

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

EIA Reference number: TBC

Project name: Power line for the Sonvanger Solar Power Plant

Project title: Power line for the Sonvanger Solar Power Plant

Date screening report generated: 19/07/2021 20:14:10

Applicant: Pele Green Energy (Pty) Ltd

Compiler: Lisa Opperman

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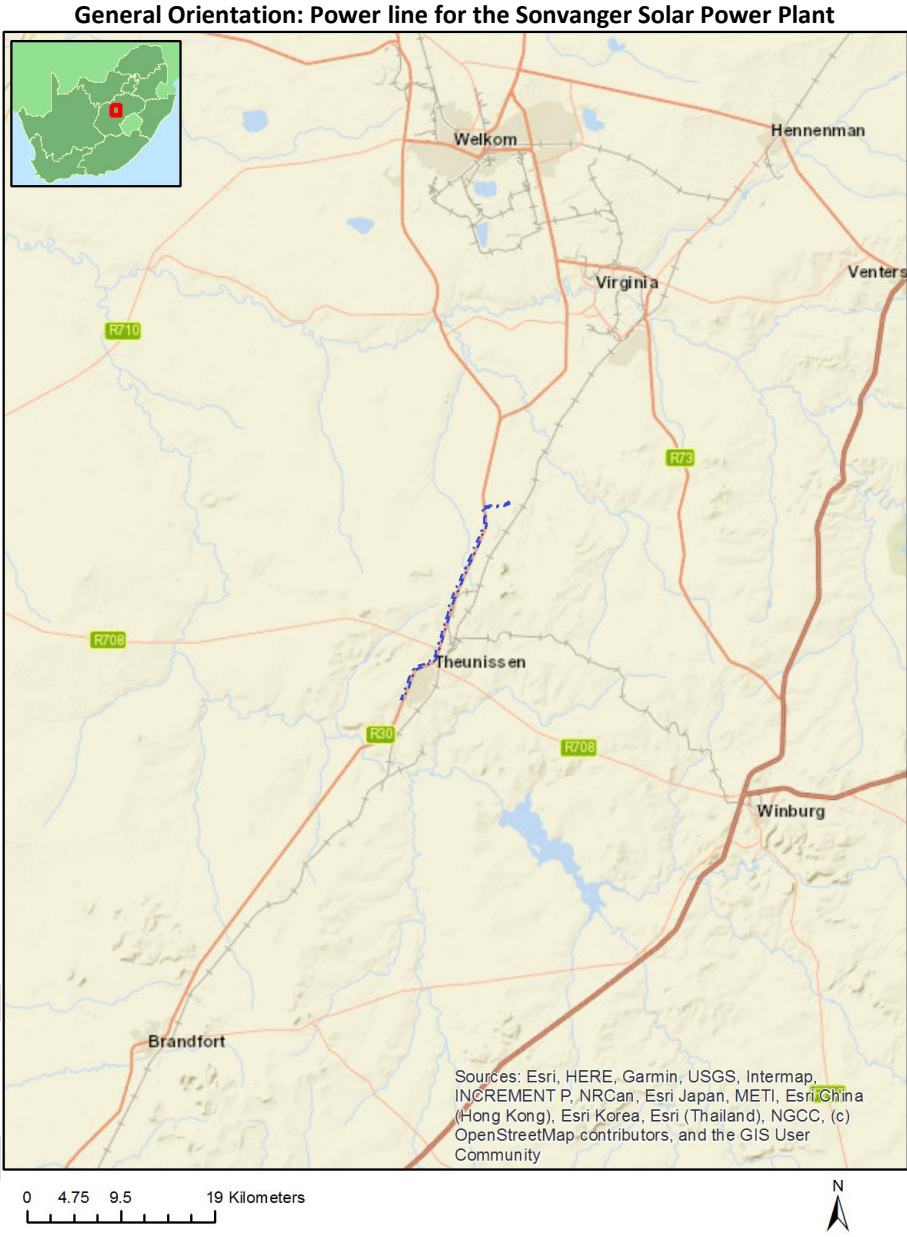
Application Category: Utilities Infrastructure | Electricity | Distribution and Transmission | Powerline

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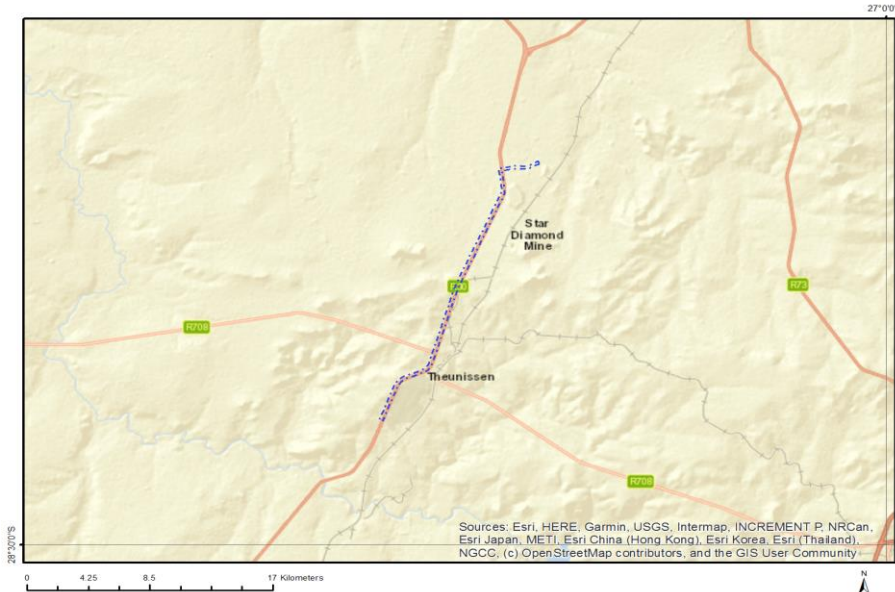
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Proposed Project Location

