

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

EIA Reference number:

Project name: Zibulo North Colliery 132kV OHL

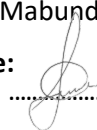
Project title: 132kV Powerline and Substations

Date screening report generated: 24/11/2023 11:32:46

Applicant: Thungela Resources Limited

Compiler: Vukosi Mabunda - Environmental Impact Management Services (Pty) Ltd

Compiler signature:



Application Category: Utilities Infrastructure | Electricity | Distribution and Transmission | Powerline

Table of Contents

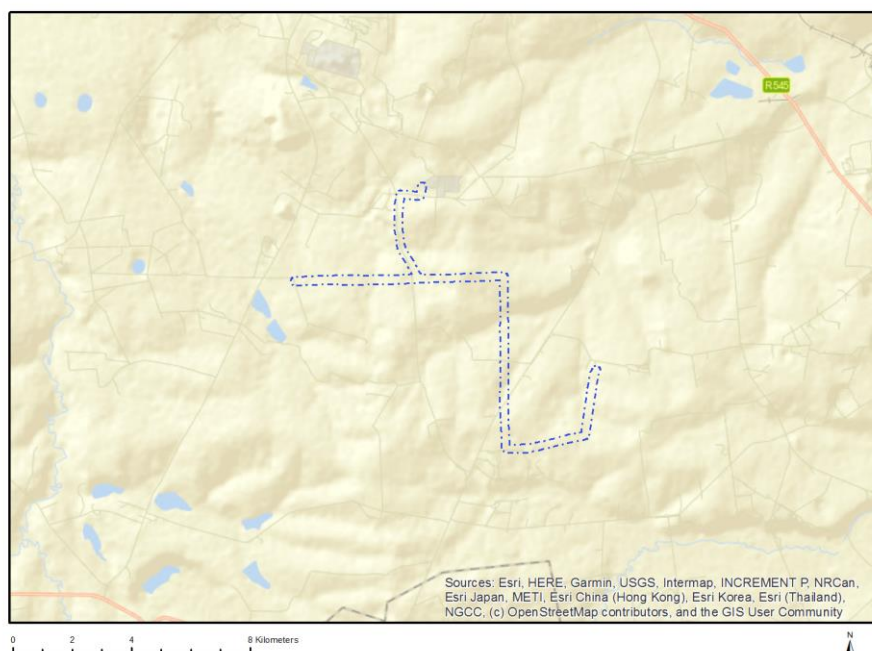
| | |
|---|----|
| Proposed Project Location | 3 |
| Orientation map 1: General location | 3 |
| Map of proposed site and relevant area(s) | 4 |
| Cadastral details of the proposed site | 4 |
| Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area | 5 |
| Environmental Management Frameworks relevant to the application | 5 |
| Environmental screening results and assessment outcomes | 6 |
| Relevant development incentives, restrictions, exclusions or prohibitions | 6 |
| Proposed Development Area Environmental Sensitivity | 6 |
| Specialist assessments identified | 6 |
| Results of the environmental sensitivity of the proposed area | 8 |
| MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY | 8 |
| MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY | 9 |
| MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY | 10 |
| MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY | 11 |
| MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY | 12 |
| MAP OF RELATIVE DEFENCE THEME SENSITIVITY | 13 |
| MAP OF RELATIVE PALEONTOLOGY 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 | OLGA | 35 | 0 | 26°11'42.01S | 29°0'27.07E | Farm |
| 2 | ZONDAGSFONTEIN | 253 | 0 | 26°10'15.54S | 28°59'15.35E | Farm |
| 3 | SMITHFIELD | 44 | 0 | 26°9'57.32S | 29°2'45.51E | Farm |
| 4 | RIETVLEI | 64 | 0 | 26°12'29.44S | 29°1'57.33E | Farm |
| 5 | LEEUFONTEIN | 219 | 0 | 26°7'43.97S | 28°57'10.64E | Farm |
| 6 | RIETVLEI | 64 | 1 | 26°12'6.58S | 29°0'58.47E | Farm Portion |
| 7 | LEEUFONTEIN | 219 | 13 | 26°8'31.21S | 28°59'26.7E | Farm Portion |
| 8 | SMITHFIELD | 44 | 3 | 26°11'7.25S | 29°1'25.93E | Farm Portion |
| 9 | LEEUFONTEIN | 219 | 12 | 26°8'18.14S | 28°58'22.95E | Farm Portion |
| 10 | LEEUFONTEIN | 219 | 35 | 26°7'18.5S | 28°59'46.67E | Farm Portion |
| 11 | LEEUFONTEIN | 219 | 24 | 26°7'43.82S | 28°59'33.85E | Farm Portion |
| 12 | ZONDAGSFONTEIN | 253 | 5 | 26°10'33.14S | 29°0'15.47E | Farm Portion |
| 13 | RIETVLEI | 64 | 7 | 26°11'52.05S | 29°1'24.85E | Farm Portion |
| 14 | LEEUFONTEIN | 219 | 0 | 26°7'39.13S | 28°58'57.91E | Farm Portion |
| 15 | ZONDAGSFONTEIN | 253 | 0 | 26°9'22.26S | 29°0'12.21E | Farm Portion |
| 16 | ZONDAGSFONTEIN | 253 | 9 | 26°9'29.4S | 28°58'57.32E | Farm Portion |
| 17 | SMITHFIELD | 44 | 2 | 26°10'32.67S | 29°2'0.03E | Farm Portion |
| 18 | ZONDAGSFONTEIN | 253 | 4 | 26°11'4.21S | 29°0'45.09E | Farm Portion |
| 19 | ZONDAGSFONTEIN | 253 | 8 | 26°9'25.92S | 28°58'26.08E | Farm Portion |
| 20 | SMITHFIELD | 44 | 1 | 26°10'40.9S | 29°3'31.84E | Farm Portion |
| 21 | RIETVLEI | 64 | 4 | 26°12'1.8S | 29°2'49.55E | Farm Portion |
| 22 | LEEUFONTEIN | 219 | 18 | 26°8'36.79S | 28°58'44.98E | Farm Portion |
| 23 | RIETVLEI | 64 | 0 | 26°12'0.33S | 29°2'13.31E | Farm Portion |
| 24 | ZONDAGSFONTEIN | 253 | 2 | 26°9'43.93S | 28°57'34.9E | Farm Portion |
| 25 | OLGA | 35 | 0 | 26°11'42.01S | 29°0'27.07E | Farm Portion |
| 26 | SMITHFIELD | 44 | 5 | 26°9'8.07S | 29°1'31.41E | Farm Portion |
| 27 | LEEUFONTEIN | 219 | 21 | 26°8'21.87S | 28°57'48.34E | Farm Portion |

