



Pembroke – Poseidon 400 kV Terrestrial Walkdown Report

Buffalo City, Amathole and Cacadu District Municipalities, Eastern Cape Province, South Africa

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CLIENT



Prepared by:

The Biodiversity Company

Cell: +27 81 319 1225

info@thebiodiversitycompany.com

www.thebiodiversitycompany.com





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Environmental Assessment Practitioner		
Report Writer	Igi jacobs (Cand. Sci. Nat. <i>pending</i>)	
Report Reviewer	Dr Candyce Areington (Cand. Sci. Nat. 167868)	
Report Reviewer	Wesley Black (Pri. Sci. Nat. 147190)	
Declaration	<p>The Biodiversity Company and its associates operate as independent consultants under the auspice of the South African Council for Natural Scientific Professions. We declare that we have no affiliation with or vested financial interests in the proponent, other than for work performed under the Environmental Impact Assessment Regulations, Amended. We have no conflicting interests in the undertaking of this activity and have no interests in secondary developments resulting from the authorisation of this project. We have no vested interest in the project, other than to provide a professional service within the constraints of the project (timing, time and budget) based on the principals of science.</p>	

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1 Introduction

The Biodiversity Company was commissioned to conduct an ecological walkdown survey for the proposed ± 165 km 400 kV powerline from the Pembroke to the Poseidon Substation as part of the proposed Greater East London Phase 4 Project. The proposed powerline starts near Qonce and ends near Cookhouse, traversing the Buffalo City Metropolitan, Raymond Mhlaba and Blue Crane Route Local Municipalities in the Eastern Cape (Figure 1-1).

A requirement of the EA and the Environmental Management Programme report (EMPr) is the undertaking of an ecological walkdown for the approved project infrastructure footprint to inform the site-specific EMPr. A walkdown was undertaken from the 7th of March to the 17th of April 2025.

According to the National Transmission Company South Africa SOC LTD (2024) this project is part of the minimum strengthening requirements in the Eastern Cape Province in meeting the IRP 2019 renewable generation integration. There is high potential for wind generation around Poseidon Substation. The expected renewable energy generation to be evacuated from the Port Elizabeth power pool is approximately 5 GW as per the IRP 2019. There has been minimal progress achieved on the Greater East London Strengthening phase 4 project thus far because of resource constraints as well as the relocations on the revised Greater East London strengthening phase 3 (Neptune – Pembroke 400 kV line and associated substation works) that were taking priority. The phase 4 project only recently became a priority project due to the IRP 2019. The concept designs that were originally done for Greater East London Strengthening phase 3 were no longer applicable to the Greater East London Phase 4 because of the re-phasing, change of scope and it was no longer valid as it was done almost 10 years ago. The concept designs for the Greater East London strengthening phase 4 project were recently redone and approved at the PDE DRT.

Eskom had provided four corridor options as part of the initial EIA process for the Neptune – Poseidon 400 kV powerline in 2012 where NEMA Consulting was appointed to do the Environmental Impact Assessment report. Freshwater ecosystems were only identified on a desktop level for the EIA phase of the project with the recommendation of having a walkdown survey to determine the final location of pylon towers ensuring that freshwater features and their respective buffers that are delineated during the walkdown are avoided.

The purpose of the ecological walkdown was to undertake a walking survey of the ± 165 km, 400 kV power line from Pembroke to Poseidon and identify buffers, sensitive sites, no-go areas, and provide site-specific mitigation measures where necessary. Thereafter, to advise if there is a need to change the pylon/tower location based on the anticipated impact.

The purpose of the ecological walkdown was to locate and identify any sensitive ecological features and locate protected or threatened plant species and/or fauna of conservation concern within the development footprint areas. The presence of all listed and protected species is detailed herein. Where applicable, this information can be used to supplement the requirements of the necessary permit application that is required from the provincial authority, i.e. the Department of Agriculture, Environmental Affairs, Rural Development and Land Reform before construction can commence. Spatial data was also provided for the walkdowns which demarcated sensitivity areas which were also considered for the placement of infrastructure.

This report only presents the findings from the ecological walkdowns, and should be considered in conjunction with other disciplines, specifically the freshwater studies and avifauna findings. These disciplines will collectively provide the demarcation of ecological constraints for the larger area.

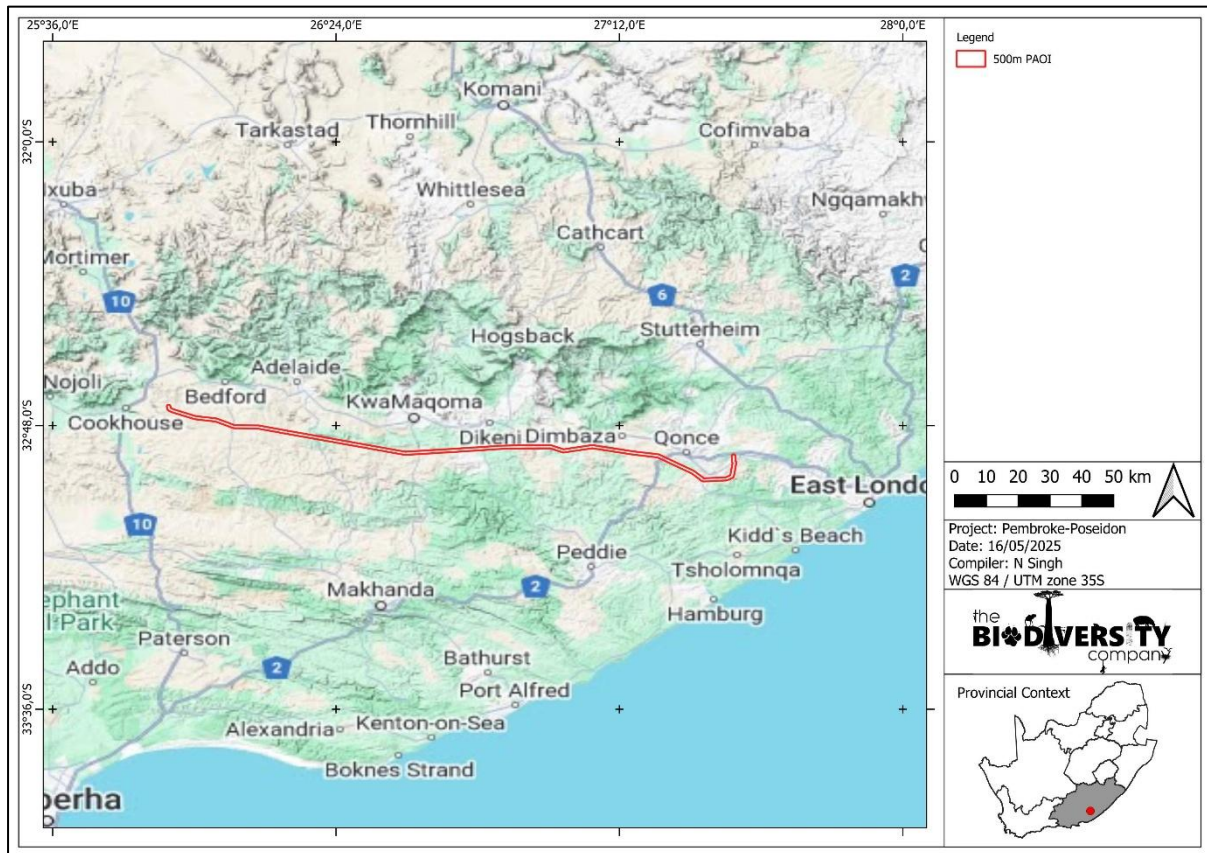


Figure 1-1 Location of the proposed project.

1.1 Terms of Reference

The Terms of Reference (ToR) for this assessment include the following:

- Review of existing information related to the development;
- Conduct an ecological walkdown for the planned footprint areas;
- Compilation of a report detailing the results of the walkdown:
 - Detail any ecological constraints identified for the planned infrastructure;
 - Present information on the presence of any Species of Conservation Concern (SCC); and
 - Provide information and recommendations for the micro-siting of relevant infrastructure.
- Provide information to adequately inform any contractors, environmental officers and personnel pertaining to the ecological significance for the area.

