



G E M
science

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Request for Exemption from Heritage Assessment

Klipparani Grain Bunker

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Prepared by GEM Science cc

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1. INTRODUCTION

GEM-Science CC was appointed by Prima Pasta and Biscuits (Pty) Ltd to compile a Basic Assessment report for the proposed development of Kliparani Grain Bunker and its associated activities. As many heritage sites are threatened by development, both the environmental and heritage legislation require impact assessment reports by qualified professionals that identify all heritage resources including archaeological and palaeontological sites in the area to be developed, and to make recommendations for protection or mitigation of the impact of the sites.

As part of the Basic Assessment a Heritage Assessment is required. According to the National Heritage Resources Act (Act 25 of 1999) South Africa's unique and non-renewable archaeological and palaeontological heritage sites are 'Generally' protected and may not be disturbed at all without a permit from the relevant heritage resources authority.

According to Section 38 (1c) a proposed development or other activity which will change the character of a site exceeding 5000m² requires an impact assessment.

It is, however, the opinion of the author that a heritage assessment for the proposed Kliparani Grain Bunker development is not necessary, and therefore requests the South African Heritage Resources Agency (SAHRA) to grant exemption from a Heritage Assessment.

2. SITE LOCATION

The proposed development is to establish a grain storage bunker on Kliparani 1 and Kliparani 2 in the Ratlou Local Municipality within the Ngaka Modiri Molema District Municipality in the North-West Province.

