

# **Basic Screening Assessment Report**

for the

## **Vetlaagte MTS Project**

400kV MTS with 3x 132kV grid connections and associated infrastructure

## **Wag-'n-Bietjie MTS Project**

400kV MTS Project with 1x grid connection and associated infrastructure

**November 2021**

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## **Appendixes**

### *Appendix A: Sensitivity Map per Specialist Field*

- *Avifauna*
- *Aquatic*
- *Fauna & Flora*
- *Heritage & Palaeontology*

### *Appendix B: Combined Sensitivity Map*

# CHAPTER 1: BACKGROUND

## 1.1 Background

Landscape Dynamics Environmental Consultants (Pty) Ltd was appointed by Mulilo Renewable Project Developments (Pty) Ltd to apply for Environmental Authorisation for the following two projects:

### ***Vetlaagte MTS Project***

- 400kV MTS
- LILO power lines
- 3x 132kV grid connections and 3x switching stations

### ***Wag-’n-Bietjie MTS Project***

- 400kV MTS Project
- LILO power lines
- 1x grid connection

This desktop Screening Assessment was done to guide the site selection process of the two Substations early on in the Basic Assessment process. This would ensure that obvious site sensitivities are taken into account right at the onset of the project, thereby preventing possible delays later on in the process.

Input was obtained from the Avifauna, Aquatic, Fauna & Flora and Heritage and Palaeontology specialists.