1.2 Assumptions and Limitations

The following assumptions and limitations should be noted for the assessment:

- It has been assumed that the spatial files provided to the specialist are accurate and any deviations would render this report and the data herein inaccurate;
- Apart from the location of the proposed pylon infrastructure as indicated in Figure 2-1, no other relevant spatial information in terms of the structure design was provided in relation to the proposed development at the time of report preparation;
- A single survey was conducted, thus temporal trends were not investigated;
- Access to the pylons (No. 39, 103, 104, 201-210 and, 259-265) were not possible during the survey due to the thickness of vegetation, traditional activities taking place in proximity to the tower, the presence of tall, electrified fences which could not be crossed and fenced-off servitude gates;
- No detailed ecological assessments are included in the report as this document focuses only on the findings of the walkdown in relation to the identification and delineation of SCC and protected species.
- The site visit was conducted during the late wet season, which means that certain flora and fauna would not have been present or observable due to seasonal effects, however, the assessment is still deemed sufficient;
- Infrastructure positions were supplied by the client. GPS accuracy during the field surveys was approximately 5 m. The findings for the infrastructure are discussed in the subsequent sections; and
- Whilst every effort was made to cover as much of the site as possible, it is possible that some plant and animal species that are present within the area were not recorded during the field investigations. However, it is the opinion of the specialist that an accurate representative sample of the ecological components considered within this assessment was collected.

2 Approach

2.1 Project Area

The powerline pylon positions were supplied by the client. The precise locations of each towers/pylon were visited and used as guidelines during the walkdown and ecosystem evaluation phase. The powerline route, tower placement and respective 500 m PAOI for the identification and delineation of any SCC or protected species is indicated in Figure 2-1. The maps in the following sections show limited extents of the PAOI in detail and the areas displayed were not selected based on any criteria and are included to provide context for the project.

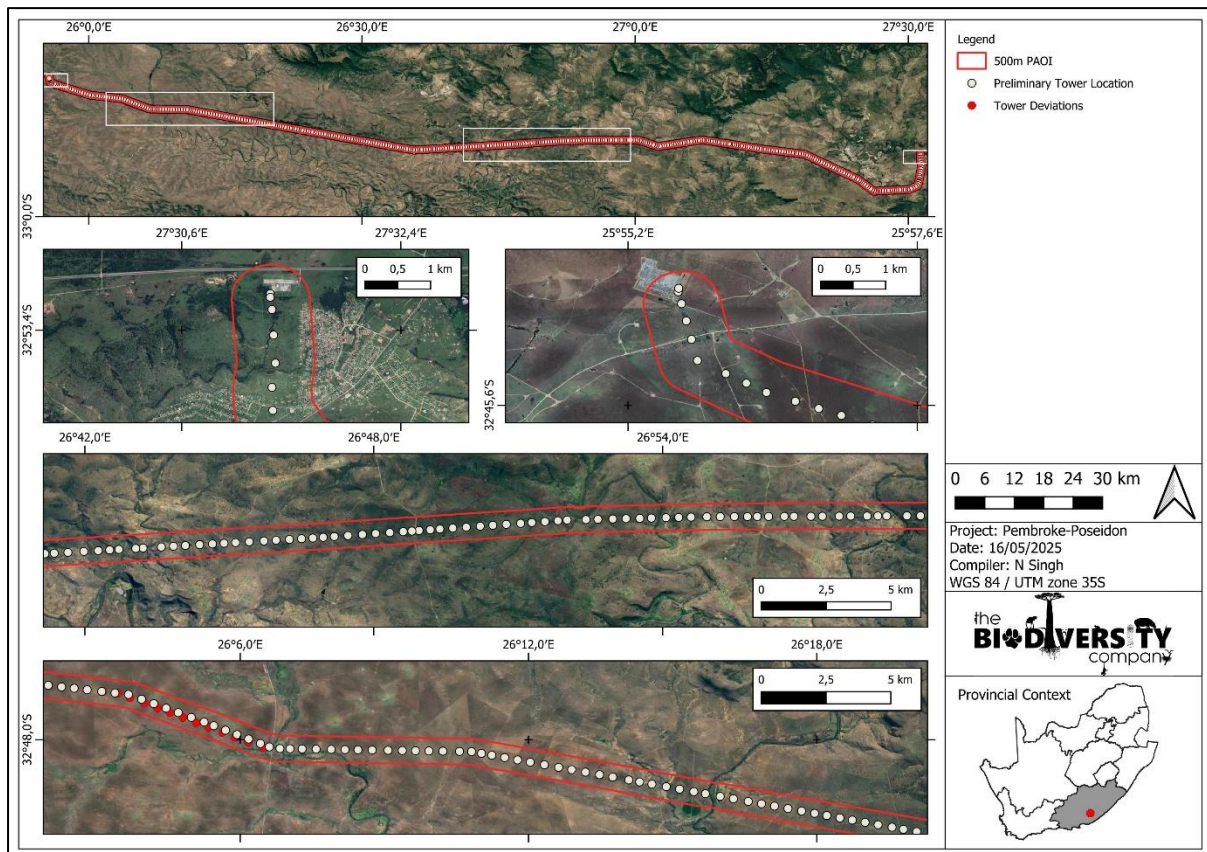


Figure 2-1 *Proposed Route, Pylon Placement and Project Area of Influence. Top – Entire Route; Second Row (Left) – Start of Route; Second Row (Right) – End of Route; Third Row – General Overview of Tower Spacing*

3 Results

The results of the ecological walkdown are presented in Table 3-1 below. The fieldwork coverage can be seen in Figure 3-1. The PAOI was divided in 9 segments that can be seen in Figure 3-2 to Figure 3-10.

Current disturbances to the PAOI were predominantly a result of agricultural activities in the form of livestock grazing (sheep, cattle, horses, and indigenous game species) as well as farm roads and other impacts noted throughout the project area. These disturbances reduce the overall sensitivity of most areas assessed in the walkdown.

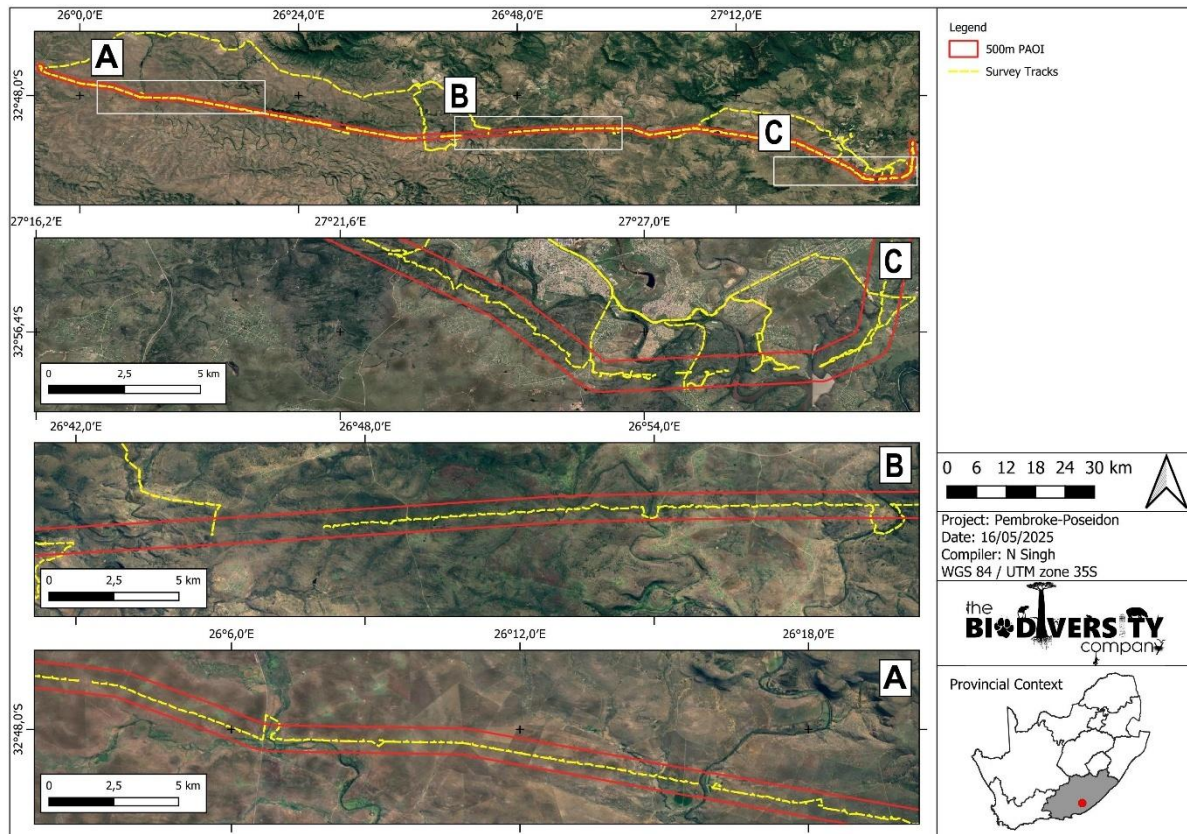













Figure 3-1 *Fieldwork coverage for the walkdown.*

Table 3-1 Site specific summary, comments and recommendations based on fieldwork across Pembroke Power line.