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	THEUNISSEN	752	0	28°23'33.08S	26°42'45.8E	Erven
2	THEUNISSEN	767	0	28°23'36.96S	26°42'42.21E	Erven
3	THEUNISSEN	756	0	28°23'33.12S	26°42'42.12E	Erven
4	THEUNISSEN	762	0	28°23'35.17S	26°42'44.55E	Erven
5	THEUNISSEN	789	0	28°23'31.59S	26°42'42.59E	Erven
6	THEUNISSEN	753	0	28°23'33.12S	26°42'44.9E	Erven
7	THEUNISSEN	747	0	28°23'31.59S	26°42'44.9E	Erven
8	THEUNISSEN	755	0	28°23'33.12S	26°42'43.05E	Erven
9	THEUNISSEN	729	0	28°23'32.18S	26°42'35.15E	Erven
10	THEUNISSEN	748	0	28°23'31.6S	26°42'45.82E	Erven
11	THEUNISSEN	758	0	28°23'35.16S	26°42'40.84E	Erven
12	THEUNISSEN	695	0	28°23'49.03S	26°42'10.53E	Erven
13	THEUNISSEN	757	0	28°23'33.11S	26°42'41.15E	Erven
14	THEUNISSEN	759	0	28°23'35.17S	26°42'41.76E	Erven
15	THEUNISSEN	761	0	28°23'35.17S	26°42'43.62E	Erven
16	THEUNISSEN	763	0	28°23'35.15S	26°42'45.8E	Erven
17	THEUNISSEN	695	2	28°23'50.83S	26°42'12.11E	Erven
18	THEUNISSEN	746	0	28°23'31.59S	26°42'43.98E	Erven
19	THEUNISSEN	750	0	28°23'33.41S	26°42'47.94E	Erven
20	THEUNISSEN	754	0	28°23'33.12S	26°42'43.97E	Erven
21	THEUNISSEN	760	0	28°23'35.17S	26°42'42.69E	Erven
22	THEUNISSEN	788	0	28°23'32.24S	26°42'47.03E	Erven
23	EXCELSIOR	147	0	28°16'7.02S	26°44'39.29E	Farm
24	SMALDEEL	262	0	28°23'29.2S	26°42'40.61E	Farm
25	SPES BONA	290	0	28°25'46.17S	26°41'40.12E	Farm
26	ERFBLOEM	12	0	28°19'17.83S	26°44'50.27E	Farm
27	GOEDEMOED	143	0	28°16'56.17S	26°44'30.78E	Farm
28	GLEN ALAN	145	0	28°22'15.26S	26°42'19.73E	Farm
29	MOOI HOEK	297	0	28°21'16.14S	26°43'19.41E	Farm

30	THEUNISSEN	252	0	28°22'31.57S	26°43'25.11E	Farm
31	LEEUBULT	52	0	28°16'25.04S	26°46'41.28E	Farm
32	AFRIKANDER OORD	80	0	28°26'26.84S	26°41'18.61E	Farm
33	LEEUVLEI	115	0	28°18'3.46S	26°45'23.83E	Farm
34	MASILO	597	0	28°24'57.31S	26°41'55.62E	Farm
35	VERGELEGEN	85	0	28°19'17.43S	26°43'28.76E	Farm
36	EBENHAEZER	401	0	28°24'39.43S	26°41'15.19E	Farm
37	SILESIA	409	0	28°18'25.47S	26°45'27.45E	Farm
38	GROTTKAU	410	0	28°17'49.46S	26°44'14.65E	Farm
39	DIRKIE'S RUST	612	0	28°20'10.67S	26°42'24.61E	Farm
40	KARREEBOOMS VALLEI	258	0	28°25'19.88S	26°40'28.36E	Farm
41	MAMRE	566	0	28°21'43.08S	26°43'54.71E	Farm
42	ERFBLOEM	12	0	28°19'10.58S	26°44'27.96E	Farm Portion
43	ERFBLOEM	12	5	28°19'11.43S	26°44'42.89E	Farm Portion
44	VERGELEGEN	85	1	28°19'53.85S	26°43'40.75E	Farm Portion
45	LEEUVLEI	115	1	28°17'46.93S	26°45'24.42E	Farm Portion
46	GLEN ALAN	145	0	28°22'6.39S	26°42'27.87E	Farm Portion
47	LEEUBULT	52	3	28°16'22.37S	26°45'43.66E	Farm Portion
48	SMALDEEL	262	20	28°24'4.82S	26°41'51.36E	Farm Portion
49	ERFBLOEM	12	6	28°19'12.29S	26°44'42.06E	Farm Portion
50	LEEUVLEI	115	3	28°17'47.54S	26°45'24.72E	Farm Portion
51	SMALDEEL	262	14	28°23'42.72S	26°42'12.3E	Farm Portion
52	SMALDEEL	262	5	28°23'29.57S	26°42'37.95E	Farm Portion
53	SMALDEEL	262	1	28°23'49.4S	26°42'10.75E	Farm Portion
54	VERGELEGEN	85	4	28°20'24.03S	26°44'6.49E	Farm Portion
55	SMALDEEL	262	21	28°23'39.63S	26°42'42.48E	Farm Portion
56	EBENHAEZER	401	0	28°24'38.08S	26°41'19.11E	Farm Portion
57	VERGELEGEN	85	5	28°20'23.58S	26°44'6.46E	Farm Portion
58	GOEDEMOED	143	2	28°17'0.95S	26°44'41.82E	Farm Portion
59	SMALDEEL	262	22	28°23'4.68S	26°43'9.84E	Farm Portion
60	SMALDEEL	262	0	28°23'9.43S	26°42'54.45E	Farm Portion
61	LEEUVLEI	115	2	28°17'58.64S	26°45'19.01E	Farm Portion
62	LEEUVLEI	115	0	28°17'58.28S	26°45'8.36E	Farm Portion
63	GOEDEMOED	143	0	28°17'13.98S	26°45'24.8E	Farm Portion
64	EXCELSIOR	147	3	28°16'7S	26°45'40.79E	Farm Portion
65	THEUNISSEN	252	2	28°22'33.14S	26°43'20.77E	Farm Portion
66	MAMRE	566	0	28°21'55.35S	26°43'28.55E	Farm Portion
67	EBENHAEZER	401	2	28°24'40.19S	26°41'34.05E	Farm Portion
68	MAMRE	566	2	28°21'31.29S	26°43'41.89E	Farm Portion
69	MASILO	597	0	28°25'4.96S	26°41'20.86E	Farm Portion
70	LEEUBULT	52	0	28°16'25.23S	26°46'41.24E	Farm Portion
71	AFRIKANDER OORD	80	0	28°25'35.15S	26°41'6.05E	Farm Portion
72	GOEDEMOED	143	3	28°17'6.12S	26°45'45.05E	Farm Portion
73	EXCELSIOR	147	2	28°16'55.16S	26°45'47.21E	Farm Portion
74	EXCELSIOR	147	1	28°16'12.47S	26°45'21.04E	Farm Portion
75	THEUNISSEN	252	0	28°22'29.26S	26°43'14.27E	Farm Portion
76	KARREEBOOMS VALLEI	258	5	28°24'51.65S	26°41'29.14E	Farm Portion
77	KARREEBOOMS VALLEI	258	1	28°25'35.14S	26°40'31.5E	Farm Portion
78	MOOI HOEK	297	1	28°20'51.6S	26°43'55.7E	Farm Portion
79	MASILO	597	12	28°25'1.01S	26°41'24.95E	Farm Portion
80	EBENHAEZER	401	1	28°24'40.88S	26°41'34.01E	Farm Portion
81	MAMRE	566	1	28°21'31.07S	26°43'42.22E	Farm Portion
82	MOOI HOEK	297	0	28°21'15.93S	26°43'22.63E	Farm Portion
83	SILESIA	409	2	28°18'17.47S	26°45'9.65E	Farm Portion
84	SILESIA	409	0	28°18'13.14S	26°45'6.37E	Farm Portion
85	GROTTKAU	410	5	28°18'24.42S	26°45'5.95E	Farm Portion
86	MOOI HOEK	297	4	28°20'51.59S	26°43'55.51E	Farm Portion

