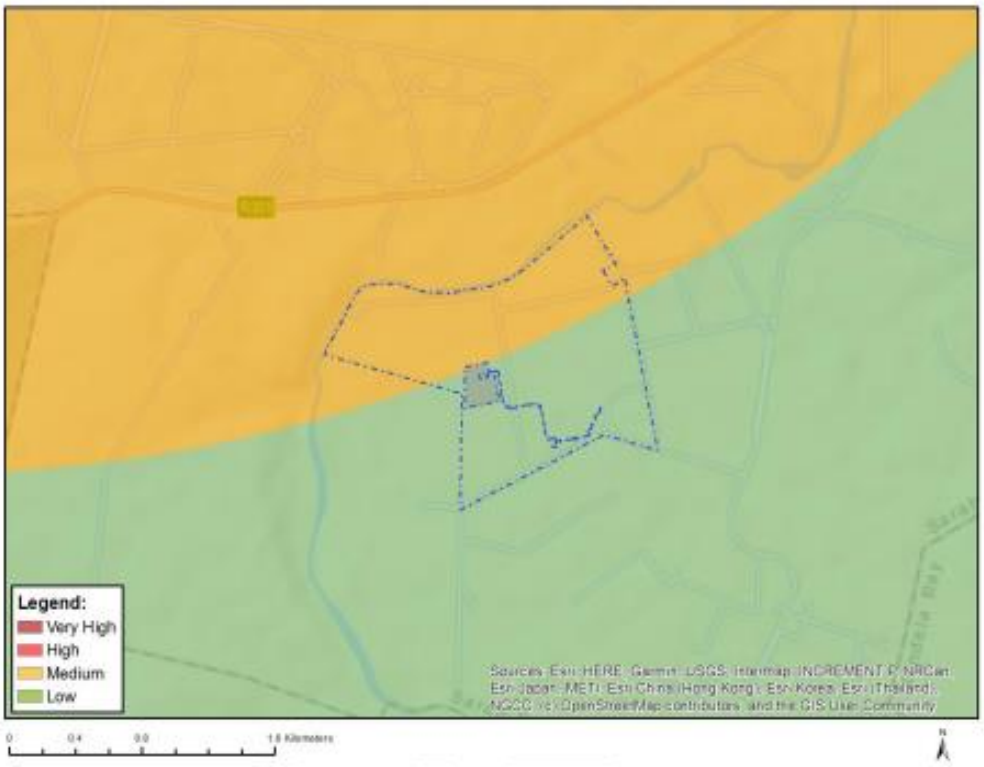
MAP OF RELATIVE AVIAN THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes
Medium	Within 8 km of an other civil aviation aerodrome

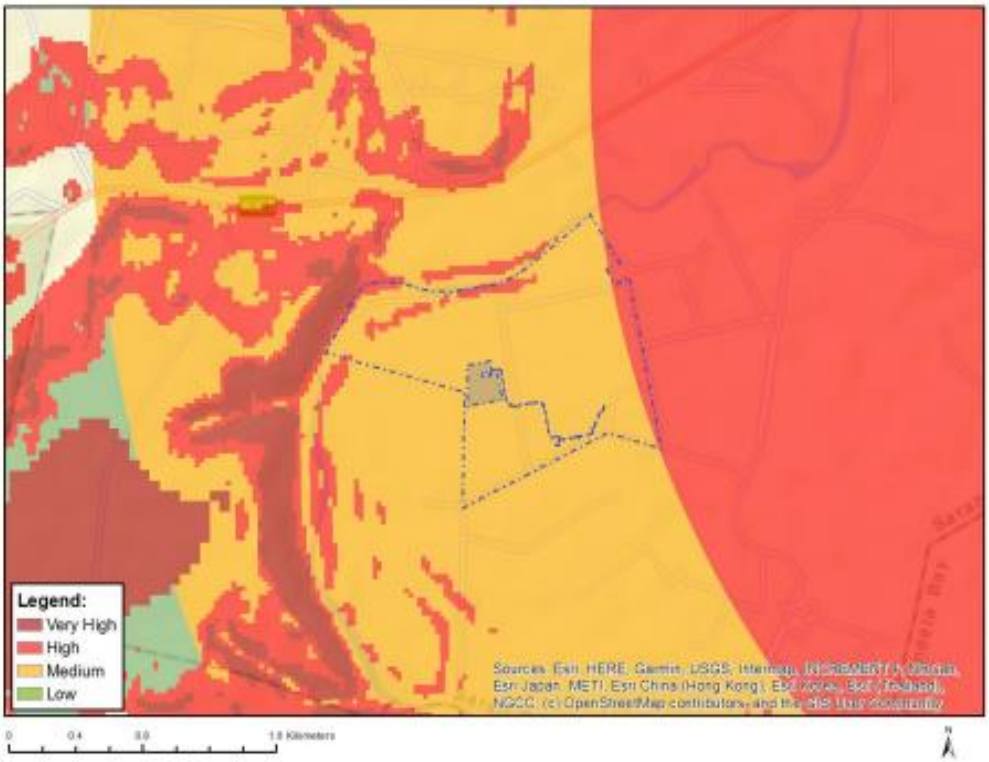
MAP OF RELATIVE DEFENCE THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY

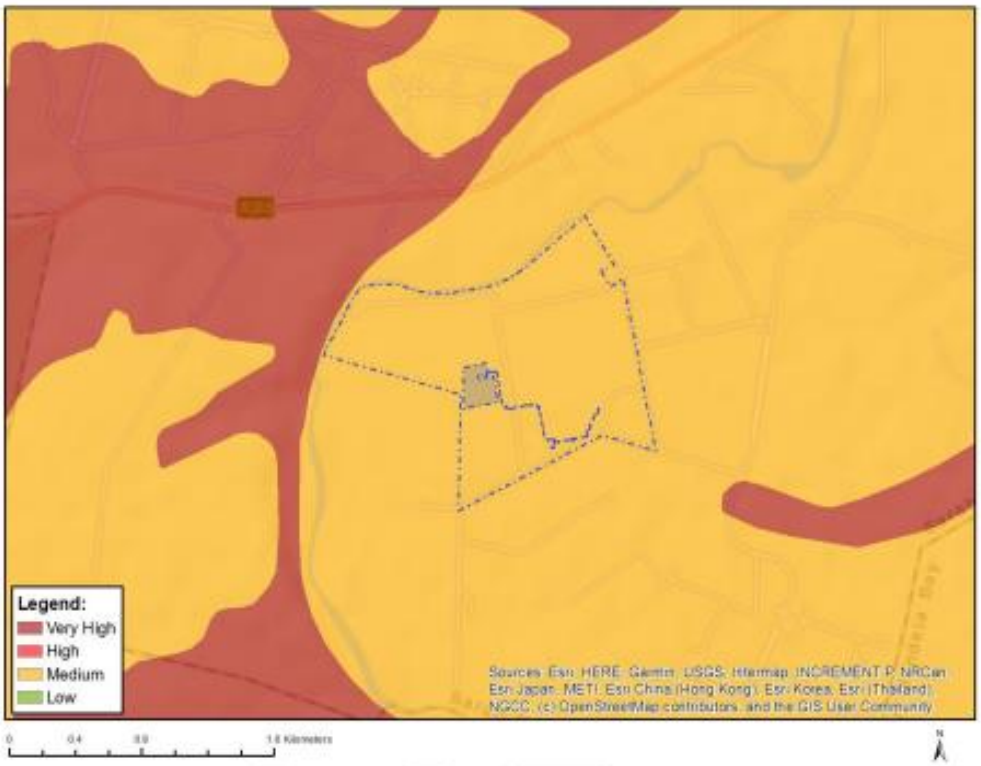


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 5 and 7.5 km of a Ramsar site of National Park

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

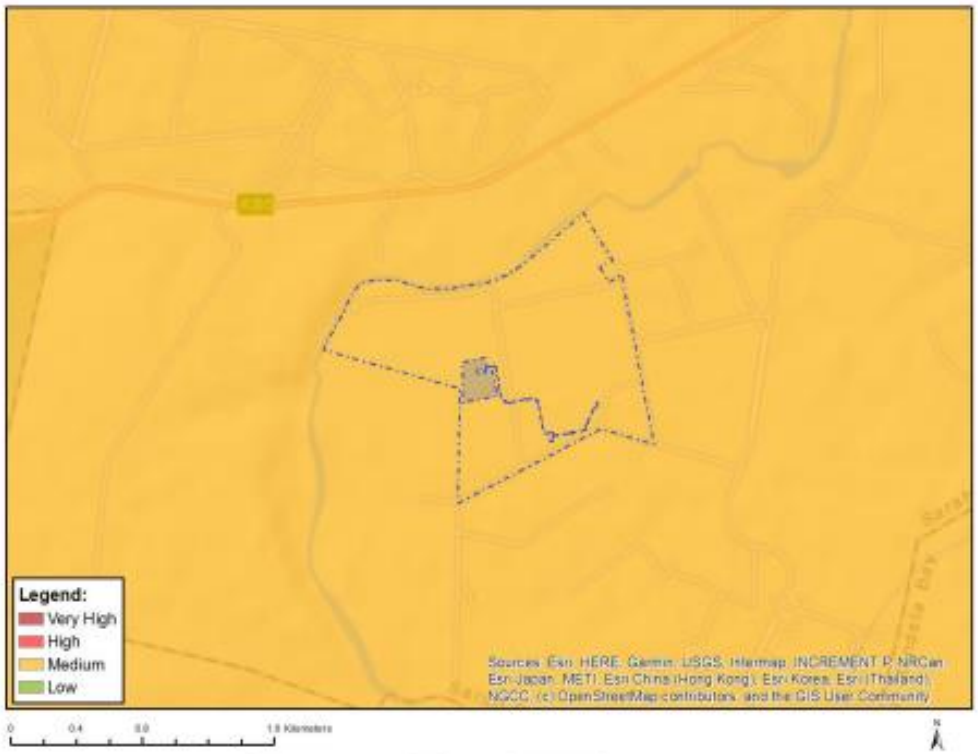
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE RFI THEME SENSITIVITY

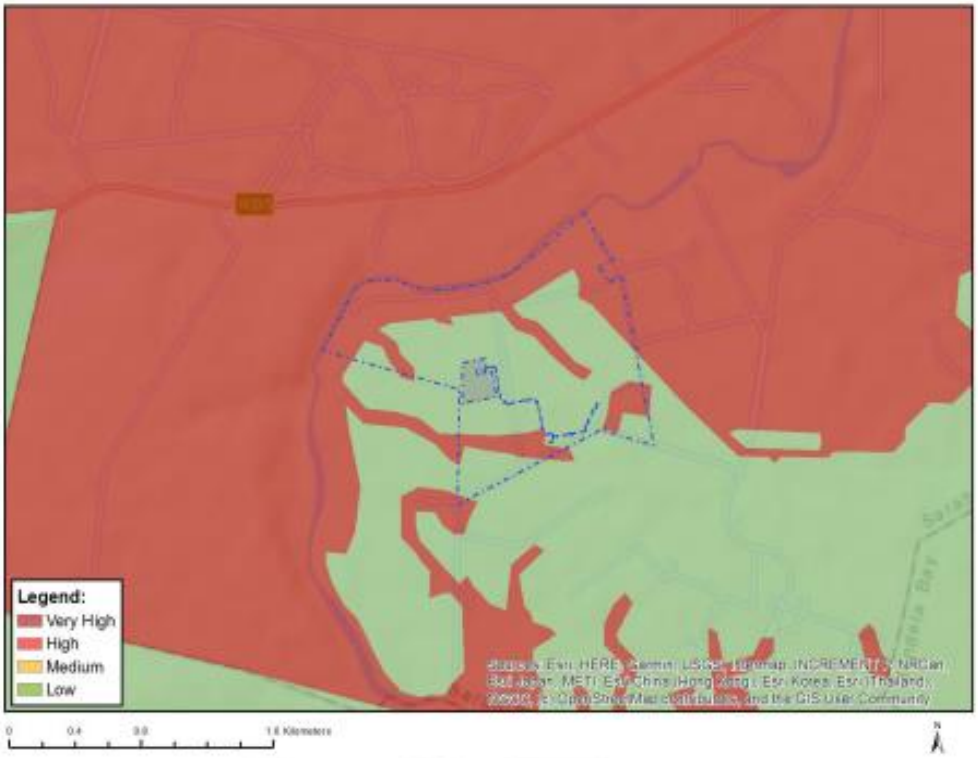


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 30 and 60 km from a Weather Radar installation and within the radar's line of sight