Site locations	Comments and recommendations	Corresponding photograph
<p>Segment 1 (Figure 3-2)</p> <p>Gantry Point, PemPos 1 – PemPos 38</p> <p>Depicted to the right is PemPos 6 and 38</p> <p>32°54'3.61"S 27°31'20.97"E</p> <p>32°56'47.13"S 27°30'36.70"E</p>	<p>Findings: Small stream crossing at PemPos 4 was observed and river crossings at PemPos 22 and 27. No other specific ecological constraints were recorded.</p> <p>Sensitivity area: No SCC species were observed in this section due to the ecological state of this area that is currently impacted by anthropogenic activities such as livestock grazing and rural development. These sections are dominated by grassland with grass species such as <i>Melinis repens</i>, <i>Sporobolus nitens</i> and <i>Bulbine abyssinica</i> was also recorded in this section. Small tree species such as <i>Vachellia karroo</i> and <i>Vachellia natalitia</i> are dominant in the thicket areas close to the river and streams. <i>Tritonia laxifolia</i> (Wide-Leaved Tritonia) which is a protected species was observed at PemPos 12 & 17.</p> <p>Recommendation: Relocation or avoidance of water resources to overcome future water erosion. Destruction permits should be obtained for <i>Tritonia laxifolia</i>.</p> <p>Points not surveyed: PemPos 39.</p>	 
<p>Segment 2 (Figure 3-3)</p> <p>PemPos 40 – PemPos 59</p> <p>Depicted to the right is PemPos 52 and 46</p> <p>32°55'10.37"S 27°22'55.89"E</p>	<p>Findings: No specific ecological constraints were recorded.</p> <p>Sensitivity of area: No SCC species were observed in this section. However, it is classified as Bhishe Thornveld (LC, NP) due to the abundance of the species <i>Vachellia karroo</i>, <i>Vachellia natalitia</i>, <i>Plumbago auriculata</i> and <i>Sporobolus africanus</i> that dominates the undergrowth. One species of <i>Boophone disticha</i> (Century Plant) were recorded at PemPos 46 which is a protected species.</p>	

32°55'52.90"S 27°24'26.87"E	Recommendation: Obtain a destruction permit from the appropriate authorities for the <i>Boophone disticha</i> species.	
Segment 3 (Figure 3-4) PemPos 60 – PemPos 79 Depicted to the right is PemPos 66 and 72 32°53'33.81"S 27°19'30.05"E 32°53'4.59"S 27°18'4.75"E	Findings: No specific ecological constraints were recorded. Sensitivity of area: No SCC species were observed in this section due to the ecological state of this area that is currently impacted by anthropogenic activities such as livestock grazing and rural development. Majority of this section is dominated by grassland with grass species such as <i>Digitaria ternata</i> and <i>Sporobolus nitens</i> . Small tree species such as <i>Vachellia karroo</i> and <i>Vachellia natalitia</i> are dominant in the thicket areas close to and in the valleys. Recommendation: Retain basal vegetation beneath towers.	 
Segment 4 (Figure 3-5) PemPos 80 – PemPos 99 Depicted to the right is PemPos 85 and 72 32°53'33.81"S 27°19'30.05"E 32°53'4.59"S 27°18'4.75"E	Findings: No specific ecological constraints were recorded. Sensitivity of area: No SCC species were observed in this section. It is classified as Bhisho Thornveld due to the abundance of the species <i>Vachellia karroo</i> , <i>Vachellia natalitia</i> , and <i>Sporobolus africanus</i> as well as <i>Aristida sp.</i> The degraded grassland area is mostly dominated by <i>Digitaria ternata</i> and <i>Eragrostis sp.</i> Recommendation: Retain basal vegetation beneath towers.	

		
Segment 5 (Figure 3-6) PemPos 100 – PemPos 136 Depicted to the right is PemPos 106 and 116 32°51'37.63"S 27° 6'59.97"E 32°51'52.19"S 27° 9'19.40"E	<p>Findings: No specific ecological constraints were recorded.</p> <p>Sensitivity area: No SCC species were observed in this section. A small portion of this area is classified as Doubeldrift Karroid Thicket (LC, NP) vegetation type, characterized by the dominance of <i>Euphorbia tetragona</i> on the embankments, and <i>Vachellia karroo</i>, <i>Euryops chrysanthemoides</i>, <i>Coddia rudis</i>, <i>Canthium spinosum</i>, and <i>Euryops chrysanthemoides</i> on the plateaus that were observed. The remainder of the section has been impacted by human activities, including livestock overgrazing and agricultural practices.</p> <p>Recommendation: Retain basal vegetation beneath panels.</p> <p>Points not surveyed: PemPos 103 and 104. (Due to no access because of dense vegetation)</p>	 
Segment 6 (Figure 3-7) PemPos 136 – PemPos 164 Depicted to the right is PemPos 135 and 149 32°51'35.25" 26°59'36.24"E	<p>Findings: No specific ecological constraints were recorded.</p> <p>Sensitivity of area: No SCC species were observed in this section however one protected species was recorded namely <i>Aloiampelos ciliaris</i>. Some of the characterises features of the Bhisho Thornveld is a dominance of <i>Vachellia natalitia</i>, <i>Aloe ferox</i>, <i>Pteronia incana</i> with <i>Sporobolus africanus</i> as undergrowth.</p> <p>Recommendation: Obtain a relocation permit from the appropriate authorities for the <i>Aloiampelos ciliaris</i> (Climbing Aloe) species.</p>	

32°51'35.36"S
26°58'28.16"E



Segment 7

(Figure 3-8)

PemPos 165 –
PemPos 234

Depicted to the right
is PemPos 231 and
224

32°52'38.16"S
26°36'34.68"E

32°52'32.60"S
26°38'21.56"E





Findings: No specific ecological constraints were recorded in this section of the power line crossing the Katrivier. Measures should be taken to avoid water erosion at PemPos 220.

Sensitivity of area: No SCC species were observed in this section, however multiple protected species were recorded at the next pylon positions. PemPos 172 *Boscia albitrunca*, PemPos 197 *Ammocharis coranica*, PemPos 211 *Boscia albitrunca*, PemPos 215 *Boscia albitrunca*, PemPos 218 *Boscia albitrunca*, PemPos 219 *Boscia albitrunca*, PemPost 222 *Boscia albitrunca*, PemPost 224 *Tritonia laxifolia*, PemPos 231 *Boscia albitrunca*. This section falls under two different vegetation types, namely Fish Valley Thicket and Bhishe Thornveld.

Recommendation: Obtain a destruction permit from the appropriate authorities for both the *Boscia albitrunca* (Shepherd's Tree) and the *Tritonia laxifolia* species seeing that relocation of the *Boscia albitrunca* species has a very low success rate and the *Tritonia laxifolia* is in abundance in this region.

