

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

**EIA Reference number:**

**Project name:** Sludgeline phase 2 VG\_River Crossing

**Project title:** Sludgeline phase 2 VG\_River Crossing

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**Applicant:** Rand Water

**Compiler:** Nomkhosi Mohlahlo

**Compiler signature:** pp



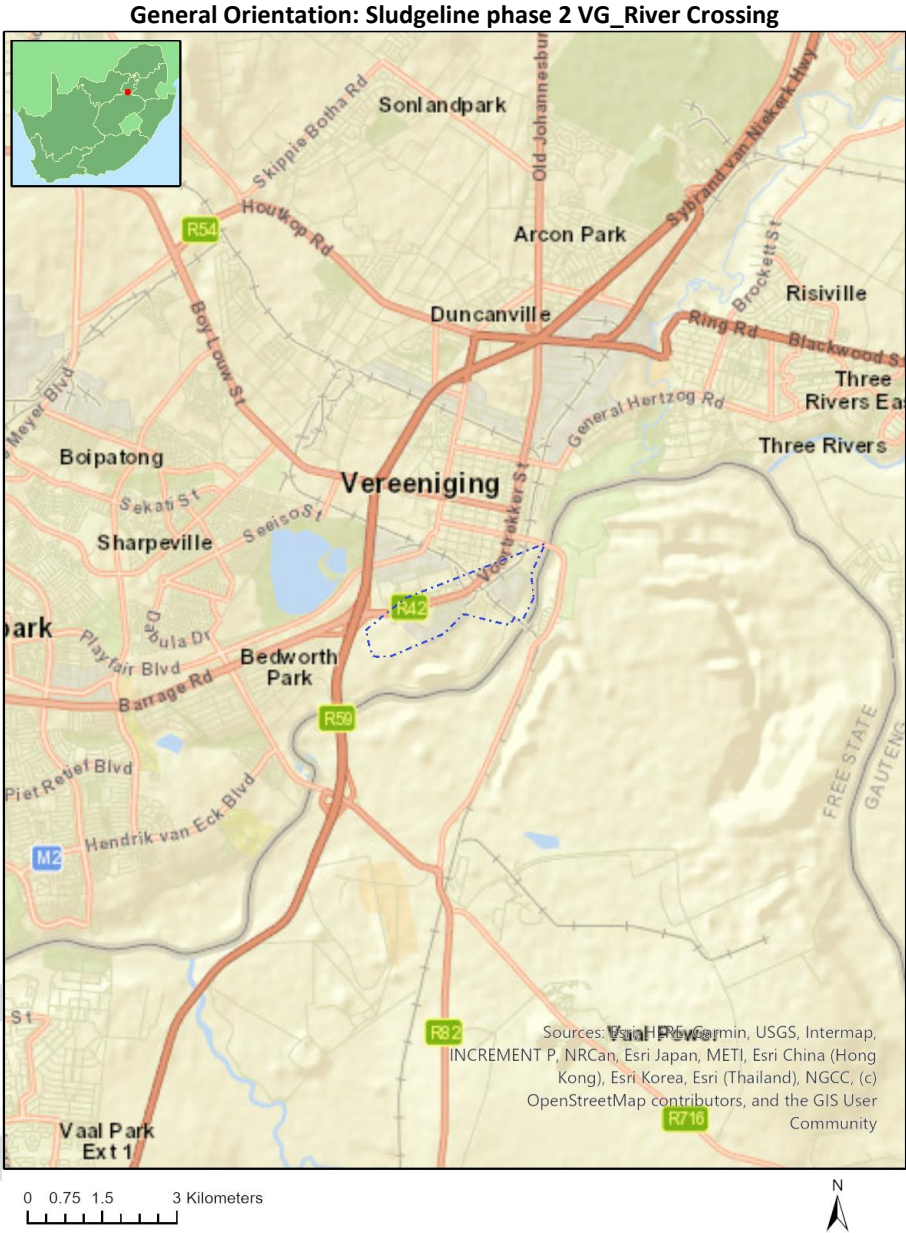
**Application Category:** Utilities Infrastructure|Pipelines|Water|Fresh\_Storm Water

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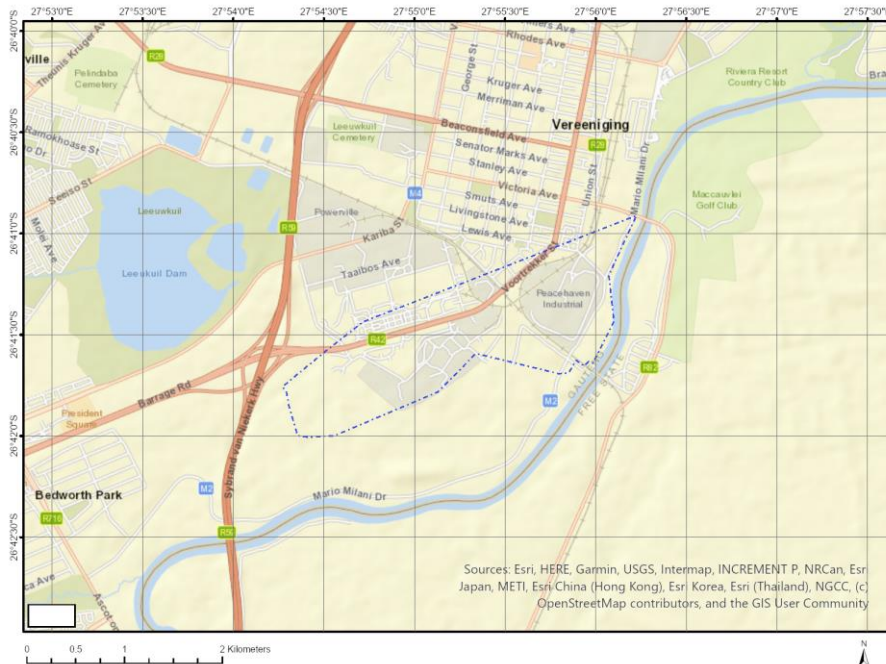
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# Proposed Project Location

