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TERMS OF REFERENCE FOR TERRESTRIAL PLANT SPECIALIST ASSESSMENT / COMPLIANCE STATEMENT

PROPOSED HARTENBOS WWTW PV SOLAR PLANT ON REMAINDER OF PORTION 101 OF THE FARM HARTENBOSCH 217, MOSSEL BAY

1. INTRODUCTION

Sharples Environmental Services cc (SES) has been appointed as the independent Environmental Assessment Practitioner (EAP) to conduct the Environmental Impact Assessment process for the Proposed Hartenbos Waste Water Treatment Works PV Solar Plant on remainder of portion 101 of the Farm Hartenbosch 217, Mossel Bay.

1.1 Location of the proposal



Figure 1: Locality Map

The yellow polygon in figure 1 indicates the proposed site within the property. There are currently two layout options being proposed, please see figures 2 & 3. The whole proposed site (option 1) must be assessed.



Figure 2: Layout Option 1.



Figure 3: Layout Option 2.

A screening report was completed on the 21 August 2023. A **“Medium”** environmental sensitivity rating was indicated for the Plant Species theme. As per the procedures for the assessment and minimum criteria for reporting on identified environmental themes (Terrestrial Plant Species) in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation (October 2020), *“An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of “medium sensitivity” for terrestrial plant species, must submit either a Terrestrial Plant Species Specialist Assessment Report or a Terrestrial Plant Species Compliance Statement, depending on the outcome of a site inspection/site sensitivity verification undertaken”*.

Sensitive features include:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Ruschia leptocalyx
Medium	Selago ramosissima
Medium	Hermannia lavandulifolia
Medium	Sensitive species 633
Medium	Sensitive species 268
Medium	Marsilea schelpeana
Medium	Sensitive species 1024
Medium	Relhania garnotii
Medium	Polygala pubiflora
Medium	Sensitive species 980
Medium	Sensitive species 516
Medium	Sensitive species 800
Medium	Sensitive species 763
Medium	Diosma passerinoides
Medium	Agathosma microcarpa

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.

2. SPECIALIST INVOLVEMENT

The purpose of this study is to determine if a Terrestrial Plant Species Specialist Assessment or a Compliance Statement is required as per the proposed site, by ascertaining the status and presence of the Species of Conservation Concern and assessing the potential impact of the proposed development on the biophysical environment. Thereafter, either a Terrestrial Animal Species Specialist Assessment or a Compliance Statement should be undertaken, based on the presence of SCC, as per the Gazetted Protocol: https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf

The report should not be limited to this brief. Where the specialist sees the necessity for providing other vital information or investigations, this should be included.

The specialist conducting this study must:

- Be independent and have expertise in conducting similar assessments.
- Have a suitable academic qualification in the relative field.

- Be registered with the South African Council for Natural Scientific Professionals (SACNASP).
- Be familiar with the assessment criteria commonly used in the EIA Process to assess and evaluate impacts, as well as the newly promulgated Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes (March 2020).
- Have good knowledge relating to assessment techniques and to relevant legislation, policies and guidelines.
- Perform the work in an objective manner, even if this results in views and findings that are not favourable to the applicant.

2.1 Terms of Reference

The assessment of the proposal will necessitate specialist input which will need to be undertaken with the Terms of Reference listed below and relevant specialist guidelines. In addition to meeting the requirements of the relevant legislation, Terrestrial Plant Specialist Assessment reports should also meet those of the Guideline for Involving Terrestrial Plant Species Assessments in the EIA Processes and the relevant Gazetted Protocols.

The Terrestrial Plant Species specialist must have no financial or other vested interest in the proposed development and must be professionally registered with the South African Council for Natural Scientific Professionals (SACNASP).

Phase 1 (Status Quo Assessment)

- ✓ The assessment must contextualize the study area in order to provide a baseline description of the ecological system, the terrestrial plant biodiversity and any significant terrestrial features must be provided.
- ✓ The assessment must identify the following;
 - ✓ Terrestrial critical biodiversity areas (CBAs)
 - ✓ Terrestrial ecological support areas (ESAs)
 - ✓ Protected areas as defined by the National Environmental Management: Protected Areas Act, 2004
 - ✓ Priority areas for protected area expansion
 - ✓ Indigenous forests
- ✓ Undertake a site visit and ground-truth biodiversity information. Where required, undertake baseline surveys and/or studies to supplement the information base and inform the assessment.
- ✓ Estimate the trajectory of change in the context of the 'No-Go' Alternative due to existing impacts.
- ✓ Assessment criteria to be aligned with the promulgated Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes (October 2020).