Points not surveyed: PemPos 201-210 (Access being limited by undrivable paths)



<p>Segment 8</p> <p>(Figure 3-9)</p> <p>PemPos 235 – PemPos 258</p> <p>Depicted to the right is PemPos 238 and 251</p> <p>32°52'30.63"S</p> <p>26°34'43.33"E</p> <p>32°51'56.00"S</p> <p>26°31'18.47"E</p>	<p>Findings: No specific ecological constraints were recorded.</p> <p>Sensitivity of area: No SCC species were observed in this section however three protected species were recorded at three of the Pylons. Locations as follows. PemPos 238 <i>Boscia albitrunca</i>, PemPos 251 <i>Sideroxylon inerme</i> and PemPos 245 <i>Sideroxylon inerme</i>. The majority of this section is comprised of the Bedford dry Grassland vegetation type and is dominated by the <i>Digitaria argyrograpta</i> and <i>Eragrostis curvula</i> species.</p> <p>Recommendation: Obtain a destruction permit from the appropriate authorities for both the <i>Boscia albitrunca</i> and the <i>Sideroxylon inerme</i> species seeing that relocation success rate is very low for both species.</p> <p>Points not surveyed: PemPos 259-266. (Access was not possible as area was fenced off by 3m tall, electrified fences)</p>	 
<p>Segment 9</p> <p>(Figure 3-10)</p> <p>PemPos 267 – PemPos 390</p> <p>Depicted to the right is PemPos 310 and 341</p> <p>32°49'10.92"S</p> <p>26°15'58.85"E</p> <p>32°48'11.43"S</p> <p>26° 7'17.36"E</p>	<p>Findings: No specific ecological constraints were recorded except for one SCC</p> <p>Sensitivity of area: One Near Threatened SCC species was observed at PemPos 341 in this section namely <i>Pelargonium reniforme</i> and two protected species were found at the following pylon locations. <i>Gladiolus permeabilis</i> was recorded at PemPos 368 and 23 <i>Ammocharis coranica</i> was recorded at PemPos 310. The majority of this section is comprised of the Bedford dry Grassland (LC, NP) vegetation type and is dominated by <i>Digitaria argyrograpta</i> and <i>Eragrostis curvula</i></p> <p>Recommendation: Obtain a destruction permit from the appropriate authorities for the <i>Gladiolus permeabilis</i> (Partridge Pypie) and the 23 <i>Ammocharis coranica</i> (Karoo lily) individuals. A relocation permit should be obtained for the <i>Pelargonium reniforme</i> (Rooi Rabas) and should</p>	 

be relocated in a similar habitat close to its original location.

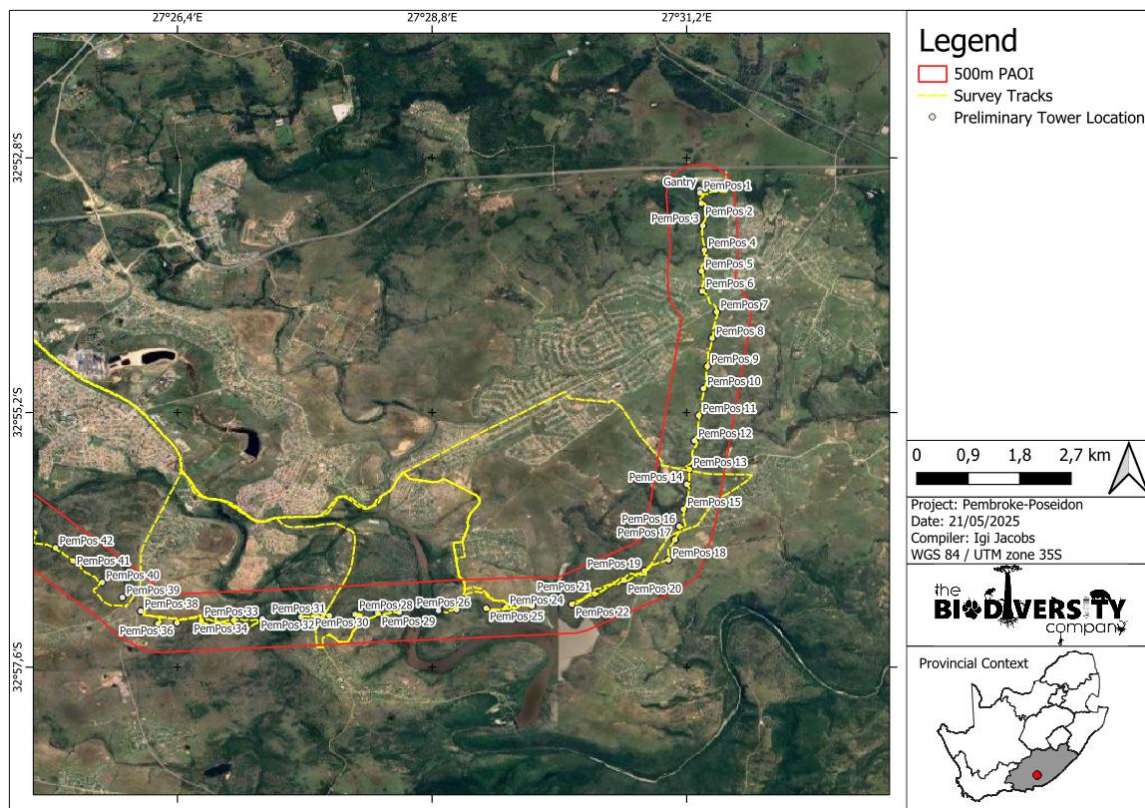


Figure 3-2 Map depicting segment 1.

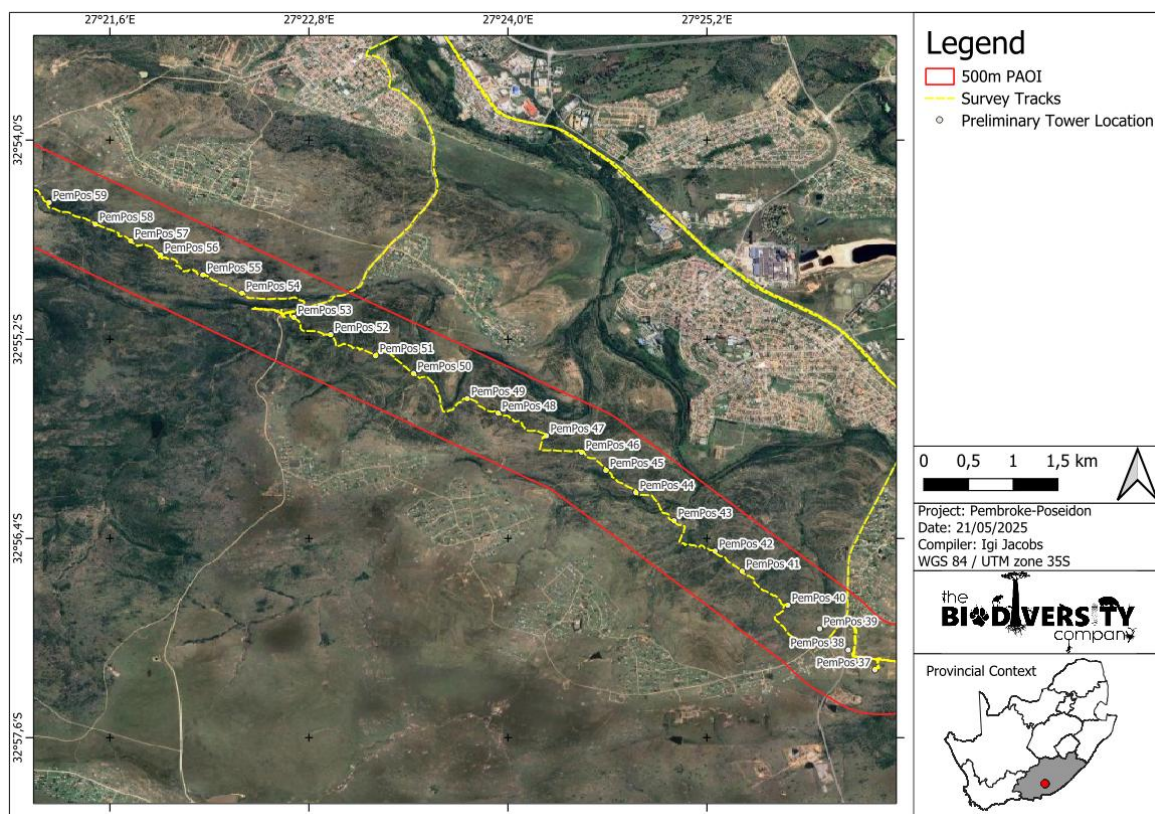


Figure 3-3 Map depicting segment 2.

