

Site Sensitivity Verification Report

**Application for the proposed construction of an agri-
processing facility on
Portion 64 of Vaal Koppies No 40, Kenhardt,
Dawid Kruiper Municipality.
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Prepared for:

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1. Introduction, Background & Location

The ECO Balance Planning Co. was appointed by *Carpe Diem Landgoed Pty. Ltd.* to facilitate the application for Environmental Authorization for the proposed construction of an agri-processing facility on Portion 64 of Vaal Koppies No 40, Kenhardt.

The proposed development triggers two (2) listed activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended):

Detailed description of listed activities associated with the project		
	Listed activity as described in GN R.327	Description of project activity that triggers listed activity
8	The development and related operation of hatcheries or agri-processing facilities outside industrial complexes where the development footprint covers an area of 2 000 square metres or more.	The proposed development consists of a pecan nut processing facility with a current estimated footprint of approximately 10ha (including associated infrastructure and services).
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for — (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	The development footprint is currently estimated at 10ha and the area where the facility is proposed is covered with natural vegetation identified as Bushmanland Arid Grassland (Least Threatened in The National List of Ecosystems).
	Listed activity as described in GN R. 325	Description of project activity that triggers listed activity
-	-	-
	Listed activity as described in GN R. 324	Description of project activity that triggers listed activity
-	-	

As a result of the above a Basic Assessment process needs to be implemented and the application is currently in the first phase; being *Application for Environmental Authorization*.

The applicant, *Carpe Diem Landgoed Pty. Ltd.* intends construct an agri-industrial facility on Portion 64 of farm Vaal Koppies No. 40, Kenhardt.

Carpe Diem Pty Ltd is proposing the construction of an agri industrial facility for the processing of pecan nuts on Portion 64 of Vaal Koppies No 40, Kenhardt. At present the development footprint is estimated at approximately 10ha, which includes the facility, parking areas, loading zones, water evaporation pond and a new access point and access road.

The N10 national road that connects Upington with Groblershoop forms the northern boundary and the Kleinbegin Road forms the western boundary of the property.

The property has a size of 366.2080ha. Existing activities on the property consist of table grape cultivation as well as an existing Packhouse. The southern part of the property, the section along the western boundary as well as the northern part of the property are covered with natural vegetation identified as Bushmanland Arid Grassland.

The agri-processing facility is proposed in the northern part of the property, along the western boundary. No new roads are included in the development as existing roads will provide access to and within the property.