87	KARREEBOOMS VALLEI	258	6	28°24'52.03S	26°41'28.84E	Farm Portion
88	KARREEBOOMS VALLEI	258	2	28°24'58.53S	26°40'42.89E	Farm Portion
89	SPES BONA	290	0	28°25'17.74S	26°41'12.14E	Farm Portion
90	SILESIA	409	4	28°18'16.31S	26°45'9.98E	Farm Portion
91	GROTTKAU	410	3	28°18'25.85S	26°45'5.47E	Farm Portion
92	DIRKIE'S RUST	612	0	28°20'12.39S	26°42'29.99E	Farm Portion
93	SPES BONA	290	2	28°25'17.42S	26°41'17.78E	Farm Portion
94	GROTTKAU	410	0	28°17'48.15S	26°44'46.77E	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	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	12/12/20/2669	Solar PV	Approved	8.5
2	12/12/20/2666/A	Solar PV	Approved	6.6
3	12/12/20/2668	Solar PV	Approved	0
4	12/12/20/2666	Solar PV	Approved	6.6
5	12/12/20/2667	Solar PV	Approved	0
6	12/12/20/2669/A	Solar PV	Approved	8.5

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

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.

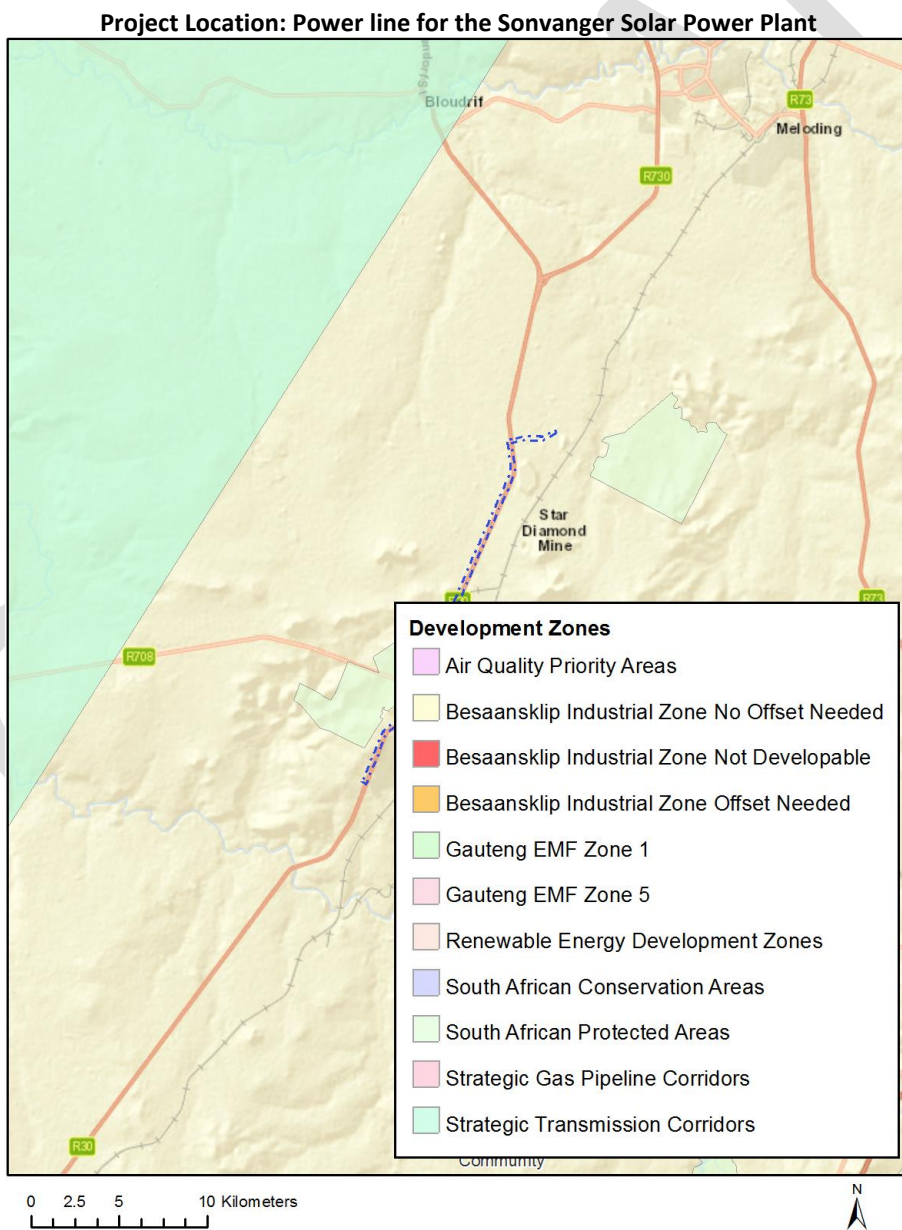
Relevant development incentives, restrictions, exclusions or prohibitions

