

ARCHAEOLOGICAL IMPACT ASSESSMENT

S24G Application, Illegal vineyard development on Arendsnes (Portion 30 of the Farm Zeekoesteek No. 9), near Augrabies, Kai! Garib Municipality, Northern Cape

Assessment conducted under Section 38 (3) of the National Heritage Resource Act
(No. 25 of 1999)

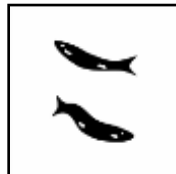
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Executive summary

1. Introduction

ACRM was instructed by GroenbergEnviro to conduct an Archaeological Impact Assessment (AIA) for an illegal vineyard development (i. e. Section 24G application process) on the Farm Arendsnes (Portion 30 of the Farm Zeekoesteeek No. 9), near Augrabies, Kai! Garib Municipality in the Northern Cape Province.

Arendsnes is located about 40kms north-west of Augrabies on the southern bank of the Orange/Gariep River, adjacent the Augrabies Falls National Park.

The illegal vineyards, totalling about 104ha in extent, were established between 1998 and 2016, without environmental authorisation.

The AIA forms part of a Section 24G Application. A S24G Application is a process in which to legally correct an unauthorised development.

2. Legal requirements

In terms of Section 38 (1) (c) (iii) of the National Heritage Resources Act 1999 (Act 25 of 1999), a Heritage Impact Assessment (HIA) of the proposed project is required if the footprint area of the development is more than 5000m² in extent.

A HIA of the agricultural development was not undertaken at the time.

3. Aim of the AIA

The overall purpose of the AIA is to determine the impacts that the unauthorised development had on archaeological resources.

4. Limitations

There were no limitations associated with the field study.

5. Findings

A field assessment of the agricultural development took place on 14th July 2020, in which the following observations were made:

No archaeological resources were recorded in the 104ha footprint area of the unauthorised development. Combined, the five areas of mostly cultivated vineyards constitute a highly transformed landscape.

No previous archaeological work has been done in the intensively farmed area, but the archaeologist David Morris notes that there are substantial pre-colonial herder encampments along the floodplain of the Orange River, but these tend to be short duration visits by small groups of hunter-gatherers. Most of these camps have, however, been destroyed by intensive farming activities and would no longer be archaeologically visible in the landscape.

6. Built environment

No old buildings, structures, features or equipment were recorded on the farm.

7. Graves

No graves or typical grave features such as stone cairns were located on the farm.

8. Impact statement

The results of the study indicate that the listed activity (i. e. an illegal vineyard development), has likely not had an impact of great significance on archaeological resources.

9. Conclusion

The receiving environment (i. e. existing vineyards) comprises a severely transformed and modified landscape.

The impact significance of the illegally established vineyards on archaeological heritage is therefore assessed as LOW.

10. Recommendations

1. With regard to the illegal establishment of vineyards on the Farm Arendsnes (Farm Zeekoestee 9/30), no further archaeological mitigation is required.

Table of Contents

	Page
Executive summary	1
1. INTRODUCTION	5
2. HERITAGE LEGISLATION	6
3. TERMS OF REFERENCE	7
4. THE STUDY SITE	7
5. STUDY APPROACH	12
5.1 Method of survey	12
5.2 Constraints and limitations	12
5.3 Results of the desk top study	12
6. FINDINGS	12
6.1 Illegally developed vineyards (S24G Process)	12
6.2 Built Environment	12
6.3 Graves	12
7. ASSESSMENT OF IMPACTS	13
8. CONCLUSION	13
9. RECOMMENDATIONS	13
10. REFERENCES	14

1. INTRODUCTION

ACRM was instructed by GroenbergEnviro, on behalf of CapeSpan Farms (Pty) Ltd to conduct an Archaeological Impact Assessment (AIA) for an illegal/unauthorised vineyard development (i. e. Section 24G application process) on the Farm Arendsnes (Portion 30 of the Farm Zeekoesteek No. 9), near Augrabies, Kai! Garib Municipality in the Northern Cape Province (Figures 1-3).

The illegal vineyards were established between 1998 and 2016 (Kühn 2019).

Area 5 (\pm 35ha) was developed between 1976 and 1994, Area 4 (\pm 53ha) was developed between 1998 and 2016, Area 3 (9.3ha) and Area 2 (5ha) were developed between 2013 and 2016, and Area 1 (1.4ha) was developed between 2010 and 2013 (Figure 4). All the Areas are cultivated with vineyards (table grapes). Area 5, in the floodplain of the Gariep/Orange River is a combination of mulch, vineyards, vegetable gardening and recreation (soccer field). Area 5 was developed prior to Environmental Approvals being necessary. All the irrigated areas are supplied via pipelines from a pump station at the Gariep River.

