



AINP

Archaeo-Info Northern Province

PO Box 522

Louis Trichardt

0920

Tel: 082 573 2061

E-mail: stephan@lajuma.com

Heritage Impact Assessment

Proposed Second Phase Recommendations for
the Rescue Excavation of and Early Iron Age Site
on the Proposed Eco-Estate on the Farm
Happyland, Limpopo Province.

PREPARED BY:

Archaeo-Info Northern Province

PREPARED FOR:

Triviron EAP (Pty) Ltd

December 2007



Credit Sheet

Project Director

Stephan Gaigher (BA Hons, Archaeology, UP)

Principal Investigator for AINP

Member of ASAPA (# 057)

Tel.: (015) 593 0352

Cell.: 083 324 2714

E-mail: stephan@lajuma.com

Fieldworker

Eric N. Mathoho (BA, Archaeology, Univen)

Fieldworker for AINP

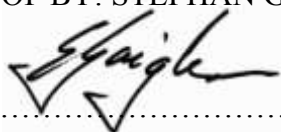
Member of ASAPA

Report Author

Stephan Gaigher

Disclaimer; Although all possible care is taken to identify all sites of cultural importance during the investigation of study areas, it is always possible that hidden or sub-surface sites could be overlooked during the study. AINP and its personnel will not be held liable for such oversights or for costs incurred as a result of such oversights.

SIGNED OF BY: STEPHAN GAIGHER



Management Summary

Site name and location: Proposed Eco-Estate on the Farm Happyland , Limpopo Province.

Magisterial district: Mopani District Municipality

Developer: Suger Creek Trading 33 (Pty) Ltd, t/a Zandspruit Estates

Consultant: AINP, PO Box 147, Bendorpark, Polokwane, 0713, South Africa

Date development was mooted: June 2007

Date of Report: 14 December 2007

Proposed date of commencement of development: September 2007

Table of Contents

| | |
|---|----|
| Credit Sheet | 2 |
| Management Summary..... | 3 |
| Table of Contents | 4 |
| List of Figures, Tables & Appendices..... | 5 |
| Introduction..... | 6 |
| Proposed Project | 6 |
| Project Area | 6 |
| Methodology..... | 6 |
| Site Evaluation | 6 |
| Resource Evaluation | 8 |
| Identification of Deposit..... | 8 |
| Extent of Deposit..... | 8 |
| Depth of Deposit | 8 |
| Cultural Affiliation | 8 |
| Richness of Site | 8 |
| Scope of Impact..... | 8 |
| Mitigation Recommendations | 8 |
| Zandspruit Eco-Estate | 8 |
| Excavation Team | 9 |
| Operational Costs | 9 |
| Timescale | 9 |
| Way Forward..... | 10 |
| References Cited | 11 |

List of Figures, Tables & Appendices

| | | |
|------------|---|----|
| Appendix A | Photographs..... | 16 |
| | Photo 1 – Surface of site at ZEE 001 | |
| | Photo 2 – Artefacts retrieved from site ZEE 001 | |
| Appendix B | Location Maps..... | 18 |

Heritage Impact Assessment

Proposed Eco-Estate on the Farm Happyland , Limpopo Province.

Introduction

Archaeo-Info Northern Province (AINP) was contracted by Triviron EAP (Pty) Ltd. to conduct a Heritage Impact Assessment (HIA) on the Proposed Eco-Estate on the Farm Happyland 241 KT, Limpopo Province.

A member of AINP performed the assessment on 03 August 2007.

The extent of the proposed development sites were determined as well as the extent of the areas to be affected by secondary activities (access route, construction camp, etc.) during the development. The sites were plotted using a Global Positioning System (GPS) and photographed digitally. The sites were surveyed on foot and by vehicle.

The result of this survey was the identification of a single occupational site on the eastern side of the existing runway on the property. The site was deemed of high scientific and cultural importance and a second phase of investigation was recommended. A site visit with representatives of the South African Heritage Resource Agency (SAHRA) corroborated the initial findings.

This report serves as an outline of the recommended mitigation measures for the preservation of the site and is compiled for submission to the provincial SAHRA Limpopo offices.