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	VEREENIGING	1286	0	26°41'9.54S	27°55'28.48E	Erven
2	VEREENIGING	1287	0	26°41'10.37S	27°55'27.82E	Erven
3	VEREENIGING	1288	0	26°41'10.85S	27°55'26.97E	Erven
4	VEREENIGING	1289	0	26°41'11.33S	27°55'26.37E	Erven
5	VEREENIGING	1290	0	26°41'12.02S	27°55'25.85E	Erven
6	VEREENIGING	1291	0	26°41'11.55S	27°55'25.12E	Erven
7	VEREENIGING	1318	0	26°41'7.71S	27°55'37.47E	Erven
8	VEREENIGING	1324	0	26°41'9.79S	27°55'31.81E	Erven
9	VEREENIGING	1325	0	26°41'9.4S	27°55'32.27E	Erven
10	VEREENIGING	1326	0	26°41'9.05S	27°55'32.76E	Erven
11	VEREENIGING	1327	0	26°41'8.7S	27°55'33.21E	Erven
12	VEREENIGING	1328	0	26°41'8.37S	27°55'33.66E	Erven
13	VEREENIGING	1329	0	26°41'8.02S	27°55'34.12E	Erven
14	VEREENIGING	1330	0	26°41'7.67S	27°55'34.59E	Erven
15	VEREENIGING	1331	0	26°41'7.32S	27°55'35.1E	Erven
16	VEREENIGING	1332	0	26°41'11.86S	27°55'31.72E	Erven
17	VEREENIGING	1333	0	26°41'12.38S	27°55'30.88E	Erven
18	VEREENIGING	1334	0	26°41'13.25S	27°55'30.04E	Erven
19	VEREENIGING	1337	0	26°41'13.81S	27°55'27.68E	Erven
20	VEREENIGING	1338	0	26°41'13.36S	27°55'26.82E	Erven
21	VEREENIGING	1339	0	26°41'12.95S	27°55'27.37E	Erven
22	VEREENIGING	1340	0	26°41'12.46S	27°55'28E	Erven
23	VEREENIGING	1341	0	26°41'12.06S	27°55'28.56E	Erven
24	VEREENIGING	1342	0	26°41'11.78S	27°55'28.96E	Erven
25	VEREENIGING	1343	0	26°41'11.31S	27°55'29.54E	Erven
26	VEREENIGING	1344	0	26°41'10.92S	27°55'30.05E	Erven
27	VEREENIGING	1345	0	26°41'10.54S	27°55'30.57E	Erven

