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09 April 2025

Attention: Humansrus Solar PV Energy Facility 2 (Pty) Ltd
Phunge Muwanwa: p.munwanwa@grupocobra.com

To whom it may concern:

AVIFAUNAL SPECIALIST INPUT FOR THE PART 1 AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION (EA) FOR THE PROPOSED DEVELOPMENT OF THE HUMANSRUS SOLAR PV ENERGY FACILITY 2 (PREVIOUSLY KNOWN AS THE RE CAPITAL 14 SOLAR POWER PLANT), HUMANSRUS, NORTHERN CAPE.

1 Background

Humansrus Solar PV Energy Facility 2 (Pty) Ltd proposes the amendment of the Environmental Authorisation (EA) for the construction, operation and maintenance of a solar photovoltaic (PV) Project, Humansrus PV 2, with a generation of 100 megawatt (MW). The project is located near Copperton on the Remainder of Farm 147, Humansrus, within the Pixley Ka Seme District in the Northern Cape Province, under the jurisdiction of the Siyathemba Local Municipality.

The proposed solar development is situated adjacent to the R357 Provincial Road, approximately 6 km east of the existing Cuprum Substation and approx. 6km north of the existing Kronos Substation. The total farm area is 4769 hectares (ha). Humansrus Solar PV Energy Facility 2 (referred to as Humansrus PV 2) is approximately 295 ha. The provided project footprint is referred to as the Project Area of Influence (PAOI) for the purposes of this report (there are no alterations to the previously approved PAOI) (Figure 1).

Condition 6 of the Environmental Authorisation issued on the 19th of June 2015, DEA Reference 14/12/16/3/3/2/673 states that:

"This activity must commence within a period of ten (10)) years from the date of issue of the authorisation (i.e. the EA lapses on 17 June 2025). If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken."

The EA for Humansrus PV 2 is nearing expiration and as such Humansrus Solar PV Energy Facility 2 (Pty) Ltd is now applying for an amendment to the Environmental Authorisations. Specifically, they are requesting an extension of the validity period of the Environmental Authorisation by an additional 10 years.

Cape EAPrac have been appointed as the Registered Environmental Assessment Practitioner (EAP) to prepare the EA Amendment Application. The EA Amendment is being completed in terms of Regulation 29 of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended and in terms of Regulation 30(1)(a), Department of Forestry, Fisheries and the Environment (DFFE) have requested specialist input to inform the amendment application.