Proposed Project

Sugar Creek Trading 33 (Pty) Ltd, t/a Zandspruit Estates is proposing the establishment of a residential, commercial and retail development with associated infrastructure to be referred to as the Zandspruit Estates. The proposed project entails a residential, commercial and retail establishment consisting of 130 luxury bush stands, 230 "Residential1" town stands, a retirement village, 37 airport stands, 140 residential 1 beginner stands, an equestrian stand, offices, retail (shop), a hotel, 9 multi-story & clusters "Residential 3" stands, a landing strip and associated infrastructure.

The project was tabled during June 2007 and the developer intends to commence construction as soon as possible after receipt of the ROD from the Department of Environmental Affairs

Project Area

The proposed site for development is situated on the farm Happyland 241 KT and encompasses approximately 948 hectares. The farm is situated approximately 1km out of the town of Hoedspruit on the southern side of the R527 road. The southern boundary of the development is demarcated by the Sandspruit river. The whole farm is situated on an alluvial plain with sandy soil being predominant (See Appendix B: Location Map).

Fine and hot weather conditions were experienced during the field investigations.

Methodology

Site Evaluation

In order to determine the cultural significance of the site the following actions were taken;

- Identification of occupational deposit

- Determination of the extent of the occupied area
- Depth of deposit
- Possible cultural affiliation of site
- Richness and intactness of site
- Scope of the impacts anticipated on the site by the proposed development

Chapter 2

Resource Evaluation and Mitigation

Resource Evaluation

Identification of Deposit

This was determined by a first phase HIA survey of the area and is reported in the HIA report.

Extent of Deposit

After a site inspection with a representative of SAHRA it was determined that the site covers an area of approximately 50m x 30m. This area could increase with the identification of subterranean deposits not visible on the surface.

Depth of Deposit

No intrusive investigations were made and thus the depth of deposit is still unknown. Based on the surface features and exposed deposit, however it is estimated that occupational deposits will not be deeper than 100cm.

Cultural Affiliation

The site is placed, preliminarily, within the Letaba- or Eiland Industries, based on the few decorated ceramics collected from the surface. The absence of stone walled features could possibly indicate a connection to the Early Iron Age.

Richness of Site

Surface features on the site are not well defined and very few diagnostic pot shards were recovered from the surface of the site. The site does not show extensive animal damage or erosion and most of the deposit is still intact. Some damage to the site was suffered during the construction of the existing runway. The majority of the site, however still seems to be intact.

The site contains less cultural materials than other similar sites. It is however expected that more intact materials will be uncovered below the surface.

Scope of Impact

The scope of the impacts were identified and quantified during the first phase study and is available in the HIA report. Significant destruction of the site is anticipated.

Mitigation Recommendations

Zandspruit Eco-Estate

The following *guideline* recommendation is proposed for the mitigation of the site identified at Zandspruit Estate;

- Surveying of surface deposit and features

A site plan will be compiled to indicate the surface features of the site before excavations of any kind are commenced.

- Determination of the extent of the deposit as well as the depth.

It is recommended that two diagonal excavation trenches be dug across the north/south and east/west lines of the site. These trenches will be 500mm wide and will descend to virgin soil or bedrock to determine the depth of the deposit.

Should the deposit extend further than the boundaries identified on the surface the trenches will be extended to include this deposit.

The trenches will be excavated in arbitrary layers, only if no distinct occupational layers can be identified. These trenches will also serve to identify possible sub-surface features.

- Excavation of features

Should any cultural features be identified during the trench excavations, the excavations will be extended to include the features and expose them. Blocks measured from the datum point will be measured out to be excavated.

- Documentation of materials and features

All features and materials will be documented in detail and plotted on a site plan.

- Curation of finds

All finds will be marked, inventoried and curated according to standard practices. Materials will be stored in a local institution.

Excavation Team

The excavation team will consist of;

- The Principal Investigator, who will sanction all work, sign off on the report and be responsible for the excavation permit from SAHRA as well as the reporting to them.
- The Site Director, who will be responsible for the on-site excavations, overall management of the project as well as the writing of reports to SAHRA as well as the client.
- Team leaders, who will be responsible for the running of different areas of the excavation, documentation of finds and curation as well as adequate documentation.
- Unschooled labor, in addition to possible student volunteers the project will also be making use of unschooled labor. A workforce of approximately 20-30 laborers is anticipated in order to expedite the excavations.