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

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.

Incentive, restriction or prohibition	Implication
South African Protected Areas	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SAPAD_OR_2021_Q1_Metadata.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 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 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.

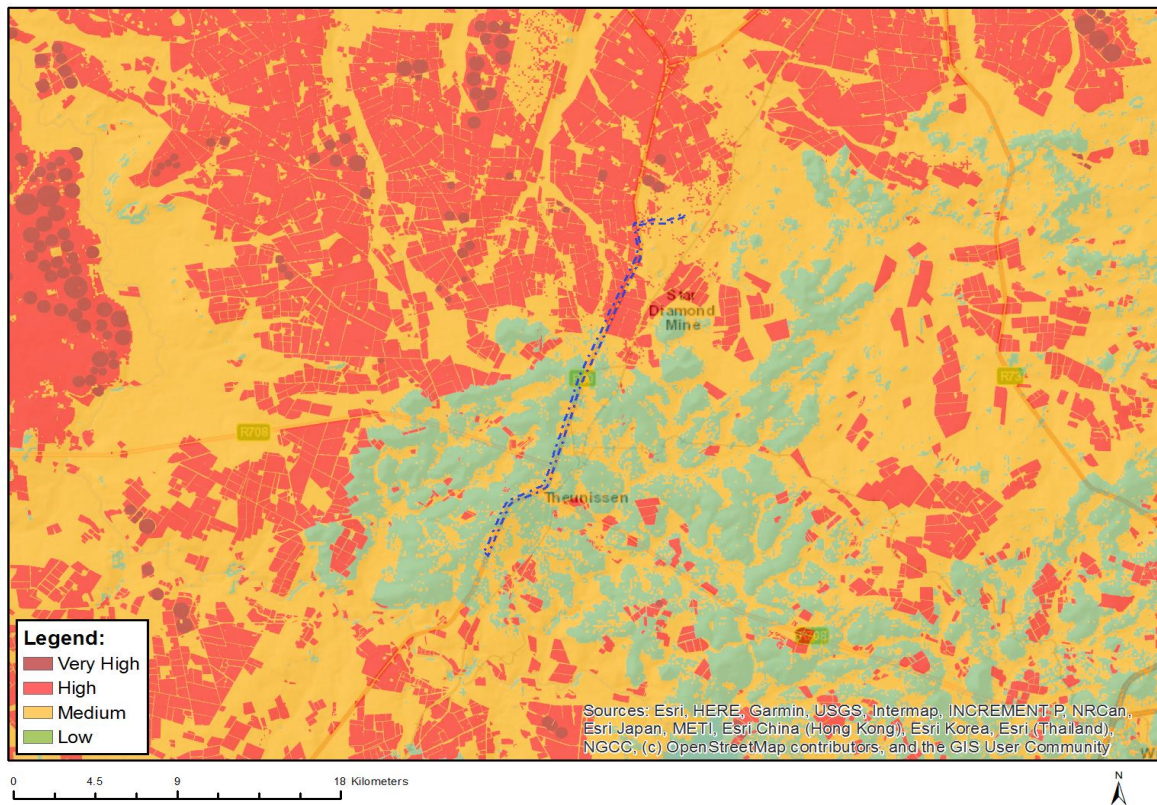
N o	Special ist assess ment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Agriculture Assessment Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted 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

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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