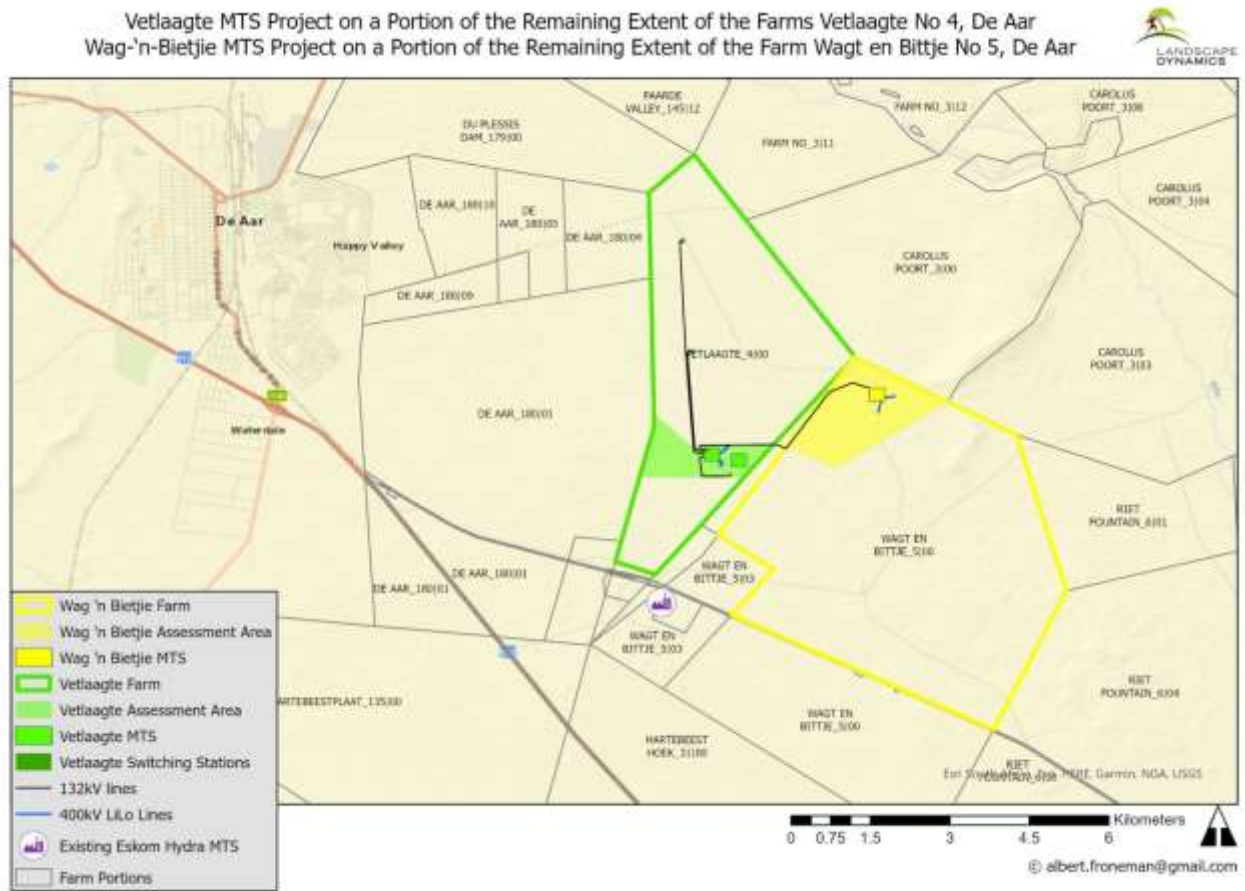
## 1.2 Gaps and Uncertainties

Storm water constraints were not taken into account during this assessment, because a consulting engineer was only appointed on 23 November. This leaves gaps and uncertainties regarding the accuracy of the Combined Sensitivity Map as presented in this report.

The flood line assessment was also not done due to the same reason, but a First Constraints Map as determined by the aquatic specialist is however included in Chapter 2 below and should suffice for the purposes of this Screening Assessment.

### 1.3 Locality

The sites are situated to the southeast of De Aar in the Northern Cape Province.