| | | | | | | |
|----|----------------|-----|---|--------------|--------------|--------------|
| 28 | ZONDAGSFONTEIN | 253 | 3 | 26°11'21.81S | 29°0'7.14E | Farm Portion |
| 29 | ZONDAGSFONTEIN | 253 | 6 | 26°10'4.63S | 29°0'3.12E | Farm Portion |
| 30 | ZONDAGSFONTEIN | 253 | 7 | 26°9'21S | 28°57'49.39E | Farm Portion |

Development footprint¹ 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 nearby wind or solar developments found.

Environmental Management Frameworks relevant to the application



| Environmental Management Framework | LINK |
|------------------------------------|---|
| Olifants EMF | https://screening.environment.gov.za/ScreeningDownloads/EMF/Zone_4_6, 67, 78, 80, 92, 103, 122, 129.pdf |

¹ “development footprint”, means the area within the site on which the development will take place and includes 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 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:

Utilities Infrastructure | Electricity | Distribution and Transmission | Powerline.

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, restriction or prohibition | Implication |
|--|---|
| Strategic Transmission Corridor-International corridor | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf |
| Air Quality-Highveld Priority Area | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/HIGHVELD_PRIORITY_AREA_AQMP.pdf |
| Renewable energy development zones 9-Emalahleni | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_REDZ.pdf |
| Strategic Gas Pipeline Corridors-Phase 8: Rompco Pipeline Corridor | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf |

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

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the

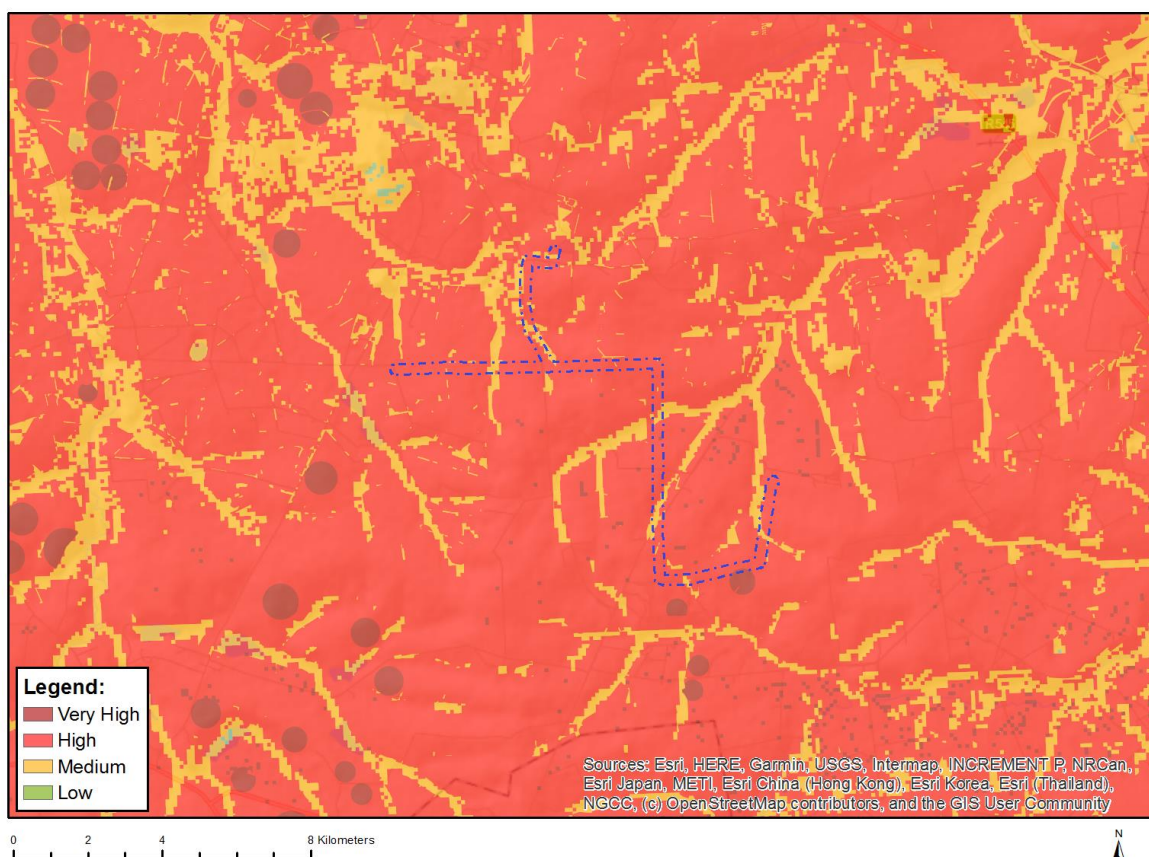
assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