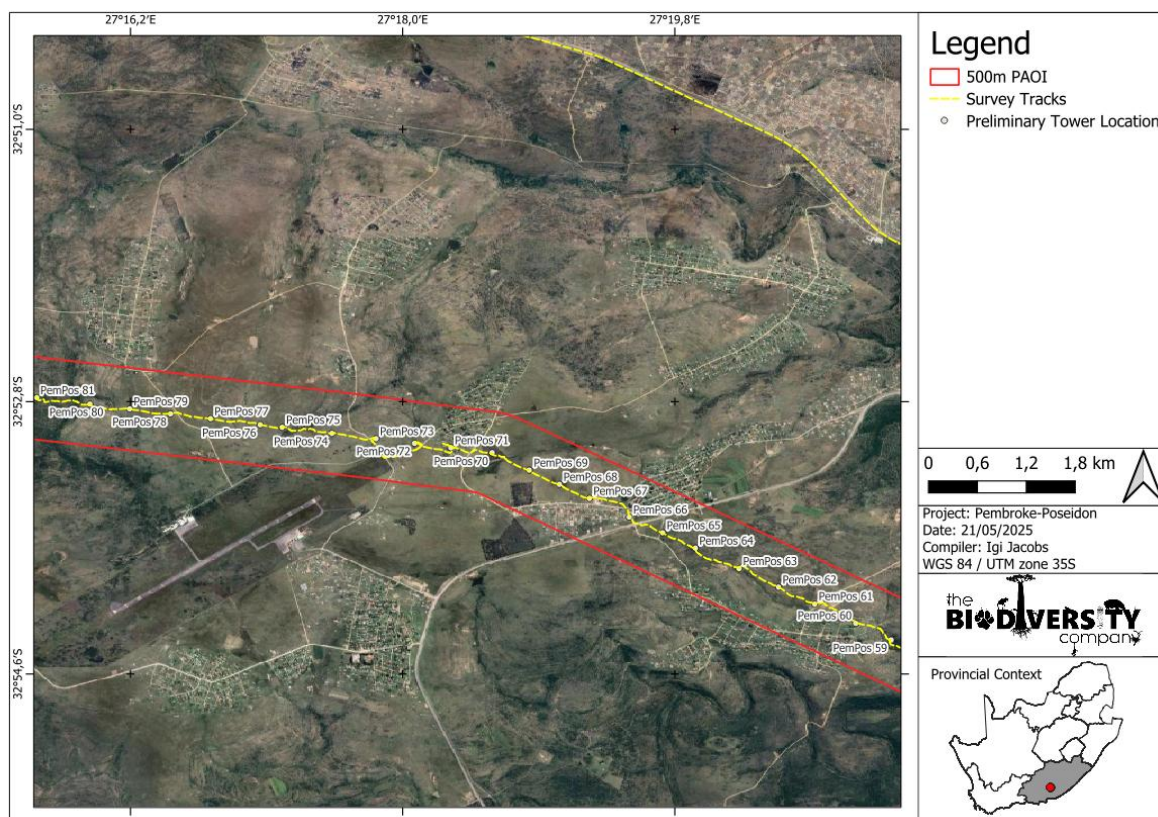


Figure 3-4 Map depicting segment 3.

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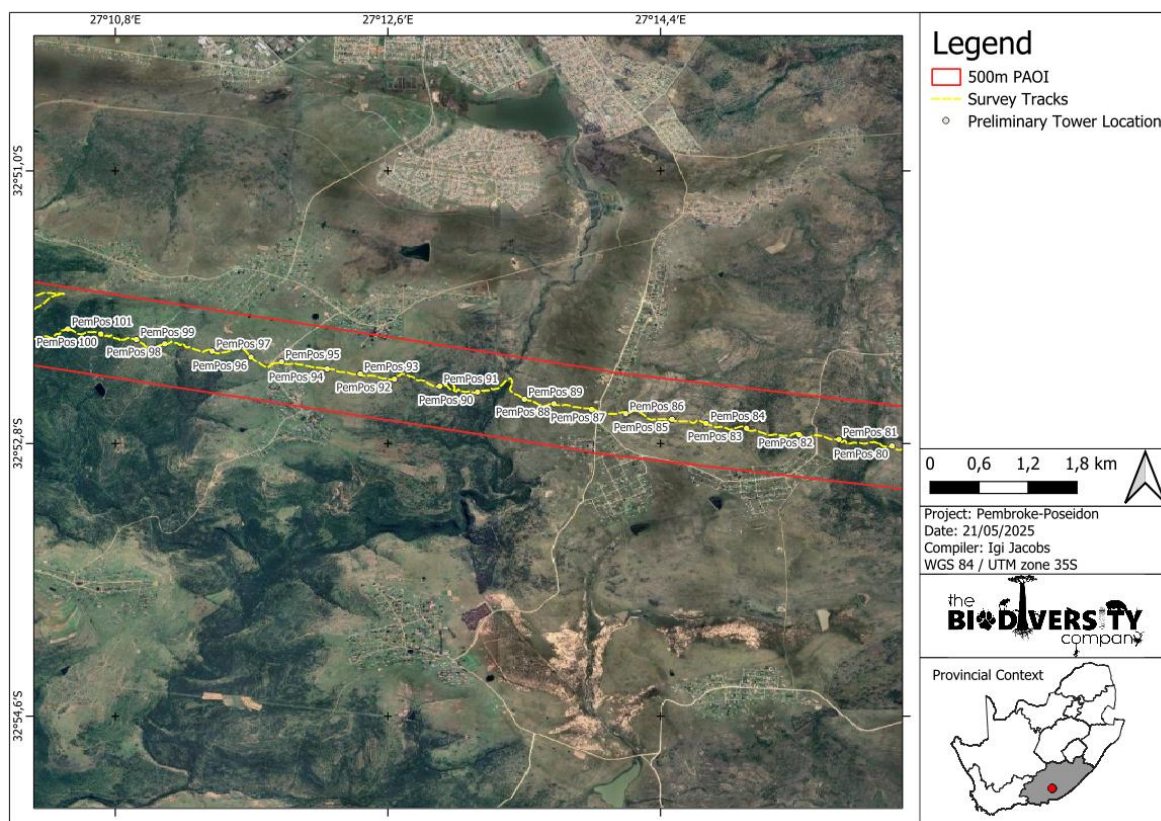


Figure 3-5 Map depicting segment 4.

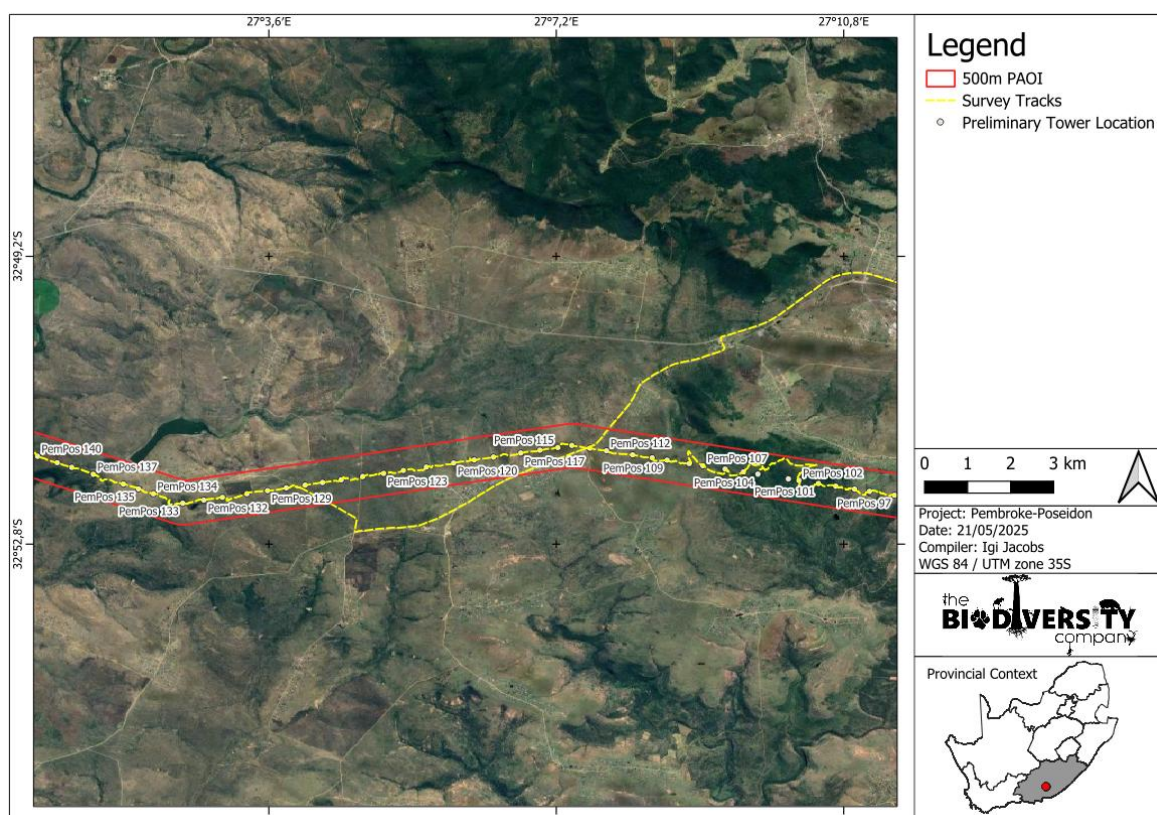


Figure 3-6 Map depicting segment 5.