Following the site verification visit, in which the Specialist confirms the presence, likely presence or confirmed absence of a SCC identified within the site identified as "medium" sensitivity by the screening tool, the Specialist is to confirm the need for a Compliance Statement or a Terrestrial Plant Species Assessment and undertake this report/statement in accordance with the Gazetted Protocol (October 2020).

If a Compliance Statement is Required:

- ✓ Specialist must SACNASP registered under one of the two fields of practice (Botanical Science or Ecological Science).
 - The compliance statement must:
 - be applicable within the study area;
 - confirm that the study area is of "low" sensitivity for terrestrial plant species; and
 - indicate whether or not the proposed development will have any impact on SCC.
- ✓ Minimum Requirements Include:
 - contact details and relevant experience as well as the SACNASP registration number of the specialist preparing the compliance statement including a curriculum vitae;
 - a signed statement of independence by the specialist;
 - a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;
 - a description of the methodology used to undertake the site survey and prepare the compliance statement, including equipment and modelling used where relevant;

- where required, proposed impact management actions and outcomes or any monitoring requirements for inclusion in the EMPr;
- a description of the assumptions made and any uncertainties or gaps in knowledge or data;
- the mean density of observations/ number of samples sites per unit area; and
- any conditions to which the compliance statement is subjected.

Phase 2 (If a Terrestrial Plant Specialist Assessment Report is Required) - Please also refer to Appendix A

- ✓ In accordance with the Gazetted Protocols, the findings of the assessment must be written up in a Terrestrial Plant Specialist Assessment Report.
- ✓ Terrestrial Plant Specialist Assessment Report must include the following;
 - ✓ The Identification, prediction and description of potential impacts on terrestrial ecology during the construction and operational phases of the project. Impacts are described in terms of their extent, intensity, and duration. The other aspects that must be included in the evaluation are probability, reversibility, irreplaceability, mitigation potential, and confidence in the evaluation.
 - ✓ This must be undertaken for all of the alternatives and must be rated with and without mitigation to determine the significance of the impacts.
 - ✓ The degree to which the impacts and risks can cause loss of irreplaceable resources.
 - ✓ Recommend actions that should be taken to avoid impacts on sensitive ecology, in alignment with the mitigation hierarchy, and any measures necessary to restore disturbed areas or ecological processes.
 - ✓ Identify areas of high importance or sensitivity on which impacts should *preferably* be avoided or prevented or, where they cannot altogether be avoided, should at least be *minimized* (e.g. through buffers or setbacks).
 - ✓ Identify areas that are known to be important for biodiversity but are degraded or invaded by alien species and require rehabilitation/restoration, including areas that could improve connectivity and reduce fragmentation in the landscape.
 - ✓ An accurate description and map of the areas and features of importance to biodiversity and their sensitivity to the proposed development. Possibly recommend alternatives.
 - ✓ Rehabilitation guidelines for disturbed areas associated with the proposed project.
 - ✓ Any monitoring protocol that is deemed necessary
- ✓ A substantiated statement, based on the findings of the specialist assessment, regarding the acceptability, or not, of the proposed development, if it should receive approval or not must be included
- ✓ Minimum requirements for report content include that the assessment must be undertaken in accordance with the Species Environmental Assessment Guideline and must:
 - Identify the SCC which were found, observed or are likely to occur within the study area;
 - provide evidence (photographs) of each SCC found or observed within the study area, which must be disseminated by the specialist to a recognized online database facility⁹ immediately after the site inspection has been performed
 - identify the distribution, location, viability and detailed description of population size of the SCC identified within the study area;
 - identify the nature and the extent of the potential impact of the proposed development to the population of the SCC located within the study area;
 - determine the importance of the conservation of the population of the SCC identified within the study area, based on information available in national and international databases including the IUCN Red List of Threatened Species, South African Red List of Species, and/or other relevant databases;
 - determine the potential impact of the proposed development on the habitat of the SCC located within the study area;
 - include a review of relevant literature on the population size of the SCC, the conservation interventions as well as any national or provincial species management plans for the SCC.
 - This review must provide information on the need to conserve the SCC and indicate whether the development is compliant with the applicable species management plans and if not, a motivation for the deviation;

