

### SITE VERIFICATION REPORT

PROPOSED DEVELOPMENT OF ERF 1327 AND 1328, STRUBENSVALLEI EXTENSION 24

### **FINAL**

#### **Proponent:**

Renico Construction (Pty) Ltd.

#### **Project Reference:**

22040-Strubensvallei Ext 24

#### **Report Date:**

December 2021

#### **Report Reference:**

22040-SVA-1

### **DOCUMENT CONTROL**

| Project Name               | The Proposed Development of Erf 1327 And 1328, Strubensvallei |
|----------------------------|---------------------------------------------------------------|
|                            | Ext 24, City of Johannesburg                                  |
| Report Title               | Site Verification Assessment                                  |
| Authority Reference Number | GAUT 002/21-22/E2896                                          |
| Report Status              | Public Review                                                 |

| Applicant Name | Renico Construction (Pty) Ltd. |
|----------------|--------------------------------|
|                |                                |

|                            | Name                                  | Signature | Date    |
|----------------------------|---------------------------------------|-----------|---------|
|                            |                                       |           |         |
| Document Compilation       | Ms. V Stippel                         | National  |         |
|                            | (MSc. Animal, Plant and               | Societies | 2021/12 |
|                            | Environmental Science).  <br>Reg. EAP |           |         |
|                            | Pr.Sci.Nat.                           |           |         |
| Site Visit and Site Photos | Mr. D. J. Meintjes                    | /         |         |
|                            | (B.Sc. Hons. Geog & Env.              | Mente     | 2021/02 |
|                            | Man.) (Cum Laude)                     | War Cong  |         |
|                            | Cand.Nat.Sci.(Pending)                |           |         |
| Document Review            | Mr. D. Botha                          |           |         |
|                            | (M.A. Env.Man.) (PHED)                | OR.       | 2021/12 |
|                            | Wetland Specialist  <br>Reg. EAP      | (S)Offer  | 2021/12 |
|                            | Pr.Sci.Nat.                           |           |         |
| Document Signoff           | Mr. D. Botha                          | 00        |         |
|                            | (M.A. Env.Man.) (PHED)                | G Boller  |         |
|                            | Wetland Specialist                    |           | 2021/12 |
|                            | Reg. EAP                              |           |         |
|                            | Pr.Sci.Nat.                           |           |         |

### **DOCUMENT PROGRESS**

### **Distribution List**

| Date               | Report Reference<br>Number | Document Distribution | Number of Copies |
|--------------------|----------------------------|-----------------------|------------------|
| 1 December<br>2021 | 22040-SVR-1                | GDARD                 | Online           |
|                    |                            |                       |                  |
|                    |                            |                       |                  |

### **Amendments on Document**

| Date | Report | Reference Number | Description of Amendment |
|------|--------|------------------|--------------------------|
|      |        |                  |                          |
|      |        |                  |                          |
|      |        |                  |                          |
|      |        |                  |                          |
|      |        |                  |                          |

### INDEMNITY AND CONDITIONS RELATING TO THIS REPORT

The findings, results, observations, conclusions and recommendations given in this report are based on the author's best scientific and professional knowledge as well as available information. The report is based on survey and assessment techniques which are limited by time and budgetary constraints relevant to the type and level of investigation undertaken and Prism Environmental Management Services and its staff reserve the right to modify aspects of the report including the recommendations if and when new information becomes available from ongoing research or further work in this field, or pertaining to this investigation.

Although Prism Environmental Management Services exercises due care and diligence in rendering services and preparing documents, Prism Environmental Management Services accepts no liability, and the client, by receiving this document, indemnifies Prism Environmental Management Services and its directors, managers, agents and employees against all actions, claims, demands, losses, liabilities, costs, damages and expenses arising from or in connection with services rendered, directly or indirectly by Prism Environmental Management Services and by the use of the information contained in this document.

This report must not be altered or added to without the prior written consent of the author. This also refers to electronic copies of this report which are supplied for the purposes of inclusion as part of other reports, including main reports. Similarly, any recommendations, statements or conclusions drawn from or based on this report must make reference to this report. If these form part of a main report relating to this investigation or report, this report must be included in its entirety as an Annexure or separate section to the main report.

### **COPYRIGHT**

Copyright on all documents, drawings and records, whether manually or electronically produced, which form part of the submission and any subsequent report or project document, shall vest in Prism Environmental Management Services.

The client, on acceptance of any submission by Prism Environmental Management Services and on condition that the client pays to Prism Environmental Management Services the full price for the work as agreed, shall be entitled to use for its own benefit:

- The results of the project;
- The technology described in any report; and
- Recommendations delivered to the client.

Should the applicant wish to utilise any part of, or the entire report, for a project other than the subject project, permission must be obtained from Prism Environmental Management Services to do so. This will ensure validation of the suitability and relevance of this report on an alternative project.

### **TABLE OF CONTENTS**

| 1 | INT        | TRODUCTION                                                         | 7  |
|---|------------|--------------------------------------------------------------------|----|
| 2 | RE         | QUIREMENTS OF THE SITE SENSITIVITY VERIFICATION AND REPORT OUTLINE | 8  |
| 3 | DE.        | TAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)           | 10 |
| 4 | DE         | SKTOP ASSESSMENT OF SENSITIVITY                                    | 12 |
|   | 4.1        | PROJECT LOCATION                                                   | 12 |
|   | 4.2        | SUMMARY OF THE FINDINGS OF THE NATIONAL SCREENING TOOL             | 14 |
|   | 4.3        | Additional Desktop Sensitivity Assessment                          | 14 |
| 5 | SA         | TELLITE IMAGERY ASSESSMENT                                         | 17 |
|   | 5.1        | HISTORICAL IMAGERY                                                 | 17 |
|   | 5.2        | Existing Status                                                    | 19 |
|   | 5.3        | CIVIL AVIATION                                                     | 20 |
| 6 | SIT        | TE VERIFICATION                                                    | 21 |
|   | 6.1        | SITE CONDITIONS                                                    | 21 |
|   | 6.2        | Updated Sensitivity                                                | 24 |
| 7 | со         | ONCLUSION                                                          | 27 |
| 8 | AN         | INEXURES                                                           | 28 |
|   | <b>8</b> 1 | NATIONAL SCREENING TOOL REPORT                                     | 28 |