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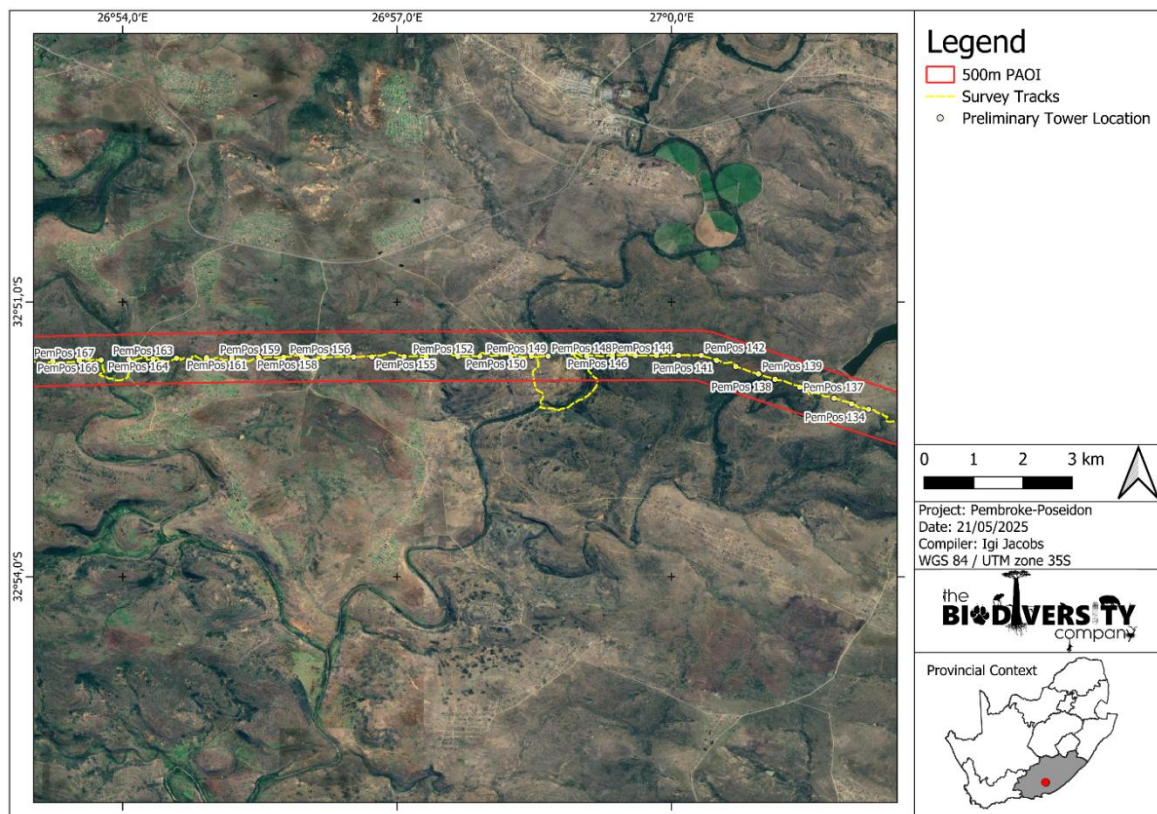


Figure 3-7 Map depicting segment 6.

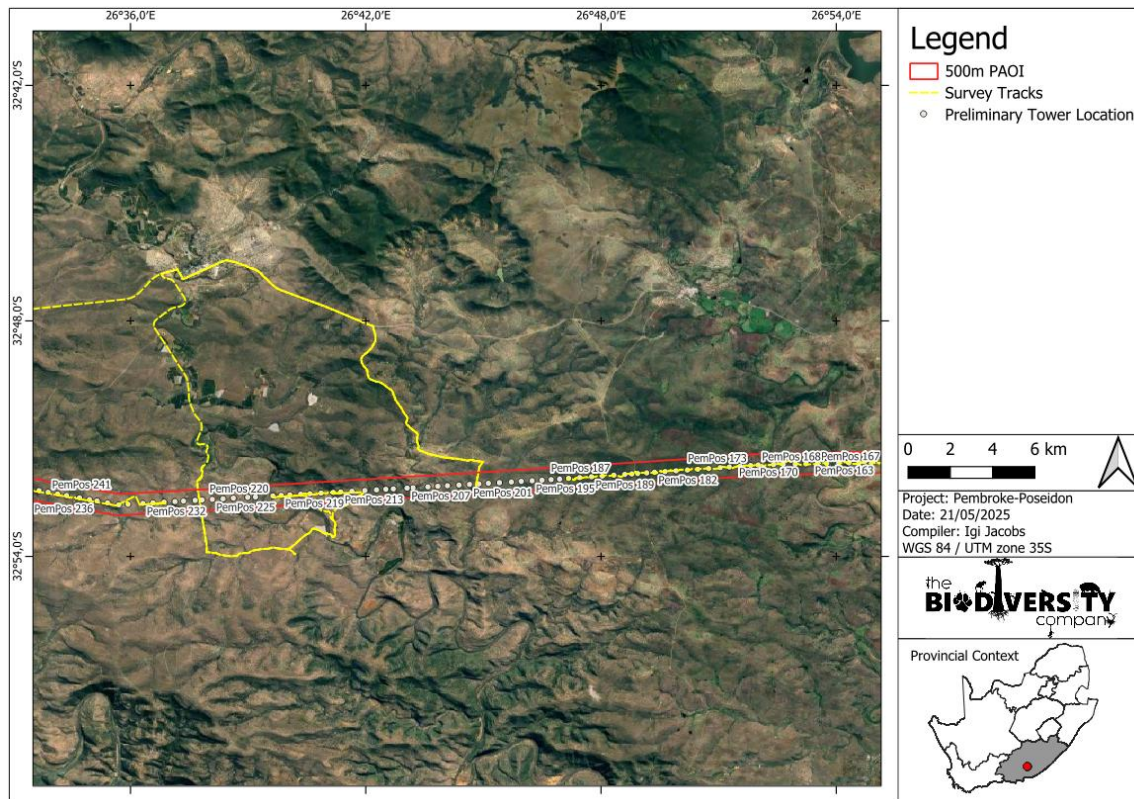


Figure 3-8 Map depicting segment 7.

