

Open space management plan

Objectives:

The purpose of the Open Space Management Plan (OSMP) is to provide a framework for the integrated management of the natural and semi-natural areas within the wind energy facility (WEF). This requires managing and maintaining the ecosystem in a near-natural state and restoring and/or rehabilitating the ecosystems to such a state.

The overall objective of the OSMP is to restore and maintain the ecological infrastructure (i.e. intact ecosystems that deliver valuable services to people) that is found on site.

Project outline:

The Longyuan Mulilo De Aar 2 North WEF consists of 96 turbines, each with a generation capacity of 1.5 MW. The total wind farm footprint (144 ha) is spread over an area of 14 500 hectares (ha) accounting for 0.9% of the total area. The majority of the property will therefore remain undeveloped. The construction and presence of the WEF will however introduce unique effects to the area that should be managed in order to promote the maintenance of biodiversity within the site, ensure an intact ecosystem and does not have a long term negative impact on the local environment.

Relation to other plans

Given that the goal of the OSMP is to ensure biodiversity compatible management of the facility, it cannot be considered independently of the other environmental management plans at the site. In particular, the Stormwater Management Plan (erosion management included in the Stormwater Management Plan), Revegetation and Rehabilitation Plan, and Alien Invasive Plant Management Plan should align closely with the OSMP.

The following elements are also considered part of OSMP:

Access control

- Access to the facility should be strictly controlled.
- All visitors and contractors should be required to sign-in.
- Signage at the entrance should indicate that disturbance to fauna and flora is strictly prohibited.

Prohibited activities

The following activities should not be permitted by anyone except the landowner or his representatives:

- No fires within the site.
- No hunting, collecting or disturbance of fauna and flora, except where required for the safe operation of the facility and only by the Environmental Control Officer on duty with the appropriate permits and landowner permission.
- No domestic pets or livestock are permitted on site.
- No driving off of demarcated roads.
- No interfering with livestock.

- No use (e.g. swimming or washing of clothes or machinery) of any natural water resource.
- No marking / painting or any natural features (e.g. rock formations).

Ecological process areas

Ecological process areas, such as water resources and sensitive vegetation, were identified by respective specialists and designated as “no-go” areas and need to be protected adequately. Based on the ecological importance of aquatic environments, all construction activities shall remain outside of aquatic environments, with special efforts implemented to maintain an appropriate buffer, as recommended by the freshwater specialist, between construction related activities and any rivers / water course / wetlands / drainage lines. These no-go areas shall stay in place until construction of the infrastructure within the buffer area must commence. The recommended ecological sensitive areas and buffer areas, as indicated in Figure 1, shall be demarcated as “no-go” areas and construction activities shall remain outside these designated areas.

To ensure the protection of ecological process areas, the following mitigation measures are recommended:

- All works to be undertaken shall be within the boundary of the site.
- A “no-go” area shall extend on either side of the working area (i.e. all areas outside of the defined working area and designated access and construction roads).
- No equipment associated with earthworks shall be allowed outside of the working area and defined access and construction roads or within “no-go” areas, unless expressly permitted by the Environmental Control Officer / Engineer.

Fire risk management

Fires are not a regular occurrence at the site. However fires may occasionally occur under the right circumstances. Ignition risk sources in the immediate area include:

- Lightning strikes;
- Personnel within the facility; and
- Infrastructure, such as transmission lines.

In accordance with EMP, the Contractor shall ensure that there is basic fire-fighting equipment available on site at all times. The Contractor shall ensure that the employees are aware of the procedure to follow in the event of a fire.

Grazing management

The development of the WEF will not prevent the site from being used for its current land use of extensive grazing land for free range sheep production. As the construction of turbines and associated infrastructure will only influence a small area of the total farm, normal grazing is permitted. Extensive grazing is therefore compatible with biodiversity maintenance provided that it is implemented according to the basic principles of sustainable grazing management.

Alien Plant Control

Alien invasive plants should be controlled according to the Alien Invasive Plant Management Plan.

Erosion Management

The facility should be inspected every 6 months for erosion problems or more frequently in the event of exceptional rainfall events. All erosion problems should be rectified according to the Stormwater Management Plan.