| No | Specialist assessment | Assessment Protocol |
|----|--|---|
| 1 | Agricultural Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf |
| 2 | Landscape/Visual Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 3 | Archaeological and Cultural Heritage Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 4 | Palaeontology Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 5 | Terrestrial Biodiversity Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf |
| 6 | Aquatic Biodiversity Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf |
| 7 | Avian Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Avifauna_Assessment_Protocols.pdf |
| 8 | Civil Aviation Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf |
| 9 | RFI Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 10 | Geotechnical Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 11 | Plant Species Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf |
| 12 | Animal Species Assessment | 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



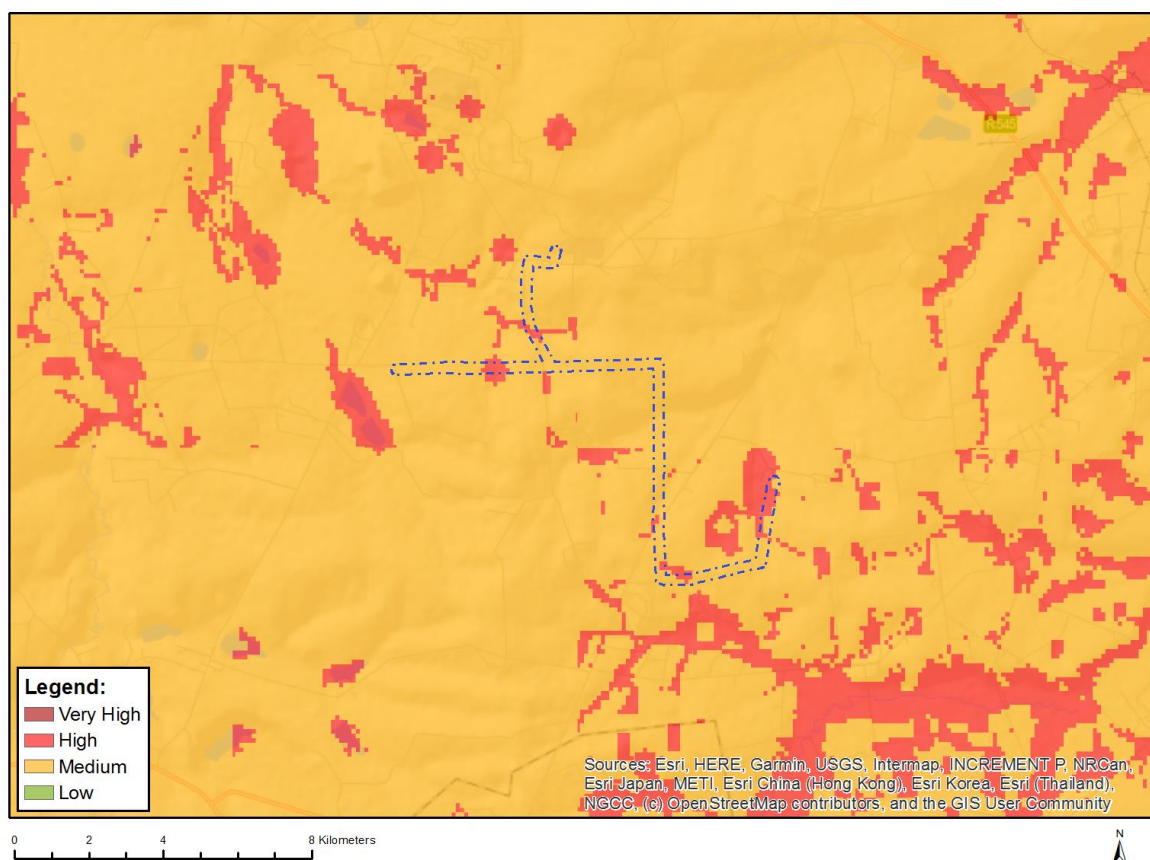
| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| X | | | |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|--|
| High | Land capability;09. Moderate-High/10. Moderate-High |
| High | Annual Crop Cultivation / Planted Pastures Rotation;Land capability;09. Moderate-High/10. Moderate-High |
| High | Annual Crop Cultivation / Planted Pastures Rotation;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate |
| High | Old Fields;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate |
| High | Old Fields;Land capability;09. Moderate-High/10. Moderate-High |
| Medium | Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate |
| Very High | Land capability;11. High/12. High-Very high/13. High-Very high/14. Very high/15. Very high |
| Very High | Pivot Irrigation;Land capability;09. Moderate-High/10. Moderate-High |