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Ecological support area 1

MIDDLEDRIFT SOLAR PHOTOVOLTAIC FACILITY
BASIC ASSESSMENT

SITE SENSITIVITY VERIFICATION REPORT

Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T`Zoetgeneugd No.192, known as Middledrift, Sundays River Valley Municipality

October 2022

Prepared for:
The Boeram Venter Trust
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Public Process Consultants
Environmental Impact Assessment and Public Participation Management

Title:	Middledrift Solar Photovoltaic Facility: Proposed Construction of a Solar Photovoltaic Facility and Associated Infrastructure, on a portion of Portions 10 & 40 of Farm T`Zoetgeneugd No.192, known as Middledrift, Sundays River Valley Municipality (October 2022).
Purpose of this report:	This Site Sensitivity Verification (SSV) Report forms part of a series of reports and information documents that are being provided during the Basic Assessment Process for the proposed Middledrift PVs on Portions 10 & 40 of Farm T'Zoetgeneugd No. 192, Sundays River Valley Municipality. As per the various Assessment Protocols prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the screening tool must be confirmed by undertaking an SSV Report. In terms of the various assessment protocols promulgated in terms the NEMA EIA Regulations, 2014, the SSV Report **must** be undertaken by an environmental assessment practitioner (EAP) or a specialist. The outcome of the site sensitivity verification must be recorded in the form of a report that: • Confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc, • Contains a motivation and evidence (e.g.) photographs of either the verified or different use of the land and environmental sensitivity; and • Is submitted together with the relevant assessment report The primary objective of this SSV is to present to the competent authority the outcomes of the SSV, which either confirm or dispute the current use of the land and sensitivity of the site under assessment as identified by the National Web Based Screening tool and which has been used, **amongst other tools**, to determine the specialist assessments to be undertaken as part of the assessment.
Prepared for:	The Boeram Venter Trust PO Box 112 Kirkwood 6120
Prepared by:	Public Process Consultants PO Box 27688, Greenacres, 6057 Phone: 041 374 8426; VOIP 087 147 2451
Authors:	Sandy Wren, Emily Whitfield, Geena Pringle, and JP Hechter
Date:	October 2022
To be cited as:	Wren S, Whitfield E, Pringle G, and Hechter JP, November 2022. Middledrift PV - Basic Assessment: Site Sensitivity Verification Report, Portions 10 & 40 of Farm T`Zoetgeneugd, No.192, Sundays River Valley Municipality.

TABLE OF CONTENTS

ABBREVIATIONS

CBAR – Consultation Basic Assessment Report
EAP – Environmental Assessment Practitioner
SSV – Site Sensitivity Verification

1. INTRODUCTION

The NEMA EIA Regulations 2014 (as amended), Regulation 16 (1) (b) (v) requires that a report, generated by the National Web-based Environmental Screening Tool, accompanies the application for environmental authorization which is submitted to the competent authority. Further Regulation 16 (3) (a) indicates that any report submitted as part of an application must comply with any protocol or minimum information requirements relevant to the application. As such, several assessment protocols and minimum report content requirement guidelines have been gazetted which inform the information that is to be contained in the specialists' assessments that form part of an Assessment.

Regulation 16 (3) (a) of GN R326 indicates that any report submitted as part of an application must "*comply with any protocol or minimum information requirements relevant to the application as identified and gazetted by the Minister in a government notice*". As such, several assessment protocols and minimum report content requirement guidelines have been gazetted by the Minister which inform the information that is to be contained in the specialists' assessments that form part of the EIA Report.

Regulation 16 (3) (c) requires that a report submitted as part of an application must "*take into account any applicable government policies and plans, guidelines, environmental management instruments and other decision-making instruments that have been adopted by the competent authority…*". The Screening Tool is **one** of the environmental management instruments that are utilized in determining the environmental sensitivity of the site, as well as, which potential specialist studies should be included in the assessment process. Other **instruments** utilized would include, amongst others, biodiversity planning frameworks, for example the ECBCP, NBA, VegMap and the SRVM Biodiversity Sector Plan. In addition, public participation can assist in determining specialist studies which should form part of an assessment.

1.1 Project Overview

The project applicant, The Boeram Venter Trust, proposes the construction and operation of a 2.2MW Solar Photovoltaic (PV) facility, including associated support and ancillary infrastructure on a portion of Portion 10 and 40 of Farm T`Zoetgeneugd No. 192, known as Middledrift, near Addo in the Sundays River Valley Municipality. It is anticipated that the facility will have a development footprint of approximately 3 ha and will produce 2.2 MW of AC electricity for private use for existing agricultural activities on the farm Middledrift. It is proposed that the PV facility supplements Eskom supply by providing a more regular, reliable, affordable, and clean source of renewable energy on site. The farm portions under assessment measure approximately ~114ha in combined extent and are currently zoned Agriculture 1. Middledrift is a working farm located within an agricultural area and consists predominantly of transformed land for pastures for grazing of domestic cattle and associated infrastructure, offices, diary, staff housing, farm dams and a cleared area for the construction of a poultry breeder facility (a separate assessment and environmental authorisation).