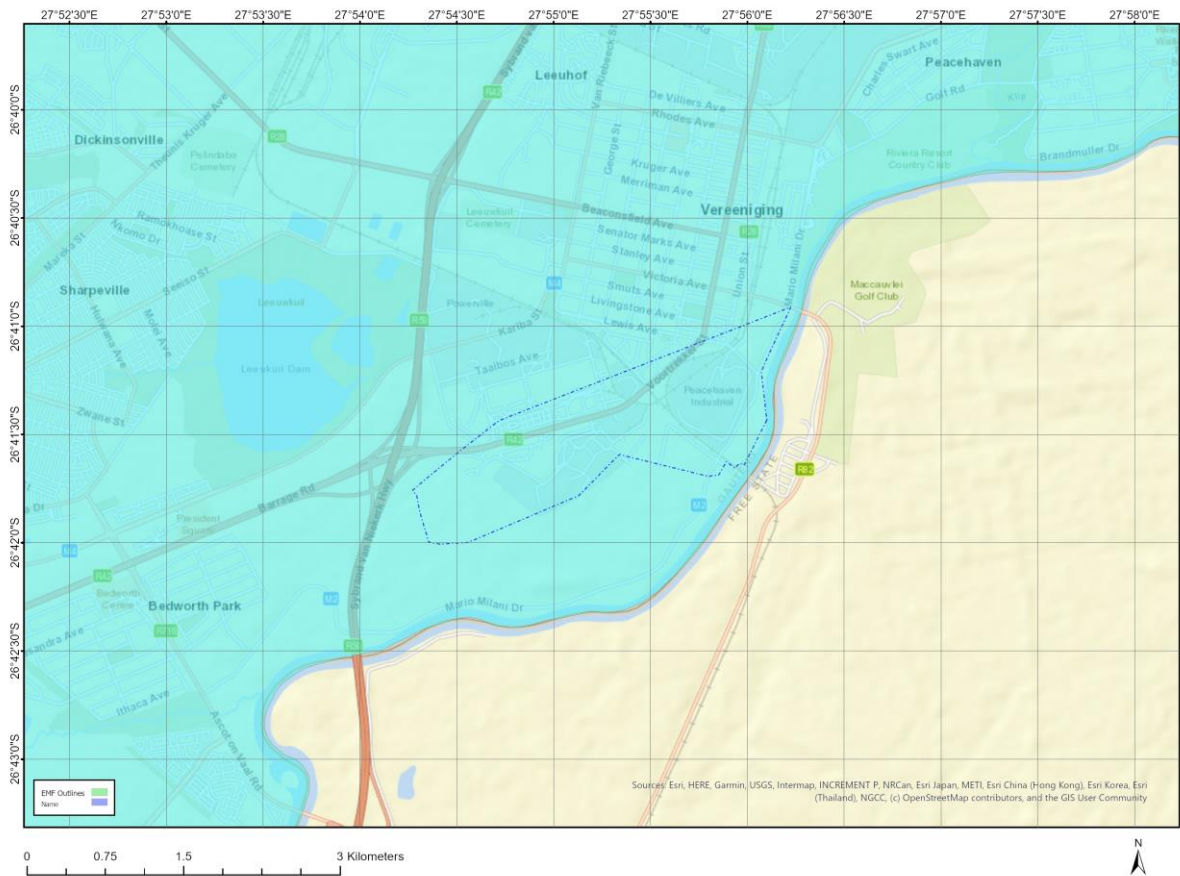
28	VEREENIGING	1351	0	26°41'0.66S	27°55'55.46E	Erven
29	VEREENIGING	1432	0	26°41'0.11S	27°55'50.84E	Erven
30	VEREENIGING	1449	1	26°41'4.3S	27°55'54.3E	Erven
31	VEREENIGING	1449	0	26°41'2.6S	27°55'54.79E	Erven
32	VEREENIGING	1462	0	26°41'5.99S	27°55'39.64E	Erven
33	VEREENIGING	1467	0	26°41'14.53S	27°55'21.35E	Erven
34	VEREENIGING	1468	0	26°41'19.96S	27°55'28.68E	Erven
35	VEREENIGING	1469	0	26°41'16.12S	27°55'32.5E	Erven
36	VEREENIGING	1470	0	26°41'16.97S	27°55'33.74E	Erven
37	VEREENIGING	1531	0	26°41'8.94S	27°55'36.5E	Erven
38	VEREENIGING	1532	0	26°41'10.1S	27°55'34.2E	Erven
39	VEREENIGING	1534	0	26°41'14.11S	27°55'28.93E	Erven
40	LEEUWKUIL	596	0	26°41'5.94S	27°53'39.18E	Farm
41	USCO	603	0	26°41'13.73S	27°55'55.18E	Farm
42	KLIPPLAATDRIFT	601	0	26°39'31.23S	27°58'22.01E	Farm
43	LEEUWKUIL	596	101	26°41'7.47S	27°55'26.85E	Farm Portion
44	LEEUWKUIL	596	187	26°41'16.3S	27°55'31.8E	Farm Portion
45	LEEUWKUIL	596	188	26°41'17.06S	27°55'23.41E	Farm Portion
46	LEEUWKUIL	596	95	26°41'1.42S	27°55'57.09E	Farm Portion
47	LEEUWKUIL	596	110	26°41'10.54S	27°55'44.7E	Farm Portion
48	LEEUWKUIL	596	117	26°41'59.63S	27°54'0.55E	Farm Portion
49	LEEUWKUIL	596	127	26°41'5.98S	27°55'49.68E	Farm Portion
50	LEEUWKUIL	596	75	26°41'14.2S	27°55'41.62E	Farm Portion
51	LEEUWKUIL	596	146	26°41'14.04S	27°55'38.93E	Farm Portion
52	LEEUWKUIL	596	160	26°41'44.96S	27°54'20.17E	Farm Portion
53	LEEUWKUIL	596	224	26°41'34.98S	27°54'40.18E	Farm Portion
54	LEEUWKUIL	596	246	26°41'36.41S	27°54'56.26E	Farm Portion
55	LEEUWKUIL	596	39	26°41'24.73S	27°55'31.58E	Farm Portion
56	LEEUWKUIL	596	48	26°41'7.38S	27°55'40.7E	Farm Portion
57	LEEUWKUIL	596	60	26°41'33.16S	27°55'56.76E	Farm Portion
58	LEEUWKUIL	596	76	26°41'8.24S	27°55'45.08E	Farm Portion
59	LEEUWKUIL	596	77	26°41'9.44S	27°55'42.08E	Farm Portion
60	LEEUWKUIL	596	79	26°41'25.99S	27°55'38.58E	Farm Portion
61	LEEUWKUIL	596	80	26°41'22.02S	27°55'34.9E	Farm Portion
62	LEEUWKUIL	596	82	26°41'24.76S	27°55'36.62E	Farm Portion
63	LEEUWKUIL	596	84	26°41'35.52S	27°55'51.08E	Farm Portion
64	LEEUWKUIL	596	136	26°41'13.2S	27°55'17.4E	Farm Portion
65	LEEUWKUIL	596	83	26°41'10.36S	27°55'21.57E	Farm Portion
66	LEEUWKUIL	596	74	26°41'11.11S	27°55'38.68E	Farm Portion
67	LEEUWKUIL	596	78	26°41'31.15S	27°55'44.58E	Farm Portion
68	LEEUWKUIL	596	81	26°41'38.5S	27°55'55.68E	Farm Portion
69	LEEUWKUIL	596	108	26°41'23.32S	27°55'33.09E	Farm Portion
70	LEEUWKUIL	596	111	26°41'18.17S	27°54'54.2E	Farm Portion
71	LEEUWKUIL	596	135	26°41'9.71S	27°55'49.21E	Farm Portion
72	LEEUWKUIL	596	245	26°41'30.7S	27°54'59.62E	Farm Portion
73	LEEUWKUIL	596	260	26°41'44.78S	27°55'29.62E	Farm Portion
74	LEEUWKUIL	596	98	26°41'48.16S	27°54'39.38E	Farm Portion
75	LEEUWKUIL	596	244	26°41'6.05S	27°55'47.6E	Farm Portion
76	LEEUWKUIL	596	106	26°41'6.61S	27°55'44.5E	Farm Portion
77	LEEUWKUIL	596	255	26°41'47.38S	27°55'50.24E	Farm Portion
78	LEEUWKUIL	596	222	26°41'4.85S	27°55'53.74E	Farm Portion
79	LEEUWKUIL	596	0	26°41'30.59S	27°54'17.9E	Farm Portion
80	LEEUWKUIL	596	251	26°41'57.37S	27°54'23.67E	Farm Portion
81	LEEUWKUIL	596	122	26°42'1.65S	27°54'46.56E	Farm Portion
82	KLIPPLAATDRIFT	601	142	26°40'56.8S	27°56'0.45E	Farm Portion
83	KLIPPLAATDRIFT	601	72	26°41'25.28S	27°56'4.05E	Farm Portion
84	USCO	603	0	26°41'13.73S	27°55'55.18E	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 No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/2/753	Solar PV	Approved	4.8