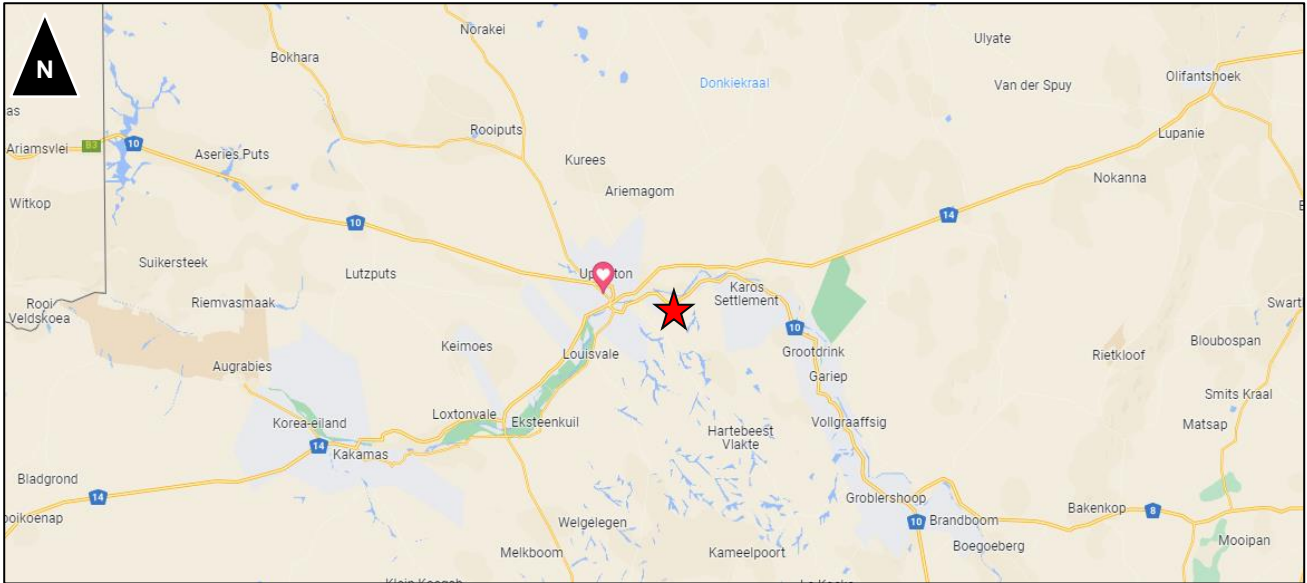


Figure 1. The location of Vaal Koppies 64/40, indicated as a red coloured star, slightly south east of Upington.

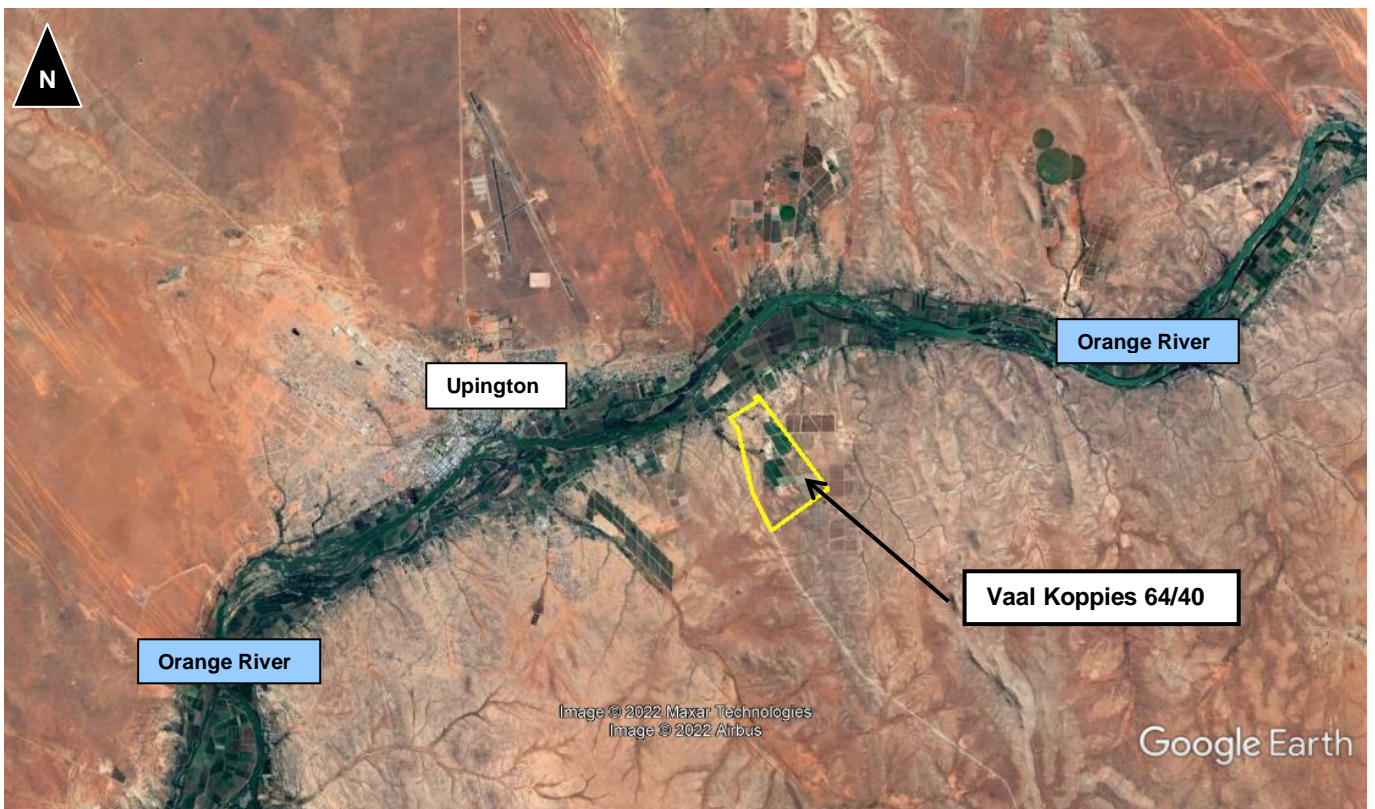


Figure 2. The location of Vaal Koppies 64/40 slightly south east of Upington (Source: Google Earth).

