FRESHWATER COMPLIANCE STATEMENT

Remaining Portion of Farm 139, Zandhoogte, Tergniet.

Prepared for Cape EAPrac

by

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aquatic consulting & research

DECLARATION OF SPECIALIST INDEPENDANCE

- I consider myself bound to the rules and ethics of the South African Council for Natural Scientific Professions (SACNASP);
- At the time of conducting the study and compiling this report I did not have any interest, hidden or otherwise, in the proposed development that this study has reference to, except for financial compensation for work done in a professional capacity;
- Work performed for this study was done in an objective manner. Even if this study results in views and findings that are not favourable to the client/applicant, I will not be affected in any manner by the outcome of any environmental process of which this report may form a part, other than being members of the general public;
- I declare that there are no circumstances that may compromise my objectivity in performing this specialist investigation. I do not necessarily object to or endorse any proposed developments, but aim to present facts, findings and recommendations based on relevant professional experience and scientific data;
- I do not have any influence over decisions made by the governing authorities;
- I undertake to disclose 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 a competent authority to such a relevant authority and the applicant;
- I have the necessary qualifications and guidance from professional experts in conducting specialist reports relevant to this application, including knowledge of the relevant Act, regulations and any guidelines that have relevance to the proposed activity;
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- All the particulars furnished by me in this document are true and correct.

Specialist: Dr. James Dabrowski (Ph.D., Pr.Sci.Nat. Water Resources)

Date: 3 March 2021

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1. INTRODUCTION

Confluent Environmental was appointed by Cape EAPrac to undertake a freshwater survey for a proposed residential property development on the Remaining Portion of Farm 139, Zandhoogte, Tergniet in the Western Cape. The development involves the construction of a group housing development. The site has been classified as having '**Low**' aquatic biodiversity by the Department of Environmental Affairs (DEA) screening tool.

The scope of work for this report is guided by the legislative requirements of the National Environmental Management Act (NEMA).

1.1 National Environmental Management Act

According to the protocols specified in GN 1540 (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), assessment and reporting requirements for aquatic biodiversity are associated with a level of environmental sensitivity identified by the national web-based environmental screening tool (screening tool). 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:

- **Very High** sensitivity for aquatic biodiversity, must submit an Aquatic Biodiversity Specialist Assessment; or
- **Low** sensitivity for aquatic biodiversity, must submit an Aquatic Biodiversity Compliance Statement.

The screening tool classified the site as being of **Low** aquatic biodiversity. According to the protocol, a site sensitivity verification must be undertaken to confirm the sensitivity of the site as indicated by the screening tool:

- Where the information gathered from the site sensitivity verification differs from the screening tool designation of **Low** aquatic biodiversity sensitivity, and it is found to be of a **Very High** sensitivity, an Aquatic Biodiversity Specialist Assessment must be submitted.

1.2 Scope of Work

The objectives of this assessment included the following:

- To undertake a desktop analysis and site inspection to verify the sensitivity of aquatic biodiversity as **Very High** or **Low**; and
- Compile an Aquatic Biodiversity Compliance Statement or Aquatic Biodiversity Specialist Assessment based on the site verification of the sensitivity of the site.

2. APPROACH

The following rationale was adopted to determine the sensitivity of aquatic biodiversity within the footprint of the site:

- In the event that watercourses are confirmed to fall within the development footprint and that these watercourses will be impacted by the development, then the site

sensitivity is confirmed as **Very High** and a full specialist freshwater assessment is required; and

- In the event that no watercourses are identified within the development footprint the site sensitivity is confirmed as **Low** and an Aquatic Compliance statement is required.

The determination of the site sensitivity relied upon the following approaches:

- Interrogation of available desktop resources including:
    - DWS spatial layers;
    - National Freshwater Ecosystem Priority Areas (NFEPA) spatial layers (Nel et al., 2011);
    - National Wetland Map 5 and Confidence Map (CSIR, 2018) – the latest national wetland inventory map for South Africa;
    - Western Cape Biodiversity and Spatial Plan (WCBSP) for Mossel Bay (CapeNature, 2017).
- A site visit was undertaken, during which time the following activities were undertaken:
    - Identification and classification of watercourses within the footprint of the site according to methods detailed in Ollis et al. (2013);
    - Soil augering to confirm the presence of soil indicators (DWAF, 2005) that may indicate the presence of a wetland (if applicable); and
    - Identification of hydrophilic plant species that may indicate the presence of wetland plant species (if applicable).