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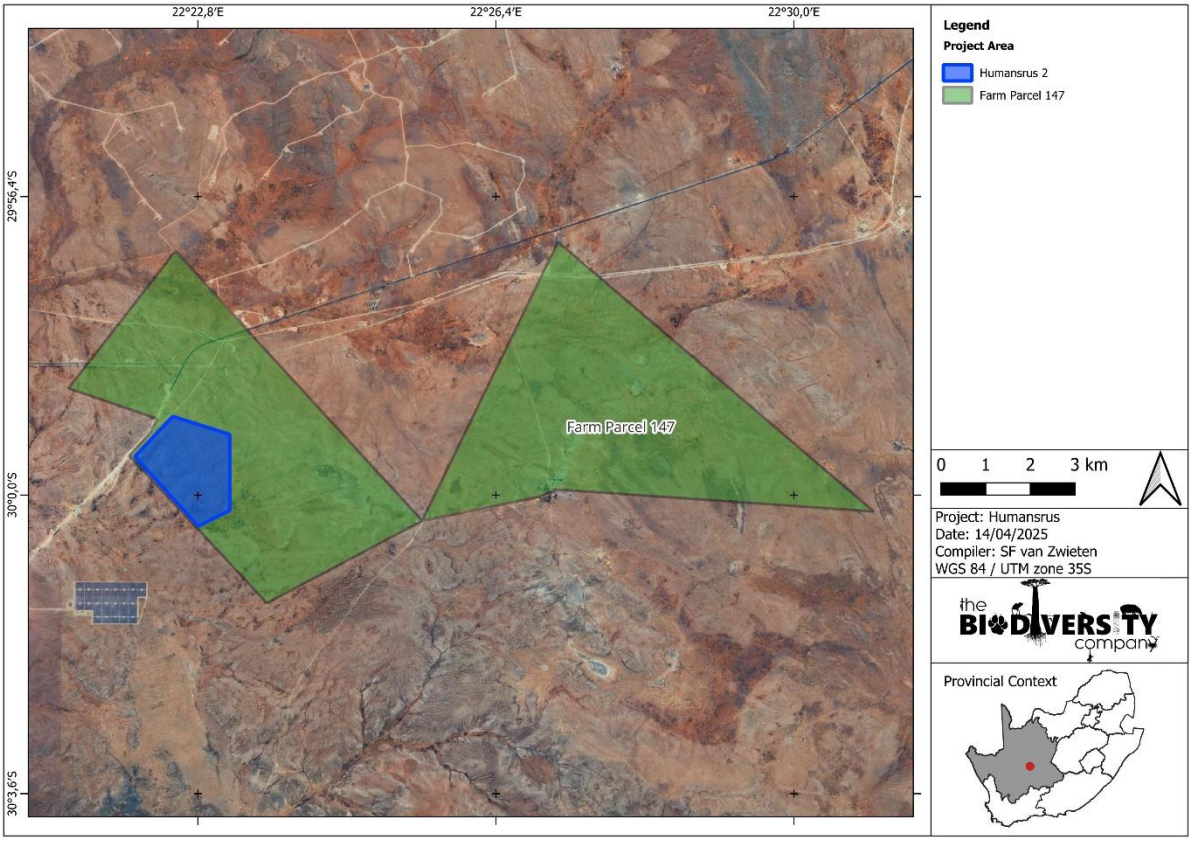

Figure 1 ***The Project Area of Influence, consisting of Humansrus 2***

2 Scope of Work

The Biodiversity Company was appointed to provide specialist inputs for this Amendment Application. The Scope of Work for this report is as follows:

- Confirmation of the status of the environment compared to that at the time of the original assessments done in 2014 by Simon Todd.
- An indication as to whether the impact rating as provided in the initial assessment remains valid; if the mitigation measures provided in the initial assessment are still applicable; or if there are any new mitigation measures which need to be included into the EA, should the request to extend the commencement period be granted by the DFFE.
- An indication as to whether there are any new assessments/guidelines which are now relevant to the authorised development which were not undertaken as part of the initial assessment, must be taken into consideration and addressed in the report.
- A description and an assessment of any changes to the biophysical environment that has occurred since the initial EA was issued.
- A description and an assessment of the surrounding environment in relation to new developments or changes in land use which might impact the authorised project, the assessment must consider the following:

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- Identified cumulative impacts, and where possible, the size of the identified impact must be quantified and indicated, i.e., hectares of cumulatively transformed land.

3 Assumptions and Limitations

A field survey was conducted to meet the amendment requirements. The field survey sought to determine site characteristics and conditions to determine any changes from the baseline conditions and previous reports, supplemented by satellite imagery.

The field survey was conducted during January 2025, which constitutes the wet season (between August to April). Despite the survey being conducted during the preferred season, site conditions were 'dry' for the period. However, this doesn't present a limitation for the purposes of this amendment process.

4 Project Description

The project description remains as per the EA and no changes to the scope are proposed as part of this EA Amendment process. The project description as authorised:

- Transportation of solar components and equipment to site;
- Establishment of internal access roads;
- Undertaking site preparation (including clearance of vegetation; stripping of topsoil where necessary);
- Erecting of solar PV frames and panels;
- Cabling (DC) low and medium voltage {LV/MV);
- Installing of inverter rooms;
- Establishing the underground connections between PV panels and inverters;
- Constructing the on-site substation;
- Establish connections between inverters and on-site substation;
- Establishment of additional infrastructure (workshop and maintenance buildings);
- Connection of on-site substation to power grid;
- Undertaking site remediation; and,
- Construction of perimeter fencing.

5 Site Baseline and Sensitivity (2014)

1 The following assessments were considered for this report:

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1.1. Simon Todd (2014). Environmental Impact Assessment for the Proposed RE Capital 13 (Humansrus PV 1) Solar Power Plant, Humansrus, Northern Cape.