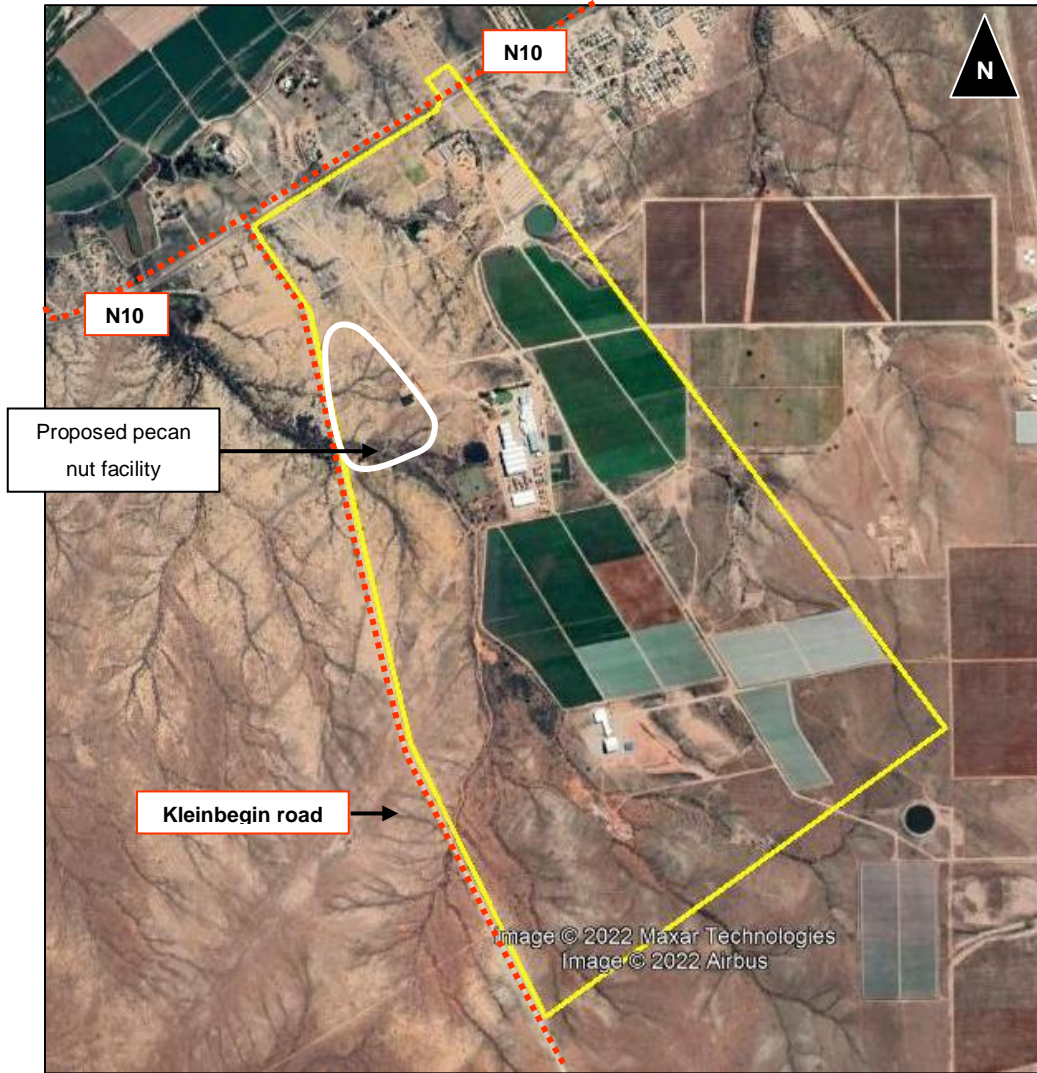


Figure 3. Property boundary of Vaal Koppies 64/50 in yellow. Existing cultivation and development are visible in the middle and eastern sections. The current location of the proposed agri-processing facility is indicated as a white coloured polygon.