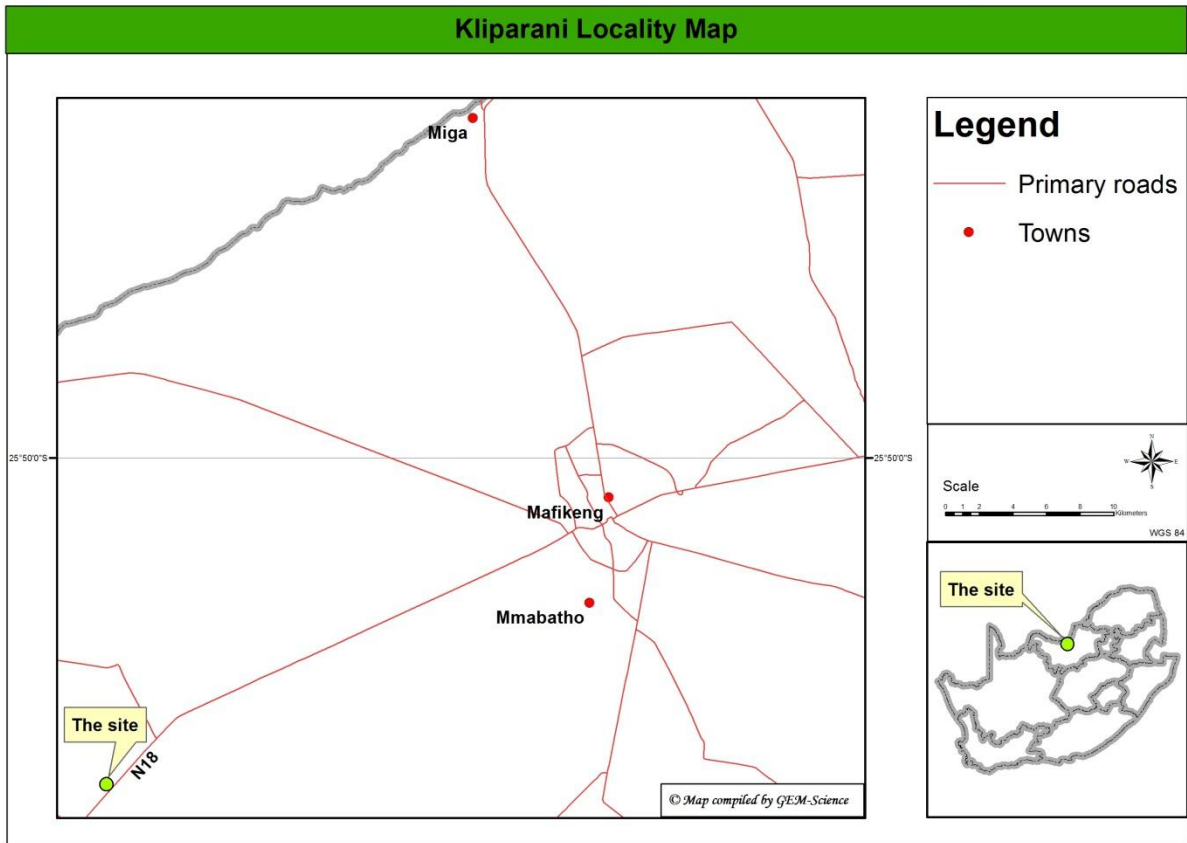


Figure 1. Locality map of Kliparani 1 and Kliparani 2

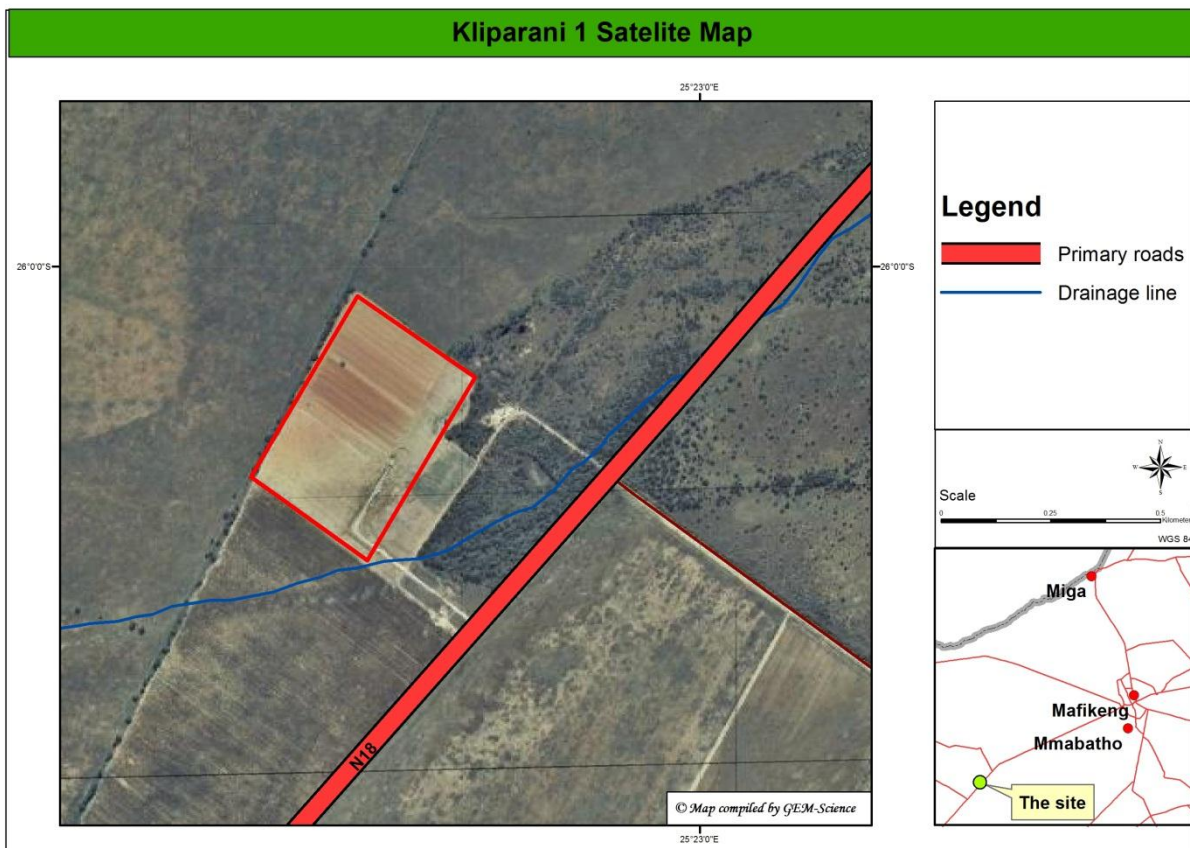


Figure 2. Satellite image for Kliparani 1

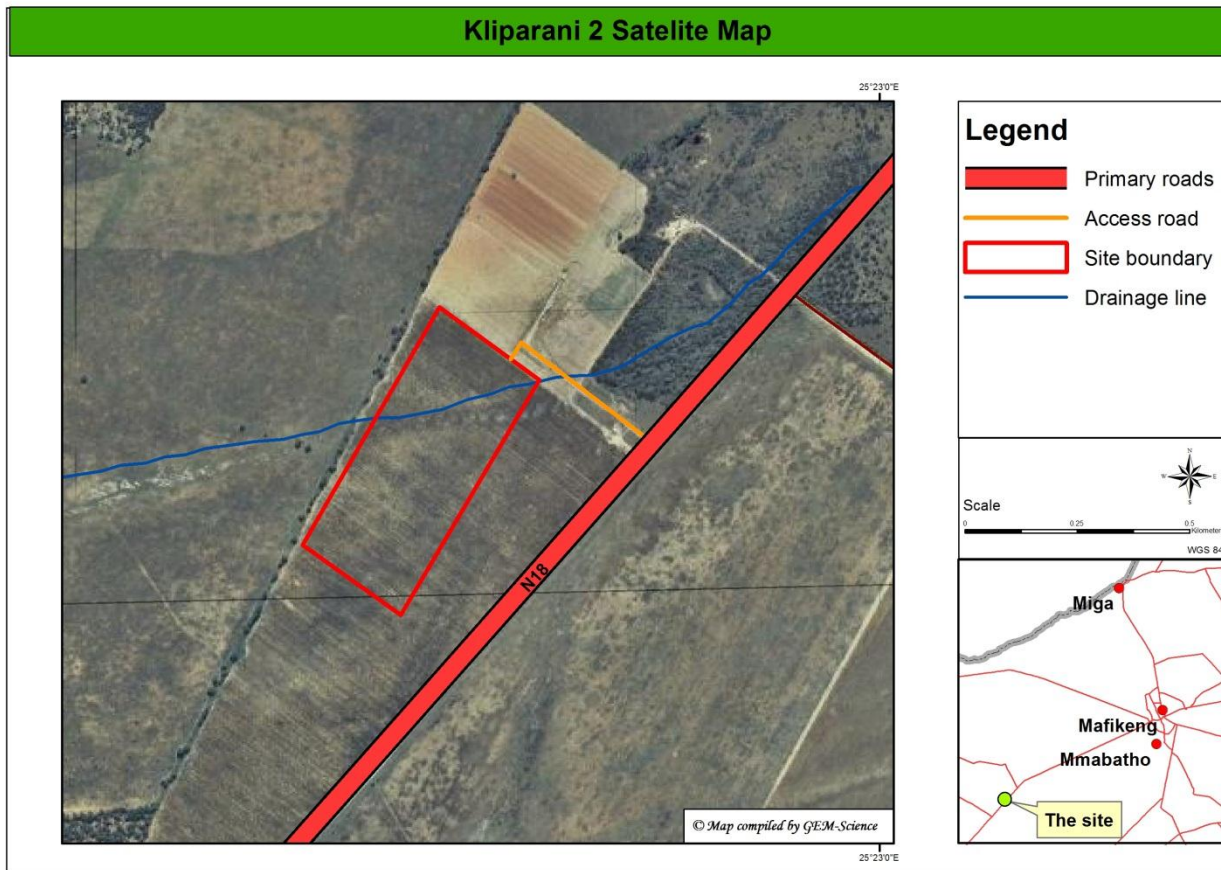


Figure 3. Satellite image for Klipparani 2

3. PROJECT DESCRIPTION

Prima Pasta and Biscuits (Pty) Ltd intends to establish a grain storage bunker and associated infrastructure on the remainder of portion 1 and 2 of the farm Klipparani 519 IO, also referred to as Klipparani 1 and Klipparani 2.

A grain bunker, also called a bunker silo, is used to store dry grain. The grain is stored on the ground in a purpose-built storage area. The ground surface of the storage area is compacted and covered with a waterproof liner. The grain is then loaded into the storage area from a centre point and retained by retaining walls of aluminium sheeting. The grain is then tightly covered with plastic sheeting. Currently grain silo bags, also called a grain tunnels, are used to store dry grain. A silo bag is simply a polyethylene bag that is filled with grain and then closed. The bag is sealed airtight with a life of 1 to 1.5 years in the open, preventing the development and reproduction of fungus and insects. This airtight environment can eliminate the need for chemicals.