| | |
|-----------|--|
| Very High | Annual Crop Cultivation / Planted Pastures Rotation;Land capability;11. High/12. High-Very high/13. High-Very high/14. Very high/15. Very high |
|-----------|--|

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



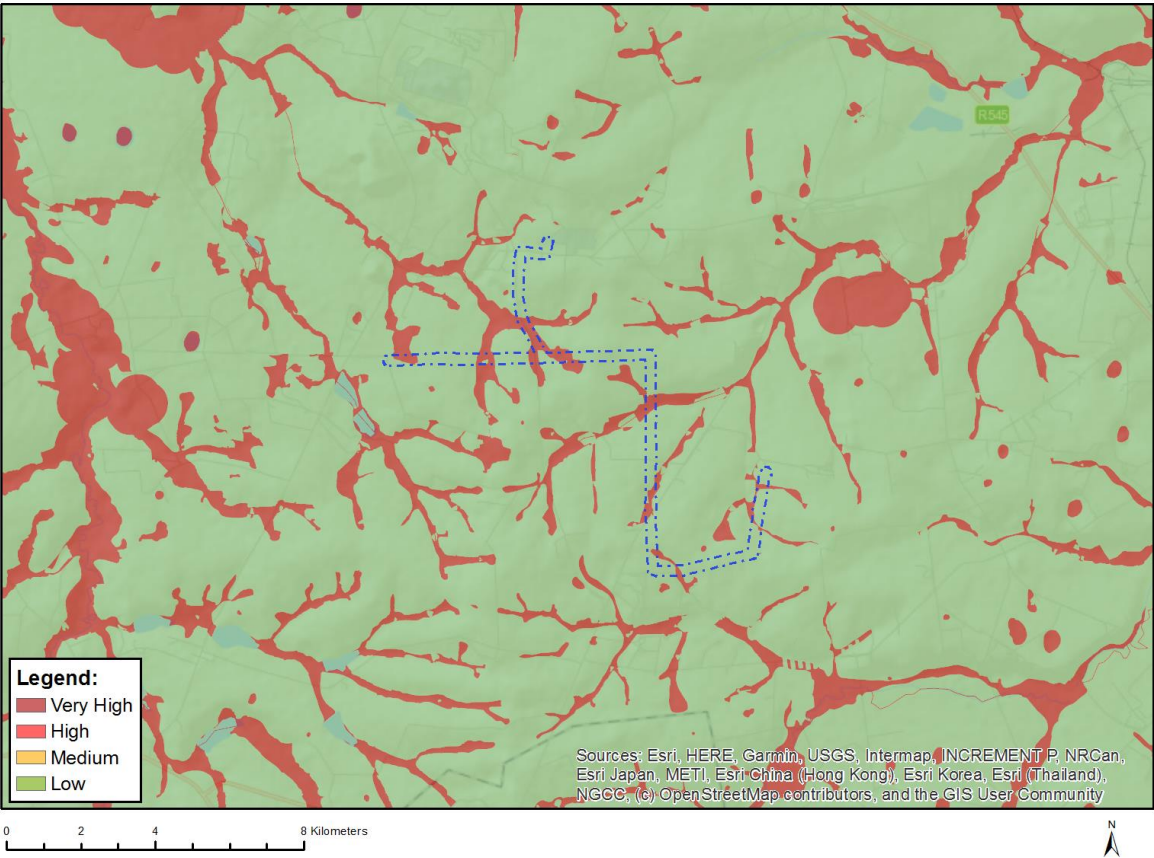
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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 Features:

| Sensitivity | Feature(s) |
|-------------|----------------------------------|
| High | Aves-Tyto capensis |
| High | Aves-Circus ranivorus |
| High | Aves-Mycteria ibis |
| Medium | Aves-Tyto capensis |
| Medium | Aves-Hydroprogne caspia |
| Medium | Aves-Eupodotis senegalensis |
| Medium | Mammalia-Chrysospalax villosus |
| Medium | Mammalia-Crocidura maquassiensis |
| Medium | Mammalia-Dasymys robertsii |
| Medium | Mammalia-Hydricitis maculicollis |