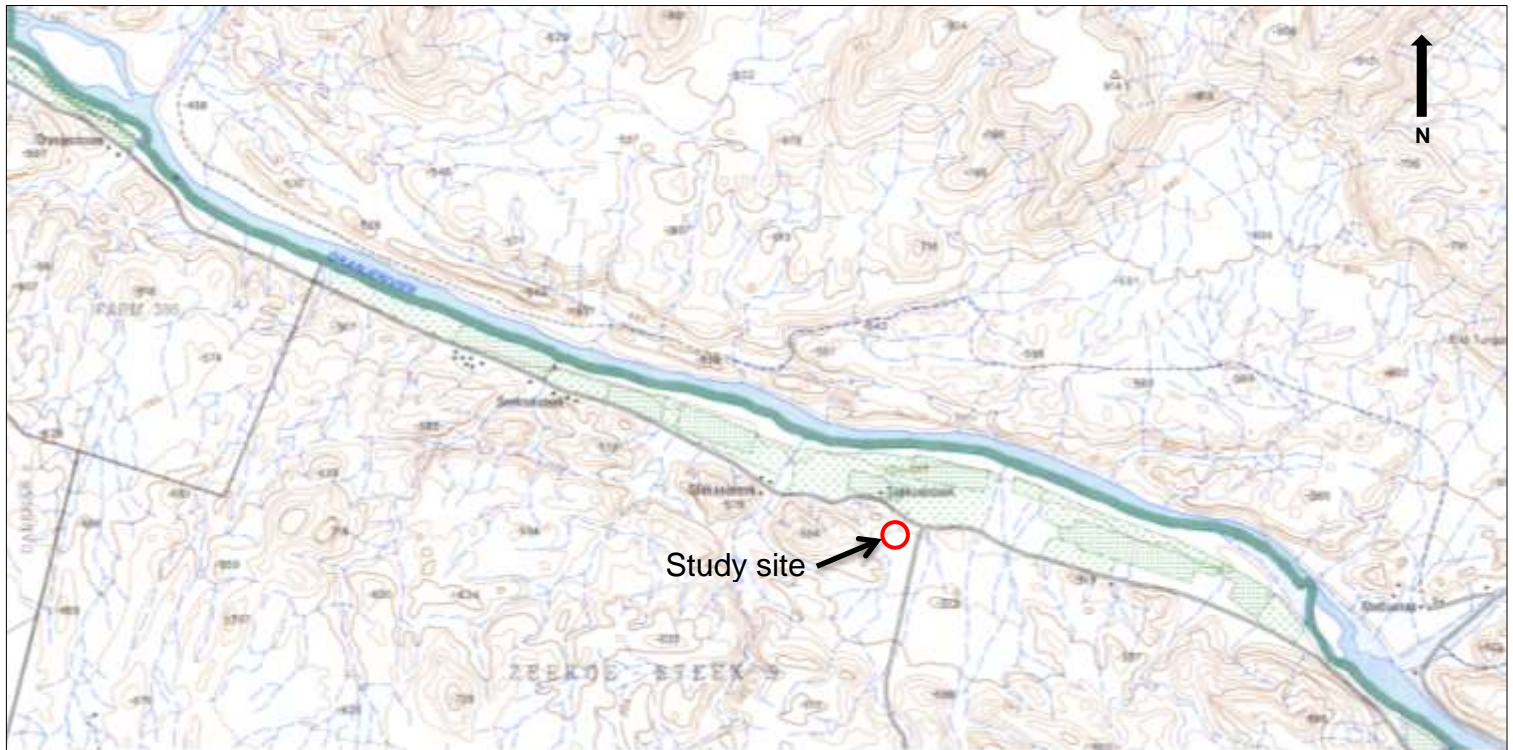


Figure 1. Locality Map (2820AC Riemvasmaak). Red polygon illustrates the location of the study area

Archaeological Impact Assessment, illegal vineyard development on Arendsnes Farm near Augrabies, Northern Cape



Figure 2. Google satellite map illustrating the location of the study site (yellow pin) in relation to Augrabies.



Figure 3. Close up view of the Farm Arendsnes (red polygon)



Figure 4. Google satellite map indicating the 5 Areas of vineyards developed on the farm between 1996 and 2016

2. HERITAGE LEGISLATION

The National Heritage Resources Act (Act No. 25 of 1999) makes provision for a compulsory Heritage Impact Assessment (HIA) when an area exceeding 5000 m² is being developed. This is to determine if the area contains heritage sites and to take the necessary steps to ensure that they are not damaged or destroyed during development.