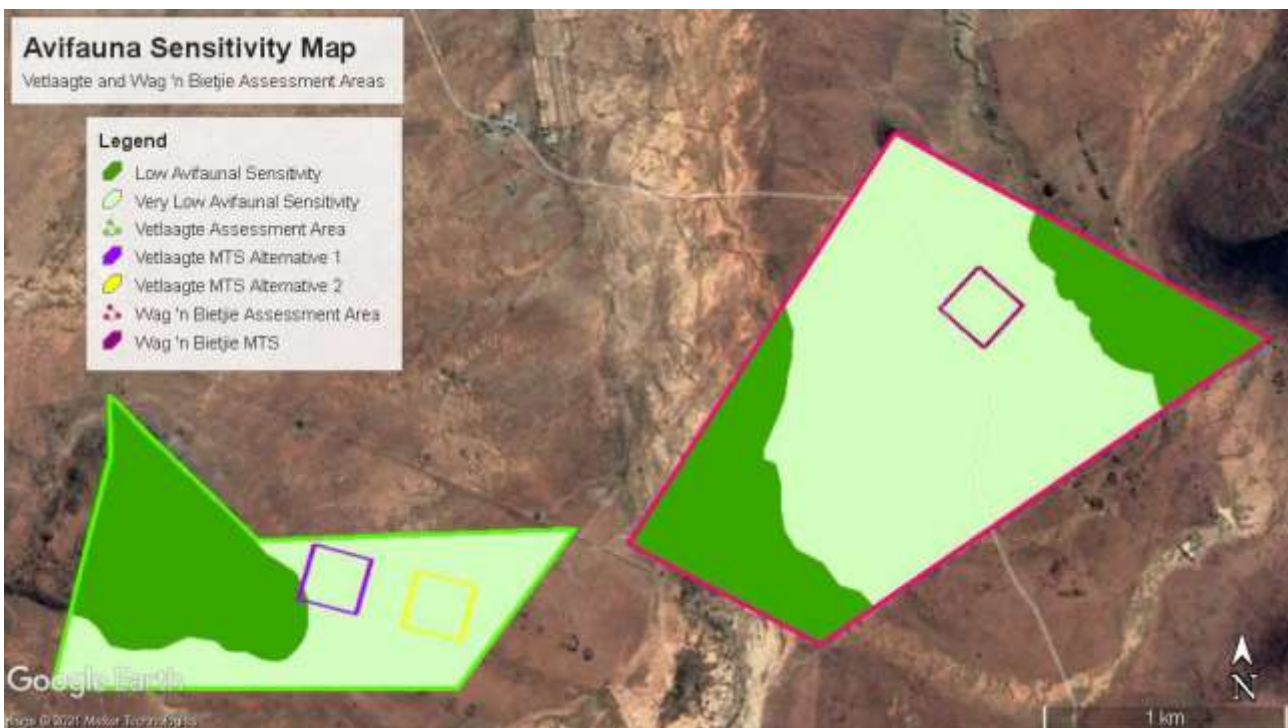
## CHAPTER 2: SPECIALISTS' ASSESSMENTS

Initial desktop assessments were conducted by the specialists in order to determine obvious high sensitive / no go areas. These areas will have a direct impact on the MTS site selection process.

### 2.1 Avifauna

The two assessment areas are in general of **low** avifaunal sensitivity, with large areas of **very low** sensitivity. Impacts would be reduced if the development footprint can be placed within the very low sensitivity