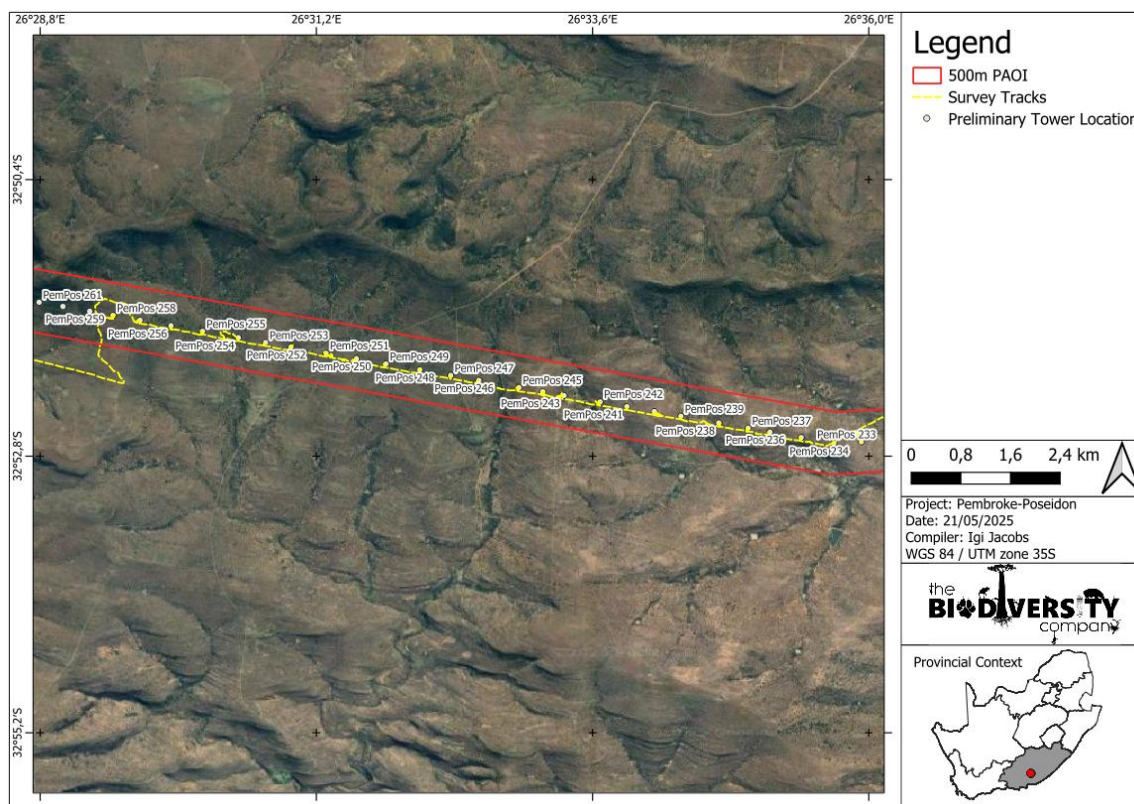


Figure 3-9 Map depicting segment 8.

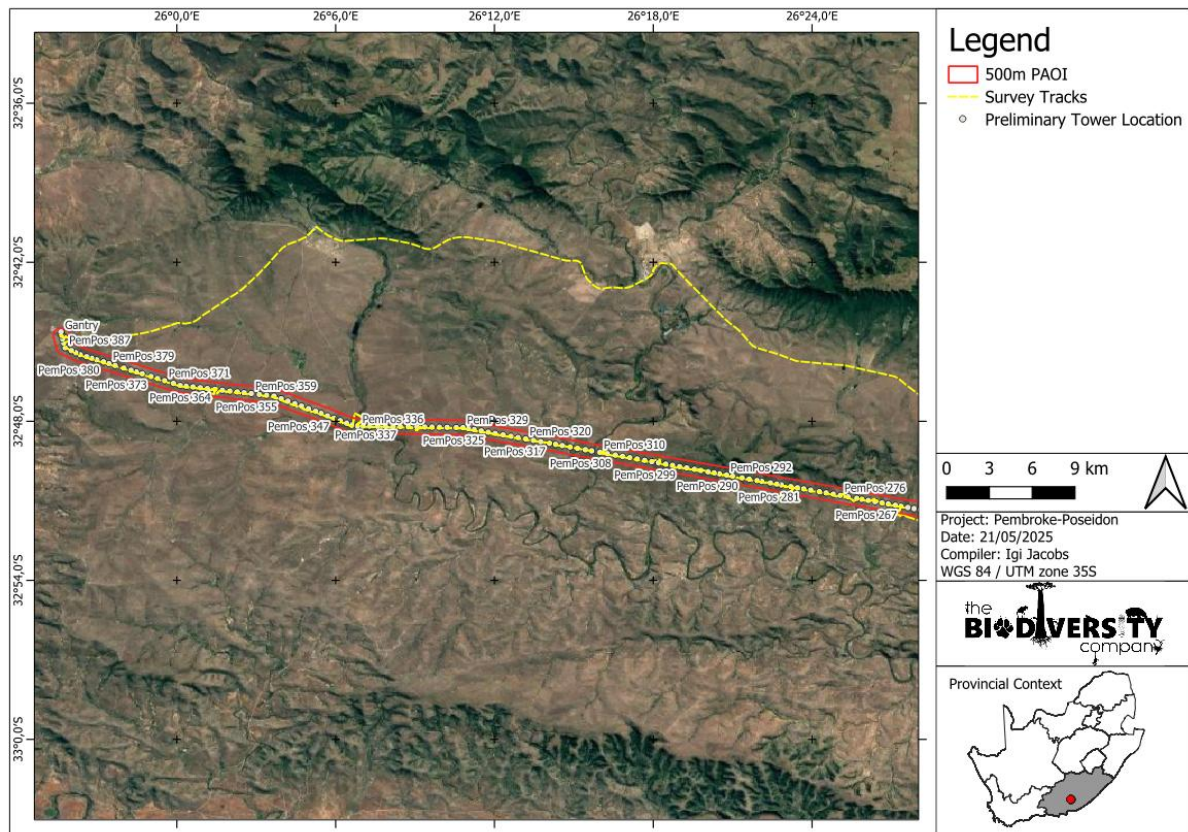


Figure 3-10 Map depicting segment 9.

3.1 Protected and Threatened Species

The following are observations pertaining to the PAOI recorded from the ecological walkdown. Flora SCCs and protected species are detailed below:

Flora identified on site that are listed as SCC and as protected species by the Eastern Cape Nature Conservation Ordinance 19 of 1974 are pictured below.

Seven different provincially protected flora species namely *Gladiolus ochroleucus*, *Boophone disticha*, *Aloiampelos ciliaris*, *Ammocharis coranica*, *Tritonia laxifolia*, *Sideroxylon inerme* and *Gladiolus permeabilis* were recorded in the footprint of development and one SCC species namely *Pelargonium reniforme*. A description of each species follows below (Figure 3-11 to Figure 3-18).

3.1.1 *Gladiolus ochroleucus*

Gladiolus ochroleucus is a perennial plant in the Iridaceae family, native to southern Africa. It grows from corms and features erect spikes of zygomorphic, funnel-shaped flowers. The blooms are typically pale yellow to creamy white, sometimes with green or pink hues. This species thrives in well-drained, sandy or rocky soils, often found in grassland or montane environments. It is appreciated in horticulture for its striking floral display and adaptability.



Figure 3-11 Photographs presenting the Provincially Protected species *Gladiolus ochroleucus*.

3.1.2 *Boophone disticha*

Boophone disticha is a bulbous perennial plant in the Amaryllidaceae family, native to southern Africa. It is characterized by its large, fan-shaped arrangement of leaves and striking, spherical inflorescences. The flowers are typically pink to red and are borne on a tall, leafless stalk. This species thrives in well-drained, sandy soils and is often found in grassland and rocky habitats. *Boophone disticha* is known for its ornamental value and its traditional use in African medicine.



Figure 3-12 Photographs presenting the Provincially Protected species *Boophone disticha*.

3.1.3 *Aloiampelos ciliaris*

Aloiampelos ciliaris, formerly known as *Aloe ciliaris*, is a climbing succulent plant in the Asphodelaceae family, native to South Africa. It is characterized by its slender, sprawling stems and fleshy, lance-shaped leaves with ciliated margins. The plant produces tubular, bright red to orange flowers arranged in racemes. *Aloiampelos ciliaris* thrives in well-drained soils and is often found in thickets and along forest margins.



Figure 3-13 Photographs presenting the Provincially Protected species *Aloiampelos ciliaris*.

3.1.4 *Ammocharis coranica*

Ammocharis coranica is a bulbous perennial plant in the Amaryllidaceae family, native to southern Africa. It is distinguished by its large, spherical umbels of fragrant, pink to red flowers that emerge on a stout, leafless stalk. The plant's leaves are broad, strap-shaped, and arranged in a rosette. *Ammocharis coranica* thrives in well-drained, sandy or rocky soils, often found in open grasslands and savannas.



Figure 3-14 Photographs presenting the Provincially Protected species *Ammocharis coranica*.

3.1.5 *Tritonia laxifolia*

Tritonia laxifolia is a cormous perennial plant in the Iridaceae family, native to South Africa. It is characterized by its slender, arching stems and narrow, grass-like leaves. The plant produces loose spikes of tubular, brightly colored flowers, typically orange to red, which are arranged in a lax inflorescence. *Tritonia laxifolia* thrives in well-drained, sandy soils and is commonly found in fynbos and grassland habitats.