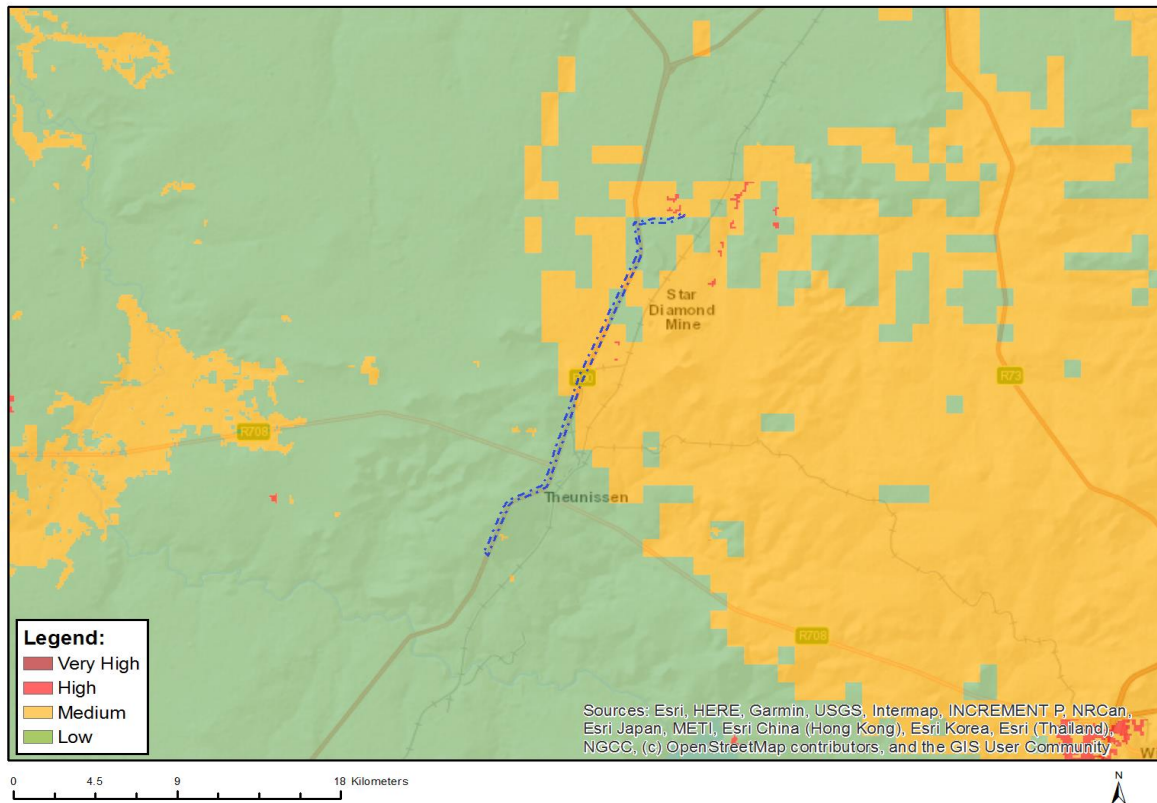


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



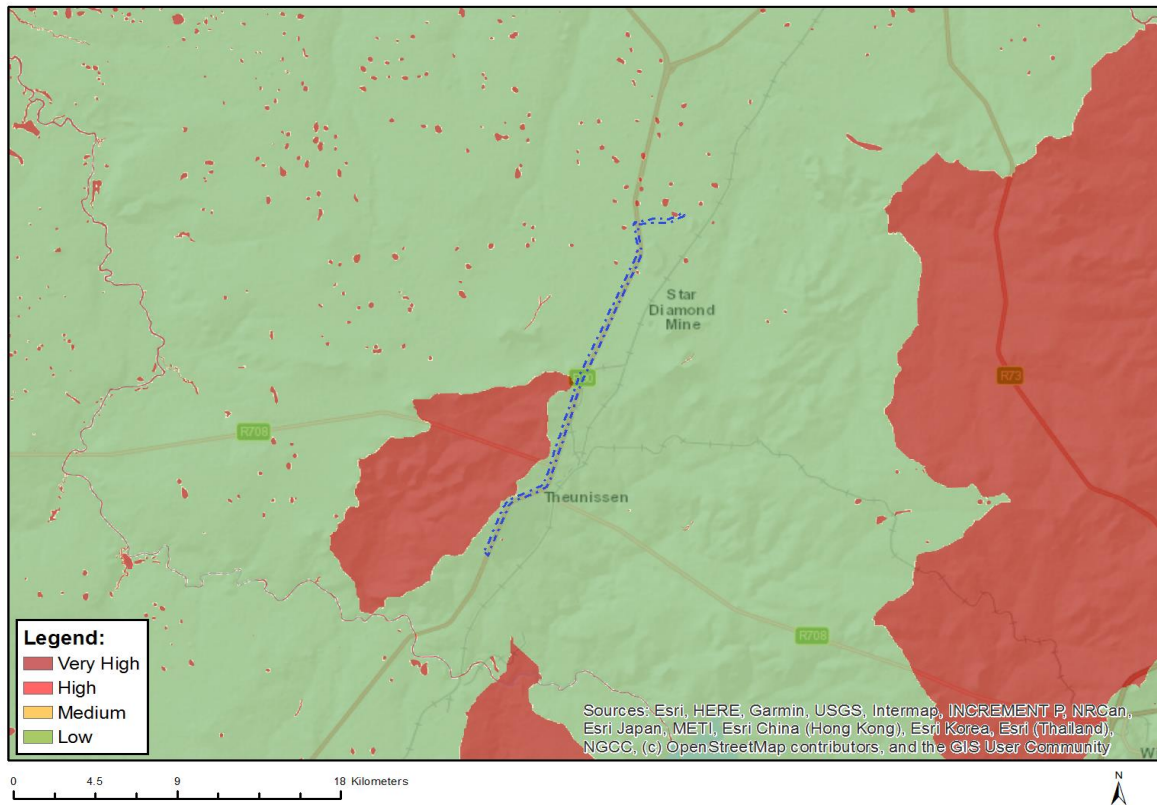
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their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