areas and avoiding the low sensitivity areas. However, from an avifaunal perspective there isn't a great concern if that is not practically possible. The primary reasons for the difference between low and very low sensitivity areas are

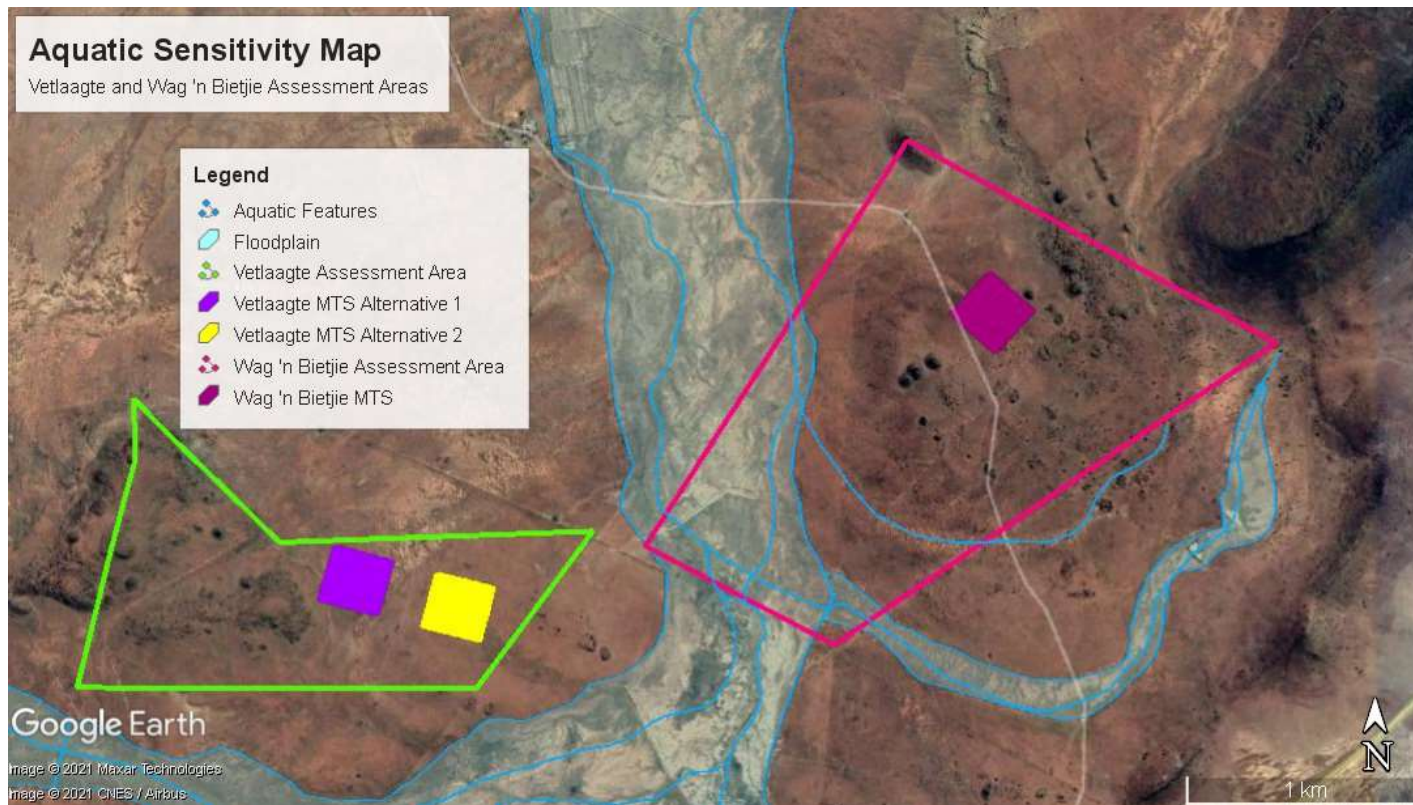
- the slightly elevated areas may be utilised by Ludwig's Bustard for displaying (albeit with a low likelihood) and
- the drainage area may be used as a flyway or allow for the movement of smaller species across the landscape.