Figure 3-15 Photographs presenting the Provincially Protected species *Tritonia laxifolia*.

3.1.6 *Sideroxylon inerme*

Sideroxylon inerme, commonly known as the white milkwood, is a tree in the Sapotaceae family, native to coastal regions of southern Africa. It is characterized by its dense, rounded crown and leathery, dark green leaves. The tree produces small, fragrant, white to cream-colored flowers, followed by fleshy, berry-like fruits. *Sideroxylon inerme* thrives in coastal forests and thickets, often found in sandy or rocky soils. It is valued for its ecological importance, providing habitat and food for various wildlife, and is protected due to its cultural and historical significance.



Figure 3-16 *Photographs presenting the Provincially and Nationally Protected species Sideroxylon inerme.*

3.1.7 *Gladiolus permeabilis*

Gladiolus permeabilis is a cormous perennial plant in the Iridaceae family, native to southern Africa. It is characterized by its slender, erect stems and narrow, sword-shaped leaves. The plant produces spikes of funnel-shaped flowers, typically in shades of white, pink, or purple, with distinctive markings on the tepals. *Gladiolus permeabilis* thrives in well-drained, sandy or rocky soils, often found in grasslands and open woodlands.



Figure 3-17 Photographs presenting the Provincially Protected species *Gladiolus permeabilis*.

3.1.8 *Pelargonium reniforme*

Pelargonium reniforme is a perennial herbaceous plant in the Geraniaceae family, native to South Africa. It is characterized by its rounded, kidney-shaped leaves with a velvety texture and its vibrant, magenta to pink flowers. The plant typically grows in a low, spreading habit and produces flowers in loose clusters. *Pelargonium reniforme* thrives in well-drained, sandy or rocky soils, often found in grasslands and scrublands.



Figure 3-18 Photographs presenting the SCC species *Pelargonium reniforme*.

3.2 Impacts and Mitigations

This report provides comprehensive guidance on the location of all protected and SCC flora / fauna. There was no fauna species observed in the PAOI however the ECO must be on site to confirm that no fauna SCC or protected species will be impacted in the construction footprint. It is imperative that all the recommendations are to be followed as stipulated in this report to ensure the preservation of critical habitats and the protection of all SCC and protected species. **It is imperative that the mitigations provided in the full EIA be adhered to in addition with those measures presented below.**

3.3 Mitigations

The proposed layout, as presented herein, is acceptable and does not present any fatal flaws. However, to facilitate the development of the area, recommendations have been provided for the footprint areas that will have notable impacts on the local habitats and/or SCCs. The following recommendations are in addition to what has previously been stated:

- All mitigation measures prescribed by previous specialist ecological reports remain applicable for the development and must be adhered to;
- Rocky outcrops and wetlands/drainage areas/water resources must be avoided as much as possible.
- Indigenous vegetation to be maintained under the pylons to ensure biodiversity is maintained and to prevent soil erosion;
- Protected flora species, listed in section 3.1 of this report will require relevant permit application, if their disturbance cannot be mitigated. A subsequent search and rescue plan must be drafted and search and rescue operations must be conducted thereafter; and
- The floral search and rescue operation must be undertaken during December - March for the summer flowering species, and during August for the winter flowering species.
- The ECO must be present at the towers that were not surveyed (No. 39, 103, 104, 201-210 and, 259-265) prior to construction, to ensure no SCC and protected species are present and/or disturbed without obtaining the necessary permits where required.

4 Appendices

Appendix A *Specialist declarations*

DECLARATION

I, Igi Jacobs, declare that:

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.



Igi Jacobs

Environmental Consultant

The Biodiversity Company

May 2025

DECLARATION

I, Dr Candyce Areington, declare that:

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.



Dr Candyce Areington

Ecologist

The Biodiversity Company

May 2025

DECLARATION

I, Wesley Black, declare that:

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.



Wesley Black

Ecologist

The Biodiversity Company

May 2025

Appendix B Specialists CVs

Igi Jacobs

Terrestrial Ecologist and Registered Project Manager

Cell: +27 84 208 7610

Email: igi@thebiodiversitycompany.com

Identity Number: 9505285182084

Date of birth: 28 May 1995

**Profile Summary**

Environmental work experience across South Africa (3 years).

Theoretical and practical understanding of methodology in both Botany and terrestrial.

General training and experience in aspects of conservation, terrestrial ecology and floral relocation and monitoring.

Landscaping and landscape designing (6 years).

Theoretical and practical understanding of project management in landscaping and plant science.

Areas of Interest

Ecological systems approach, botany, search and rescue and relocation of protected plants, traditional medicinal plant science, conservation and propagation of plants.

Key Experience

- Terrestrial, Ecological Assessments
- Environmental Field work and field methodology
- Rehabilitation of Plants and Monitoring
- Biodiversity Assessments
- Botany
- Habitat delineation
- Ecological Monitoring
- Field work and research

Country Experience

South Africa

Nationality

South African

Languages

English – Proficient

Afrikaans – Proficient

Qualifications

- Project Management (NQF6)
- Certificate of Competence: ASI Snake Awareness, first aid for snake bite and venomous snake handling
- SACNASP (Application Pending)

Dr Candyce Areington

PhD Plant Ecophysiology and Biotechnology
(Cand. Sci. Nat. 167868)

Cell: +27 79 896 5889

Email: candyce@thebiodiversitycompany.com

Identity Number: 9112090106083

Date of birth: 9 December 1991



Profile Summary

Working experience throughout KwaZulu-Natal (South Africa).

Environmental Control Officer (ECO).

Specialist expertise in Climate Change and Plant Ecophysiology and Biochemistry.

Areas of Interest

Plant Ecophysiology, Biochemistry and Biochemistry.

Abiotic Stress.

Air Pollution.

Sustainability and Conservation.

Landscape rehabilitation.

Experimental Design.

Key Experience

- Vegetation Assessments
- Rehabilitation Plans Development and Implementation
- Monitoring programmes
- Field work and research

Country Experience

South Africa

Nationality

South African

Languages

English – Proficient

Afrikaans – Conversational

Qualifications

- PhD Biological Sciences, University of KwaZulu-Natal
- MSc Biological Sciences (*Cum laude*), University of KwaZulu-Natal
- BSc (Hons) Biological Sciences (*Cum laude*), University of KwaZulu-Natal
- BSc Environmental Science, University of KwaZulu-Natal
- Cand. Sci. Nat. 167868
- Snake Awareness, first aid for snakebites and venomous snake handling (ASI-January 2024)

Wesley Black

M Agric Wildlife and Grassland Science

Pri Sci Nat: reg no: 147190

Cell: +27 72 242 3979

Email: wesley@thebiodiversitycompany.com or wesremus@yahoo.com

Identity Number: 9102215272084

Date of birth: 21 February 1991



Profile Summary

Working experience throughout Africa but especially West Africa, Central and Southern Africa as well as the middle east.

Specialist experience in mining, agriculture, protected areas, conservation, private sector and land use planning.

Specialist expertise includes Botany, Terrestrial Ecology, Wildlife Management and Agroecology.

Country Experience

South Africa

Lesotho

Mozambique

Zambia

Namibia

United Arab Emirates

Angola

Sierra Leone

Botswana

Key Experience

- Rehabilitation Plans and Monitoring
- Farm Plans
- Grazing and Fire Management
- Biodiversity Assessments
- Environmental, Social and Health Impact Assessments (ESHIA)
- IFC performance standards
- Environmental Management Programmes (EMP)
- Botany.
- Veld management and Veld condition
- Remote sensing and GIS
- Ecological monitoring
- Habitat suitability for livestock and wildlife
- Carbon stock estimations

Areas of interest

- Agriculture, Conservation, Mining and Sustainability.

Nationality

South African

Languages

English – Proficient

Afrikaans – Proficient

Qualifications

- Masters in Agriculture (Wildlife Management and Grassland Sciences), University of the Free State.
- B Agric (Hons) – Wildlife Management (Cum Laude): University of the Free State.
- B-Tech in Nature Conservation, Tshwane University of Technology, Pretoria, South Africa.
- National Diploma in Nature Conservation, Tshwane University of Technology, Pretoria, South Africa.
- GIS short course – University of the Free State
- Snake identification and Snake handling (2013) (2020)