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Gauteng EMF	<a href="https://screening.environment.gov.za/ScreeningDownloads/EMF/GPEMF_2021_Gazette_and_summary.pdf">https://screening.environment.gov.za/ScreeningDownloads/EMF/GPEMF_2021_Gazette_and_summary.pdf</a>

<sup>1</sup> “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 | Pipelines | Water | Fresh\_Storm Water.**

### 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-Central corridor	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf</a>
Air Quality-Vaal Triangle Airshed Priority Area	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Final_VTAPA_AQMP_20090408_-15_April_2009.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Final_VTAPA_AQMP_20090408_-15_April_2009.pdf</a>
Strategic Gas Pipeline Corridors-Phase 3: Richards Bay to Gauteng	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf</a>
Gauteng EMF-Urban development zone 1	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Zone1_2021.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Zone1_2021.pdf</a>

### 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

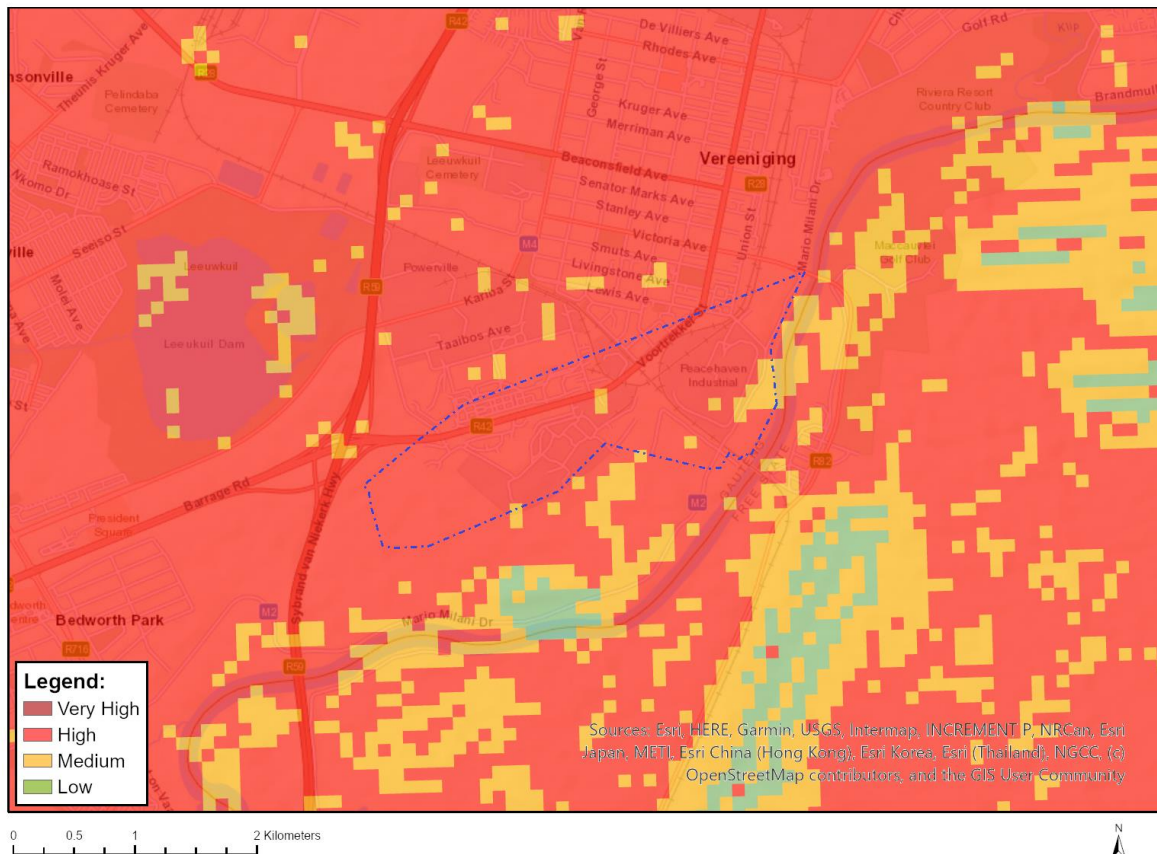
Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, 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	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf</a>
2	Archaeological and Cultural Heritage Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
3	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
4	Terrestrial Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf</a>
5	Aquatic Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf</a>
6	Geotechnical Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
7	Socio-Economic Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
8	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf</a>
9	Animal Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf</a>