## 2.2 Aquatic

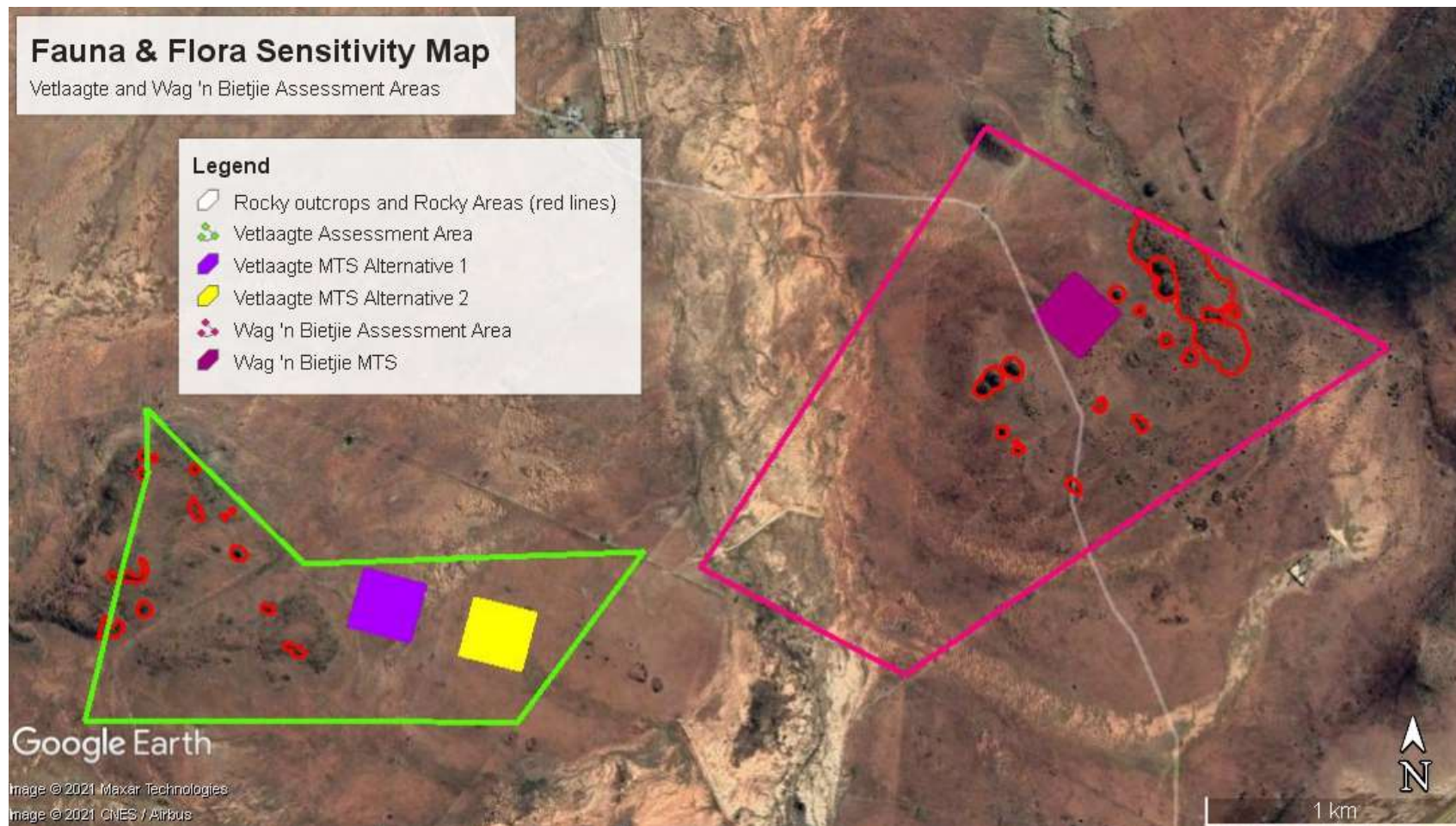
Even though the floodplain covers a very large area of the two farms, these areas are not seen as total no-go areas, i.e. there are existing pylons within the floodplain. Any development within the 1 in 100 year flood line will however require some mitigation from flood damage and in terms of stormwater related management measures, which will be addressed in detail in the Impact Assessment Report.