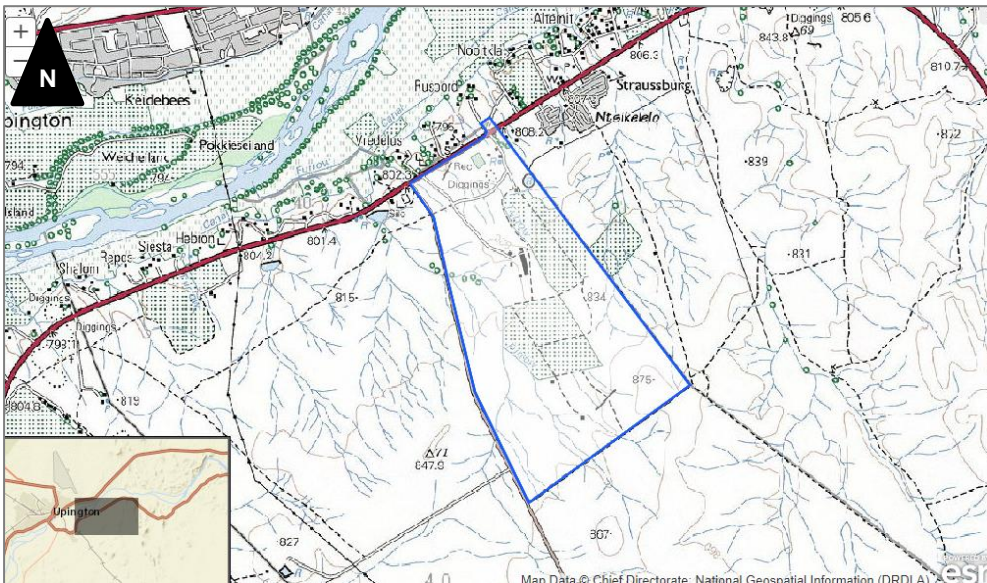


Figure 4. The location of Vaal Koppies 64/40 indicated on a 1:50 000 Topographic Map (Source: CapeFarmMapper).

2. Methodology

Input into this site verification report was informed by a combination of desktop analysis, specialist reports, satellite imagery, site visits / on-site inspections and meetings with the Proponent and project team. The Screening Tool, Google Earth Pro and SANBI Biodiversity GIS websites were consulted to identify any constraints in terms of biodiversity conservation mapping and data have been used to inform the Scoping and EIA study. Planning documents (e.g. SDF, IDP, etc.) from the local and provincial municipalities have also been and will continue to be consulted to inform the socio-economic aspects of the study.

3. Outcome of the Screening Report

The Screening Tool Report generated for the proposed development highlighted the following site development environmental themes:

THEME	VERY HIGH	HIGH	MEDIUM	LOW
Agricultural Theme				X
Animal Species Theme		X		
Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme		X		
Defence Theme			X	
Plant Species Theme				X
Terrestrial Biodiversity Theme	X			

The following list of specialist assessments was identified in the Screening Report (Annexure 1) for inclusion in an assessment report:

1. Agricultural Impact Assessment
2. Archaeological and Cultural Heritage Impact Assessment
3. Palaeontology Impact Assessment
4. Terrestrial Biodiversity Impact Assessment
5. Aquatic Biodiversity Impact Assessment
6. Marine Impact Assessment
7. Noise Impact Assessment
8. Traffic Impact Assessment
9. Health Impact Assessment
10. Socio-Economic Assessment
11. Ambient Air Impact Assessment
12. Air Quality Impact Assessment
13. Plant Species Assessment
14. Animal Species Assessment

As a result of the above, this Site Sensitivity Verification Report is compiled to determine whether Specialist Assessments or Compliance Statements for the abovementioned specialist studies are required for the proposed development.

4. Site Sensitivity Verification Report

4.1 Agricultural Impact Assessment

The application is for the proposed construction of an agri-processing facility. As the proposed activity is also agricultural related, it will contribute positively to the agriculture potential of the property. In fact, the agri-processing facility will contribute to the local, regional and national economy. The EAP is of opinion that an Agricultural Impact Assessment is thus not required.

