

TERMS OF REFERENCE FOR PLANT SPECIES AND TERRESTRIAL BIODIVERSITY FOR CLEARING OF VEGETATION ON FARM 800, WORCESTER

NEMA Protocols

The new **Protocols of National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (NEMA)** prescribe general requirements for undertaking an initial site sensitivity verification and for protocols for the assessment and minimum reporting requirements of environmental impacts.

The Protocol for the assessment and reporting of environmental impacts on terrestrial plant species and terrestrial biodiversity must be applied when undertaking a botanical assessment. These protocols have been integrated into the terms of reference, but it is your responsibility to ensure your assessment meets all requirements of the relevant protocol.

Other guidelines

Any guidelines for the required study must be referred to and adhered to. These include the DEA&DP guidelines for Specialist Studies, and any other relevant guidelines or legislation.

Professional Registration

A Specialist **must be** SACNASP registered specialist.

Timeframes

Should you be appointed, your availability to meet the stringent deadlines imposed by the EIA Regulations 2014, as amended, will be confirmed prior to the official EIA process commencing. Failure to meet the deadlines agreed upon would result in the lapsing of the application.

INITIAL SITE SENSITIVITY VERIFICATION

The current use of the land and the potential environmental sensitivity of the site as identified by the national web based environmental screening tool must be confirmed by undertaking an Initial Site Sensitivity Verification.

The Initial Site Sensitivity Verification must be undertaken through the use of:

- a desk top analysis, using satellite imagery; and
- a preliminary on-site inspection

The outcome of the Initial Site Sensitivity Verification must be recorded in the form of a report that-

- confirms or disputes the current use of the land and environmental sensitivity as identified by the national web based environmental screening tool;
- contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.

TERRESTRIAL PLANT SPECIES AND TERRESTRIA BIODIVERSITY IMPACT ASSESSMENT

The botanical impact 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 facility immediately after the site inspection has been performed (prior to preparing the report contemplated in paragraph 3);
- 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;
- 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.

This report must include, as a minimum, the following information:

- contact details and relevant experience as well as the SACNASP registration number including a curriculum vitae;
- signed statement of independence by the specialist;
- statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;
- description of the methodology used to undertake the site sensitivity verification and impact assessment and site inspection, including equipment and modelling used where relevant;
- description of the assumptions made and any uncertainties or gaps in knowledge or data;
- 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 footprints identified as per paragraph above that were identified as having “low” or “medium” terrestrial plant species sensitivity and were not considered appropriate.

Please note:

- You will be required to assess the impacts for each of the proposed development alternatives **and the no-go option**, which will be identified throughout the process. The impacts must be assessed according to the attached tables (Appendix 1) using the criteria in Appendix 2 and Appendix 3.
- Your impact assessment will need to consider the potential negative as well as positive impacts that would result from each of the proposed alternatives and must include mitigation measures to reduce the negative impacts as well as measures that would enhance the positive impacts, for each alternative including the No-Go Option, where the impacts could not be avoided.
- Cumulative impacts must be described, and mitigation measures provided where possible.
- The specialist report must provide advantages and disadvantages for each alternative provided.
- Specific management and monitoring requirements/guidelines must be provided. These requirements/guidelines will be used as conditions of approval for the Environmental Authorisation (should it be granted) and the EMPr.
- The potential impacts and recommended mitigation measures must be separated into:
 - Planning, Design
 - Development phase; and
 - Operational phase.

The report must be submitted in digital format, and all findings mapped must be provided as a GIS shape file (.shp) or a Google Earth file (KML or KMZ).