Additional buffers around the floodplain areas will most probably not be needed, but this will be confirmed during the site visit. Water Use Authorisation will be required for the Wag 'n Bietjie MTS Project due to the proposed crossing of the overhead powerline of the flood plain area.



## 2.3 Fauna & Flora

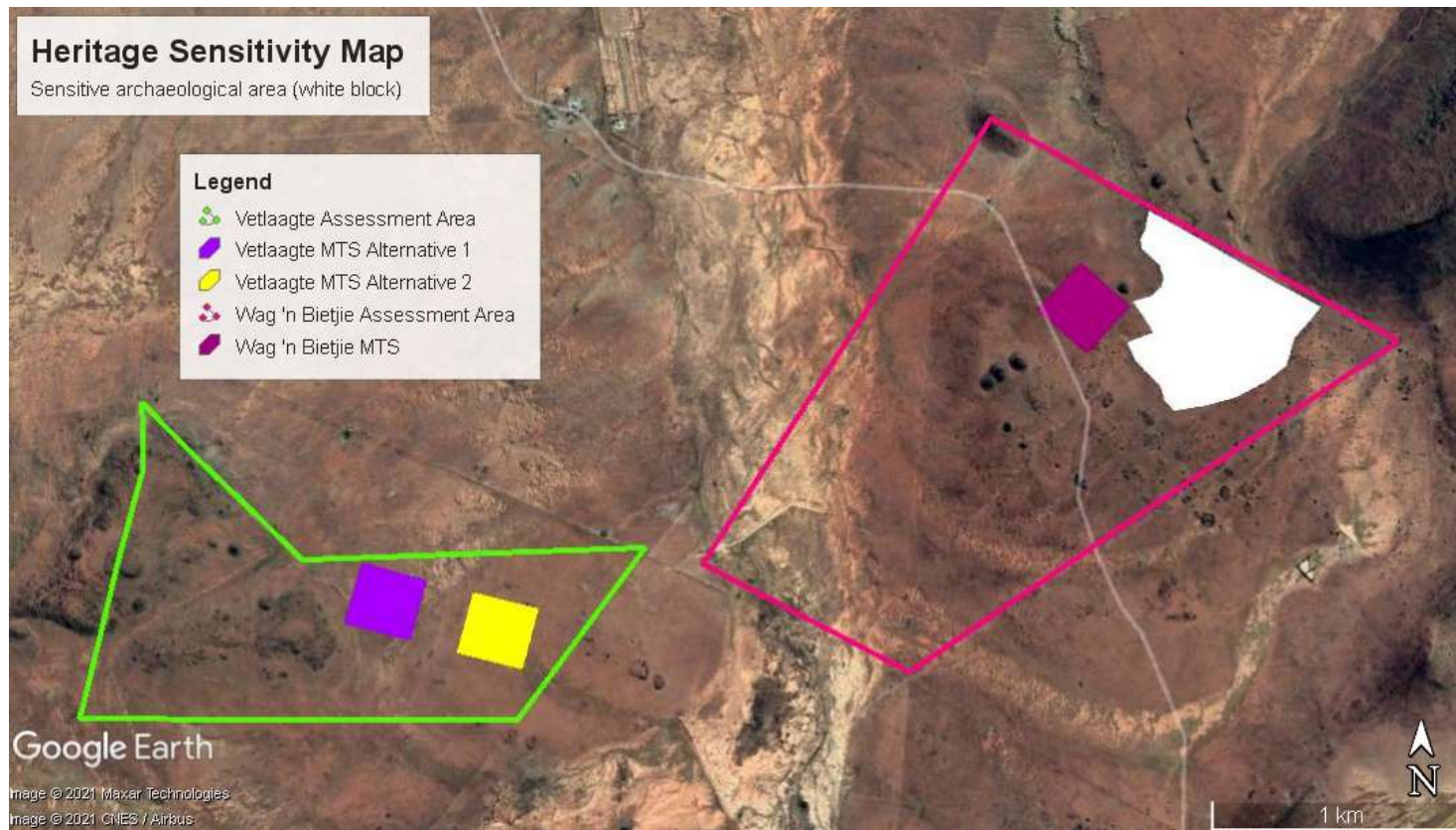
The fauna & flora constraints are the small rocky outcrops and rocky areas scattered throughout the site. It is possible that they may have higher diversity than surrounding areas, and also may possibly contain *Boscia* (protected tree) although this is not definite and will be confirmed during the site visit and final assessment. It is however preferable to treat these outcrops and rocky areas as no-go areas at this stage.



