

Reg. No. 2017/213820/017

## **EXECUTIVE SUMMARY DOCUMENT**

Proposed Development of the Endangered Wildlife Operational Centre on Portion 6 of Farm Ruimte-74 in the Dinokeng Game Reserve, Limpopo Province.

Legacy EMC Project No.: 22044

24 February 2023

#### AIM OF THIS DOCUMENT

The purpose of this Executive Summary Document (ESD) is:

- To provide potential interested and affected parties (I&APs) with background information regarding the proposed development application.
- To provide an outline of the Basic Assessment Process that will be undertaken; and
- To provide details on how you can register as an I&AP, participate in the Basic Assessment Process and comment on the application.

#### INTRODUCTION

Legacy Environmental Management Consulting (Pty) Ltd. (Legacy EMC) has been appointed by the Endangered Wildlife Operational Center NPC (the applicant) as the independent Environmental Assessment Practitioner (EAP) to undertake the Basic Assessment Process in terms of the National Environmental Management Act, 1998 (No 107 of 1998, as amended) (NEMA) and the 2014 Environmental Impact Assessment (EIA) Regulations (as amended) for the proposed development of an Endangered Wildlife Operational Center (EWOC) on Portion 6 of Farm Ruimte-74 in the Dinokeng Game Reserve, Limpopo Province.

## DEVELOPMENT PROPOSAL

The proposed Facility will be constructed on approximately 30 hectares of Portion 6 of Farm Ruimte-74, see Figure 1, which is situated within the Bela-Bela Local Municipality, Limpopo Province, and will entail the following:

- Staff accommodation ±528 m<sup>2</sup>;
- A fully equipped veterinary hospital ±3783 m<sup>2</sup>;
- Wildlife animal enclosures ±6 711 m<sup>2</sup> (this includes future animal holding areas);
- Tourism Information Hub ±255 m<sup>2</sup>;
- 5 m Clearance Building Platforms ±18 300 m<sup>2</sup>; and
- Access Roads (gravel) ±5 423 m<sup>2</sup>.

As per the Civil Engineering Services Report (dated November 2021, by WEC Consulting Engineers), water for the proposed development is intended to be sourced from an existing active borehole (BH7) which is located at the following coordinates 25°16'41.5" S 28°21'03.7" E.

The proposed site is located within the Quaternary Catchment 'A23C'. The National Water Act (No. 36 of 1998) (NWA) permits a maximum abstraction volume of groundwater at this location in the 'A23C' catchment at 45 m<sup>3</sup>/ha/year.

As per the Borehole Test Certificate (dated 27 May 2021, by Boorgat Guru), the actual yield of the existing borehole is 6 000 litres per hour, while the maximum allowable groundwater abstraction volume calculated is 30 Ha x 45 m<sup>3</sup> = 1.35 M<sup>2</sup> per year. Further, this equates to a maximum abstraction rate of approximately 3 700  $\ell$ /day that may be abstracted from this borehole.



Figure 1: The location of the proposed Endangered Wildlife Operational Center. The total footprint of the proposed EWOC and associated infrastructure is  $\pm 342.857m^2$ .

Road infrastructure to the location comprises gravel roadways surrounding the plot's perimeter, accessed mainly via the N1 freeway, onto the R734 offramp and a gravel road (parallel to the N1) for approximately 25 km. There are also minor gravel roads surrounding the nearby existing development on the Eastern portion of the Farm.

No formal water, stormwater or sewer infrastructure currently exists near the proposed site. As per the Civil Engineering Services Report, the average daily water demand for the proposed development is 0.84 peak flow ( $\ell$ /s), and the average daily sewerage runoff is 0.45 peak flow ( $\ell$ /s). A preliminary layout of the internal reticulation network will only be available during the detailed design phase.

Connection of a new internal sewer network cannot be made to nearby existing infrastructure due to the remote location of the development site. Therefore, sewerage generated by the facilities on the site will be discharged onto a closed system/package plant. EWOC proposes using the CALCAMITE BloMite Treatment Plant, a SABS-approved septic tank. From the septic tank, sewage is transferred to the Waste Water Treatment Plant (WWTP) tanks, treated to odourless and clear waste water to a water quality standard that is safe for re-use for irrigation or dust suppression on the site. The system is entirely automated and requires no full-time operator on site. The WWTP will be constructed within concrete bunds to capture potential spills and prevent possible soil and groundwater contamination. The WWTP will reach full working efficiency within ninety days (bio-mass to be built up) on the condition that eco-friendly chemicals are introduced and maintained at all times.

The solid general and health care risk waste (general and hazardous) generated by the Facility will be removed by a private service provider weekly and disposed of at the closest licenced Waste Management Facility.

As per the Electrical Load Report prepared by Elfranja Boerdery CC (5 August 2021), there is an 11kV line with a 50kVA transformer next to the site that would be available to feed the electrical load required for the proposed development. However, it is recommended that since the load is spread out over a large area, it may be prudent to consider powering some of the smaller loads (i.e., electric fencing and lights) from a small solar system(s). This can easily be applied to all the animal enclosures remote from the main hospital. It may also be feasible to consider installing a more extensive solar system for the main hospital to circumvent load shedding and save some costs. It would eliminate the need for a standby generation unit if designed correctly.

# ENVIRONMENTAL LEGISLATIVE REQUIREMENTS IN TERMS OF THE NEMA

In terms of the NEMA, the Minister of Environmental Affairs has made regulations pertaining to environmental impact assessment and published lists of activities that would require environmental authorisation prior to commencement of that activity.