4.2 Archaeological and Cultural Heritage Impact Assessment

The proposed development area is larger than 5 000m² and therefore Section 38(1)(c)(i) is triggered and an Heritage Impact Assessment will be undertaken as one of the specialist studies of the EIA process. *Ubique Heritage Consultants* was appointed to draft the required documentation, application and Heritage Impact Assessment.

4.3 Palaeontology Impact Assessment

Ubique Heritage Consultants was appointed to draft the required documentation, application and Heritage Impact Assessment (HIA). The HIA will include a desktop Palaeontological assessment.

4.4 Terrestrial Biodiversity Impact Assessment

A Terrestrial Biodiversity Impact Assessment will be conducted by a SACNASP registered Botanical specialist, Mr. Greg Nicolson (CAPENSIS).

4.5 Aquatic Biodiversity Impact Assessment

The study area is located within a very dry, warm climate mostly associated with deserts and receives an annual rainfall of approximately 124mm. It is located within the arid Kalahari Basin in the Northern Cape. No permanent surface water occurs within the vicinity of the site. There are no rivers or surface streams in close proximity to the study area. The drainage channels that do exist in the property are almost perpetually dry, only conveying water during the odd occasion when it rains heavy in the area. In most cases with the drainage channels around the property, some of these streams also only flow for a limited distance before they merely disappear into the Kalahari Basin sand.

The protocol for the assessment of freshwater biodiversity prepared in support of the (Department of Environment, Forestry and Fisheries (DEFF), 2020) National Web-based Environmental Screening Tool (hereafter the "Screening Tool Report") provides the criteria for the assessment and reporting of impacts on aquatic biodiversity for activities requiring environmental authorisation. The indicates that the site is of 'Low' aquatic sensitivity.

The proposed development is for the proposed construction of agi-industrial facility and it will not impact on any aquatic features. Thus an Aquatic Biodiversity Impact Assessment will not be undertaken.