## 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

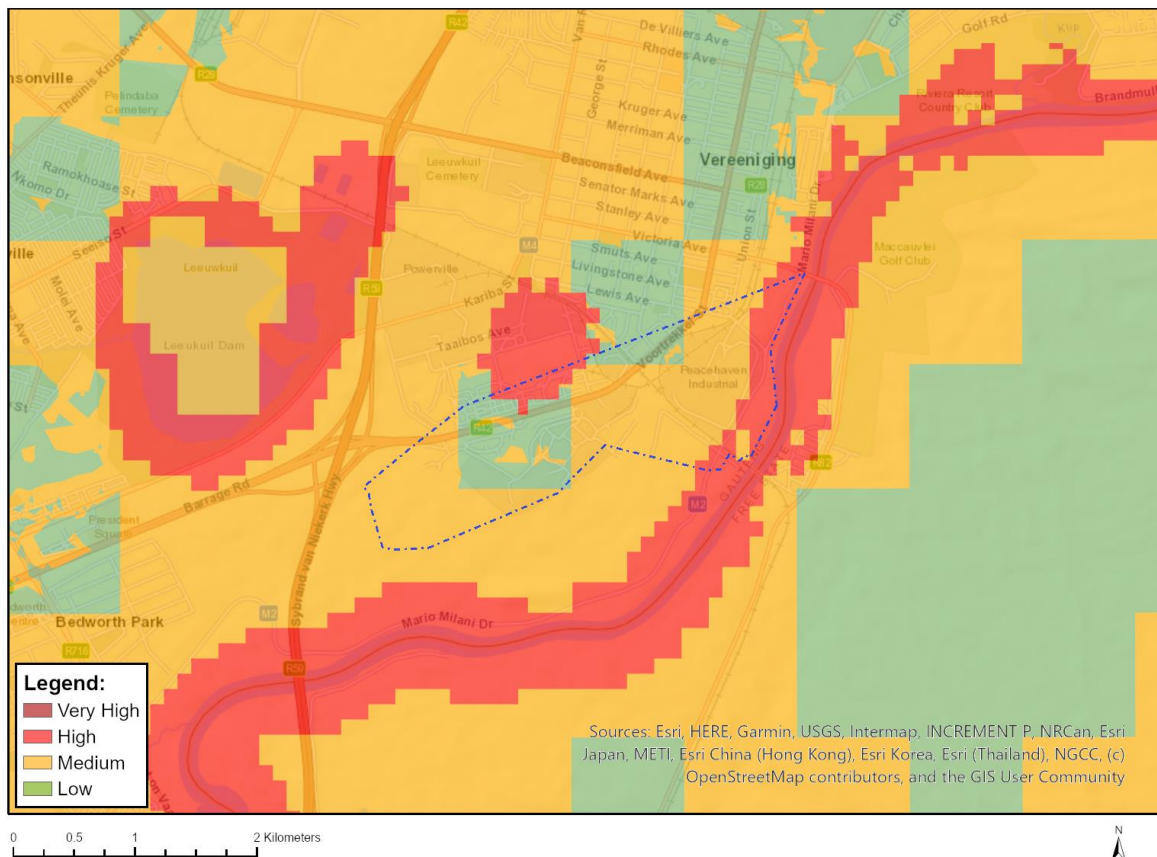


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

#### Sensitivity Features:

Sensitivity	Feature(s)
High	08. Moderate
High	09. Moderate-High
High	10. Moderate-High
Medium	07. Low-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 [eiadatarequests@sanbi.org.za](mailto: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-Hydroprogne caspia
High	Aves-Mycteria ibis
Low	Subject to confirmation
Medium	Insecta-Lepidochrysops procera
Medium	Insecta-Orachrysops mijburghi
Medium	Mammalia-Crocidura maquassiensis
Medium	Mammalia-Hydrictis maculicollis
Medium	Mammalia-Ourebia ourebi ourebi