## 2.4 Heritage and Palaeontology

The eastern side of the Wag 'n Bietjie assessment area is amongst dolerite outcrops and is more sensitive than the rest of the site. The ground is also not level and would be more expensive to develop. It is recommended that this demarcated zone be avoided, but smaller foot print infrastructure will however be acceptable (e.g. powerlines). It is recommended that a full HIA be undertaken.

Due to the very low heritage sensitivity of the Vetlaagte assessment area, further studies for the Vetlaagte area would not be required. However, a field assessment will be undertaken to be in line with standard SAHRA requirement.

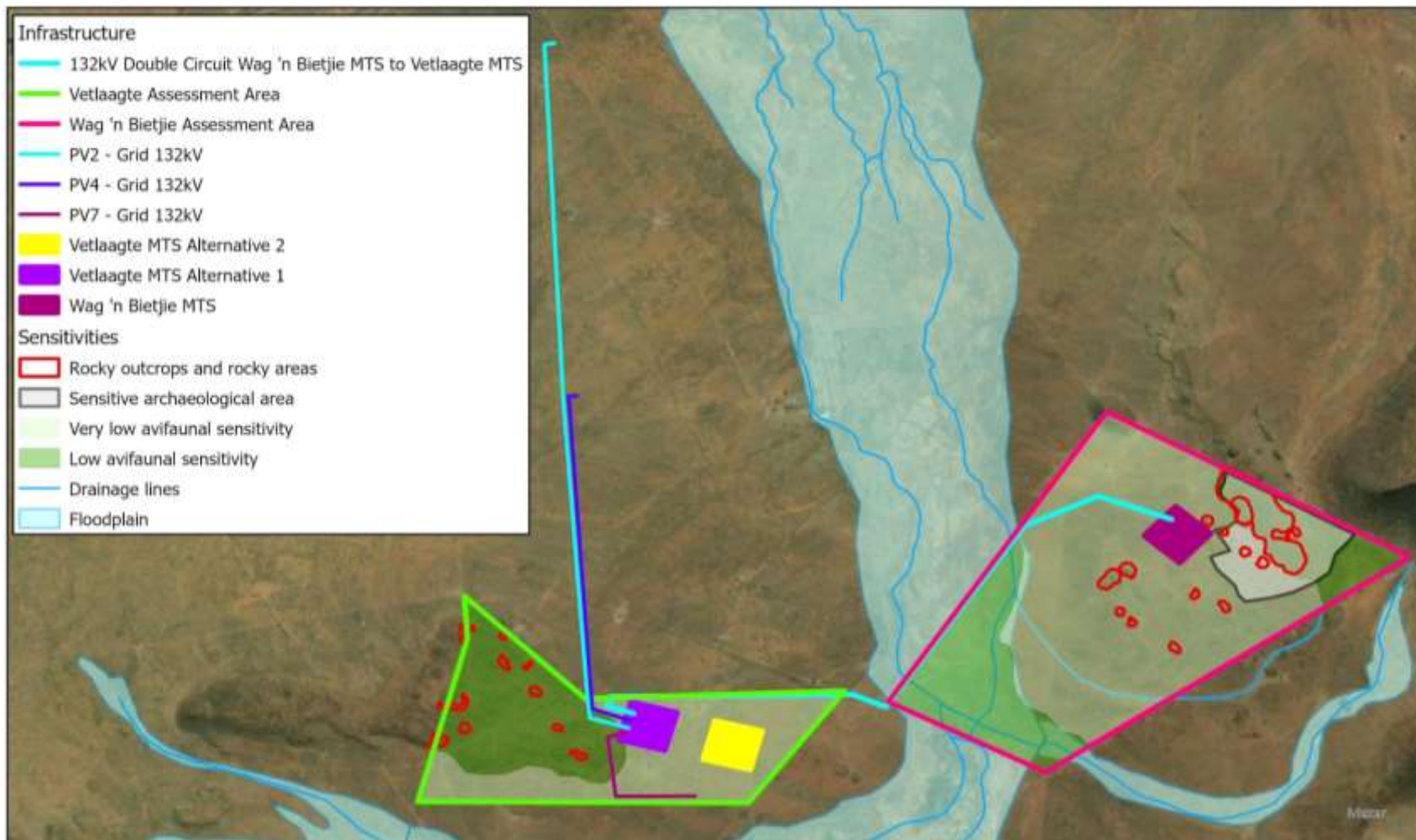




## CHAPTER 3: SENSITIVITY MAP

### 3.1 Combined Sensitivity Map

The combined Sensitivity Map clearly indicates the areas suitable for the development for the two Main Transmission Substations.



## CHAPTER 4: THE WAY FORWARD

### 4.1 The Way Forward

Based on the information provided in this *Screening Assessment*, Mulilo can now determine the alternative substation sites and route corridors that will most likely be approved by the DFFE.

#### **Information required from Mulilo**

Mulilo is requested to provide Landscape Dynamics with the following:

- The kml/kmz file of the Preferred MTS Site Alternative 1 and MTS Site Alternative 2 for the Wag 'n Bietjie farm.
- The kml/kmz file of the Preferred MTS Site Alternative 1 and MTS Site Alternative 2 for the Vetlaagte farm should it be different from the sites presented in this report.
- Motivation as to why each site is preferred / not preferred from a technical point of view. This information is important when alternatives are being discussed in the Basic Assessment Report(s).

#### **Power line route/corridors**

Problems/issues regarding the power line route/corridors for both the Vetlaagte and Wag 'n Bietjie farms are not foreseen. The position of the Vetlaagte MTS site will however impact on the final power line/corridors for both project selected as the Preferred Route/Corridors.

#### **Working Programme**

It is important to note that, according to the Working Programme originally submitted to Mulilo, the specialists must submit their Comprehensive Impact Assessments to Landscape Dynamics before 16 December 2021. It is therefore imperative that the final site alternatives be determined and forwarded to Landscape Dynamics no later than **30 November 2021**.

#### **DFFE Pre-Application Meeting**

The following was confirmed during the Pre-Application meeting:

##### WAG-'N-BIETJIE MTS PROJECT

- 1x Environmental Authorisations: 1x BA processes with 1x BAR

##### VETLAAGTE MTS PROJECT

- 4x Environmental Authorisations: 4x BA processes with 4x BARs

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