- identify any dynamic ecological processes occurring within the broader landscape, that might be disrupted by the development and result in negative impact on the identified SCC, for example, fires in fire-prone systems;
- identify any potential impact on ecological connectivity within the broader landscape, and resulting impacts on the identified SCC and its long-term viability;
- determine buffer distances as per the Species Environmental Assessment Guidelines used for the population of each SCC; and
- discuss the presence or likelihood of additional SCC including threatened species not identified by the screening tool, Data Deficient or Near Threatened Species, as well as any undescribed species and
- identify any alternative development footprints within the preferred development site which would be of "low" sensitivity" or "medium" sensitivity as identified by the screening tool and verified through the site sensitivity verification.

General

- ✓ Reference all sources of information and/or data used.
- ✓ Indicate limitations and assumptions, particularly in relation to seasonality.
- ✓ Description of the methodology adopted in preparing the report
- ✓ Provide a reasoned opinion as to whether the proposed activity should be authorised
- ✓ The specialist and the report must comply with the following guidelines and legislation:
 - ✓ Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of Sections 24(5)(A) and (H) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation.
 - ✓ Fynbos forum. 2016. *Ecosystem guidelines for environmental assessment in the Western Cape*. Cape town.
 - ✓ Brownlie, S. 2005. *Guideline for involving biodiversity specialists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 C. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
 - ✓ Any national, provincial and municipal biodiversity and development planning documents must be consulted where available.
- ✓ The report should be prepared in a suitable font and submitted to SES in draft form.
- ✓ Minimum requirements as per the Gazetted Protocol includes:
 - contact details and relevant experience as well as the SACNASP registration number of the specialist preparing the assessment including a curriculum vitae;
 - a signed statement of independence by the specialist;
 - a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;
 - a description of the methodology used to undertake the site sensitivity verification and impact assessment and site inspection, including equipment and modelling used where relevant;
 - a description of the assumptions made and any uncertainties or gaps in knowledge or data;
 - a description of the mean density of observations/number of samples sites per unit area of site inspection observations;
 - details of all SCC found or suspected to occur on site, ensuring sensitive species are appropriately reported;
 - the online database name, hyperlink and record accession numbers for disseminated evidence of SCC found within the study area;
 - the location of areas not suitable for development and to be avoided during construction where relevant;
 - a discussion on the cumulative impacts;
 - impact management actions and impact management outcomes proposed by the specialist for inclusion in the Environmental Management Programme (EMPr);
 - a reasoned opinion, based on the findings of the specialist assessment, regarding the acceptability or not, of the development related to the specific theme considered, and if the development should receive approval or not, related to the specific theme being considered, and any conditions to which the opinion is subjected if relevant; and

- a motivation must be provided if there were any development footprint alternatives identified as having “low” or “medium” terrestrial plant species sensitivity and were not considered appropriate.
- ✓ Ensure it is clear that the mitigation hierarchy has been applied, in order, when recommendations and mitigation is applied.
- ✓ Ensure that there are no conflicting recommendations or conclusions.
- ✓ Ensure the EAP is provided with working files, ie: KML/KMZ/Shapefiles and if a buffer is recommended, please ensure relevant table of coordinates are provided.

2.2 Quotation Details

Please provide a written quote for all Phases, including a break-down of costs and indicate your availability to commence the study.

3. EXPECTED DELIVERABLES

An initial draft report covering the above requirements must be submitted to *SES* **two weeks** after the notice to proceed with above scope of work. The report must be prepared in a suitable font (such as Arial 12) and the format and content must comply with Appendix 6 of the amended EIA Regulations, 2017, as well as the Promulgated Protocols relating to Plant Species (dated Oct 2020). The final report (which shall include any reasonable amendments in response to the EAP's comments on the initial draft, if necessary) shall be delivered **two weeks** after the draft report, assuming the EAP shall have provided comments within a week after receiving the initial draft report.