Additional structures required as part of the bunker storage area, include a weighbridge and office space. These structures will only be established on Kliparani 1. Kliparani 2 will only be used for grain bunkers. The established access road will be made available for trucks to transport the grain to and from the storage area. All structures will be removable once the grain bunker is no longer needed.

Kliparani 1 has been under maize production in recent years but due to the proposed development, no maize has been planted since 2010 and the soil compacted as to limit dust generation from the empty agricultural fields. No vegetation clearing will thus take place for the proposed development. Kliparani 2 has been under soya bean production in recent years.

Temporary infrastructure includes fencing the area and constructing temporary offices, stores, a workshop, a weighbridge and ablution facilities. This has already taken place. A hopper has also been constructed to fill grain bags before loading the grain onto trucks.

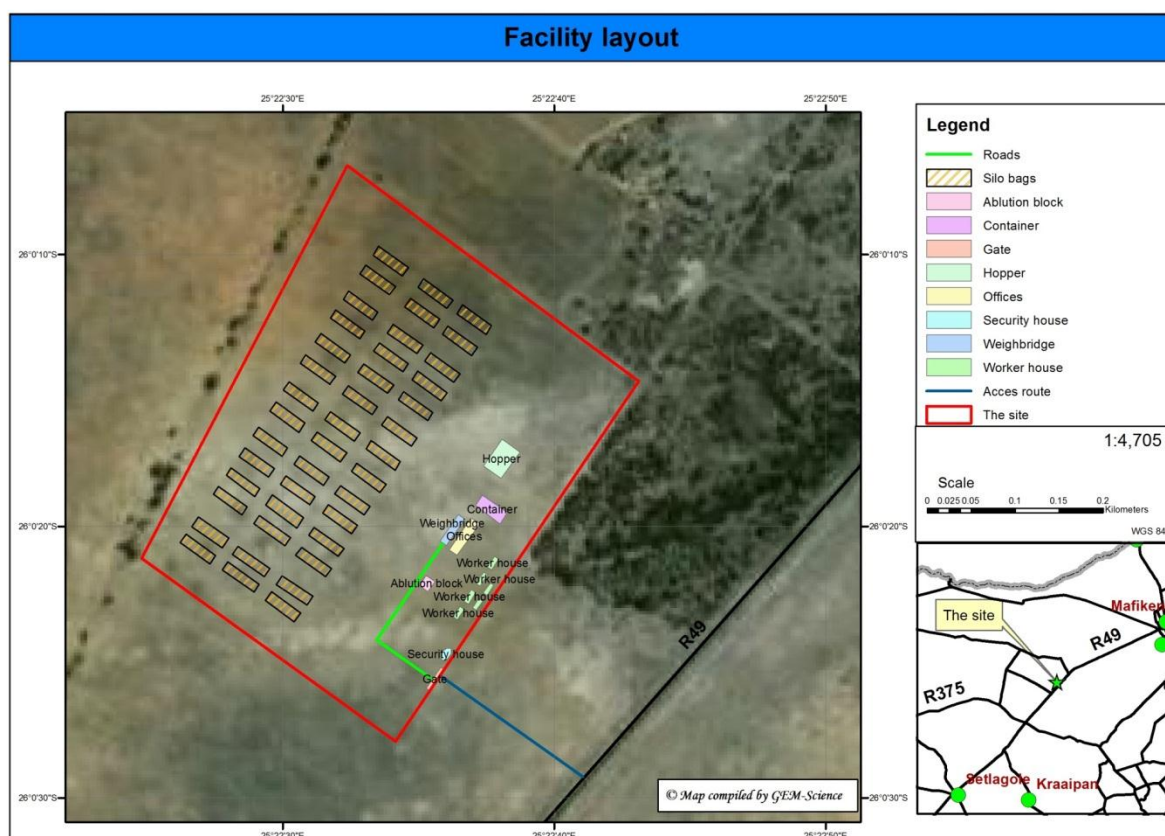


Figure 4. Proposed facilities layout on Kliparani 1



Figure 5. Hopper used to load grain onto trucks



Figure 6. Example of grain bunker



Figure 7. Example of grain bunker

4. MOTIVATION FOR REQUEST FOR EXEMPTION FROM HERITAGE ASSESSMENT

Information supplied by the Environmental Assessment Team that conducted the Basic Assessment for Prima Pasta and Biscuits (Pty) Ltd was evident that the environment was disturbed from its natural state. Images from Google Earth and photographic evidence from the initial site visits by the Environmental Team suggested that no archaeological or heritage sites are present or visible on Klipparani 1 and Klipparani 2.