Listed activities must be subject to either a Basic Assessment or a Scoping and Environmental Impact Assessment Process, as set out in the 2014 EIA Regulations (as amended) made under sections 24(5) and 44 of the NEMA.

The proposed project triggers the following listed activity(ies):

#### Activities in terms of Listing Notice 1:

#### Activity 4

The development and related operation of facilities or infrastructure for the concentration of animals in densities that exceed— (i) 20 square metres per large stock unit and more than 500 units per facility.

#### **Activity 9**

The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water— (i) with an internal diameter of 0,36 metres or more; or (ii)with a peak throughput of 120 litres per second or more.

#### Activity 10

The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes–

(i) with an internal diameter of 0,36 metres or more; or

(ii) with a peak throughput of 120 litres per second or more.

#### Activity 27

The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—

(i) the undertaking of a linear activity; or

(ii) maintenance purposes undertaken in accordance with a maintenance management plan.

#### Activity 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; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.

#### Activity 30

Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).

#### Activities in terms of Listing Notice 3:

#### Activity 2

The development of reservoirs, excluding dams, with a capacity of more than 250 cubic metres.

- (e) Limpopo-
- (ii) Outside urban areas:

(ff) 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.

#### Activity 4

The development of a road wider than 4 metres with a reserve less than 13,5 metres.

- (e) Limpopo—
- ii. 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.

#### Activity 5

The development of resorts, lodges, hotels, tourism or hospitality facilities that sleeps 15 people or more.

(e) Limpopo-

## ii. 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.

#### 0 Activity 12

The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.

## (e) Limpopo-

i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;

ii. Within critical biodiversity areas identified in bioregional plans; or

iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space. conservation or had an equivalent zoning.

#### 2 Activity 18

The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.

(e) Limpopo-

ii. 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; or

(hh) Areas within a watercourse; or within 100 metres from the edge of a watercourse.

#### **BASIC ASSESSMENT PROCESS**

A Basic Assessment Process will be undertaken to provide the competent authority, the Limpopo Provincial Department of Economic Development, Environment and Tourism (LEDET), with information about the potential impacts of the proposed development as well as possible mitigation measures for the predicted impacts.

The steps in the Basic Assessment process are as follows:

- Step 1: I&AP Notification and Registration; and Availability of a Draft Basic Assessment Report (BAR) for a 30-day comment period.
- Step 2: Prepare a Final BAR (which reflects the incorporation of comments received) and submit it to the LEDET for a decision, to grant or refuse the Environmental Authorisation (EA).

Step 3: Notify Registered I&APs of the decision (to grant or refuse the EA) and their right to appeal the decision.

#### **SPECIALIST STUDIES**

The following specialist and technical reports were prepared to identify, assess, and mitigate potential impacts associated with the development proposal:

- Civil Engineering Services Report; 2
- 2 Electrical Load Report;
- 2 Borehole Water Quality Results;
- 2 Borehole Test Certificate;
- Ecological Assessment Report (inclusive of fauna and 2 flora); and
- Heritage Screening Report. 2

Full copies of the above reports are attached as appendices to the draft BAR and are also available for comment.

#### **IDENTIFIED ENVIRONMENTAL IMPACTS**

The potential positive and negative environmental impacts associated with the proposed development include the following:

- 2 Ecological Impacts, including loss or destruction of faunal and floral habitat.
- 2 Loss of Threatened or Protected Species (ToPs) Protected Tree Species.
- 2 Nuisances, such as localised noise and/or dust during the construction phase.
- 2 Stormwater runoff and associated erosion due to site clearance for construction.
- 2 Limited temporary job opportunities during the construction phase.

The heritage screening report identified no significant heritage impacts because of the proposed development.

The identified impacts have been investigated and assessed, and the negative impacts are of a low significance (after mitigation). The required impact management actions (mitigation measures) are described in the Environmental Management Programme (EMPr).

#### INVITATION TO COMMENT

The Draft BAR and EMPr are available for a 30-day comment period in hard copy at the Mphebatho Community Library, as well as electronically on the following website: www.legacyemc.co.za from Tuesday 28 February 2023 to Friday 31 March 2023.

#### HOW TO PARTICIPATE AND REGISTER AS AN I&AP

Members of the public are hereby invited to register as I&APs and/or submit written comments on the Draft BAR to Legacy EMC on or before 31 March 2023.

A register of I&APs will be opened and maintained containing the names, contact details and addresses of all persons who

have submitted written comments or who have requested in writing for their names to be placed on the register, as well as all relevant organs of state. Written submissions should please refer to the project name, and include the I&APs name, contact details (postal address, fax number and e-mail address), and an indication of any direct business, financial, personal, or other interest which the party may have in the approval or refusal of the application.

To submit written comments, register as an I&AP for the project or for further information, please submit **in writing** your complete contact details; your interest in the proposed project (direct business, financial, personal, etc.) as well as your comments and/or concerns to Legacy EMC, as listed below. **Note**: In registering as an I&AP, you consent to the processing of your personal information by Legacy EMC, as contemplated in the Protection of Personal Information Act (4 of 2013) (POPIA).

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The IAP registration period will be open from **Tuesday 28** February 2023 to Friday 31 March 2023.

The following documents are attached to this Executive Summary Document:

#### I&AP Registration, Consent and Comment Form