### **LIST OF FIGURES**

| FIGURE 4-1: LOCALITY MAP                                                    | 12 |
|-----------------------------------------------------------------------------|----|
| FIGURE 4-2: AERIAL LOCALITY MAP                                             | 13 |
| FIGURE 4-3: GPEMF                                                           | 15 |
| FIGURE 4-4: C-PLAN, RIVERS AND STREAMS AND THREATENED ECOSYSTEMS            | 16 |
| FIGURE 4-5: SURFACE WATER                                                   | 16 |
| FIGURE 4-6: GAPA                                                            | 17 |
| FIGURE 5-1: GOOGLE EARTH IMAGERY – SEPTEMBER 2007                           | 18 |
| FIGURE 5-2: GOOGLE EARTH IMAGERY – DECEMBER 2011                            | 18 |
| FIGURE 5-3: GOOGLE EARTH IMAGERY – MAY 2017                                 | 19 |
| FIGURE 5-4: GOOGLE EARTH IMAGERY – CURRENT STATUS                           | 19 |
| FIGURE 5-5: DISTANCE TO LANSERIA AIRPORT                                    | 20 |
| FIGURE 5-6: DISTANCE TO O.R. TAMBO AIRPORT                                  | 22 |
| LIST OF TABLES                                                              |    |
| Table 2-1: Report Outline                                                   | 9  |
| Table 3-1.: Details of the Assessor                                         | 10 |
| TABLE 4-1: DESKTOP SENSITIVITY AS IDENTIFIED BY THE NATIONAL SCREENING TOOL | 14 |
| TABLE 6-1: SITE PHOTOGRAPHS                                                 | 22 |

### 1 INTRODUCTION

The proposed Strubensvallei Ext. 24 will involve the development of Erf 1327 and Erf 1328. The following rights are applicable to Erf 1327:

Zoning: Residential 3Site Area: 1.9724 ha

Height 3 Storeys (with council consent))

Coverage 40%Floor Area Ratio (FAR) 0.4

Density 40 units per hectare

Number of units
 72 units

Number of Parking Bays: 166 parking bays

Refuse Area Details
 41 m<sup>2</sup>

Erf 1328 will not be developed but will remain public open space.

The site is affected by the future Metro Boulevard planned by the Johannesburg Roads Agency which is excluded from the project footprint. Necessary access, internal roads and services will also be put in place as follows:

- Water Services A new 110 mm diameter mPVC pipe (SANS 1283) will be put in place within the new access road and will connect to this existing pipe. The length of this connection is approximately 180m.
- Sewer Services A new 160mm-diameter uPVC CL 400 H/D pipe will connect into the existing sewer system by means of a new manhole. This new connection pipeline is approximately 51m in length.
- Stormwater services An internal stormwater reticulation system will be put in place and will utilize 160mm and 300mm pipes to direct stormwater to 300mm and 375mm OGEE pipe which will run down the eastern side of the development and lead to a stormwater attenuation pond which will be approximately 231 m² in extent. From there, a 450mm OGEE pipe will discharge water under the proposed Metro boulevard into Erf 1348. The length of this pipe is approximately 79m.
- Access The site access will be provided from the cul-de-sac intersecting with Fiddle Avenue. As part of the development, this new cul-de-sac and new section of surfaced road extending to the existing Fiddle Avenue road surface will be constructed to council standards and handed over to council upon completion and acceptance of the road infrastructure. This road will include one inbound lane with a minimum width of 3.0m and one outbound lane with a minimum width 4.5m. A 2m paved sidewalk along the northern side of the cul-de-sac will also be provided.

It should be noted that whilst the development includes both Erf 1327 and 1328, the development footprint is limited to Erf 1327 as Erf 1328 will remain as public open space and will not be developed.

Further, please note: a townplanning application has been submitted to the City of Johannesburg and the layout plan approved in 2011. Conditions of establishment were subsequently provided on 16 September 2011 and the township proclaimed on 11 March 2014.

In addition, an Environmental Authorisation process was undertaken in 2011 and was subsequently approved by the Gauteng Department of Agriculture and Rural Development (GDARD) on 15 December 2011 (GAUT:006/11-12/E0075). Whilst this EA has since lapsed, this current assessment (including new specialist studies) have determined that impacts related to the development can be satisfactorily mitigated as such this Basic Assessment Report recommends the project be approved.

**Prism Environmental Management Services (Prism EMS)** has been appointed to undertake the requisite Environmental Authorisation process.

In line with the recent Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of Section 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 when applying for Environmental Authorisation (GN 320 of 20 March 2020), a Site Sensitivity Verification is required prior to commencing with the specialist assessment and aims to confirm the sensitivity of the site identified by the National Screening Tool.

This Site Verification Report aims to provide the findings of this Site Sensitivity Verification and will included as an appendix to the Basic Assessment Report.

## 2 REQUIREMENTS OF THE SITE SENSITIVITY VERIFICATION AND REPORT OUTLINE

In terms of GN 320 of 20 March 2020, the site sensitivity verification can be undertaken by an environmental assessment practitioner (EAP) or a specialist and should utilize the following methodology:

- A desk top analysis, using satellite imagery;
- A preliminary on-site inspection; and
- Any other available and relevant information.

Further, the outcome of the site sensitivity verification must be recorded in a report that-

- Confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.:
- Contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and
- Is submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations1 (EIA Regulations).

In order to ensure these requirements are met, they are tabulated together with the associated chapter name in Table 2-1.