Adaptive management:

Ecosystems are complex and it is not always possible to predict how they will respond to management interventions. The OSMP should be reviewed annually for the first three years post construction to evaluate the effectiveness of management actions so that these can be adapted as appropriate.

The OSMP is intended to be a simple management tool that can be easily understood and used by the implementers and that is cost effective.

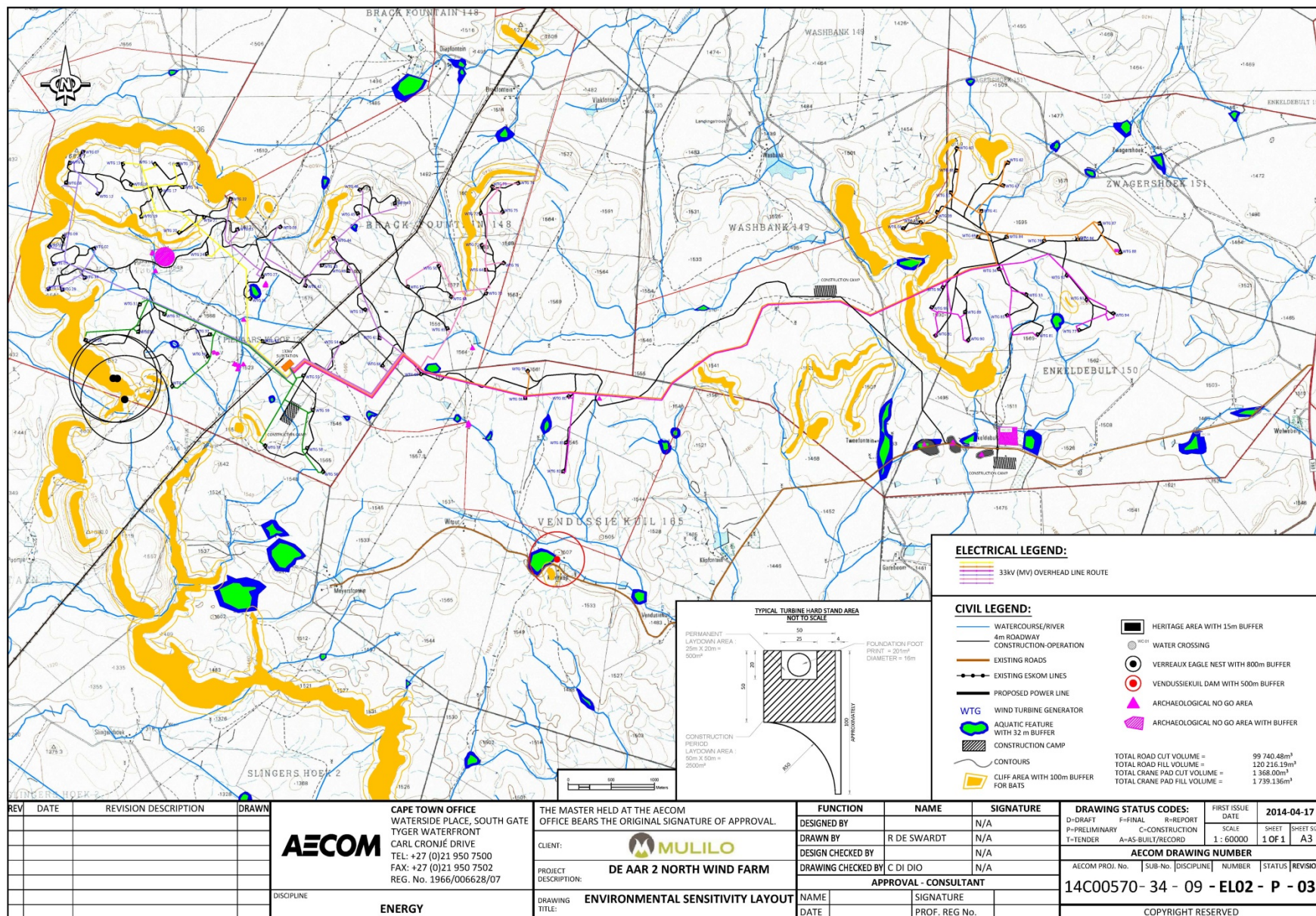


Figure 1: Environmental sensitivity map