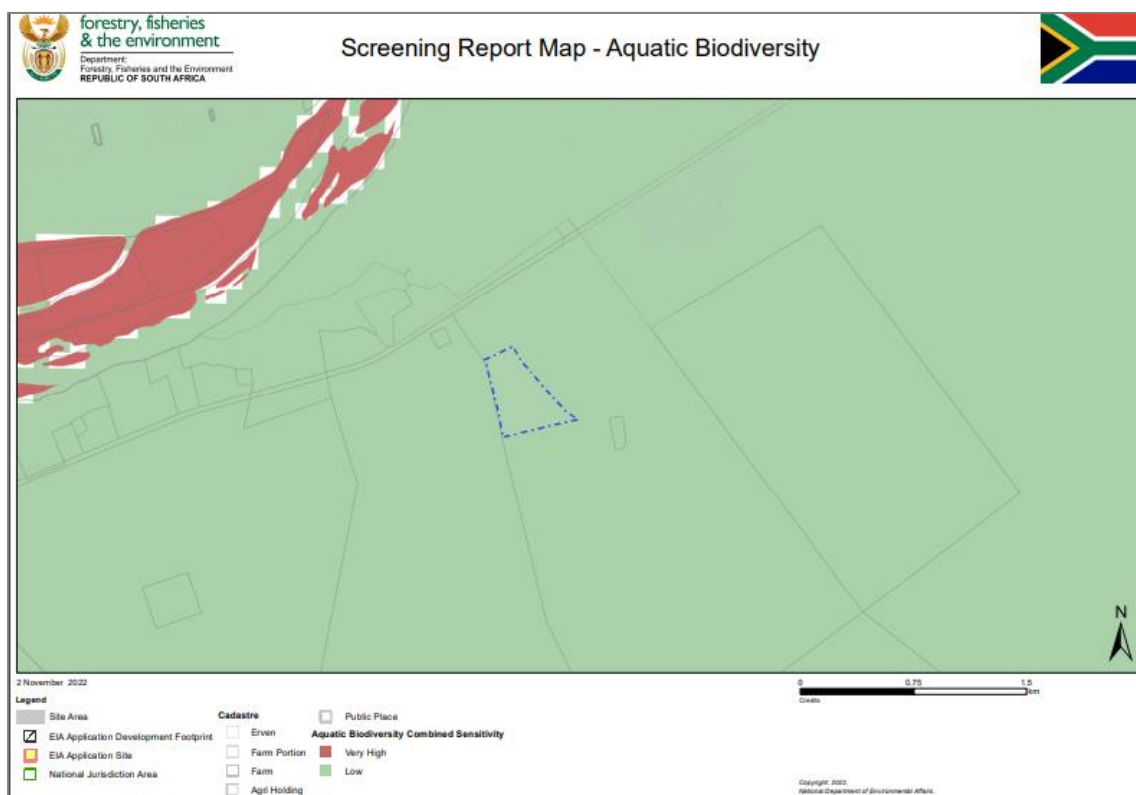


Figure 5. Low sensitivity rating for the aquatic biodiversity theme.

4.6 Marine Impact Assessment

A marine impact assessment is not applicable as the project is located in the Northern Cape, south east of the town of Upington.

4.7 Noise Impact Assessment

The Screening Tool has not assigned a sensitivity rating to noise. Noise impacts will be contemplated in the BAR and mitigation measures will be included in the EMP to mitigate noise impacts during construction. However, the site is not considered to be a noise-sensitive environment given that it is located on a privately owned farm in the rural area of Upington. Therefore, no further considerations in this regard are applicable.

4.8 Traffic Impact Assessment

The Screening Tool has not assigned a sensitivity rating to traffic. The proposed project consists of the construction and operation of an agri-processing facility.

The N10 will be used to transport materials, equipment and personnel to the proposed site during the construction and operational phases. The horizontal alignment of this road within the study area ranges from fairly gentle to moderately winding in some sections. The vertical alignment of this road ranges from fairly flat in some sections to rolling in other sections. As such, the general geometric design of this road is conducive to the movement of heavy vehicle traffic. Since this road is a national road, it is prudent to assume that this road was built to fairly high structural standard. As such, the road pavement will have the structural strength to convey the additional volumes of heavy vehicles that will be generated by this project without showing signs of any major structural distress.

The current pavement condition on the N10 within the study area ranges from good to fair throughout its length within the study area. The general road safety conditions on the N10 within the study area are good as no road safety hazards were observed during the site visit.

It should be noted that no other heavy vehicles, other than the normal, will be used to transfer construction material to the site. No traffic impact assessment will be undertaken.

4.9 Health Impact Assessment

The proposed consists of the construction of an agri-processing facility. It will not impact negatively in the health of the surrounding community or workforce and thus a Health Impact Assessment will not be undertaken

4.10 Socio-Economic Assessment

The application is for the construction of an agri-processing facility. It holds the following socio-economic contributions:

Anticipated CAPEX value of the project on completion	R50m
What is the expected annual income to be generated by or as a result of the project?	R80m
New skilled employment opportunities created in the construction phase of the project	5
New skilled employment opportunities created in the operational phase of the project	15
New un-skilled employment opportunities created in the construction phase of the project	20
New un-skilled employment opportunities created in the operational phase of the project	60
What is the expected value of the employment opportunities during the operational and construction phase?	R1.8m
What percentage of this value that will accrue to previously disadvantaged individuals?	60%
What percentage of this value that will accrue to previously disadvantaged individuals?	60%
The expected current value of the employment opportunities during the first 10 years	R72m
What percentage of this value that will accrue to previously disadvantaged individuals?	60%

No socio-economic assessment will be undertaken as the socio-economic environment will be impacted positively.

4.11 Ambient Air Impact Assessment & 4.12 Air Quality Impact Assessment

The proposed development consists of an agri-processing facility for pecan nuts. The development will not impact on air quality during the construction or the operational phase as no emissions will be generated as a result of the development.

4.12 Plant Species Assessment

The Screening Tool Report indicates a "Low sensitivity rating" for the plant species theme. A SACNASP registered Botanical specialist, Mr. Greg Nicolson (CAPENSIS), was appointed to compile a Terrestrial Plant Species Compliance Statement.