1.2. Simon Todd (2014). Environmental Impact Assessment for the Proposed RE Capital 14 (Humansrus PV 2) Solar Power Plant, Humansrus, Northern Cape.

1.3. Simon Todd (2014). Environmental Impact Assessment for the Proposed Humansrus PV 2 Grid Connection, Humansrus, Northern Cape.

1.4. Simon Todd (2016). Environmental Impact Assessment for the Proposed Humansrus Solar 3 PV Facility Development, South-West of Prieska, Northern Cape: Avifaunal Impact Study.

1.5. Simon Todd (2016). Environmental Impact Assessment for the Proposed Humansrus Solar PV Facility 4 Development, South-West of Prieska, Northern Cape: Avifaunal Impact Study.

2 The following is summarised for the avifauna theme:

2.1. In the assessments, although two vegetation types, Bushmanland Arid Grassland and Bushmanland Basin Shrubland are mapped within the site, it is relatively homogenous and consists almost entirely of an open shrubland with grasses more common in places. The habitat is described as “low open shrubland”. Soils are mostly shallow and stony, with exposed calcrete in some areas and loose surface stone in other areas. Areas with deeper soils have taller and larger woody shrubs. The vegetation consists predominantly of shrub species, with a higher density of graminoids in certain areas.

2.2. The data from the 2014 Grid Connection report were considered as a supplement data to assessing Humansrus PV 1. The only avifauna Species of Conservation Concern (SCC) reported to be observed was Ludwig’s Bustard (*Neotis ludwigii*). However, this predates the 2015 Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland, which indicates regionally threatened species in these countries. This could imply that some avifauna species that are currently considered SCC, were observed at the time of this survey and were not considered an SCC at the time and are thus not referred to in the report as a result. Such as the Karoo Korhaan (*Eupodotis vigorsii*), which was only considered an SCC after 2015.

2.3. In the two 2016 reports, two additional SCCs were reported to be observed, the aforementioned Karoo Korhaan (*Eupodotis vigorsii*) and Kori bustard (*Ardeotis kori*).

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2.4. The habitat was assigned a low to medium-high sensitivity by Todd (2014; Figure 2).