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

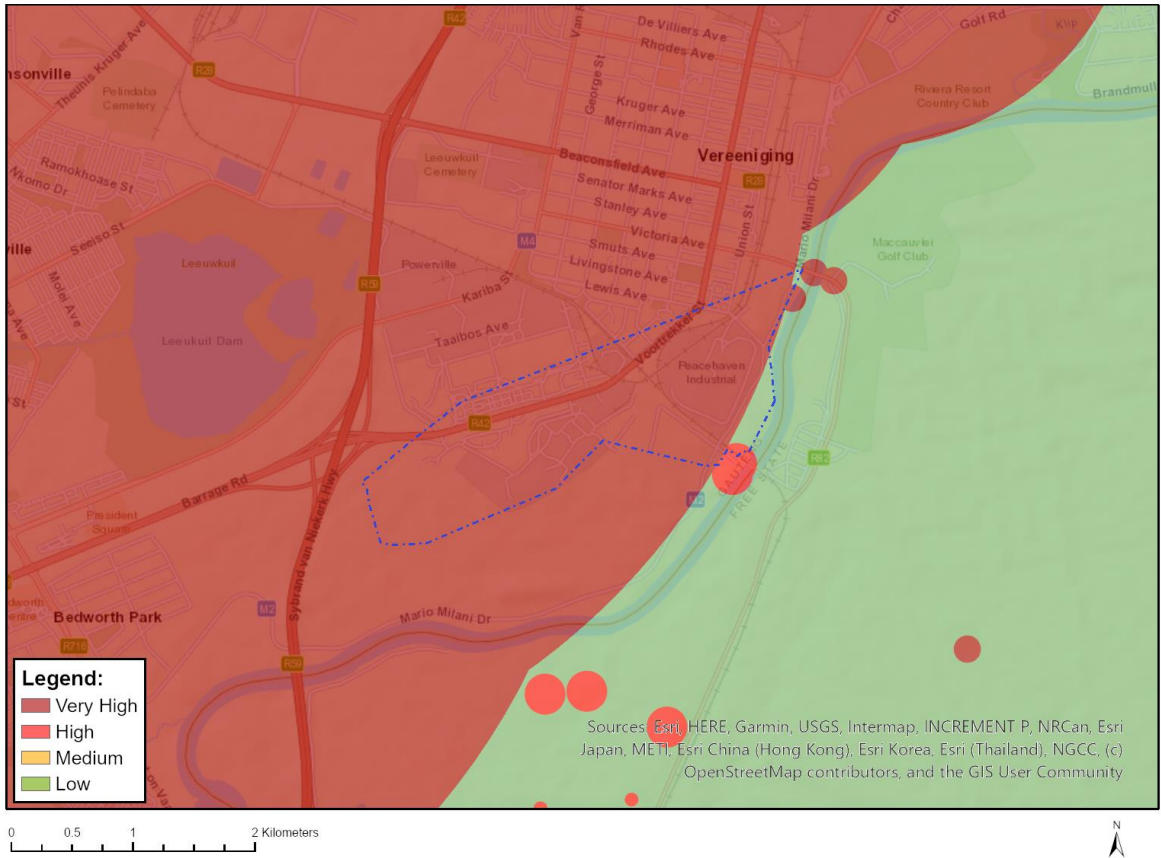


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Wetlands_(River)
Very High	Wetlands_Dry Highveld Grassland Bioregion (Seep)

# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

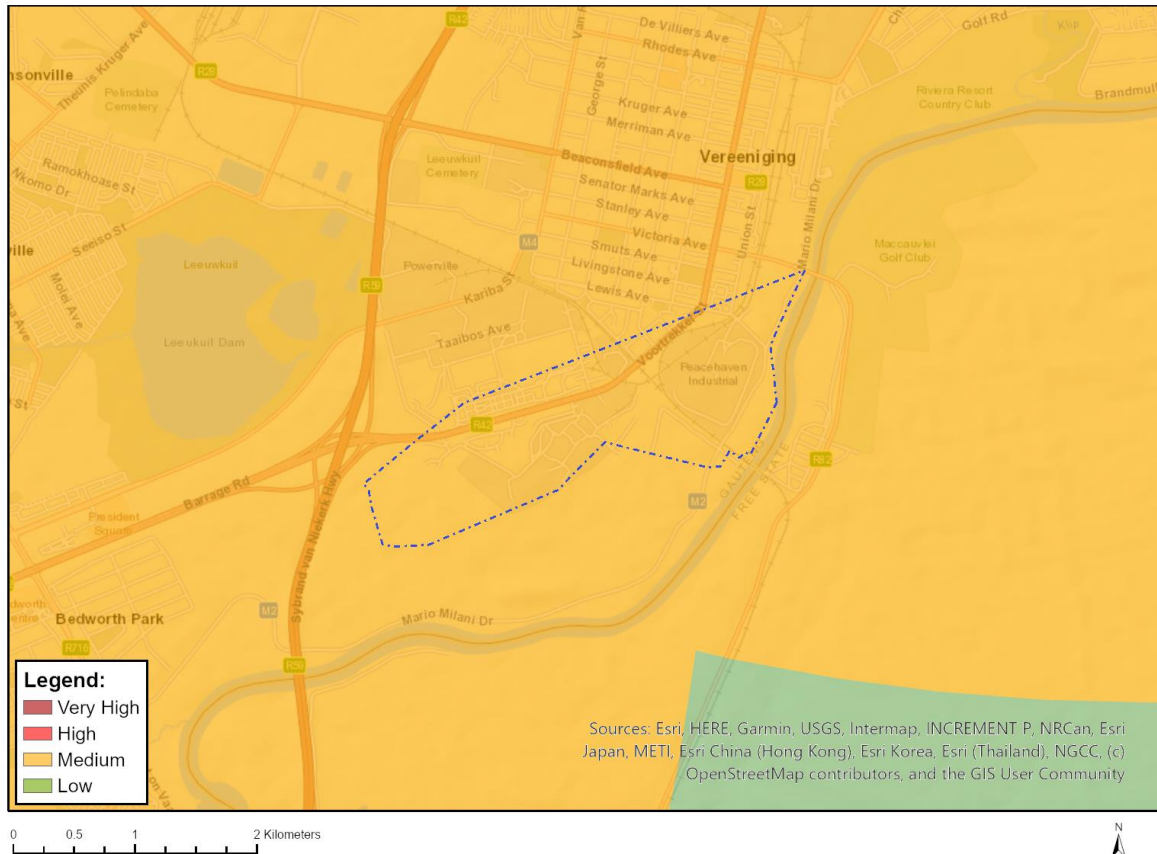


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

## Sensitivity Features:

Sensitivity	Feature(s)
High	Within 150m of a Grade IIIa Heritage site
Low	Low sensitivity
Very High	Within 5km of a Grade I Heritage site
Very High	Within 2km of a Grade II Heritage site
Very High	Within 100m of an Ungraded Heritage site

## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

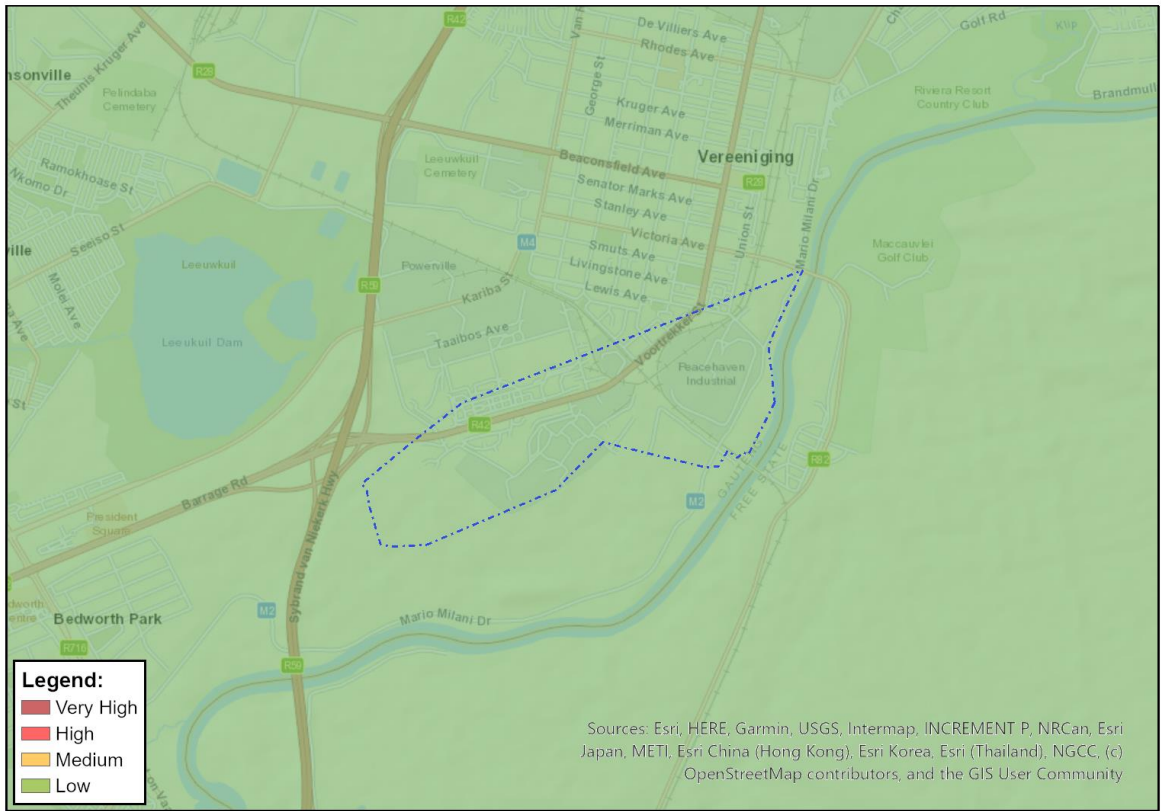


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

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

# MAP OF RELATIVE DEFENCE THEME SENSITIVITY



0 0.5 1 2 Kilometers

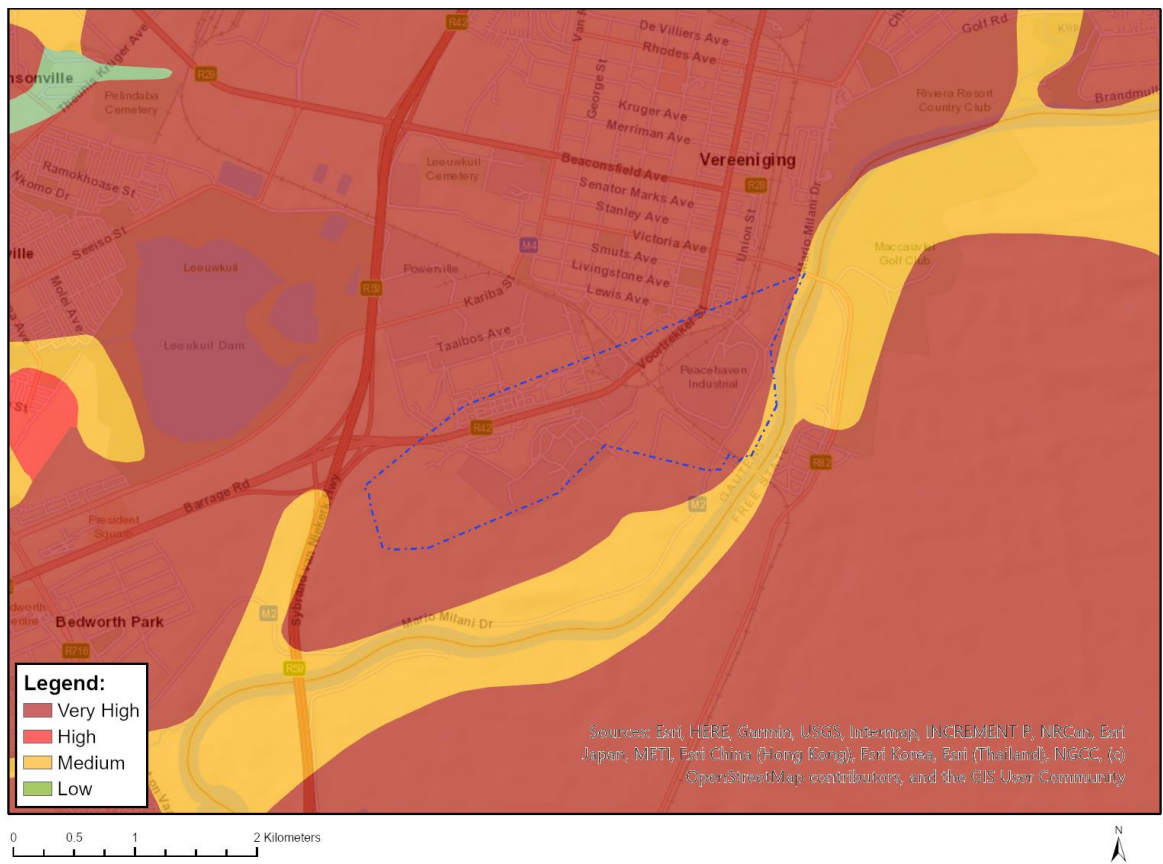


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