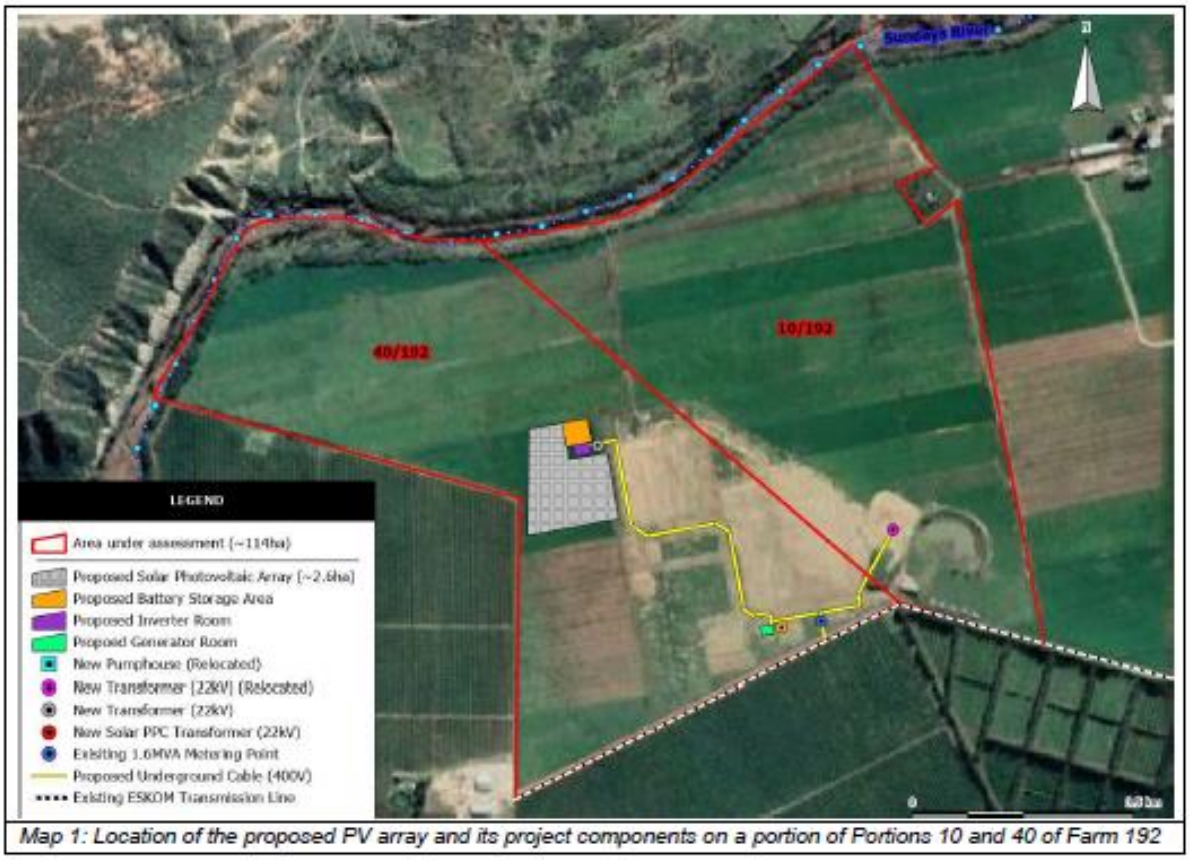
It is proposed that the PV facility is constructed on the western boundary of a portion of Portion 40, with a 100meter length of 22kV cable being installed underground on Portion 10. The PV facility will have a total development footprint of 3 hectares comprising of a ~2.6 ha photovoltaic solar panel array, a ~750m2 Battery Energy Storage System (BESS), a ~200m2 inverter room, and ~200m2 generator room. The generator room is proposed to be constructed on the southern boundary of the site and will include a new Power Plant Controller (PPC) transformer.

To connect the existing electrical infrastructure on site, including connecting to the Eskom grid, a ~950m underground 22kV will be installed from a new transformer adjacent to the inverter room to

connect to a transformer at the dam pump house. The PV panels are proposed to be mounted onto metal frames which are usually a combination of aluminium, galvanised steel and concrete foundations. The type of PV panel and BESS installed will be based on the best available technology at the time of construction, however the PV panels will be stationary and have a built-in nonreflective film.

The PV facility will be a hybrid facility, as it will consist of a PV array as well as a BESS. Micro-siting and positioning of the individual mounts within the array will be confirmed by the technical team at the time of construction and will take into consideration the solar regime and other climatic conditions, topographic features, soil stability, and hydrology of the site. However, subject to the outcome of this detailed planning phase, it is anticipated that approximately 6 PV blocks may be constructed on site over an area of ~ 2.6 ha.

The farm Middledrift is located ~4.6km south of Addo/ Valentia (as the crow flies) in the Sundays River Valley Municipality. The farm can be accessed by turning off the R335 road onto the MN50595 gravel road and continuing for a distance of ~2.7km, which intersects a private access road situated along the southern boundary of Portion 10 and gives access to the farm. The nearest boundary of the Addo Elephant National Park is located ~5.2km east of portion 40 of Farm 192 and ~5.6km from the proposed development footprint.



Map 1: Location of the proposed PV array and its project components on a portion of Portions 10 and 40 of Farm 192

2. APPROACH AND METHODOLOGY

In terms of the above-mentioned assessment protocols, prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the screening tool must be confirmed by undertaking a site sensitivity verification (this report).

In order to verify the site sensitivities identified by the screening tool, on Portions 10 & 40 of Farm 192, the following minimum content requirements have been utilised:

a) A desktop analysis utilising the following resources:
   - Plans
   - Guidelines
   - Spatial Tools and Mapping Resources
   - Municipal Development Planning Frameworks and Instruments
   - Relevant literature and Web-based Information
   - Satellite imagery utilising (Google Earth)
   - DFFE's National Web-based Environmental Screening Tool and Assessment Protocols

b) Preliminary on-site inspections which took place on the 21 April 2022 and 2 June 2022 during which photographic evidence of the current land use and environmental sensitivities was collected.

c) The information gathered from the site observations was supplemented by preliminary specialist input.

d) In addition, the site sensitivity has been informed by the Environmental Assessment Practitioner's (EAPs) experience with the undertaking of a previous Basic Assessment on Portion 6, 10 & 40 of Farm 192 as well as knowledge of the local area based on several previous environmental assessments.