The NHRA provides protection for the following categories of heritage resources:

- Landscapes, cultural or natural (Section 3 (3))
- Buildings or structures older than 60 years (Section 34);
- Archaeological sites, palaeontological material and meteorites (Section 35);
- Burial grounds and graves (Section 36);
- Public monuments and memorials (Section 37);

- Living heritage (defined in the Act as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) (Section 2 (d) (xxi)).

3. TERMS OF REFERENCE

The terms of reference for the archaeological study were to:

- Determine whether there are likely to be any archaeological resources that may have been impacted by the proposed development activities;
- Identify potentially sensitive archaeological areas, and
- Recommend any mitigation action.

4. THE STUDY SITE

Arendsnes (Portion 30 of the Farm Zeekoestek No. 9), is located off the R64 about 40kms north-west of Augrabies on the southern bank of the Gariep River. Agriculture (mostly vineyards) is the primary agricultural activity in the surrounding area, where the floodplain is intensively farmed. Area 5 is situated on the level flood plains of the Orange River and is characterized by softer alluvial deposits. The topography of the upper slopes (Areas 1-4) is characterised by dry drainage channels, gritty quartz and feldspar rubble on weathered schist. The ± 104ha of mostly illegal vineyards is completely transformed by agricultural development (Figures 5-16).



Figure 5. Area 1. View facing north

Archaeological Impact Assessment, illegal vineyard development on Arendsnes Farm near Augrabies, Northern Cape



Figure 6. Area 2. View facing south



Figure 7. Area 2. View facing north



Figure 8. Area 3. View facing north west

Archaeological Impact Assessment, illegal vineyard development on Arendsnes Farm near Augrabies, Northern Cape



Figure 9. Panoramic view of Area 4 and Area 1. View facing south



Figure 10. Area 4. View facing north west



Figure 11. Area 4. View facing south east

Archaeological Impact Assessment, illegal vineyard development on Arendsnes Farm near Augrabies, Northern Cape



Figure 12. Area 4. View facing south east



Figure 13. Area 4. View facing south west



Figure 14. Area 5. View facing south east



Figure 15. Area 5. View facing west



Figure 16. Area 5. View facing west

5. STUDY APPROACH

5.1 Method of survey

The overall purpose of the AIA is to determine the impacts that the illegal development had on archaeological resources.

To this end a site assessment was undertaken on the 14th July, 2020.

A literature survey was also carried out to assess the archaeological context of the surrounding area.

5.2 Constraints and limitations

There were no constraints or limitations associated with the study. Access to the site was easy and archaeological visibility was very good.

5.3 Results of the desk top study

The desk top study has relied primarily on sourcing reports from the SAHRIS content management system, as well as the author's own work in the surrounding area

No previous archaeological work has been done in the farming area near Blouputs, but numerous studies have been done in Augrabies, about 40kms further to the north east (Kaplan, 2019, 2018, 2017; Orton 2012; Pelsler 2012). Morris (2014) also notes that there are substantial herder encampments along the floodplain of the Orange River, but these tend to be short duration visits by small groups of hunter-gatherers. Most of these camps have, however, been destroyed by intensive farming activities and would no longer be archaeologically visible in the landscape.

6. FINDINGS

6.1 Illegally developed vineyards

No archaeological resources were found during the site assessment, or in the immediate surrounding area. The illegal vineyards were developed over a period of 20 years, and the receiving environment is completely modified and transformed.

6.2 Built environment

No old buildings, structures, features or equipment were recorded on the farm.

6.3 Graves

There are no graves of typical grave features such as stone cairns on the farm.



Figure 16 Trackpaths in blue (site assessment undertaken on 14th July, 2020).

7. ASSESSMENT OF IMPACTS

In the case of the illegal vineyard development on the Farm Arendsnes (Farm Zeekoesteek No. 9/30), it is expected that impacts on pre-colonial archaeological heritage are likely to have been *LOW*.

8. CONCLUSION

Cultivation of illegal vineyards on the Farm Arendsnes (Farm Zeekoesteek No. 9/30) has completely transformed the receiving environment. However, the literature survey indicates that it is unlikely that significant archaeological resources were impacted by the development.

The impact significance of the illegally established vineyards on archaeological heritage is therefore assessed as *LOW*

9. RECOMMENDATIONS

With regard to the illegal development of vineyards on the Farm Arendsnes (Farm Zeekoesteek No. 9/30), the following recommendations are made:

1. No further archaeological mitigation is required.

10. REFERENCES

Kaplan, J. 2019. Archaeological Impact Assessment, proposed agricultural development on Farm 355 Kakamas Noord, Augrabies, Northern Cape. Report prepared for Pieter Badenhorst Professional Services. ACRM, Cape Town

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