**Table 2-1: Report Outline** 

| Chapter   | Chapter Name             | Link to GN 320 of 20 March 2020                          |
|-----------|--------------------------|----------------------------------------------------------|
| Number    |                          |                                                          |
| Chapter 1 | Introduction             | -                                                        |
| Chapter 2 | Requirements of the Site | -                                                        |
|           | Sensitivity Verification |                                                          |
|           | and Report Outline       |                                                          |
| Chapter 3 | Details of Environmental | -                                                        |
|           | Assessment Practitioner  |                                                          |
| Chapter 4 | Desktop Assessment of    | Any other available and relevant information             |
|           | Sensitivity              |                                                          |
| Chapter 5 | Satellite Imagery        | A desk top analysis, using satellite imagery             |
|           | Assessment               |                                                          |
| Chapter 6 | Site Verification        | A preliminary on-site inspection                         |
|           |                          | Contains evidence (e.g. photographs) of either the       |
|           |                          | verified or different use of the land and environmental  |
|           |                          | sensitivity                                              |
| Chapter 7 | Conclusion               | Confirms or disputes the current use of the land and the |
|           |                          | environmental sensitivity as identified by the screening |
|           |                          | tool, such as new developments or infrastructure, the    |
|           |                          | change in vegetation cover or status etc.;               |
|           |                          | Contains a motivationof either the verified or different |
|           |                          | use of the land and environmental sensitivity            |

Prism EMS 9

# 3 DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Prism EMS have been appointed to undertake the required Environmental Authorisation Process in terms of the National Environmental Management Act (NEMA), 1998 (Act 108 of 1998) and the associated Environmental Impact Assessment (EIA) Regulations, 2014 (as amended). Details of the Environmental Assessment Practitioner who was responsible for the Site Verification is provided in Table 3-1 and the relevant Curriculum Vitae is included in the Basic Assessment Report.

Table 3-1.: Details of the Assessor

| Assessor:       | Vanessa Stippel                                                                   |  |  |  |
|-----------------|-----------------------------------------------------------------------------------|--|--|--|
| Company:        | Prism Environmental Management Services                                           |  |  |  |
| Qualifications: | Sc. Ecology, Environment and Conservation                                         |  |  |  |
| Experience:     | 10+ years                                                                         |  |  |  |
| Affiliation/    | Professional Member of Southern African Institute of Ecologists and Environmental |  |  |  |
| Registration    | Scientists                                                                        |  |  |  |
|                 | SACNASP Pr.Sci.Nat. (116221)                                                      |  |  |  |
|                 | EAPASA Registered EAP (2019/175)                                                  |  |  |  |
| Address:        | PO Box 1401, Wilgeheuwel, 1736                                                    |  |  |  |
| Tel:            | 087 985 0951                                                                      |  |  |  |
| Fax:            | 086 601 4800                                                                      |  |  |  |
| Email:          | vanessa@prismems.co.za                                                            |  |  |  |

| Designation   | Name                                       | Qualification           | Professional Registration                                                                                         | Specialist                                    |
|---------------|--------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
|               |                                            |                         |                                                                                                                   | Assessment                                    |
|               | 1                                          | Р                       | rism EMS Team                                                                                                     |                                               |
| Contact       | Post: PO Bo                                | ox 1401,                | Tel: 087 985 0951                                                                                                 |                                               |
| Details       | Wilgeheuwel                                | , Johannesburg,         | Fax: 086 601 4800                                                                                                 |                                               |
|               | 1736                                       |                         | Email: prism@prismems.co.za                                                                                       |                                               |
|               |                                            |                         | Website: www.prismems.co.za                                                                                       |                                               |
| Principal EAP | De Wet<br>Botha<br>18 years'<br>Experience | MA. Env. Man.<br>(PHED) | South African Council for Natural Scientific Professions (SACNASP) registered Scientist   Pr.Sci.Nat. (119979)    | Project Director<br>and Wetland<br>Specialist |
|               | Experience                                 |                         | Registered Member of Environmental<br>Assessment Practitioners Association of<br>South Africa (EAPASA)(2019/1209) |                                               |
|               |                                            |                         | Member of the International Association for Impact Assessors (IAIAsa) (1653)                                      |                                               |
|               |                                            |                         | Member of the Gauteng Wetland Forum                                                                               |                                               |
|               |                                            |                         | Member of the South African Wetland Society                                                                       |                                               |

| Designation | Name               | Qualification                     | Professional Registration | Specialist<br>Assessment |
|-------------|--------------------|-----------------------------------|---------------------------|--------------------------|
| Junior EAP  | Daniel<br>Meintjes | B.Sc. Hons.<br>Geog & Env.<br>Man | Cand.Nat.Sci.(Pending)    | Site Visit               |

### 4 DESKTOP ASSESSMENT OF SENSITIVITY

### 4.1 Project Location

The proposed development is located on Erf 1327 and Erf 1328 of Strubensvallei Ext 24, in Region C of City of Johannesburg. The centre coordinates of the site are as follows:

- 26° 7'5.59"S; and
- 27°54'43.29"E

**Figure 4-1** provides an overview of the project locality and is followed by **Figure 4-2** which provides the aerial locality map.

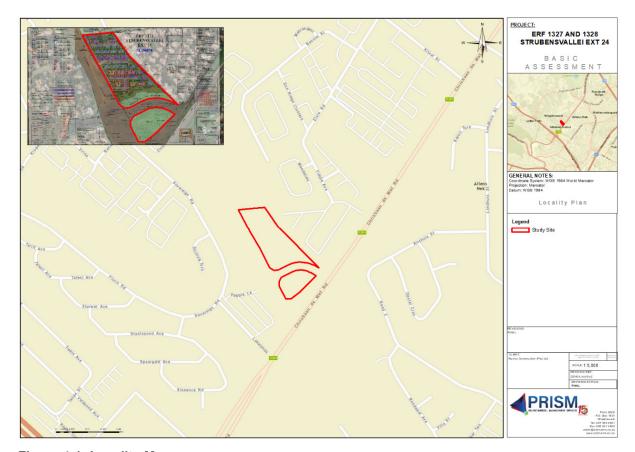


Figure 4-1: Locality Map



Figure 4-2: Aerial Locality Map

### 4.2 Summary of the Findings of the National Screening Tool

In terms of the Notice of the requirements to submit a report generated by the National Web Based Environmental Screening Tool in terms of Section 24(5)(h) of the National Environmental Management Act, 1998 and Regulation 18(1)(b)(v) of the EIA Regulations, 2014 (as amended) (GN 960 of 5 July 2019), a report generated on the National Screening tool must be submitted as part of the Application for Environmental Authorisation. It is also an important component of the site sensitivity verification, as the aim of the verification is to confirm/dispute the findings of the National Screening Tool Report.

As per the requirements, a Report has been generated and is included as Annexure 12.2. of this report. A summary of the findings of the report are included in Table 4-1.