2.1 SSV Minimum Report Content Requirements

The outcome of the site sensitivity verification must be recorded in the form of a report that: –

- Confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc,
- Contains a motivation and evidence (e.g., photographs) of either the verified or different use of the land and environmental sensitivity; and
- Is submitted together with the relevant assessment report

2.2 Limitations

The following limitations have been identified while undertaking this SSV Report.

a) Satellite imagery of the site utilised in the desk top analysis may be outdated.

b) The Screening Tool application classification does not allow the user to select and differentiate between large scale commercial renewable energy projects (*Utilities Infrastructure / Electricity / Generation / Renewable / Solar / PV*) and small-scale private use facilities, such as proposed in this assessment. As a result, the environmental sensitivities identified by the web-based screening tool may not be applicable, see point c) below.

c) As a result, the link contained in the Screening Tool for the assessment Protocol for Agricultural Impact Assessment only directs one to the following link, *https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf*, which is for "… *Onshore Wind and/or Solar Photovoltaic Energy Generation Facilities where the Electricity Output is 20*

Megawatts or more." and therefore **is not applicable** to small-scale private use facilities, such as proposed in this assessment.

d) The Screening Tool Report has identified the Avian Theme as low, however no Avifaunal specialist assessment or associated protocol, is included in the list of specialist assessments identified in the Screening Tool Report, see page 11 and 12. The Avian Theme is the only footprint sensitivity identified by the Screening Tool which does not include a corresponding specialist assessment in the list of specialist studies identified.

e) The Screening Tool Report on page 20, in the sensitivity features table relating to Landscape (Solar) Theme, line three indicates the sensitivity as medium and the description of the feature given is "*Between 5 and 7.5km of a Ramsar site* ***of*** *National Park*". The bold and underlined should read "**or**" according to the sensitivity layer in the web-based the Screening Tool.

f) The Screening Tool Report on page 12 identifies the need for a socio-economic and geo-technical specialist assessment, however neither of these are identified as one of the proposed development area environmental sensitivity themes neither is there a sensitivity rating e.g., low, medium or high.

g) The Screening Tool Report, which includes the lists of relevant sensitive species, was generated on the 16 September 2022. In the Screening Tool Report, Sensitive plant and animal species are assigned a unique number / identifier. In order to protect the species identified in the Screening Tool, these numbers/ identifiers are rerandomized at various intervals. At the time of producing the Screening Tool Report for this application, the unique number/ identifier assigned by SANBI has been utilised in this SSV Report. If rerandomization occurred between the date of generating this Screening Tool and the submission of this SSV Report, unique numbers/ identifiers could be outdated.

3. SITE OVERVIEW

The following section of the assessment provides an overview of the existing land use and activities on as the farm Middledrift.

The area under assessment measures approximately ~114ha in combined extent and is currently zoned Agriculture 1. The majority of the farm has been modified to pastures for domestic livestock grazing with no natural vegetation remaining. A ~20m buffer of vegetation associated with the Sundays River has been retained between the existing pastures and the riverbank. A ~ 20ha portion of the site has been partially cleared of pastures associated with an authorised Poultry Breeder facility. As indicated above, the applicant is currently in the process of applying for a Part 2 Amendment Application for a change in project scope.

Existing access to the farm is located on the southern boundary of Portion 10, which provides access to both Portions 10 and 40 of Middledrift. An existing workshop/ tool shed and six staff houses are located east of the farm access point, on the southern boundary of Portion 10. An existing Eskom overhead powerline runs along the southern boundary of Portion 10 and Portion 40 and an existing 1.6MVA metring point is located ~37m north of the southern boundary of the farm.

4. FOOTPRINT ENVIRONMENTAL SENSITIVITIES AS IDENTIFIED BY THE SCREENING TOOL

Table 1.1 below indicates a summary of the environmental sensitivities as identified by the online Web-based Screening Tool Report. As indicated in section 2.2 above, the Screening Tool does not allow the user to select or distinguish between large scale commercial Renewable PV projects and small-scale private use facilities, such as proposed in this assessment.

Table 1.1: Summary of Footprint Environmental Sensitives as identified by the Screening Tool (Screen grab from page 10 and 11 of the Screening Tool Report)

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Animal Species Theme			X	
Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme				X
Avian Theme				X
Civil Aviation (Solar PV) Theme			X	
Defence Theme				X
Landscape (Solar) Theme			X	
Paleontology Theme			X	
Plant Species Theme				X
RFI Theme			X	
Terrestrial Biodiversity Theme	X			

These sensitivities have been confirmed or disputed in Section 6 below, with supporting evidence provided.

5. SPECIALIST ASSESSMENTS IDENTIFIED BY THE SCREENING TOOL

"Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the footprint situation." Page 11, Screening Tool Report, 16 September 2022.

Table 1.2: Specialist Studies and Associated Assessment Protocols as per the Screening Tool Report (Screen grab from page 11 and 12 of the Screening Tool)

No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_Assessment_Protocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
13	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

6. DEVELOPMENT FOOTPRINT ENVIRONMENTAL SENSITIVITY VERIFICATION

Based on the results of the Screening Tool Report contained in Section 3 and 4 above, the site visits, desktop review of information, Google Earth Imagery, and the EAPs knowledge of the site, amongst others, the Screening Tool Themes, sensitivities, and proposed specialist studies for this assessment area discussed in detail below.

6.1 Agriculture Theme

The Screening Tool Report has indicated that the agriculture sensitivity for the proposed development is "High", however as indicated in section 2.2 b) and c) above the Screening Tool application classification does not allow the user to select and differentiate between large scale commercial renewable energy projects (*Utilities Infrastructure / Electricity / Generation / Renewable / Solar / PV*) and small-scale private use facilities, as proposed in this assessment. In addition, the link contained in the Screening Tool for the assessment protocol for Agricultural Impact Assessment only directs one to the following link, *https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf*, which is for "… *Onshore Wind and/or Solar Photovoltaic Energy Generation Facilities where the Electricity Output is 20 Megawatts or more*." The meta-data accompanying the agriculture combined sensitivity layer indicates that the mapping has been done in the context of large-scale wind and solar PV projects.