The Klipparani 1 has been under maize production in recent years but due to the proposed development, no maize has been planted since 2010 and the soil compacted as to limit dust generation from the empty agricultural fields. No buildings or structures are present on the sites. Klipparani 2 has been under soya bean production in recent years.

Refer to the following photographic evidence to support and prove the current state of Klipparani 1 and Klipparani 2.

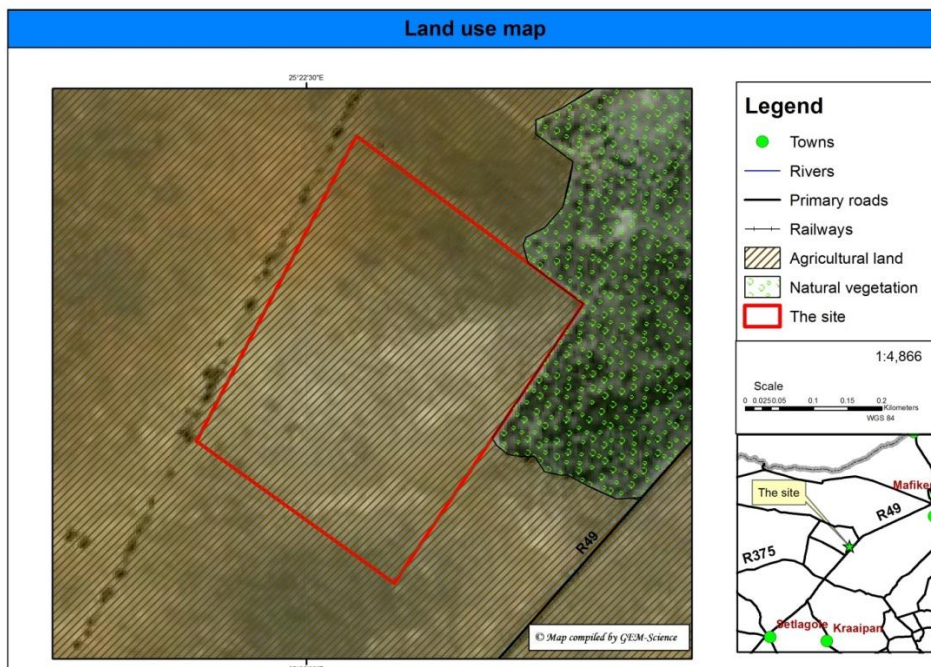


Figure 8. Land use image for Klipparani 1

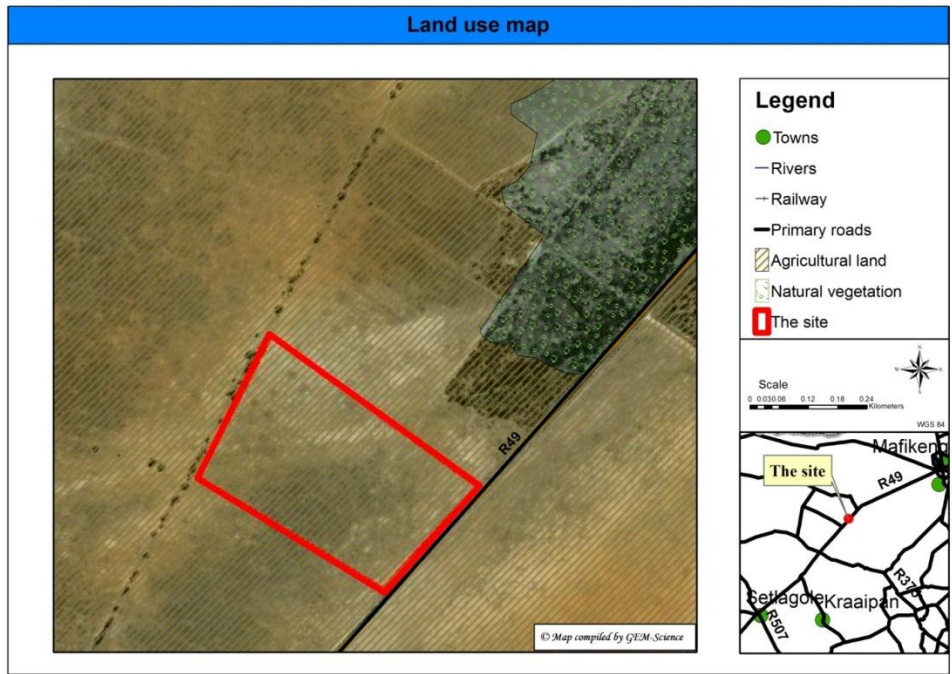


Figure 9. Land use image for Kliparani 2

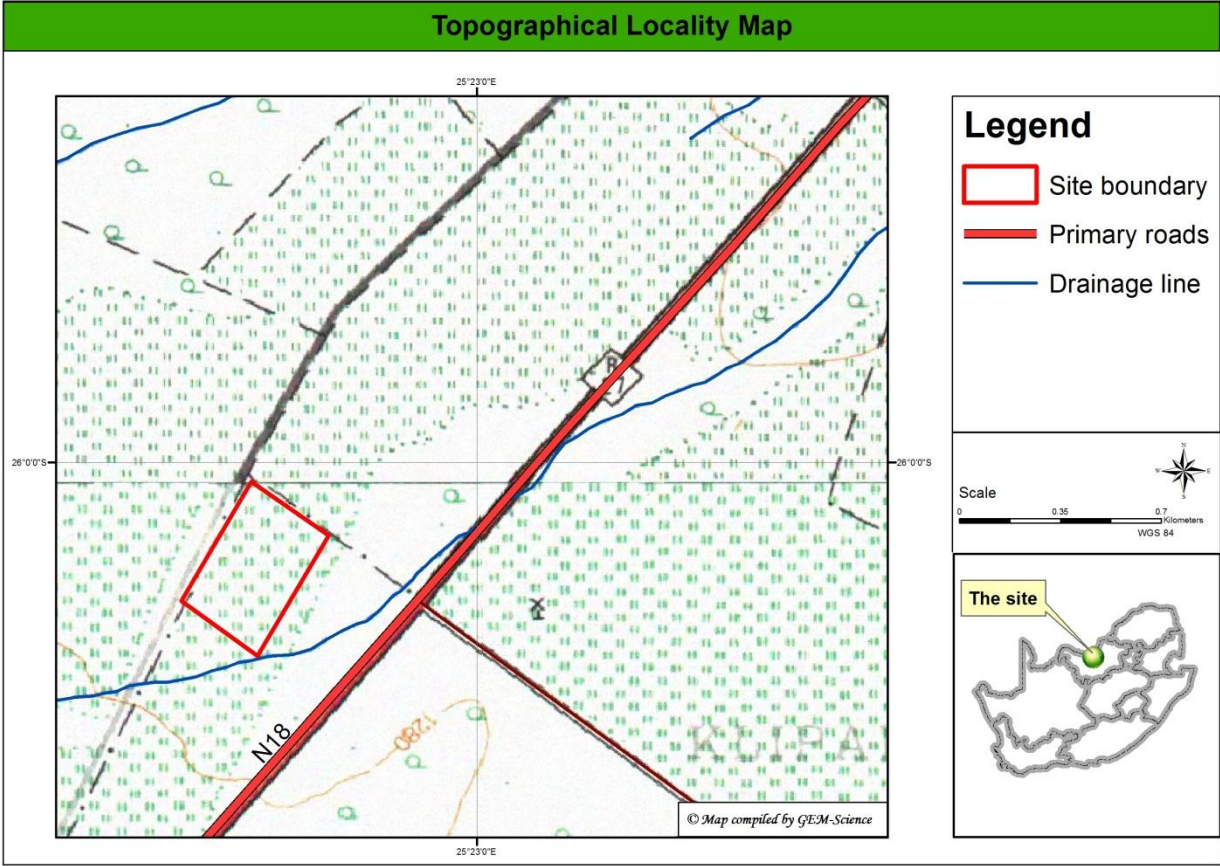


Figure 10. Topographical map for Kliparani 1

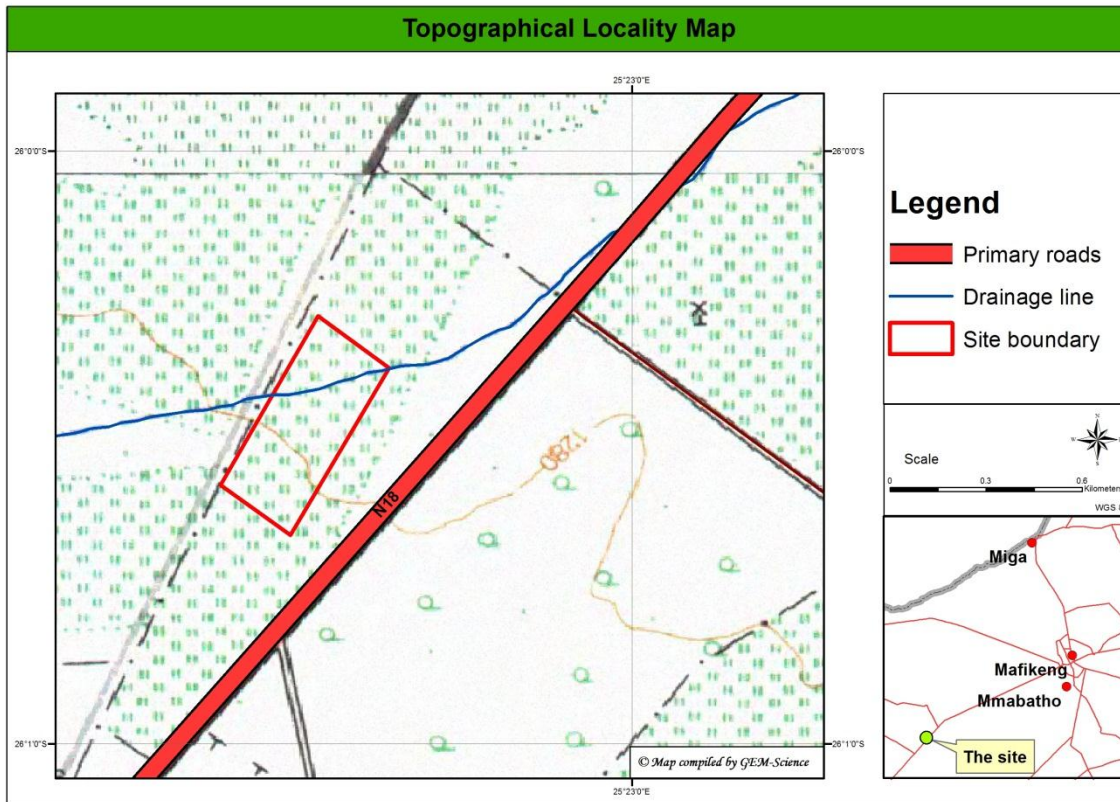