Theme High **High Sensitivity** Medium Low Sensitivity Very Sensitivity Sensitivity Agricultural **Animal Species** Aquatic Biodiversity Archaeological and Cultural Heritage Civil Aviation Defence **Plant Species** Terrestrial Biodiversity

Table 4-1: Desktop Sensitivity as identified by the National Screening Tool

### 4.3 Additional Desktop Sensitivity Assessment

In addition, a desktop assessment of the site sensitivity has been undertaken (refer to Figure 4-3 to Figure 4-6) and the following should be noted:

• Erf 1327 occurs within Zone 1: Urban development Zone in terms of the Gauteng Provincial Environmental Management Framework (GPEMF). Whilst Erf 1328 occurs within Zone 2: High Control Zone within the Urban Development Zone (UDZ), this erf is excluded from the development footprint and will remain public open space.

- According to Gauteng Conservation (C-Plan), part of the site is affected by an Ecological Support Area (ESA) and Critical Biodiversity Area (CBA): Important Area.
- The site does not fall within a National Protected Area Expansion Strategy Focus Area nor Gauteng Protected Area Expansion Priority Area;
- The site is not declared as a Protected Area nor does it occur in close proximity to any Protected Areas;
- According to the Gauteng Agricultural Potential Atlas Version 4 (GAPA IV), the site is indicated as 'high". In contrast however, the National Screening tool indicates that the site has medium agricultural sensitivity.
  - The site is not protected in terms of any international convention.
- According to the National Wetland Map version 5 (NWM5) as presented by SANBI, one wetland area occurs on site.
- As part of the townplanning process which is ongoing, Conditions of Establishment have been provided by the City of Johannesburg and the township proclaimed. Erf 1328 is therefore already designated as public open space. The development footprint does not effect Erf 1328.
- The site does not fall within an Important Bird Area (IBA).
- From a desktop perspective, the site falls within the original extent of Egoli Granite Grassland which is a threatened ecosystem type in terms of the National Environmental Management Act: Biodiversity Act (Act No. 10 of 2004).

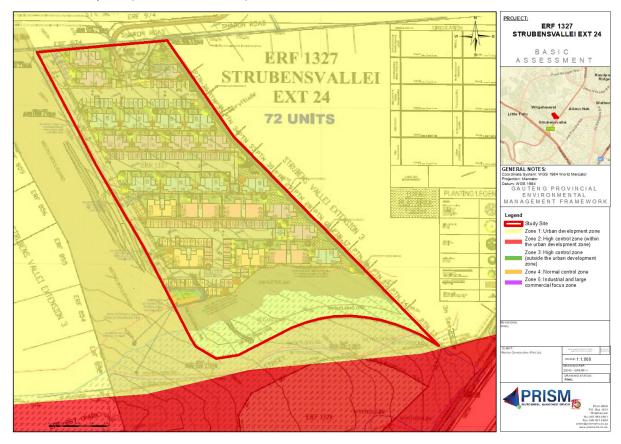


Figure 4-3: GPEMF

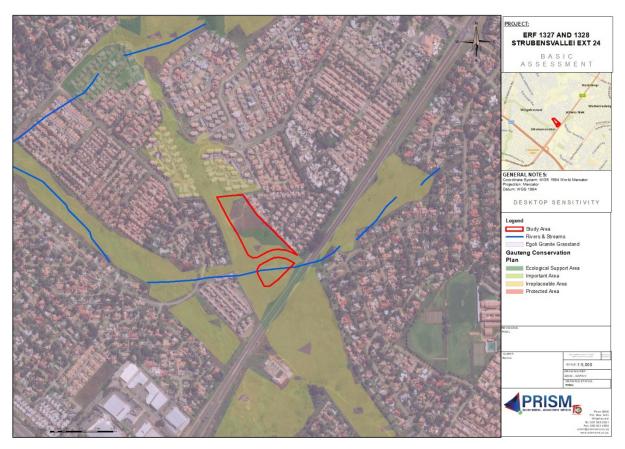


Figure 4-4: C-Plan, Rivers and Streams and Threatened Ecosystems

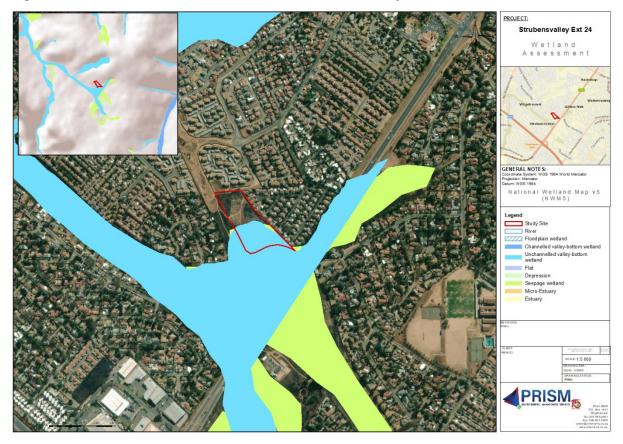


Figure 4-5: Surface Water

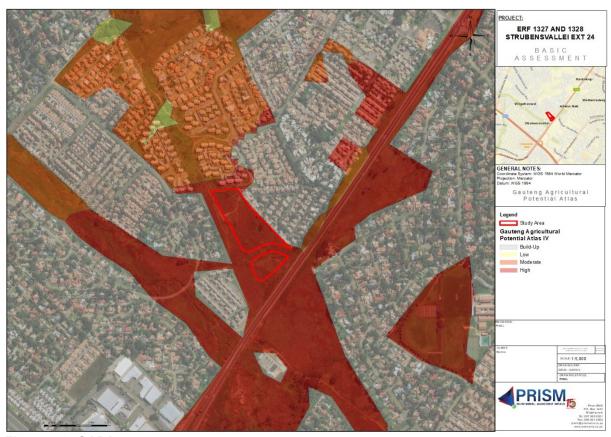


Figure 4-6: GAPA

### 5 SATELLITE IMAGERY ASSESSMENT

### 5.1 Historical Imagery

An assessment of the available historic imagery of the site was undertaken. Clear imagery was only available from September 2007 and showed the site appeared to be affected by developments in the area (Figure 5-1). A similar pattern was identified in the imagery from December 2011 and May 2017 (Figure 5-2 and Figure 5-3).