The project is not a large-scale development, rather a small scale 2.2MW facility for private use in support of existing agricultural activities, namely irrigation of pastures and domestic livestock grazing and water for the authorised Poultry Breeder Facility, which is currently under construction. In addition, the PV facility will provide the necessary electricity for water pumping infrastructure, which will supply water to the Poultry Facility and the applicant's other farms. It is therefore the opinion of the EAP that this assessment protocol does not apply to this project and as result an Agricultural Agri-Ecosystem Specialist Assessment has not been undertaken for this assessment.

6.2 Animal Species Theme

The Screening Tool Report has rated the animal species sensitivity for the proposed development as "Medium". The reason for the Medium Sensitivity rating is due to the potential occurrence of *Sensitive Species 8 as indicated in Table 1.3 below.*

Table 1.3: Screening Tool Animal Species Sensitivity Theme (Screen grab from page 14 of the Screening Tool Report)

Sensitivity	Feature(s)
Medium	Aves-Stephanoaetus coronatus
Medium	Sensitive species 8
Medium	Invertebrate-Aneuryphymus montanus

Stephanoaetus coronatus and Sensitive Species 8 are most commonly found within forest, woodland and savanna habitats. *Aneuryphymus montanus* is endemic in the cape region of South Africa and is mainly associated with Fynbos vegetation types. There are no forests, woodlands or savanna habitats within the proposed development footprint and these species are transient in nature. See Photo 1 below which indicates the transformed nature of the site. None of the animal species identified by the Screening Tool have been observed during the site inspection. The site has been transformed and no natural vegetation remains on site, as a result natural habitat where the above-mentioned species are expected to occur have not been observed on site and within the proposed development footprint. Therefore, it is not anticipated any species in identified Table 1.3 above are likely to occur within the proposed development footprint.

The EAP therefore disputes the rating for this theme as indicated in the Screening Tool Report. It is proposed that the development footprint sensitivity should be rated as Low sensitivity due to the transformed nature of the site and the unlikely presence of the identified terrestrial animals SCC's. In line with these findings and the Terrestrial Animal Species Assessment Protocol, the minimum report requirements for a Terrestrial Animal Compliance Statement will be included as part of the Terrestrial Biodiversity Compliance Statement, to be prepared by an Ecological Scientist registered with SACNASP.

Photo 1: A photograph taken from the centre of the proposed development footprint (foreground), in a southerly direction (Photo date 2 June 2022).

6.3 Aquatic Biodiversity Theme

The Screening Tool Report has rated the Aquatic Biodiversity Theme Sensitivity as "Low" for the proposed development footprint. No aquatic features, drainage lines or wetlands were observed within the proposed development footprint, however, the Sundays River runs along the northern boundary of the site. The closest boundary of the Sundays River is ~350m north of the proposed development footprint. Therefore, the EAP confirms the rating as Low.

In line with, these findings and the Aquatic Biodiversity Assessment Protocol, an Aquatic Biodiversity Compliance Statement will be prepared by a suitably qualified specialist registered with SACNASP, with expertise in aquatic sciences.

6.4 Archaeological and Cultural Heritage Theme

The Screening Tool Report has rated the Archaeological and Cultural Heritage Theme Sensitivity as "Low" for the proposed development footprint. As indicated in the sections above the site has been transformed. In addition, a Letter of Exemption of a Full Phase 1 Archaeological Assessment was undertaken as part of a previous assessment on a portion of Portions 6, 10 & 40 of Farm T'Zoetgeneugd No. 192 and identified the proposed area for development as having a low Archaeological and Cultural sensitivity.

In line with these findings, the EAP confirms the Screening Tool rating as Low and a copy of the previous Archaeological Letter of Exemption which complies with the requirements of Appendix 6 of the NEMA EIA Regulations, 2014 (as amended) will be included in the Basic Assessment as required by General Assessment Protocol.

6.5 Avian Theme

The Screening Tool Report identifies the Avian Theme as "Low", however there is no Avifaunal specialist assessment or associated assessment protocol identified by the Screening Tool. This is more than likely because the assessment protocol identified in terms of Avifauna is for "… ***onshore wind energy generation facilities*** *where the electricity output is 20 megawatts or more*". This is a Photovoltaic Energy Generation Facility and has an electricity output of less than 20MW and therefore this assessment protocol and associated specialist assessment is not applicable to this application. In line with the above, no separate Avifaunal Specialist Assessment will be undertaken.

6.6 Civil Aviation Theme

The Screening Tool Report identifies the Civil Aviation (Solar PV) Theme sensitivity as "Medium" for the proposed development footprint. In terms of the sensitivity features table associated with the Civil Aviation sensitivity layer in the Screening Tool, the development footprint is located within 8km's from "*other civil aviation aerodrome*", namely, Hitgeheim Country Lodge Airstrip.

The meta data associated with the Civil Aviation Theme sensitivity in the Screening Tool, indicates that the mapping was done in the context of Commercial scale wind energy installations. This proposed development application is for a small-scale PV facility for private use and not a Commercial scale wind energy facility. In addition, the majority of the proposed development footprint falls beyond 8km's from the Hitgeheim Country Lodge Airstrip, See Figure 1 below. In terms of the Protocol for Civil Aviation, sites that have been rated as having a Medium Sensitivity have a low potential for negative impacts on the civil aviation installations, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts may not be required. Due to distance to civil aviation installation and the small-scale of the facility, it is anticipated that there will be no negative impacts on civil aviation installations. Therefore, this theme is not applicable to the application and a specialist assessment is not required for this assessment.

The EAP disputes the finding of the Screening Tool as Medium and rates the proposed development footprint as Low Civil Aviation sensitivity, and thus no Civil Aviation Compliance Statement will be undertaken.