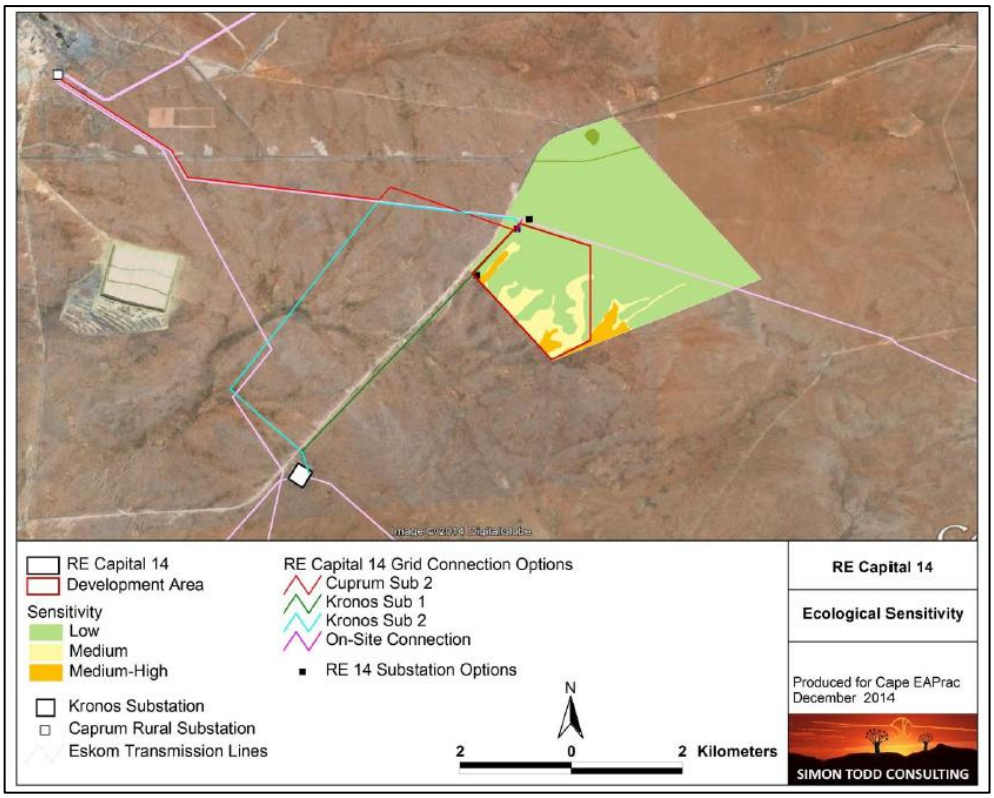

Figure 2 Avifauna sensitivity of Humansrus PV 2 as described by Simon Todd (2014)

6 Site Baseline and Sensitivity (2025)

A specialist from The Biodiversity Company (TBC) undertook a re-assessment of the potential environmental impacts associated with the PAOI on the 15th and 16th of January 2025, which constitutes a wet season survey. The pictures below were taken by the TBC specialist during the site visit (Figure 3).

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Figure 3 ***Example of the vegetation represented within the PAOI considered for this amendment.***

A screening tool was generated for the PAOI. Below are the outcomes for each (relevant) theme:

- Animal Species Theme - High. This is due to the possible presence of two (Ludwig's Bustard, Lanner Falcon) high sensitivity avifauna Species of Conservation Concern (SCC) (Figure 4).

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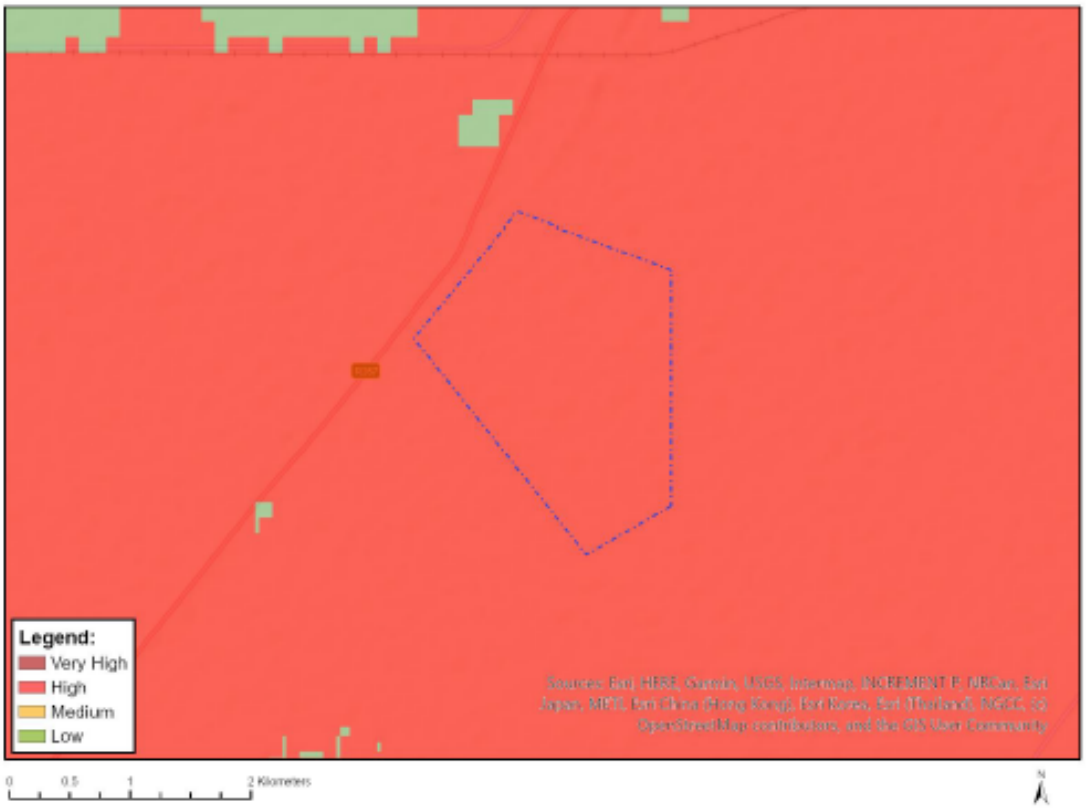
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