Operational Costs

The following costs are anticipated;

- Transport costs
- Labor salaries
- Team leader salaries
- Communication costs
- Accommodation costs
- Subsistence costs
- Curation of finds
- Radiocarbon dating
- Packaging materials
- Documentation materials
- Equipment hire
- Contingencies
- PI costs (including transport and subsistence)
- Consumables
- Photographic costs
- Artist costs
- Report costs
- Administrative costs

A full cost evaluation will be supplied to the client on the receipt of the SAHRA comments.

Timescale

The proposed excavations with the labor force indicated should be completed within three to four weeks. This timescale is however dependant on weather conditions, labor issues and the unknown extent of the occupational deposit.

Way Forward

This document will be submitted to the provincial SAHRA office. On receipt of their recommendations a complete project timeframe and costing will be supplied to the client.

References Cited

1. Aldenderfer, Mark S., and Carolyn A. Hale-Pierce
1984 The Small-Scale Archaeological Survey Revisited. *American Archeology* 4(1):4-5.

2. Butler, William
1984 Cultural Resource Management: The No-Collection Strategy in Archaeology. *American Antiquity* 44(4):795-799.

3. Deacon, J. 1996. *Archaeology for Planners, Developers and Local Authorities*. National Monuments Council. Publication no. PO21E.

4. Deacon, J. 1997. *Report: Workshop on Standards for the Assessment of Significance and Research Priorities for Contract Archaeology*. In: Newsletter No. 49, Sept.1998. South African Association of Archaeology.

5. Dincause, Dena F., H. Martin Wobst, Robert J. Hasenstab and David M. Lacy
1984 *A Retrospective Assessment of Archaeological Survey Contracts In Massachusetts, 1970-1979*. Massachusetts Historical Commission, Survey and Planning Grant 1980. 3 volumes.

6. Dunnell, Robert C., and William S. Dancey
1983 The Siteless Survey: A Regional Scale Data Collection Strategy. In: *Advances in Archaeological Method and Theory* 6:267-287. M.B. Schiffer, ed.

7. Evers, T.M. 1983. *Oori or Moloko? The origins of the Sotho/Tswana on the evidence of the Iron Age of the Transvaal*. S. Afr. J. Sci. 79(7): 261-264.

8. Hall, M.1987. *The changing past: Farmers, kings and traders in Southern Africa, 200-1860*. Cape Town: David Phillip.

9. Hall, S.L. 1981. *Iron Age sequence and settlement in the Rooiberg, Thabazimbi area*. Unpublished MA thesis, University of the Witwatersrand.

10. Huffman, T.N. 1989. "Zimbabwe ruins and Venda prehistory." *The Digging Stick*, 6(3), 11.

11. King, Thomas F.
1978 *The Archaeological Survey: Its Methods and Uses*. Interagency Archaeological Services, Department of the Interior, Washington, D.C.

12. Lightfoot, Kent G.
1989 A Defense of Shovel Test Sampling: A Reply to Shott. *American Antiquity* 54(2):413-416.

13. Maggs, T.M. O'C. 1976a. *Iron Age communities of the southern Highveld*. Pietermaritzburg: Natal Museum.

14. McManamon, F.P.
1984 Discovering Sites Unseen. In *Advances in Archaeological Method and Theory* 8:223-292, edited by

15. M.B. Schiffer, Academic Press, New York.
16. Miller, C. L., II 1989 Evaluating the Effectiveness of Archaeological Surveys. *Ontario Archaeology* 49:3-12.
17. Loubser, J.H.N. 1994. *Ndebele Archaeology of the Pietersburg Area*. Navors. Nas. Mus., Bloemfontein. Volume 10, Part 2: 62-147.
18. Pistorius, J.C.C. 1992. *Molokwane, an Iron Age Bakwena Village*. Johannesburg: Perskor Printers.
19. Schiffer, Michael B., Alan P. Sullivan, and Timothy C. Klinger
1978 The Design of Archaeological Surveys. *World Archaeology* 10:1-28.
20. Smith, L.D. 1977 *Archeological Sampling Procedures For Large Land Areas: A Statistically Based Approach*. USDA Forest Service, Albuquerque.
21. Stayt, H. 1931. *The Bavenda*. London: Oxford University Press.
22. Zubrow, Ezra B.A. 1984 Small-Scale Surveys: A Problem For Quality Control. *American Archeology* 4(1):16-27.

APPENDIX A

PHOTOGRAPHS



Photo 1. Surface of site ZEE 001.