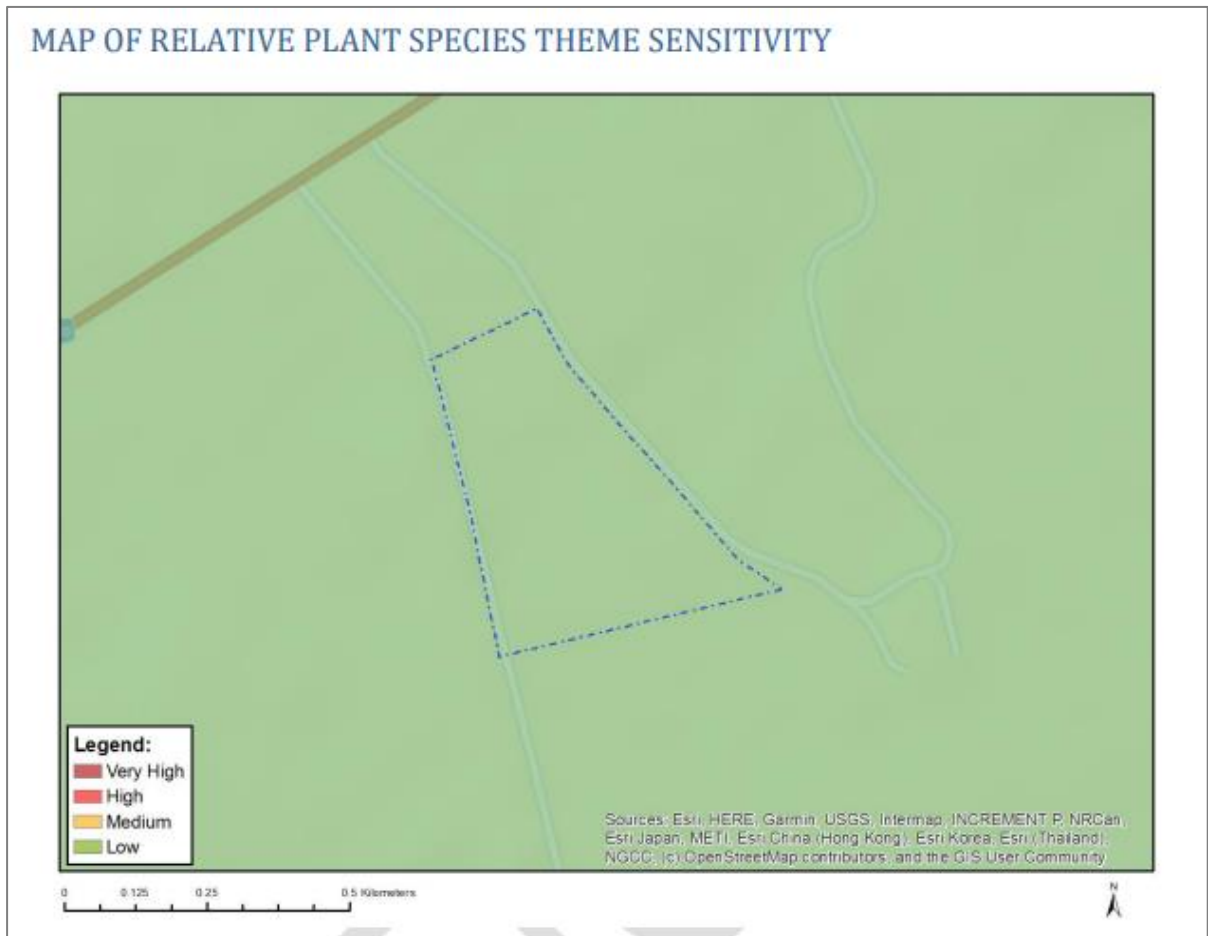


Figure 6. Low Sensitivity rating for Plant Species Theme.

4.13 Animal Species Assessment

The Environmental Screening Tool Report indicates a “High” animal species sensitivity rating for *Aves-Falco biarmicus* and a “Medium” sensitivity rating for *Aves-Neotis ludwigii*.

During various site visits, none of the species identified in the Environmental Screen Tool Report were recorded on site. Thus it can be assumed that the proposed pecan nut facility will also not impact on these species

The EAP visited the site during various occasions and thorough screenings and observations were for bird animal species. None of the mentioned bird species were recorded in the study area.

It should be noted that the proposed site is located approximately 300 metres south of the N10 and adjacent east of the Kleinbegin Road. The constant presence of humans and traffic is most likely the reason why none of these species were recorded during any of the site visits and an Animal Species Assessment will not be undertaken.