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-Neotis ludwigii
High	Aves-Falco biarmicus

Figure 4 ***Figure indicating the relative Animal Sensitivity Theme Sensitivity as identified by the Environmental Screening Tool for Humansrus PV 1***

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7 Project Impacts

Table 1 highlights the impacts that were identified during the 2014 assessment, of which only some apply to avifauna:

Table 1 Summary table of the impacts associated with the development of the project (Todd, 2014)

Phase & Impact	Without Mitigation	With Mitigation
Planning & Construction		
Impacts on vegetation and listed or protected plant species resulting from construction activities	Medium Negative	Medium-Low Negative
Direct Faunal Impacts During Construction	Medium Negative	Medium-Low Negative
Avifaunal impacts due to habitat loss and construction activities	Medium Negative	Medium-Low Negative
Soil Erosion Risk During Construction	Medium-Low Negative	Low Negative
Operation		
Alien Plant Invasion Risk During Operation	Medium Negative	Low Negative
Soil Erosion Risk During Operation	Medium Negative	Low Negative
Faunal impacts during operation:	Medium-Low Negative	Low-Negative
Avifaunal impacts due to operational activities	Medium-Low Negative	Low Negative

The quantitative impacts of the proposed project in isolation on avifauna biodiversity specifically are anticipated to be "Low" overall provided that the mitigation measures recommended in the 2014 report are implemented (Table 2).

Table 2 Quantitative impact assessment of the project in isolation

Impact	Project in Isolation							
	Duration of Impact	Spatial Scope	Severity of Impact	**Consequence**	Sensitivity of Receiving Environment	Probability of Impact	**Likelihood**	Significance (with mitigation)
Destruction, fragmentation of the vegetation community, and loss of habitat; spread of alien and invasive species; displacement and mortality of the faunal community	4	2	3	9	2	3	5	
	Life of operation or less than 20 years: Long Term	Development specific/ within the site boundary / < 100 ha impacted / Linear features affected < 100m	Significant / ecosystem structure and function moderately altered		Ecology with limited sensitivity/importance	Likely		**Low**

The quantitative impact assessment of the proposed project is in line with the findings of Todd (2014) as depicted in the table below.

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8 Mitigation Measures

No additional mitigation has been proposed as the original assessment is still deemed to be sufficient, as discussed in the report.

9 Cumulative Impacts

The 2014 study made the following comments on development in the area:

There is, however, a large amount of the other renewable energy development in the area, which raises the possibility of significant cumulative impacts. However, a number of the applications have lapsed and there are no preferred bidders in the immediate area either, suggesting that not all of the proposed facilities will ultimately be built. Nevertheless, due to the presence of the Kronos and Garona substations, the area is likely to remain attractive to renewable energy developers and it is likely that there will ultimately be a number of different renewable energy facilities operating in the area.

Todd (2014) further states that *although cumulative impacts are a potential concern, the affected habitat is not considered rare or sensitive and is widely available in the area, with the result that the contribution of the current development to cumulative impacts is likely to be low.*

The above in mind, the cumulative impacts were rated as follows:

Nature of impact	Spatial Extent	Duration	Intensity	Probability	Reversibility	Significance and Status		Confidence level
						Without Mitigation	With Mitigation	
Impact on broad-scale ecological processes due to cumulative loss and fragmentation of habitat	Regional	Long-Term	Medium	Moderate	Low	Medium-Low Negative	Low Negative	Moderate-High
Mitigation/Management Actions • Minimise the development footprint as far as possible and allow the retention of some natural vegetation between the rows of panels or trackers. • The facility should be fenced off in a manner which allows fauna to pass by the facility as easily as possible. This implies not fencing-in large areas of intact vegetation into the facility and only the developed area should be fenced. •								

An in-situ review of similar developments under the current conditions was undertaken. See ***Table 3***.