3. DESKTOP SURVEY

The site falls within Primary Catchment K (Kromme) area and in quaternary catchment K10F. According to geospatial data sources no freshwater features are indicated to occur within the footprint of the property or within close proximity to the property (Figure 1). Furthermore, the site does not fall within a sub-quaternary catchment (SQC) that has been categorised as a Freshwater Ecosystem Priority Area (FEPA) or a Strategic Water Source Area (SWSA).

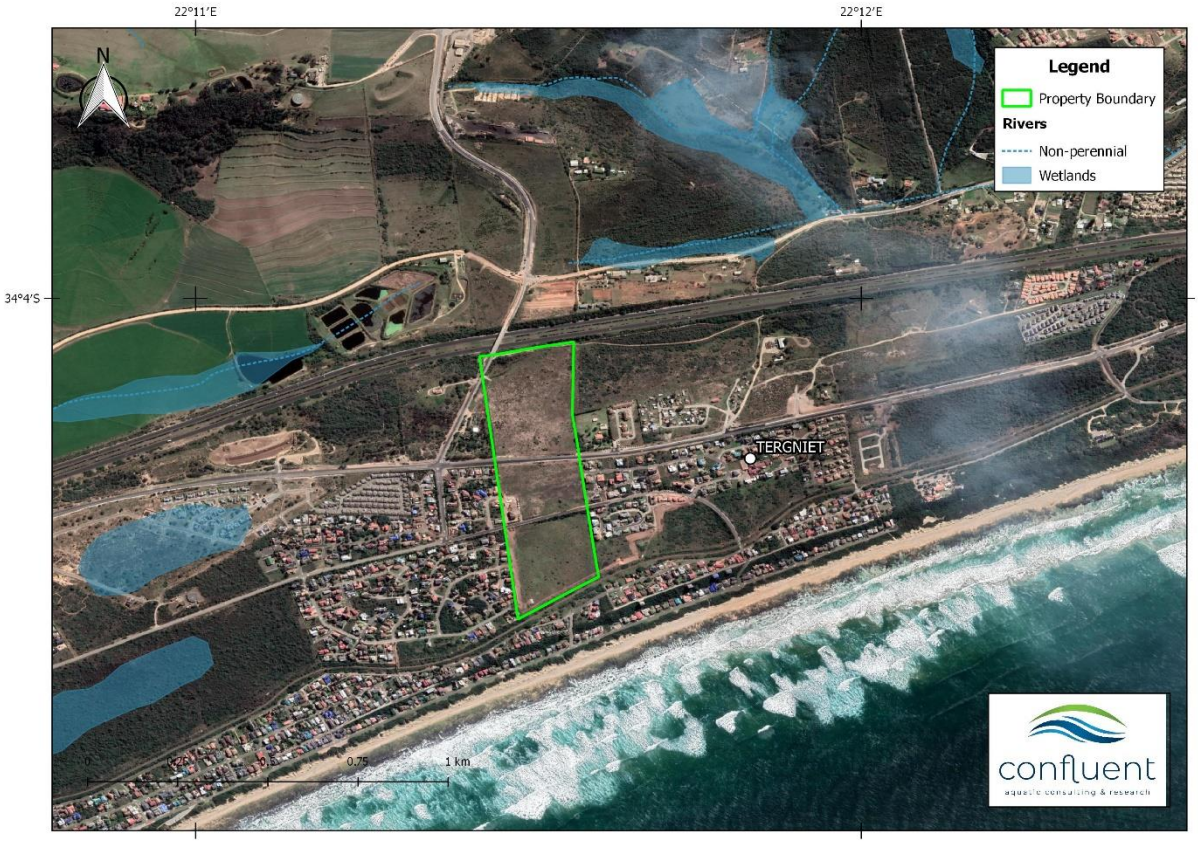

Figure 1: Location of the property in relation to mapped freshwater features.

4. SITE VISIT

The vegetation on the property was described by Vlok (2020) as follows:

"The remnant natural vegetation in the immediate area, such as those along the railway line to the south of the property, confirms that the vegetation on the property did consist of Hartenbosch Dune Thicket (Groot Brak Dune Strandveld). The Dune Thicket was, however, removed from the entire proposed development area and the area was used as agricultural lands thereafter. These lands have not been ploughed for many years and some natural vegetation has established on the old lands. In the area south of Impala street the re-established vegetation has not been disturbed much in recent years and some shrubs have established, but the area north of Impala street has been brushcutted frequently (presumably to control alien vegetation and to reduce fire risk) and the vegetation now consists mostly of grasses and herbs. It is estimated that the proposed development area has a cover of about 50% of indigenous species, with an additional cover of about 20% of alien species (mostly Acacia cyclops and especially Pennisetum clandestinum)."