Figure 5-1: Google Earth Imagery - September 2007



Figure 5-2: Google Earth Imagery - December 2011



Figure 5-3: Google Earth Imagery - May 2017

### **5.2 Existing Status**

Google Earth imagery from 2021 shows that the site occurs in an area which has been built up. Medium to High Density Residential developments occur on all sides of the proposed development except for the south, which is bordered by Christian De Wet Road. (Figure 5-4).



Figure 5-4: Google Earth Imagery – Current Status

#### 5.3 Civil Aviation

According to the National Screening Tool, the site has a medium sensitivity in terms of civil aviation as it occurs between 15 km and 35 km from a major aerodrome.

Based on Google Earth, the closest aviation feature to the site is Lanseria International Airport which is approximately 20 km away from the site (Figure 5-5). O.R. Tambo International Airport is approximately 33 km away (Figure 5-6).

Google Earth imagery also suggests that the proposed development is in line with the current uses of the area.

Further, the proposed development is a two-three storey Residential 3 development and thus will have no impact on either airport.

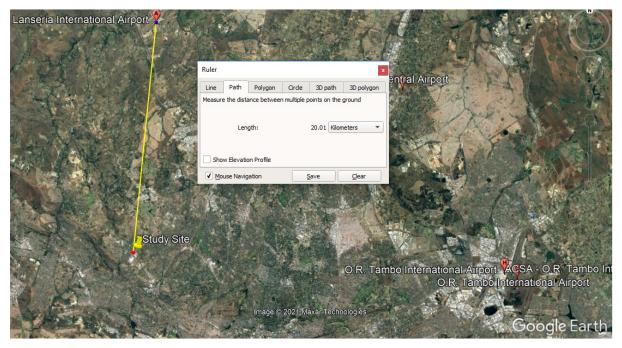


Figure 5-5: Distance to Lanseria Airport

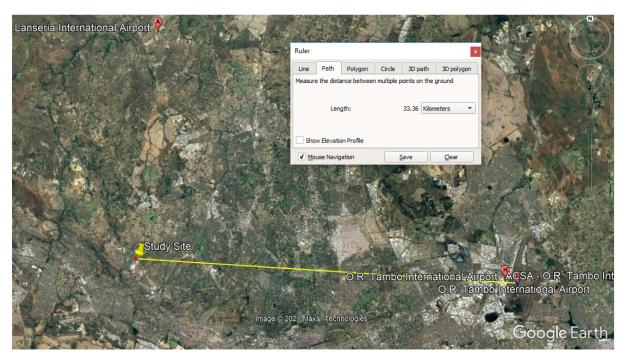


Figure 5-6: Distance to O.R. Tambo Airport

### 6 SITE VERIFICATION

### 6.1 Site Conditions

A Site Verification Assessment took place on 2 February 2021 by the Junior EAP and the following was noted:

- The site is surrounded by residential developments (mostly double storey).
- The site is degraded and there is multiple Invasive Alien Species visible.
- There is evidence of illegal dumping of building material.
- There is evidence of erosion.
- No civil aviation facilities were observed in the vicinity of the site.
- No defense facilities were observed in the vicinity of the site.

Table 6-1 provides photographs from the site verification assessment.

**Table 6-1: Site Photographs** 



Evidence of degradation



Evidence of patches of bare ground



Evidence of dumping



Adjacent residential developments

### 6.2 Updated Sensitivity

Based on the site verification assessment, the desktop sensitivity table (Table 4 1) was updated to better explain the current conditions. Information on the required specialist studies and general comments are also provided (Table 6-2).

**Table 6-2: Site Verification Sensitivity** 

| Theme                    | Very High   | High        | Medium      | Low          | General Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Specialist Study Proposed by                                                                                                                                                                       |
|--------------------------|-------------|-------------|-------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                          | Sensitivity | Sensitivity | Sensitivity | Sensitivity  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | EAP                                                                                                                                                                                                |
| Agricultural             |             |             |             | <b>√</b>     | <ul> <li>Historical imagery shows that the site has not been used for agriculture.</li> <li>The site occurs in a residential area and the proposed development is in line with this use as well as the requirements of the COJ 2040 Spatial Development Framework (SDF) and Region C SDF.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | • None                                                                                                                                                                                             |
| Animal Species           |             |             |             | $\checkmark$ | <ul> <li>From a desktop perspective, the development footprint occurs within the Original extent of a threatened ecosystem, ESA and CBA: Important Area.</li> <li>The site verification assessment however indicated that the site has low sensitivity as it is degraded.</li> <li>Alther perspective, the Alther perspective, perspective,</li></ul> | <ul> <li>Although from a desktop perspective, some sensitivity is possible, the site appears degraded.</li> <li>However, to confirm this, a</li> </ul>                                             |
| Plant Species            |             |             |             | $\checkmark$ |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Baseline Ecological Habitat<br>Assessment report which looked<br>at Flora, Avifauna, Mammals and<br>Herpetofauna was undertaken                                                                    |
| Terrestrial Biodiversity |             |             |             | $\checkmark$ |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | and is included in the Basic Assessment Report.                                                                                                                                                    |
| Aquatic Biodiversity     |             |             |             |              | From a desktop perspective,<br>the area to the south of the<br>development footprint is<br>affected by a wetland.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A Wetland Assessment has been undertaken to delineate this wetland and to recommend the necessary buffers for inclusion in the layout. This Assessment is included in the Basic Assessment Report. |

| Theme              | Very High   | High        | Medium      | Low          | General Comments                                                                                                                                                                                   | Specialist Study Proposed by   |
|--------------------|-------------|-------------|-------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
|                    | Sensitivity | Sensitivity | Sensitivity | Sensitivity  |                                                                                                                                                                                                    | EAP                            |
| Archaeological and |             |             |             |              | No evidence of                                                                                                                                                                                     | Due to the requirements of the |
| Cultural Heritage  |             |             |             | $\checkmark$ | archaeological or palaeontological sensitivity from a desktop or site perspective.                                                                                                                 |                                |
| Civil Aviation     |             |             |             | $\checkmark$ | <ul> <li>The closest airport is 20.1 km</li> <li>The site is in an existing residential area.</li> <li>No impacts to civil aviation are expected.</li> </ul>                                       | None                           |
| Defence            |             |             |             | $\checkmark$ | <ul> <li>The area was indicated as a low sensitivity in terms of defence.</li> <li>The site is in an existing residential area.</li> <li>No impacts to defence facilities are expected.</li> </ul> | • None                         |

### 7 CONCLUSION

Based on the findings of this verification assessment, the following specialist studies have been undertaken and are included in the Basic Assessment Report:

- Baseline Ecological Habitat Assessment;
- Wetland Assessment;
- · Hydropedological Assessment; and
- Heritage Impact Assessment.