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

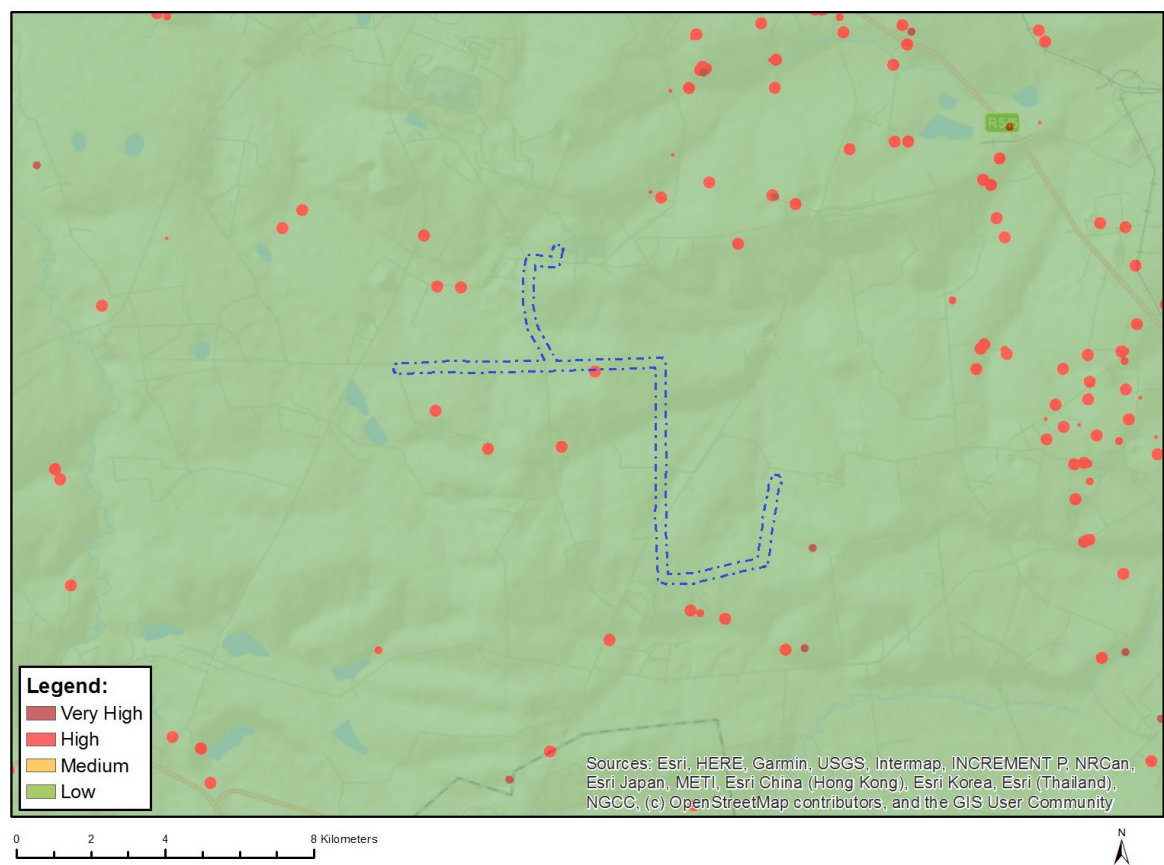


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| X | | | |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|---|
| Low | Low sensitivity |
| Very High | CBA: Wetlands |
| Very High | ESA: Wetlands |
| Very High | Rivers_D |
| Very High | Rivers_Z |
| Very High | Wetlands_Mesic Highveld Grassland Bioregion (Seep) |
| Very High | Wetlands_Mesic Highveld Grassland Bioregion (Valley-bottom) |