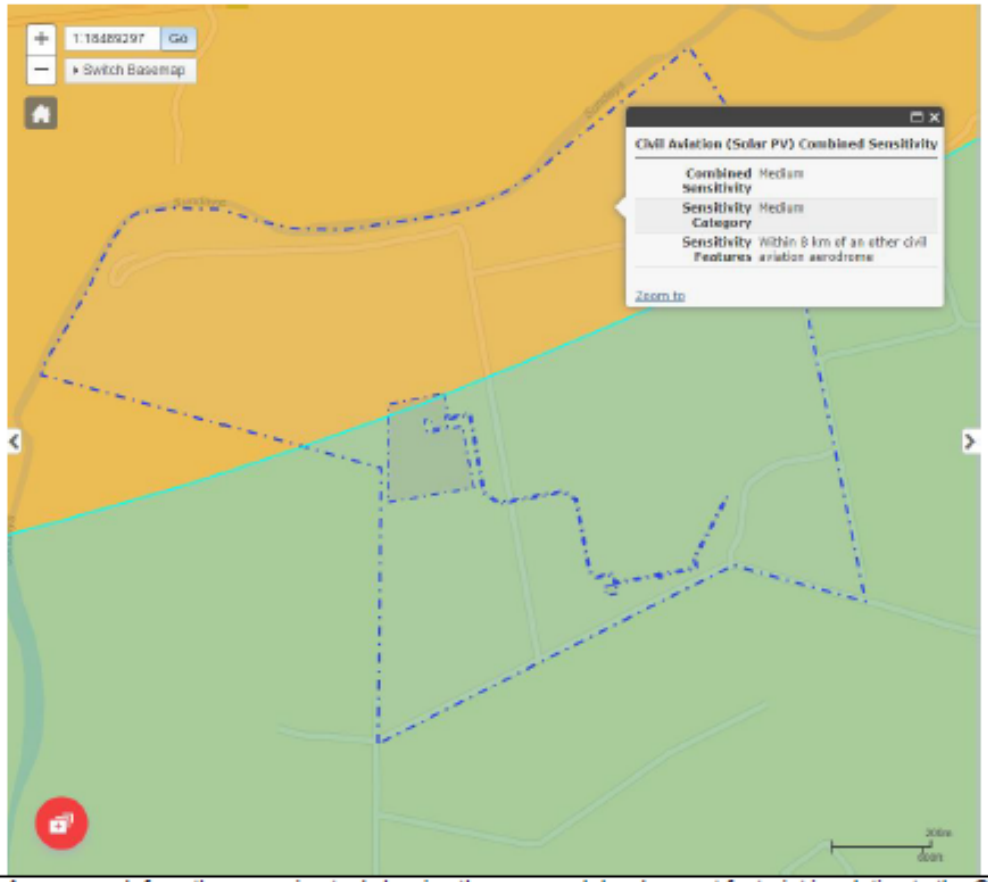


Figure 1: A screengrab from the screening tool showing the proposed development footprint in relation to the Combined Civil Aviation theme.

6.7 Defence Theme

The Screening Tool Report identifies the Defence Theme sensitivity as "Low" for the proposed development footprint. Based on the meta data associated with the Defence Theme sensitivity layer, the nearest Defence installation is located ~42km south of the proposed development footprint.

In terms of the Protocol for the Defence Theme when the site is rated as Low Sensitivity, "*No negative impacts on the defence installation are expected in low sensitivity areas. It is unlikely for further assessment mitigation measures to be required.*" The EAP confirms the finding of the Screening Tool as Low sensitivity and thus in terms of the Defence Protocol, no Defence Compliance Statement will be undertaken.

6.8 Landscape (Solar) Theme

The Screening Tool Report identifies the Landscape (Solar) Theme sensitivity as "Medium" for the proposed development footprint. In terms of the sensitivity features table associated with the Landscape (Solar) Theme sensitivity layer in the Screening Tool, the development footprint is located between 5 and 7.5 km of a Ramsar site of National Park, in this case the Addo Elephant National Park. The nearest boundary of the Addo Elephant National Park is located ~5.6km east the proposed development footprint. The meta data associated with the Landscape (Solar) Theme sensitivity in the Screening Tool, indicates that the mapping was done in the context of Commercial scale wind and Solar PV installations. The proposed development application is for a small-scale PV facility for private use and not a Commercial scale wind energy facility.

In terms of the General Assessment Protocol, a Landscape/ Visual Assessment must comply with Appendix 6 of the NEMA EIA Regulations, 2014 (as amended). Based on the above, which includes, amongst others, site inspections, a desk-top analysis of google earth imagery, the experience of the EAP with a previous assessment on the same site, it is the opinion of the EAP that the sensitivity of Medium as identified by the Screening Tool is confirmed. Therefore, a Visual Specialist Opinion Report has been undertaken for this assessment.

6.9 Palaeontological Theme

The Screening Tool Report has rated the Palaeontological Theme sensitivity as "Medium" for the proposed development footprint. As indicated in the sections above the site has been transformed. In addition, a desktop Paleontological Assessment was undertaken as part of a previous environmental assessment on a portion of Portions 6,10 and 40 of Farm T'Zoetgeneugd No. 192 which states that impacts on Palaeontological resources are not anticipated within the proposed area for development and therefore is identified as Low Palaeontological sensitivity.

line with the findings of the previous desktop Paleontological Impact Assessment, the EAP disputes the Screening Tool rating of Medium and rates the development footprint as Low Palaeontological sensitivity. The previous desktop Paleontological Impact Assessment: Proposed Letter of Exemption, will be included in the Basic Assessment as required by General Assessment Protocol.

6.10 Plant Species Theme

The Screening Tool Report has rated the Plant Species Theme sensitivity as "Low" for the proposed development footprint. As per the site visit and photographic evidence provided in Photo 1 in the Sections above, the site has been transformed to pastures. No natural habitat for SCC remains. The Plant Species Assessment Protocol indicates that a Low sensitivity rating should apply for terrestrial plant species in areas where no natural habitat remains and natural areas where there is no suspected occurrence of SCC.

In terms of the Protocol for the Plant Species Theme, a Terrestrial Plant Species Compliance Statement will be included as part of the Terrestrial Biodiversity Compliance Statement, to be prepared by an Ecological Scientist registered with SACNASP.

6.11RFI Theme (Radar Frequency Interference)

The Screening Tool Report has rated the RFI theme as "Medium" sensitivity rating for the proposed development footprint. In terms of the sensitivity feature table associated with the RFI sensitivity layer in the Screening Tool, the development footprint is located between 30 and 60km from a Weather Radar installation and within the radar's line of sight. In this case it refers to the weather radar installation at the Port Elizabeth International Airport.