No further sensitivities were identified that required specific specialist assessment and thus no further studies are deemed necessary.

### 8 ANNEXURES

### 8.1 National Screening Tool Report

# SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE ENVIRONMENTAL SENSITIVITY

**EIA Reference number:** 

**Project name:** 22040 - Strubensvallei Ext 24

**Project title:** Ecological Habitat Assessment Report

Date screening report generated: 09/03/2021 14:03:42

Applicant: Renico Construction (Pty) Ltd

**Compiler:** Prism EMS **Compiler signature:** 

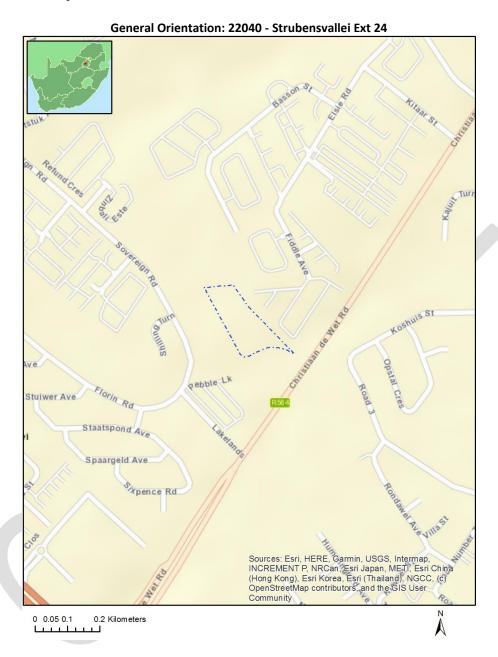
Application Category: Transformation of land | Indigenous vegetation

### **Table of Contents**

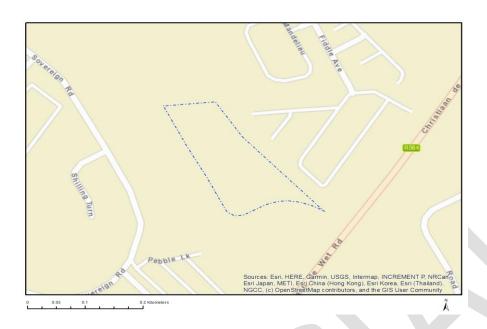
| Proposed Project Location                                                                                                                      | 3  |
|------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Orientation map 1: General location                                                                                                            | 3  |
| Map of proposed site and relevant area(s)                                                                                                      | 4  |
| Cadastral details of the proposed site                                                                                                         | 4  |
| Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area | 4  |
| Environmental Management Frameworks relevant to the application                                                                                | 5  |
| Environmental screening results and assessment outcomes                                                                                        | 5  |
| Relevant development incentives, restrictions, exclusions or prohibitions                                                                      | 5  |
| Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones             |    |
| Proposed Development Area Environmental Sensitivity                                                                                            |    |
| Specialist assessments identified                                                                                                              | 7  |
| Results of the environmental sensitivity of the proposed area                                                                                  |    |
| MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY                                                                                                  |    |
| MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY                                                                                               |    |
| MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY                                                                                         | 11 |
| MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY                                                                         | 12 |
| MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY                                                                                               | 13 |
| MAP OF RELATIVE DEFENCE THEME SENSITIVITY                                                                                                      | 14 |
| MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY                                                                                                | 15 |
| MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY                                                                                     | 16 |

### **Proposed Project Location**

### Orientation map 1: General location



### Map of proposed site and relevant area(s)



### Cadastral details of the proposed site

### Property details:

| No | Farm Name      | Farm/ Erf No | Portion | Latitude    | Longitude    | Property Type |
|----|----------------|--------------|---------|-------------|--------------|---------------|
| 1  | STRUBENSVALLEI | 1327         | 0       | 26°7'5.99S  | 27°54'43.45E | Erven         |
| 2  | MADEIRA        | 274          | 0       | 26°7'10.67S | 27°54'33.49E | Farm          |
| 3  | MADEIRA        | 274          | 1       | 26°7'8S     | 27°54'43.48E | Farm Portion  |

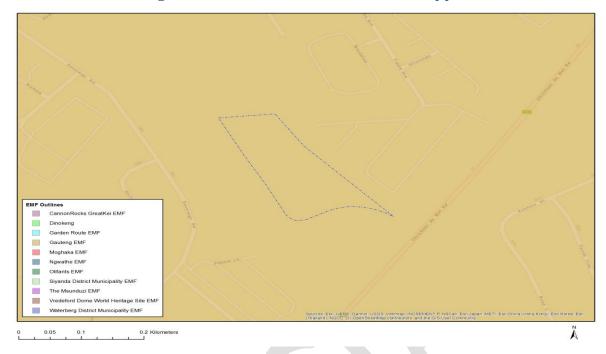
Development footprint<sup>1</sup> vertices: No development footprint(s) specified.

## Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

| No | EIA Reference | Classification | Status of   | Distance from proposed |
|----|---------------|----------------|-------------|------------------------|
|    | No            |                | application | area (km)              |
| 1  | 12/12/20/2530 | Solar PV       | Approved    | 12.9                   |
| 2  | 12/12/20/2551 | Solar PV       | Approved    | 15                     |
| 3  | 12/12/20/2537 | Solar PV       | Approved    | 24.3                   |
| 4  | 12/12/20/2539 | Solar PV       | Approved    | 18.8                   |

<sup>&</sup>lt;sup>1</sup> "development footprint", means the area within the site on which the development will take place and incudes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

### Environmental Management Frameworks relevant to the application



| Environm<br>ental<br>Managem<br>ent | LINK                                                                                                   |
|-------------------------------------|--------------------------------------------------------------------------------------------------------|
| Framewor                            |                                                                                                        |
| k                                   |                                                                                                        |
| Gauteng<br>EMF                      | https://screening.environment.gov.za/ScreeningDownloads/EMF/Zone 1, Zone 2, Zone 3, Zone 4, Zone 5.pdf |

### Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: **Transformation of land | Indigenous vegetation**.

### Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

| Incentive,<br>restrictio<br>n or<br>prohibitio<br>n | Implication                                                                 |
|-----------------------------------------------------|-----------------------------------------------------------------------------|
| Strategic                                           | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GN |

| Transmissio          | 113 16 February 2018.pdf                                                            |
|----------------------|-------------------------------------------------------------------------------------|
| n Corridor-          |                                                                                     |
| Central              |                                                                                     |
| corridor             |                                                                                     |
|                      |                                                                                     |
| Gauteng              | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Zo         |
| Gauteng<br>EMF-Urban |                                                                                     |
| U                    | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Zone_1.pdf |

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



### Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the

proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

| Theme                          | Very High   | High        | Medium      | Low         |
|--------------------------------|-------------|-------------|-------------|-------------|
|                                | sensitivity | sensitivity | sensitivity | sensitivity |
| Agriculture Theme              |             |             | Х           |             |
| Animal Species Theme           |             |             | Х           |             |
| Aquatic Biodiversity Theme     | Х           |             |             |             |
| Archaeological and Cultural    |             |             |             | Х           |
| Heritage Theme                 |             |             |             |             |
| Civil Aviation Theme           |             |             | Х           |             |
| Defence Theme                  |             |             |             | Х           |
| Plant Species Theme            |             |             | X           |             |
| Terrestrial Biodiversity Theme | Х           |             |             |             |

### Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

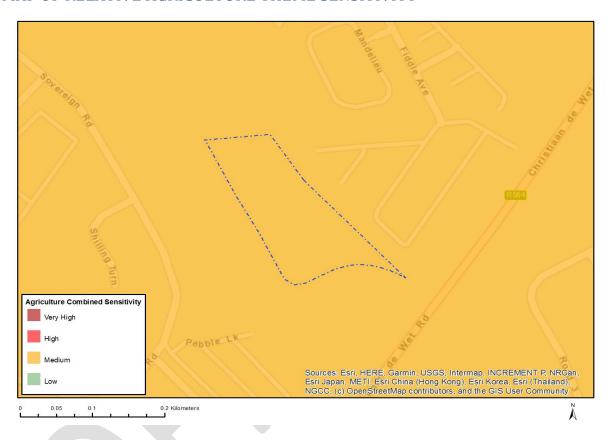
| N | Special                                                         | Assessment Protocol                                                                                                                     |
|---|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| О | ist                                                             |                                                                                                                                         |
|   | assess                                                          |                                                                                                                                         |
|   | ment                                                            |                                                                                                                                         |
| 1 | Landsca<br>pe/Visua<br>I Impact<br>Assessm<br>ent               | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf       |
| 2 | Archaeol ogical and Cultural Heritage Impact Assessm ent        | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf       |
| 3 | Palaeont<br>ology<br>Impact<br>Assessm<br>ent                   | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf       |
| 4 | Terrestri<br>al<br>Biodiver<br>sity<br>Impact<br>Assessm<br>ent | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Terrestrial Biodiversity Assessment Protocols.pdf  |
| 5 | Aquatic<br>Biodiver<br>sity<br>Impact                           | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/<br>/Gazetted Aquatic Biodiversity Assessment Protocols.pdf |

|   | Assessm                                  |                                                                                                                                   |
|---|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
|   | ent                                      |                                                                                                                                   |
| 6 | Avian<br>Impact<br>Assessm<br>ent        | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/<br>/Gazetted Avifauna Assessment Protocols.pdf       |
| 7 | Socio-<br>Economi<br>c<br>Assessm<br>ent | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 8 | Plant<br>Species<br>Assessm<br>ent       | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf       |
| 9 | Animal<br>Species<br>Assessm<br>ent      | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Animal Species Assessment Protocols.pdf      |

### Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

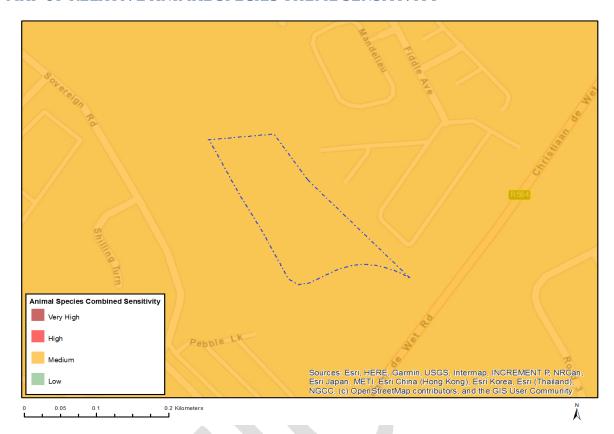
### MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
|                       |                  | X                  |                 |

| Sensitivity | Feature(s)                                                     |
|-------------|----------------------------------------------------------------|
| Medium      | Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate |

### MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

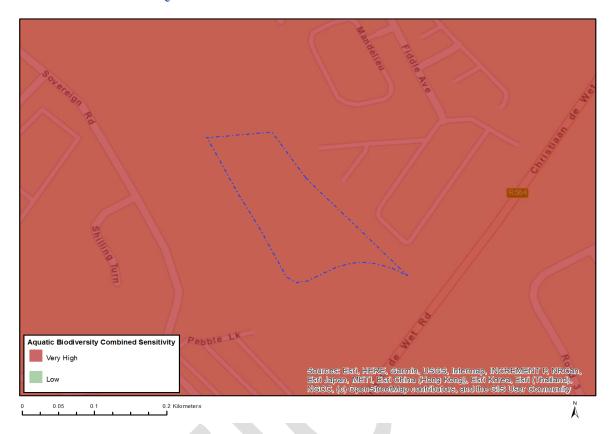


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at <a href="mailto:eiadatarequests@sanbi.org.za">eiadatarequests@sanbi.org.za</a> 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.

| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
|                       |                  | X                  |                 |

| Sensitivity | Feature(s)                         |
|-------------|------------------------------------|
| Medium      | Invertebrate-Clonia uvarovi        |
| Medium      | Insecta-Aloeides dentatis dentatis |
| Medium      | Mammalia-Chrysospalax villosus     |
| Medium      | Sensitive species 7                |