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

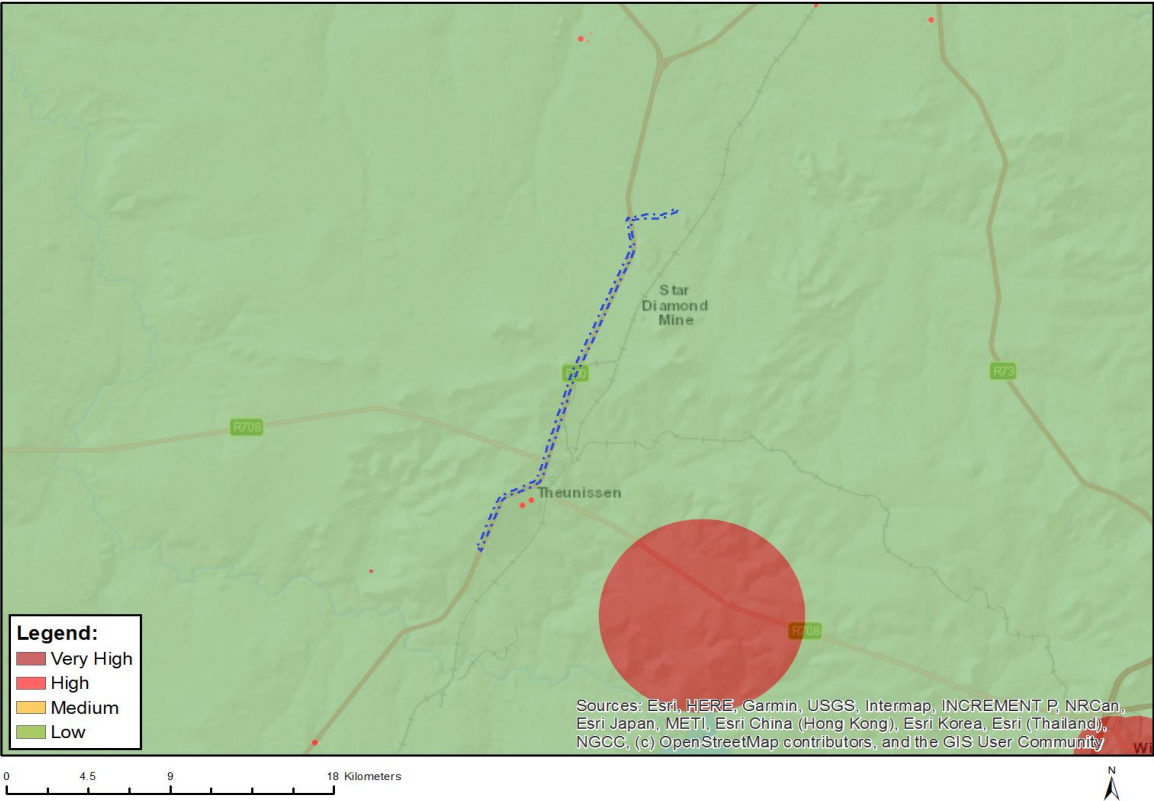


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Wetlands and Estuaries

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

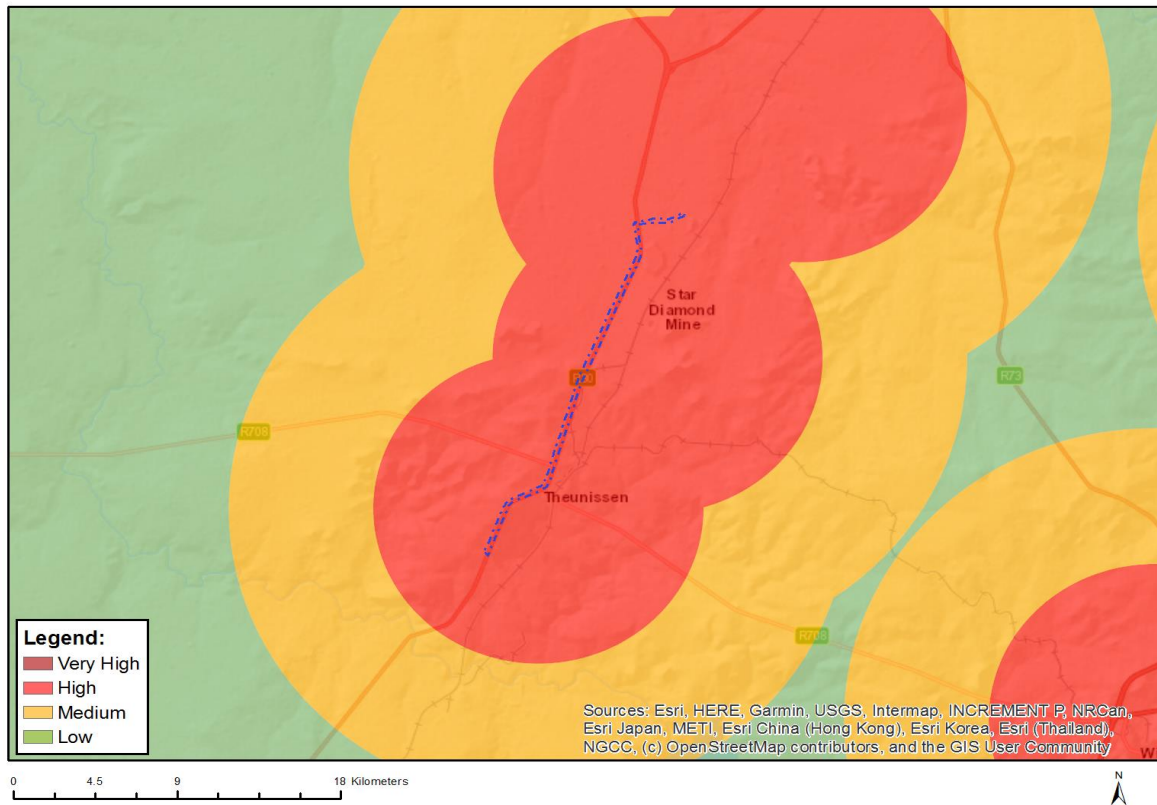


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

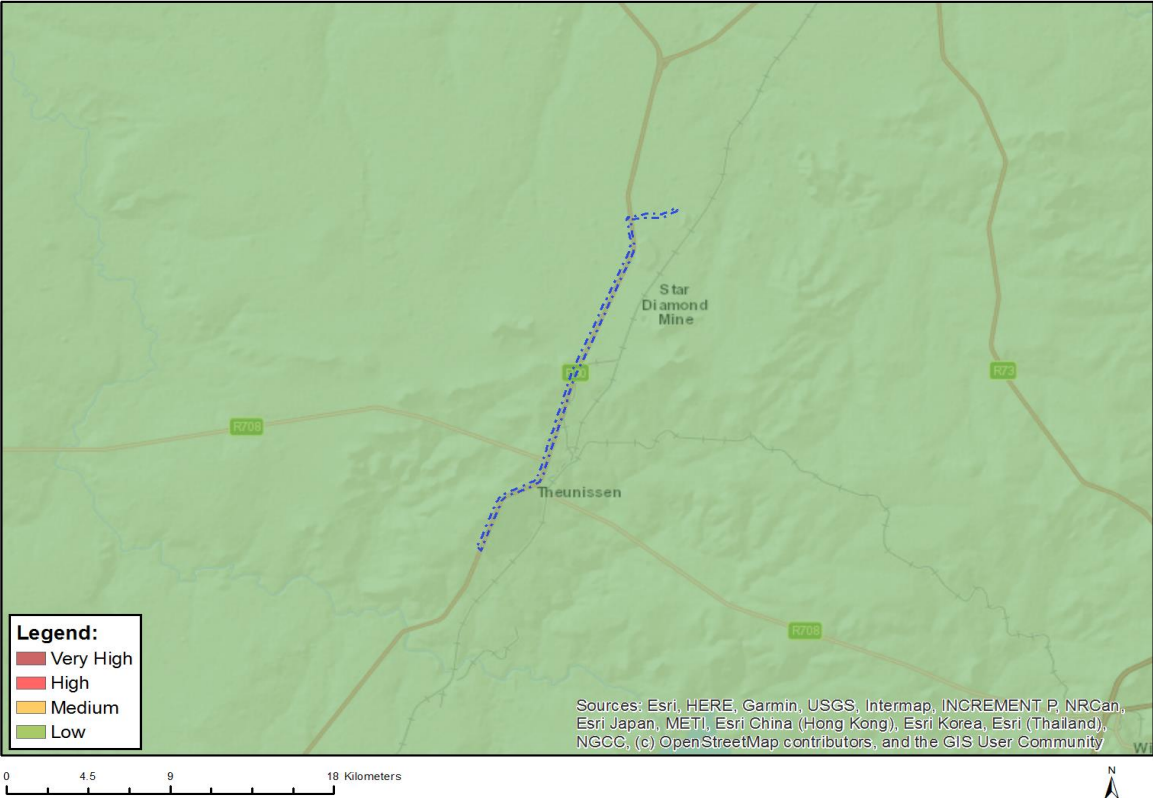