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

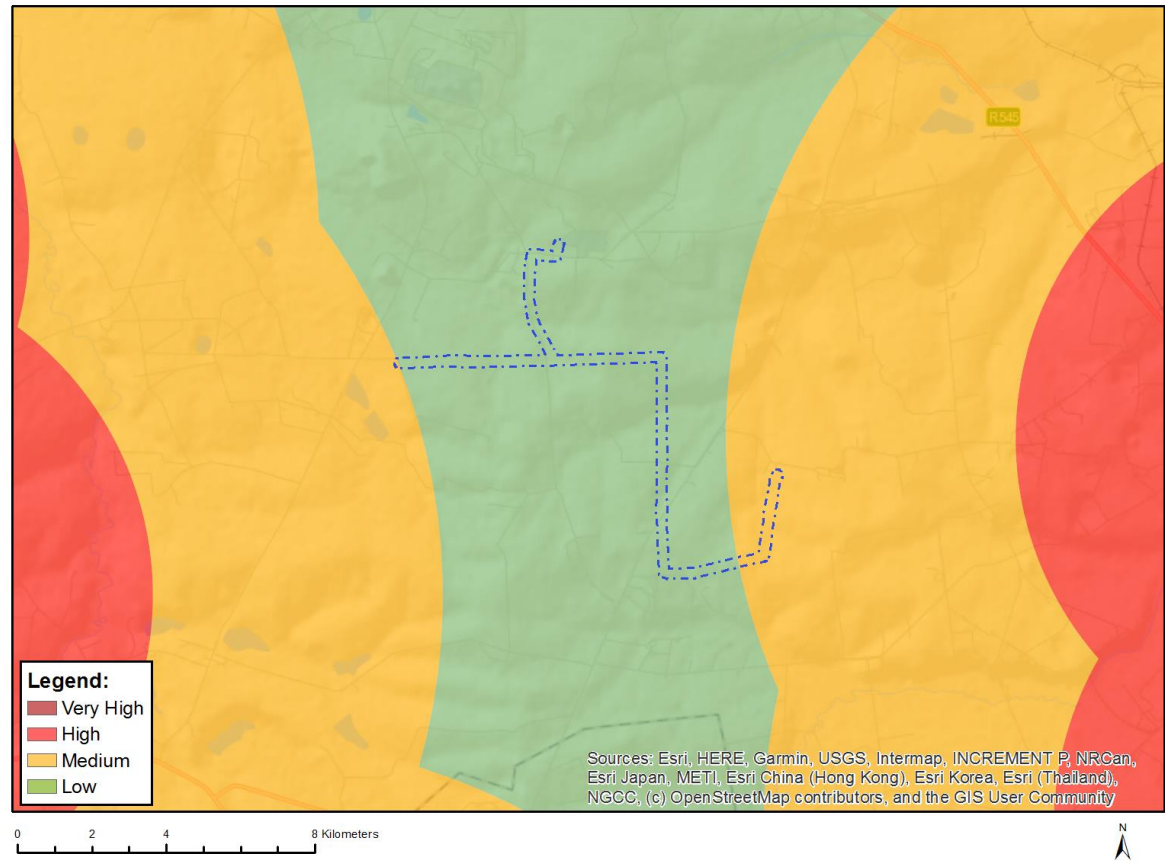


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | X | | |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|---|
| High | Within 150m of a Grade IIIa Heritage site |
| Low | Low sensitivity |

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

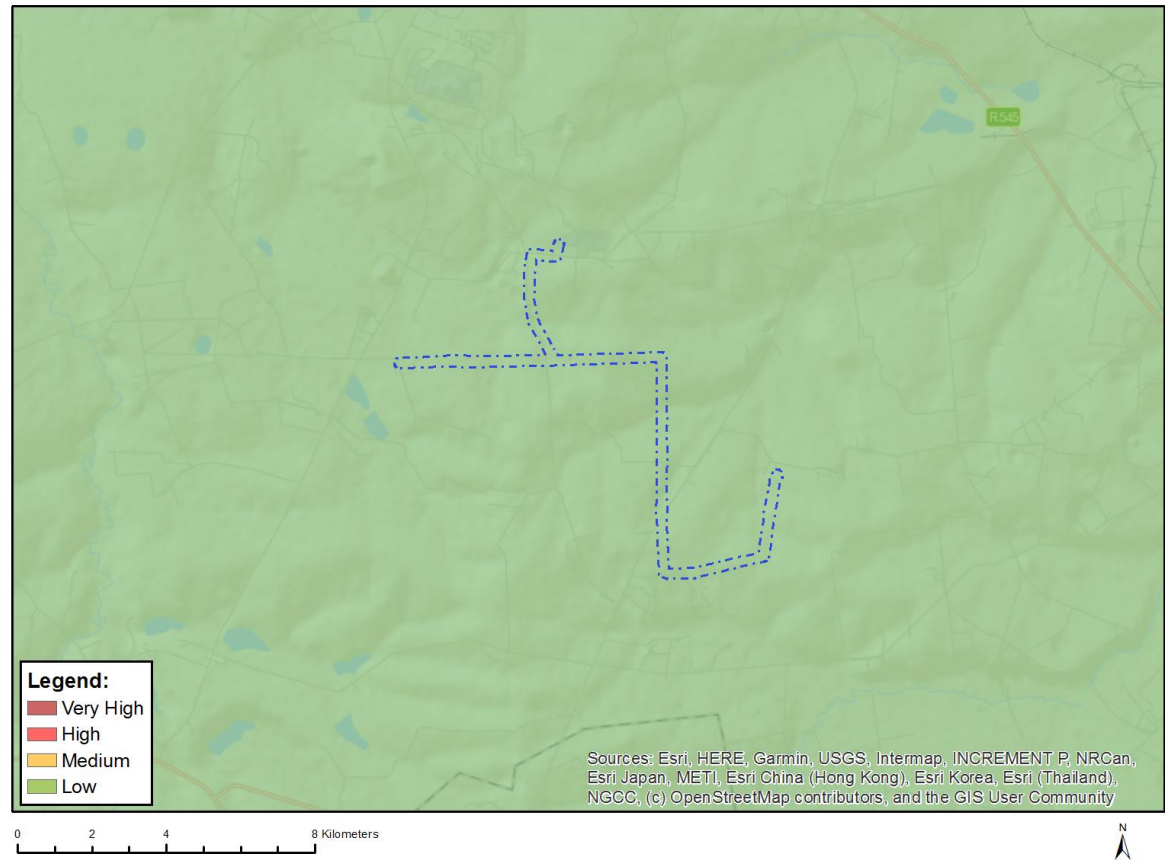


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | | X | |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|---|
| Low | Low sensitivity |
| Medium | Between 8 and 15 km of other civil aviation aerodrome |