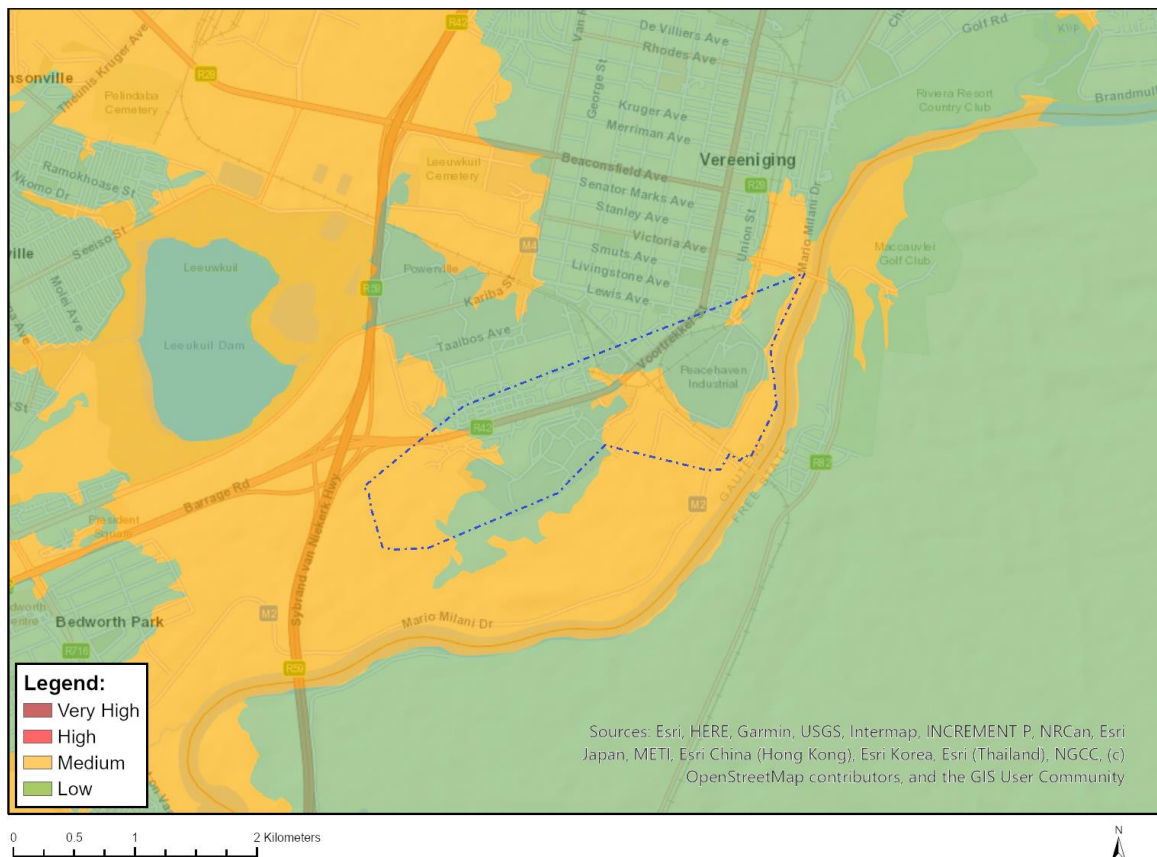


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### 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](mailto: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 1252
Medium	Delosperma macellum
Medium	Sensitive species 691

## MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Very High	ESA 1
Very High	ESA 2
Very High	VU_Soweto Highveld Grassland