Furthermore, the report confirmed that the proposed development area does not contain sensitive wetland habitat. This was confirmed during the site visit conducted by the freshwater specialist on the 3rd of March 2020. Two main roads cross the property (R102 and Blesbok Road). The property slopes downwards to the sea from north to south. There are no clear areas of natural drainage on the property and no hydro-geomorphological landscape features indicating the presence of a watercourse (i.e. stream, river or wetland) (Figure 2). No hydrophilic wetland plant species were present on site. It can therefore be concluded, with a

high degree of confidence, that no freshwater features occur within the footprint of the property.

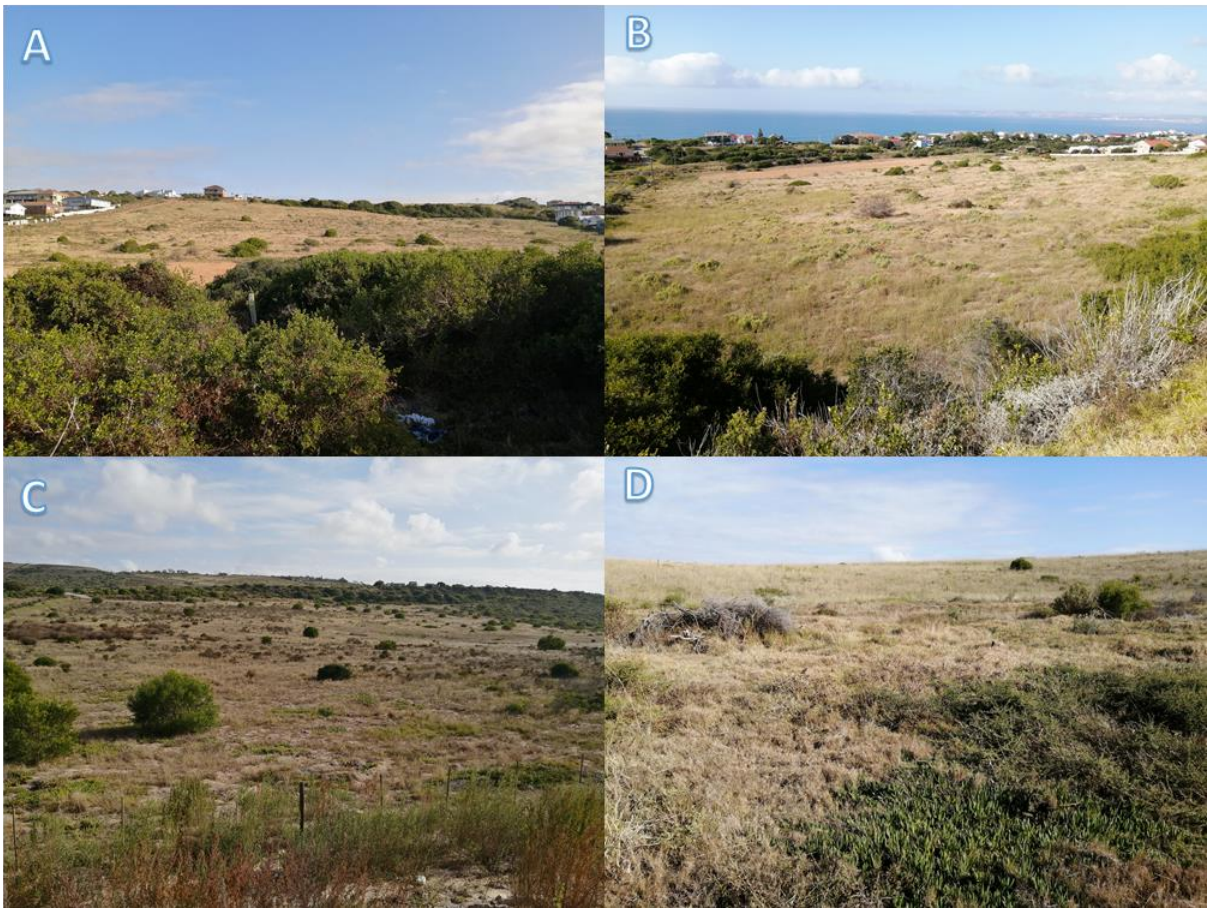

Figure 2: Photographs of the property including view to the north from the southern-most boundary (A), view to the south from Blesbok Street (B), view to the north from Blesbok Street (C) and view to the north from the R102 (D).

5. AQUATIC BIODIVERSITY COMPLIANCE STATEMENT

Based on the results of the desktop review and the site verification, the sensitivity of aquatic biodiversity on Portion 19 of Farm 257 can be regarded as **Low.** The development will not impact on any freshwater biodiversity and no impact management interventions are required in this respect.

6. REFERENCES

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