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

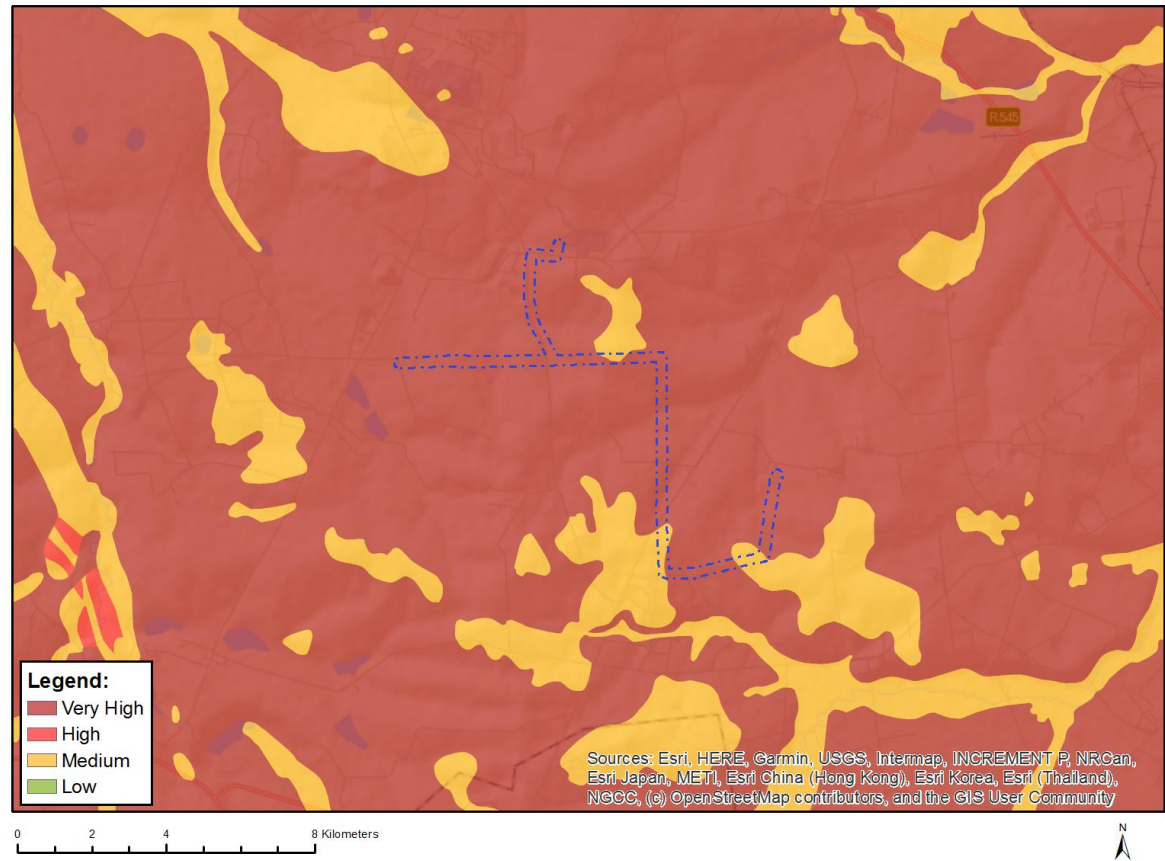


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | | | X |

Sensitivity Features:

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

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

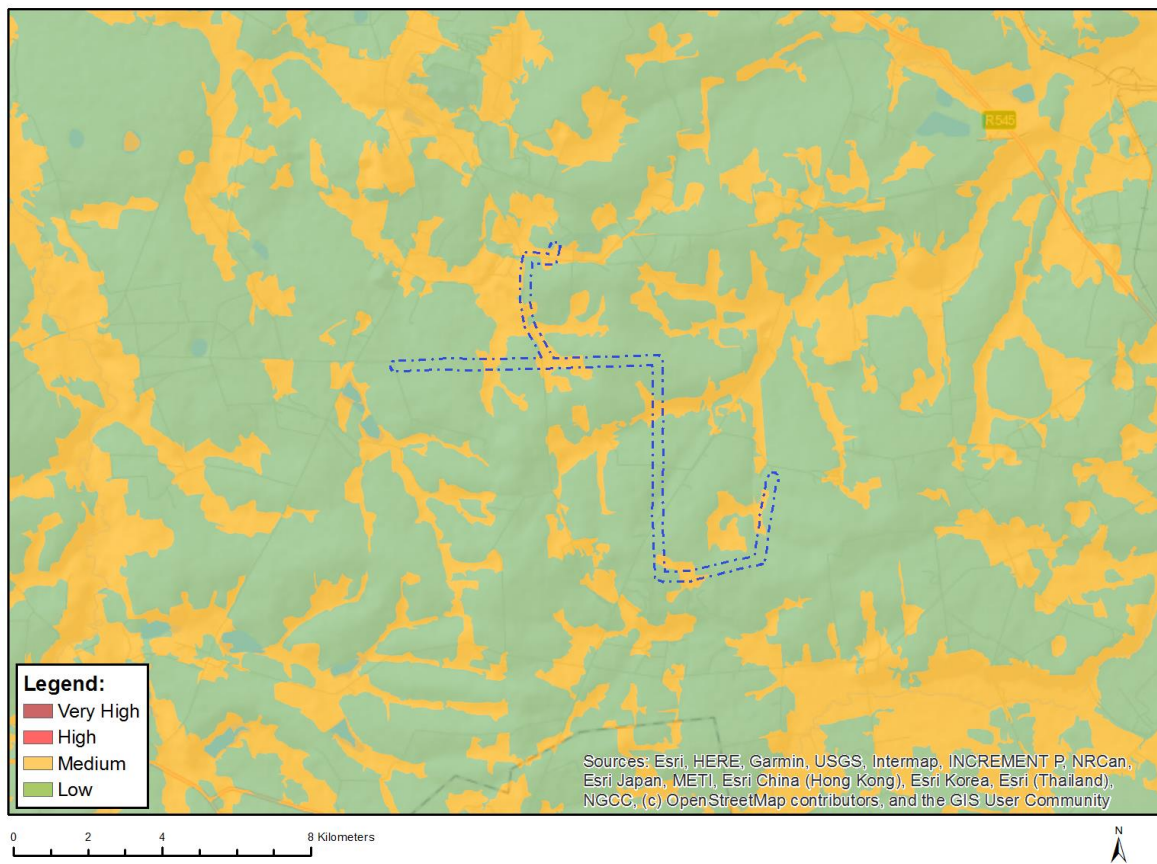


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| X | | | |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|---|
| Medium | Features with a Medium paleontological sensitivity |
| Very High | Features with a Very High paleontological sensitivity |

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



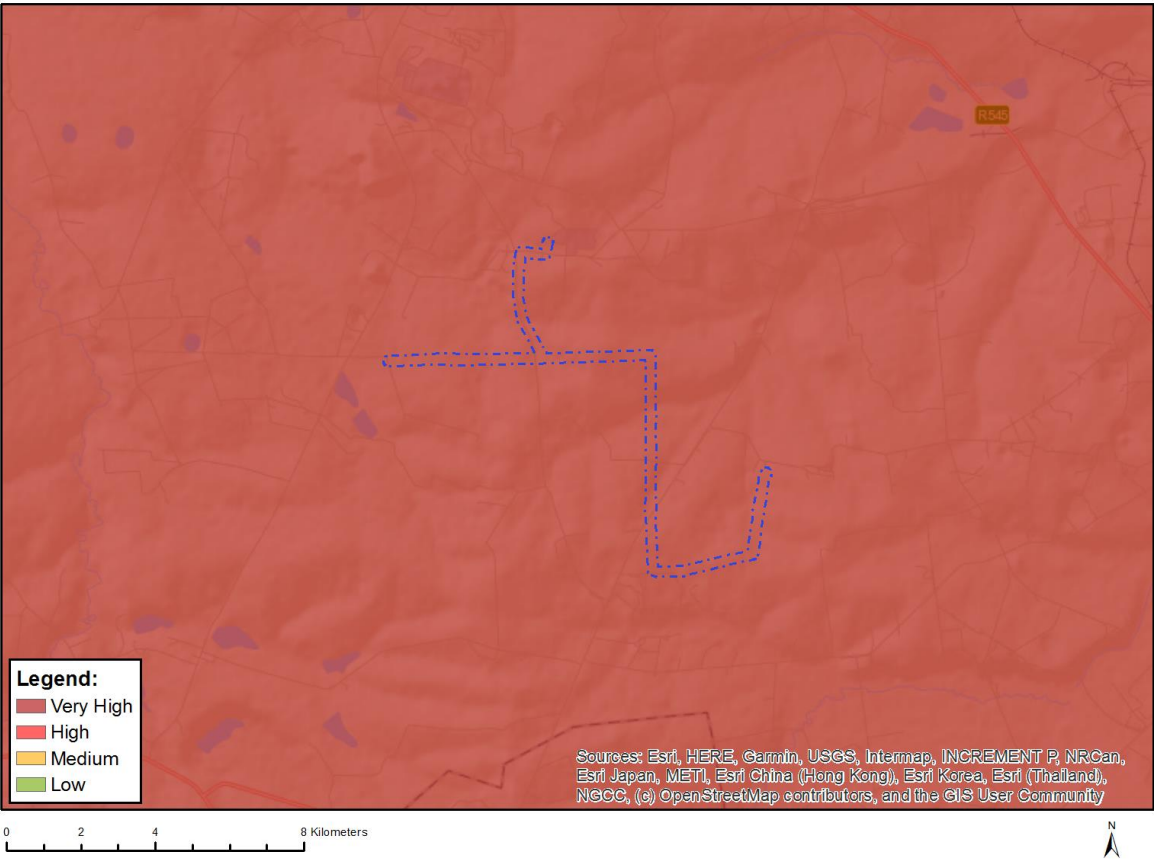
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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 Features:

| Sensitivity | Feature(s) |
|-------------|---|
| Low | Low Sensitivity |
| Medium | Sensitive species 601 |
| Medium | Sensitive species 691 |
| Medium | <i>Pachycarpus suaveolens</i> |
| Medium | <i>Brachycorythis conica</i> subsp. <i>transvaalensis</i> |

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



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

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|-------------------------------|
| Very High | EN_Eastern Highveld Grassland |