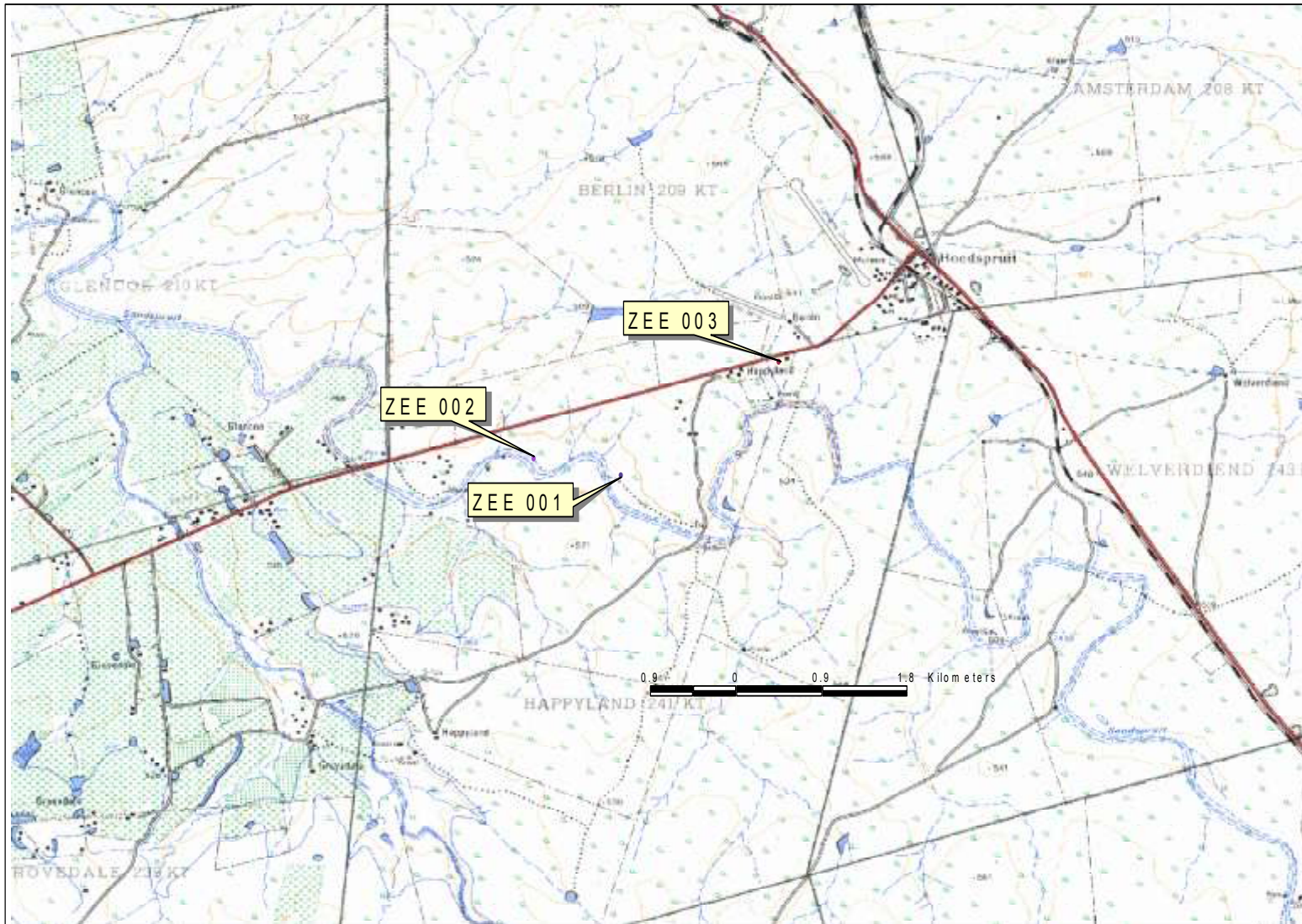


Photo 2. Artefacts recovered from site ZEE 001

APPENDIX B

Location Maps

Proposed Zandspruit Estates

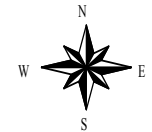


24 August 2007

Compiled by AINP

Compiled for
Triviron
EAP (Pty) Ltd.

1:50 000 Topo Map
Reference: 2430 DA



Compiled using
ArcView GIS 3.2 a



AINP
GIS by S. Gaigher