Figure 11. Topographical map for Klipparani 2



Figure 12. North-eastern view of Klipparani 1



Figure 13. Eastern view of Klipparani 1



Figure 15. Klipparani 1



Figure 16. Kliparani 2 with Kliparani 1 in the background



Figure 17. Kliparani 2 with Kliparani 1 in the background



Figure 18. Kliparani 2



Figure 19. Existing access road to Kliparani 1 and Kliparani 2



Figure 20. Aerial view of Klipparani 1 with filled silo bags

5. CONTACT DETAILS

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6. CONCLUSION

From the photographic evidence supplied by the Environmental Team it can be concluded that Klipparani 1 and Klipparani 2 are both agricultural fields and the remnants of agricultural fields. No existing heritage was reported during the public consultation meetings or by the land owners. It is therefore requested that SAHRA grants exemption from full heritage assessment on the proposed sites for development.

It is however recommended that should any heritage artefacts and sites be exposed during excavation, work in the area where the artefacts and sites were discovered shall cease immediately and the relevant authorities shall be notified as soon as possible.

All discoveries shall be reported immediately to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made. Acting on advice from these specialists, the relevant authorities will determine the necessary actions to be taken.

Under no circumstances shall any artefacts and sites be removed, destroyed or interfered with by anyone on the site.