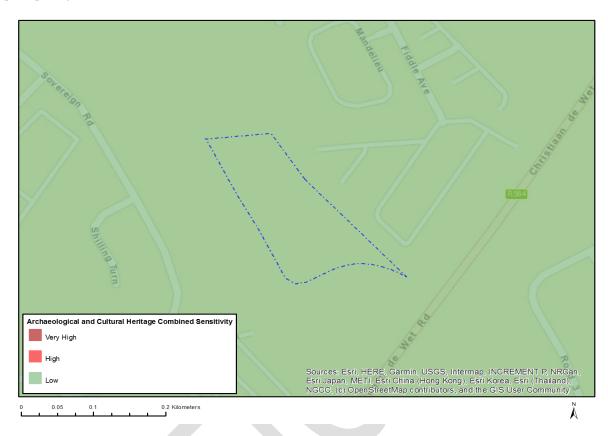
### MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| X                     |                  |                    |                 |

| Sensitivity | Feature(s)             |
|-------------|------------------------|
| Very High   | Aquatic CBAs           |
| Very High   | Wetlands and Estuaries |

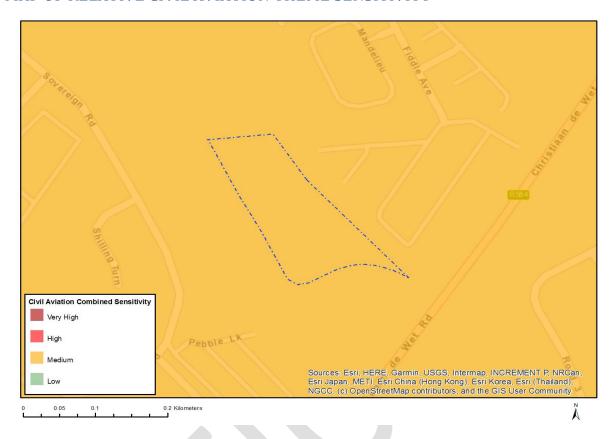
## MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
|                       |                  |                    | Χ               |

| Sensitivity | Feature(s)      |  |
|-------------|-----------------|--|
| Low         | Low sensitivity |  |

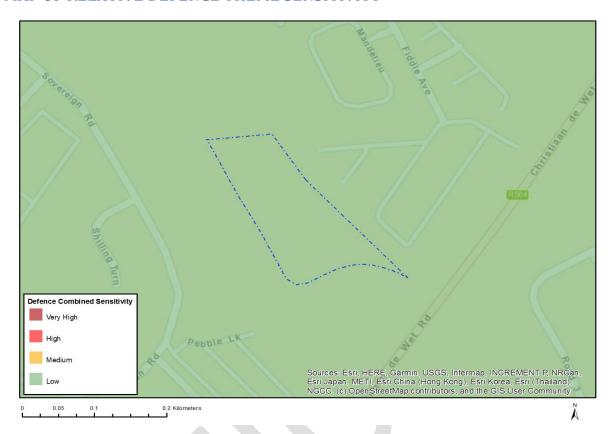
### MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
|                       |                  | X                  |                 |

| Sensitivity | Feature(s)                                                 |
|-------------|------------------------------------------------------------|
| Medium      | Between 15 and 35 km from a civil aviation radar           |
| Medium      | Between 15 and 35 km from a major civil aviation aerodrome |
| Medium      | Between 8 and 15 km of other civil aviation aerodrome      |

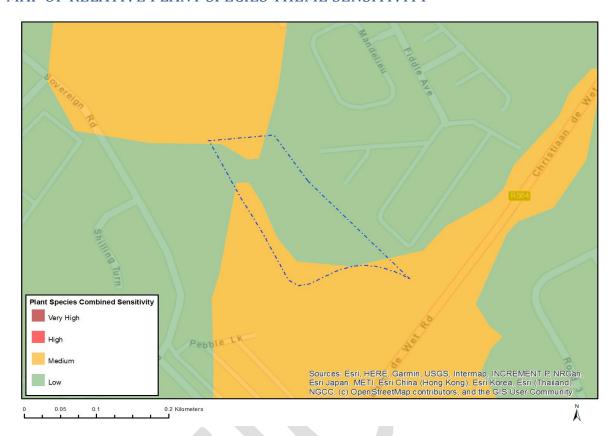
### MAP OF RELATIVE DEFENCE THEME SENSITIVITY



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
|                       |                  |                    | Χ               |

| Sensitivity | Feature(s)      |  |
|-------------|-----------------|--|
| Low         | Low Sensitivity |  |

### MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

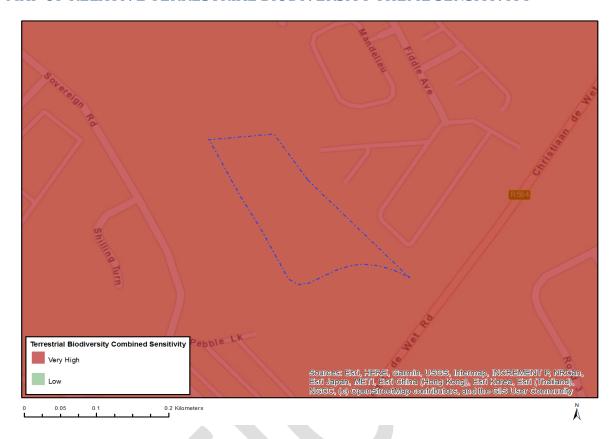


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at <a href="mailto:eiadatarequests@sanbi.org.za">eiadatarequests@sanbi.org.za</a> 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.

| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
|                       |                  | X                  |                 |

| Sensitivity | Feature(s)             |
|-------------|------------------------|
| Low         | Low Sensitivity        |
| Medium      | Melolobium subspicatum |
| Medium      | Sensitive species 1248 |

### MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| X                     |                  |                    |                 |

| Sensitivity | Feature(s)                                           |  |
|-------------|------------------------------------------------------|--|
| Very High   | Critical Biodiversity Area 2                         |  |
| Very High   | Focus Areas for land-based protected areas expansion |  |
| Very High   | Endangered ecosystem                                 |  |