The meta data associated with the RFI Theme sensitivity in the Screening Tool, indicates that the mapping was done in the context of Commercial scale wind energy installations. This proposed development application is for a small-scale PV facility for private use and not a Commercial scale wind energy facility and therefore this Theme is not applicable to this application.

The EAP disputes the finding of the Screening Tool as Medium sensitivity and proposes that the footprint is rated as Low, thus no specialist assessment is not required for this assessment.

6.12 Terrestrial Biodiversity Theme

The Screening Tool Report has rated the Terrestrial Biodiversity Theme as "Very High" for the proposed development footprint (See Figure 2 below). This sensitivity features table indicates this is due to portions of the site being designated as an Ecological Support Area (ESA 1).

However, the majority of the proposed development footprint falls outside of the Very High sensitivity areas. Only a portion of the proposed underground electrical transmission line falls within the Very High sensitivity area.

As per the site visit and photographic evidence in Photo 1 in the Sections above, the development footprint is on a transformed area, with no natural vegetation present on the site. The likelihood of any terrestrial ecosystem BPA's being found at the site or within the area of influence is very low.

The EAP thus disputes the sensitivity rating assigned by the Screening Tool and proposes that the footprint is rated as Low. In line with these findings, a Terrestrial Biodiversity Compliance Statement has been prepared by an Ecological Scientist registered with SACNASP and will be included in this Basic Assessment.

Figure 2: Terrestrial biodiversity theme sensitivity mapping according to the screening tool

7. SSV REPORT OUTCOMES AND RECOMMENDATIONS

The primary objective of this SSV Report is to present to the competent authority the outcome of the SSV, which either confirms or disputes the current use of the land and sensitivity of the site under assessment as identified by the National Web-based Screening tool and which has been used, **amongst other tools**, to determine the specialist assessments to be undertaken as part of this assessment.

Table 1.4 below provides a summary of the outcome of the SSV Report and specialist studies proposed to be undertaken for this assessment

Table 1.4: Specialist Assessments Proposed

SPECIALIST ASSESSMENTS IDENTIFIED BY THE SCREENING TOOL	EAP'S RECOMMENDATIONS FOR SPECIALIST ASSESSMENTS BASED ON SSV
Agricultural Impact Assessment	None – see comments in Section 6.1 above.
Landscape/ Visual Impact Assessment	Visual Specialist Opinion Report
Archaeological and Cultural Heritage Impact Assessment	Phase 1 Archaeological Impact Assessment
Palaeontology Impact Assessment	Phase 1 Palaeontological Impact Assessment
Terrestrial Biodiversity Impact Assessment	Terrestrial Biodiversity Compliance Statement
Aquatic Biodiversity Impact Assessment	Aquatic Biodiversity Compliance Statement
Civil Aviation Assessment	None, see comments in Section 6.6 above.
Defence Assessment	None, see comments in Section 6.7 above.
RFI Assessment	None, see comments in Section 6.11 above.
Geotechnical Assessment	None, see comments below.
Socio Economic Assessment	Desktop, see comments below.
Plant Species Assessment	Included in the Terrestrial Biodiversity Compliance Statement.
Animal Species Assessment	Included in the Terrestrial Biodiversity Compliance Statement.

Geotechnical Assessment

The site is considered to have a stable geology which was taken into account by the Project engineers as part of the facility design plans. It is not anticipated that the development will cause significant changes to surface and/ or subsurface geology that could potentially lead to negative impacts in the surrounding area.

The Screening Tool Report, in the list of specialist studies on page 12, has listed a Geotechnical Assessment to be undertaken for the development. However, the Screening Tool did not identify the Geotechnical Assessment Theme, nor has it assigned a sensitivity rating. Furthermore, to date no assessment protocol has been gazetted for the minimum report requirements for a Geotechnical assessment. In addition, no concerns have been raised by I&APs regarding the potential Geotechnical impacts of the proposed development.

Therefore, it is not deemed necessary to undertake a separate Geotechnical Assessment, as it not anticipated to significantly alter the geology of the site.

Socio Economic Assessment

The Screening Tool Report, in the list of specialist studies on page 12, has listed a Socio-Economic Impact assessment to be undertaken. The Screening Tool did not identify Socio-Economic as an environmental theme, nor has it assigned a sensitivity rating. The Socio-Economic impacts for the proposed development will be assessed as part of the Basic Assessment based on desktop information available from the project applicant and the technical team.

Based on information provided by the project applicant, a number of construction and operational phase employment opportunities will be created by the proposed development, which will contribute to the growth and stability of the local economy. As far as possible preference will be given to local labour for the construction of the proposed development. The employment opportunities provided during the operational phase will also provide skills development and career growth, thus leading to an improved standard of living and livelihood improvement for employees. No significant negative impacts on the local Socio-Economic environment are anticipated.

No concerns were raised by I&APs regarding Socio-Economic impacts during the project announcement phase of the assessment, which require a specialist assessment. Given the above, it is not deemed necessary to undertake a separate Socio-Economic Assessment.

Thus, based on the findings of the SSV Report the EAP, subject to approval by the competent authority, recommends the following specialist studies to form part of this assessment:

- Visual Specialist Opinion Report
- Terrestrial Biodiversity Compliance Statement in line with the relevant assessment protocols by an Ecologist registered with SACNASP, to include
    - Plant Species Assessment
    - Animal Species Assessment
- Aquatic Biodiversity Compliance Statement in line with the relevant assessment protocols by an Ecologist registered with SACNASP with experience in the field of Aquatic Sciences.
- Desktop Socio-Economic Impact Assessment for inclusion in the relevant section of the Basic Assessment Report.
- A Desktop Paleontological Impact Assessment: Proposed Letter of Exemption from further Specialist Studies and Archaeological Letter of Exemption for a Phase 1 Palaeontological Impact Assessment in line with Appendix 6 of the NEMA EIA Regulations 2014 (as amended)