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

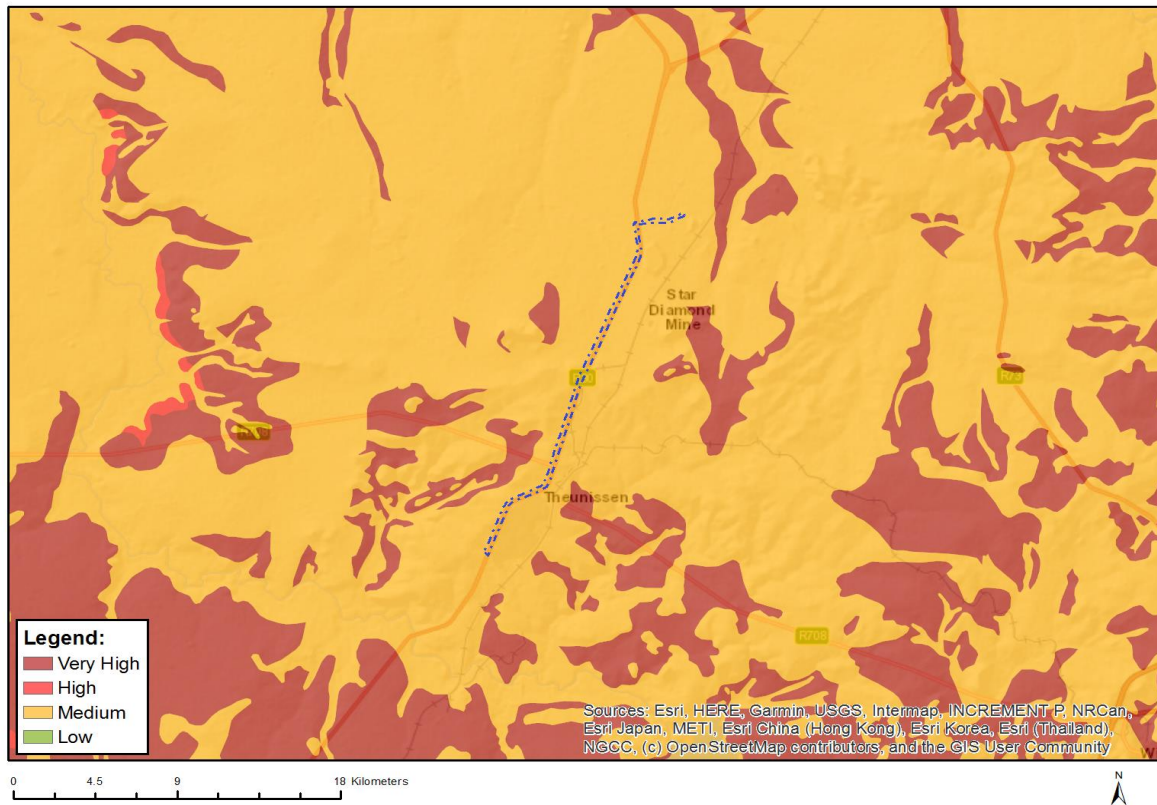


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

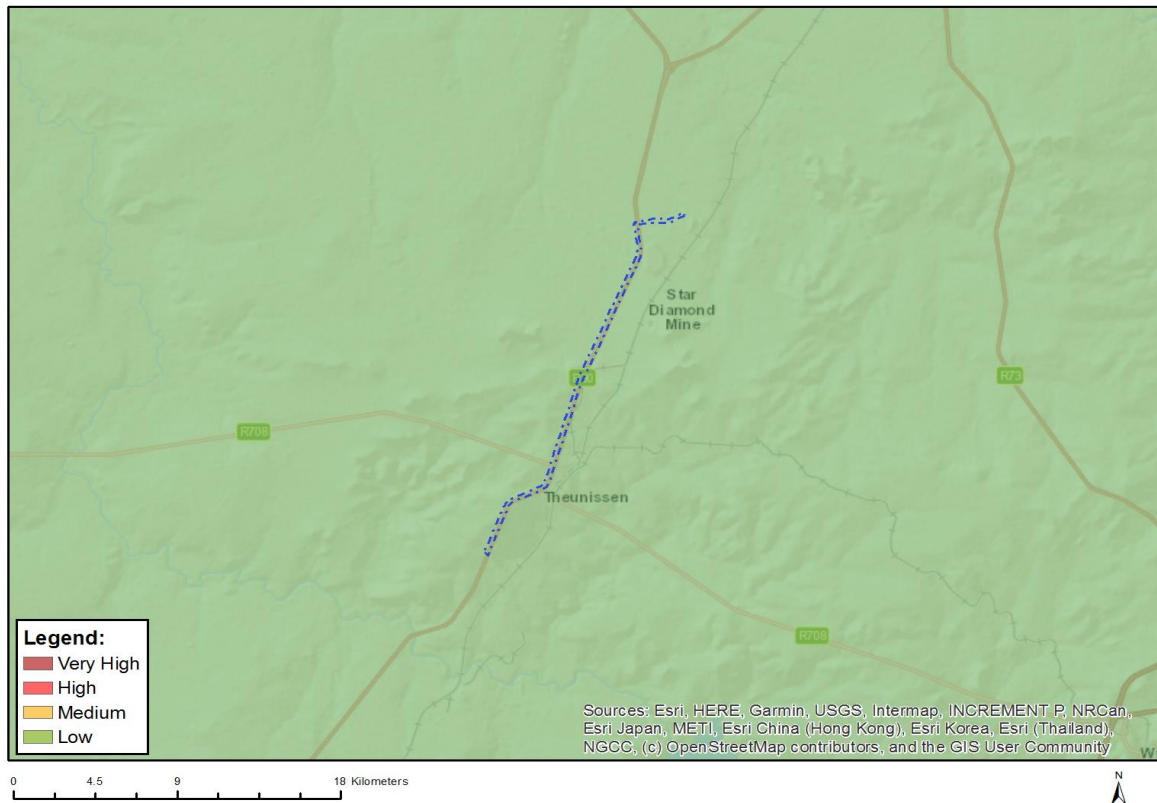


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



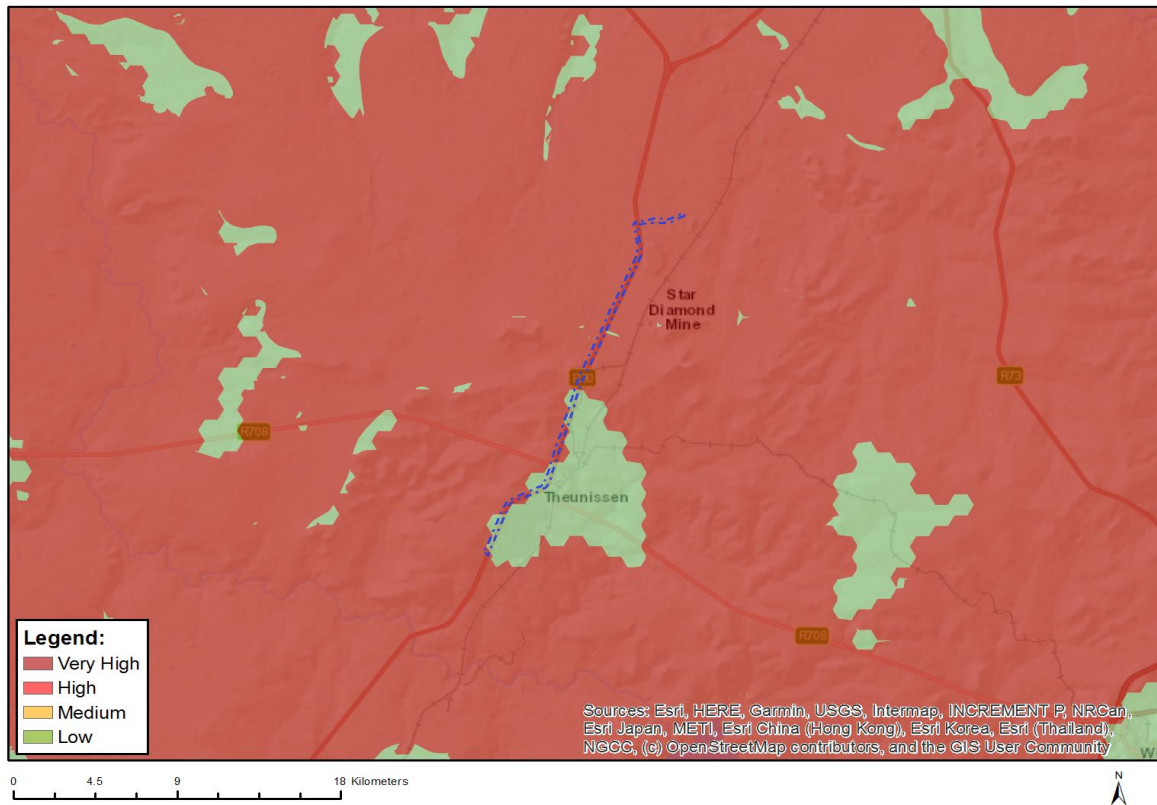
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their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

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Critical Biodiversity Area 1
Very High	Critical Biodiversity Area 2
Very High	Ecological Support Area 1
Very High	Ecological Support Area 2
Very High	Focus Areas for land-based protected areas expansion
Very High	Endangered ecosystem
Very High	South African Protected Areas