Table 3 ***The in-situ cumulative impact assessment of the current conditions for the project***

Impact	In-situ cumulative impacts							
	Duration of Impact	Spatial Scope	Severity of Impact	**Consequence**	Sensitivity of Receiving Environment	Probability of Impact	**Likelihood**	Significance (with mitigation)
Destruction, fragmentation of the vegetation community, and loss of habitat; spread of alien and invasive species; displacement and mortality of the faunal community	4	4	2	10	2	3	5	
	Life of operation or less than 20 years: Long Term	Regional within 5 km of the site boundary / < 2000ha impacted / Linear features affected < 3000m	Small / ecosystem structure and function largely unchanged		Ecology with limited sensitivity/importance	Likely		**Low**

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The cumulative impacts of the proposed project on avifauna biodiversity are anticipated to be "Low" Negative due to the number of similar projects currently within the direct area. Please note, this rating is in-situ and takes into account only the existing current similar developments, not future developments.

Todd notes that the habitat is not "rare or sensitive" and the location of the project is preferrable as it is located within a development cluster near the Kronos and Cuprum substation. The current assessment agrees with this statement.

10 Summary of Findings

The initial flora, fauna and avifaunal study was conducted in 2014 by Simon Todd for the Humansrus PV 2. The table below illustrates the comparisons between the original (or initial) assessments and this amendment process.

Table 4 Table depicting the differences between the Simon Todd 2014 findings, and the current amendment findings

Aspect	Comments and Recommendations	
	Pervious Study (Simon Todd, 2014)	**Current study**
Baseline	**Findings:** The vegetation type was deemed to be broadly homogenous with some variation due to changes in soil depth and slope position. The habitat is described as low open shrubland, with only a few SCC on site and in the surrounding environments.	**Findings:** The site was found to be largely homogenous and the findings support that the habitat represents a low open karoo shrubland.
Sensitivity	**Findings:** Humansrus PV2, the karoo shrubland was predominantly low, with medium and medium-high sensitivities found to the south-western boundary.	**Findings:** The sensitivity of the habitats are in agreement with the Simon Todd 2014 findings, that the majority of the habitat is deemed a medium sensitivity habitat. One pan were found on site.
Impacts		
Planning and Construction Phase Impacts	**Findings:** The avifauna impacts range from Low Negative to Medium-Low Negative with mitigation.	**Findings:** The quantitative impact assessment of the current assessment are in line with the findings from Todd (2014). No new impacts have been identified.
Operation Phase Impacts	**Findings:** The avifauna impacts range from Low Negative to Medium-Low Negative with mitigation.	**Findings:** The quantitative impact assessment of the current assessment are in line with the findings from Todd (2014). No new impacts have been identified.
Cumulative Impacts	**Findings:** The cumulative impacts were deemed to be low with mitigations.	**Findings:** The cumulative impact is deemed to be high. For more information, please see Cumulative Impacts Section below.
Conditions	**Findings:** Several conditions (Section 2.5) were provided.	**Findings:** Additional conditions are provided for the amendment process (Section 6).

11 Conclusion

It is the opinion of the specialist that the original assessment findings appear to be mostly appropriate, with only a few discrepancies. These include the sensitivity of the karoo shrubland habitat, which was regarded as "Low", "Medium" and "Medium-High" sensitivities in the Humansrus PV2 report. Due to the high number of similar developments within the area, the cumulative impact, evaluated in situ

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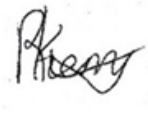
considering current similar projects within the area, is rated as Low Negative with mitigations as defined by Todd (2014). However, Todd notes that the habitat is not “rare or sensitive” and the location of the project is preferrable as it is located within a development cluster near the Kronos and Cuprum substation.

We trust you find the above in order. If there are any uncertainties or additional information required, please feel free to contact the undersigned.

Kind regards,

Sam van Zwieten (Cand. Sci. Nat. 167363)
Ecologist/Avifauna Specialist
The Biodiversity Company
April 2025



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