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PHASE 1
HERITAGE IMPACT ASSESSMENT

AN ARCHAEOLOGICAL INVESTIGATION OF (12) TWELVE PROPOSED RESERVOIRS CONSTRUCTION FROM SEVEN VILLAGES WITHIN VHEMBE DISTRICT MUNICIPALITY, LIMPOPO PROVINCE.

Report Prepared for:

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RESOURCE MANAGMENT

BACKGROUND

Naledzi Environmental consultants were appointed to handle the environmental aspects of the proposed reservoirs project. They appointed Vhufa Hashu Heritage Consultants (VHHC) cc to conduct an Archaeological and Cultural Heritage Impact Assessment study as part of the Environmental Impact Assessment (EIA) for the proposed 12 reservoirs project.

RESOURCE SUMMARY

Member of VHHC heritage specialists' team conducted a heritage Impact Assessment for the proposed project covering the affected area. No archaeological or any other categories of physical cultural heritage resources were identified within the affected project area.

RESOURCE RECOMMENDATION

Should by any chance archaeological or any other physical cultural resources be discovered subsurface, heritage authorities should be informed. From an archaeological and cultural heritage resources perspective, there are no objections to the proposed construction of reservoirs project and we recommend to South African Heritage Resources Agency (SAHRA) authorities to approve the project as planned.

TABLE OF CONTENTS

1. INTRODUCTION

Vhembe district municipality commissioned the construction of reservoirs from seven villages namely Diambele,Masakhani,Tshitavha,Tshamabera,Mutshenzheni, Tswera and Shadani. Naledzi Environmental consultants were appointed to handle the environmental aspects of the proposed project. They appointed Vhufa Hashu Heritage Consultants to conduct an Archaeological and Cultural Heritage Impact Assessment study as part of the Environmental Impact Assessment (EIA) for the proposed reservoirs.

As part of the development process, an application for an Environmental Assessment Authorization must be completed. This report is one of a series of appendices prepared for the impact assessment that is to be submitted to the Department of Economic Development, Environment and Tourism (DEDET) environmental assessment office, in support of the application. The information presented in this report provides the background and the basis for the Heritage Resources component of the Project impact assessment. The heritage resources impact assessment focused on archaeological sites.

The Project proposal constitutes an activity, which may potentially be harmful to heritage resources that may occur in the demarcated area. The National Heritage Resources Act (NHRA - Act No. 25 of 1999) protects all structures and features older than 60 years (section 34), archaeological sites and material (section 35) and graves and burial sites (section 36). In order to comply with the legislation, the Applicant requires information on the heritage resources, and their significance that occur in the demarcated area. This will enable the Applicant to take pro-active measures to limit the adverse effects that the development could have on such heritage resources. In terms of the National Heritage Resources Act (1999) the following is of relevance:

Historical remains

Section 34(1) No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

Archaeological remains

Section 35(4) No person may, without a permit issued by the responsible heritage resources authority:

- destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite

Burial grounds and graves

Section 36 (3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority:

(i) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(ii) bring onto or use at a burial ground or grave any excavation equipment, or any equipment which assists in detection or recovery of metals.

Culture resource management

Section **38(1)** Subject to the provisions of subsection (7), (8) and (9), any person who intends to undertake a development:

- must at the very earliest stages of initiating such development notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

***'development'** means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including:

(i) Construction, alteration, demolition, removal or change of use of a place or a structure at a place;

(ii) Any change to the natural or existing condition or topography of land, and
(iii) Any removal or destruction of trees, or removal of vegetation or topsoil;

*"**place** means a site, area or region, a building or other structure* ..."

*"**structure** means any building, works, device or other facility made by people and which is fixed to the ground ..."

2. AIM OF STUDY

The aim of this Heritage Impact Assessment (HIA) Study was to determine the presence or not of heritage resources such as archaeological and historical sites and features, graves and places of religious and cultural significance, and to submit appropriate recommendations with regard to the cultural resources management measures that may be required at the affected site.

2.1 Project Developers and Consultants

Developers are encouraged to consider archaeological values in their project planning and design from the outset. This will minimize scheduling and budget difficulties at later stages. As Consultants in the archaeological assessment process, we are responsible for: *(see table 1)*

- Determining the presence of archaeological sites that may be adversely impacted by the proposed development, and evaluate their significance.
- Identification of potential adverse impacts to archaeological sites protected under the National Heritage Resources Act No. 25 of 1999.

- ❖ Assessing of the heritage significance of identified archaeological sites to assist in the development of appropriate mitigation strategies.
- ❖ Make recommendations for avoidance or mitigation of protected or otherwise significant archaeological sites.
- ❖ Reporting the results of these studies to the Heritage Authorities.

Table 1

3. TERMS OF REFERENCE

The **Terms of Reference** for the study were to:

(I) Assess the significance of the known cultural resources within the borders of proposed development area, in terms of their historical, social, religious, aesthetic and scientific value.

(II) Develop mitigation or control measures for impact minimization and cultural resources preservation

(III) Develop procedures to be implemented if previously unidentified cultural resources are uncovered during the construction.

4. TERMINOLOGY

The following aspects have direct bearing on the survey and the resulting report:

- **Archaeological sites** are places where people lived and left evidence of their presence in the form of artifacts, food remains and other traces such as rock paintings or engravings, burials, fireplaces and structures.
- **Cultural Resources** are all non-physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include all sites, structures and artifacts of importance, either individually or

in groups, in the history, architecture and archaeology of human (cultural) development.

- **Cultural Significance** is the aesthetic, historical, scientific and social value for past, present and future generations.
- **Conservation** means all the processes of looking after a place so as to retain its cultural significance.
- **Historic** means significant in history.
- **Historical** means belonging to the past.
- ***In Situ* material** means archaeological remains that have not been disturbed.
- **Place** means site, area, building or other work, group of buildings or other works, together with pertinent contents, surroundings and historical and archaeological deposits.
- **Preservation** means protecting and maintaining the fabric of a place in its existing state and retarding deterioration or change, and may include stabilization where necessary.

5. METHODOLOGY

The field study involved the survey and inspection of the proposed project site. The survey was conducted by walking in transects within the affected site as well as covering the surrounding area. The survey sought to identify archaeological and cultural heritage sites or sacred sites within the project area that may be affected by the proposed project within the Vhembe district Municipality. Using GPS recording devices, we traversed the site on foot. The survey also sampled areas, which are disturbed for possible archaeological materials that might be trapped *in situ.*

6. SITE LOCATION

6.1. PROPOSED DIAMBELE RESERVOIR SITE.

Project coordinates

S22º.43´.48.0 E 30º 41´.19.7

The proposed Diambele reservoir site is situated east of the existing borrow pit at Diambele village, north of the main access gravel road from Makonde to Masisi road P277/1 and Sambandou River. The proposed sites is inside, north of the animal barricading fence and is characterized of undeveloped section of natural rocky out crop formations on a slope. Vhembe district municipality has proposed to construct 600 kiloliters concrete reservoir on the vicinity.

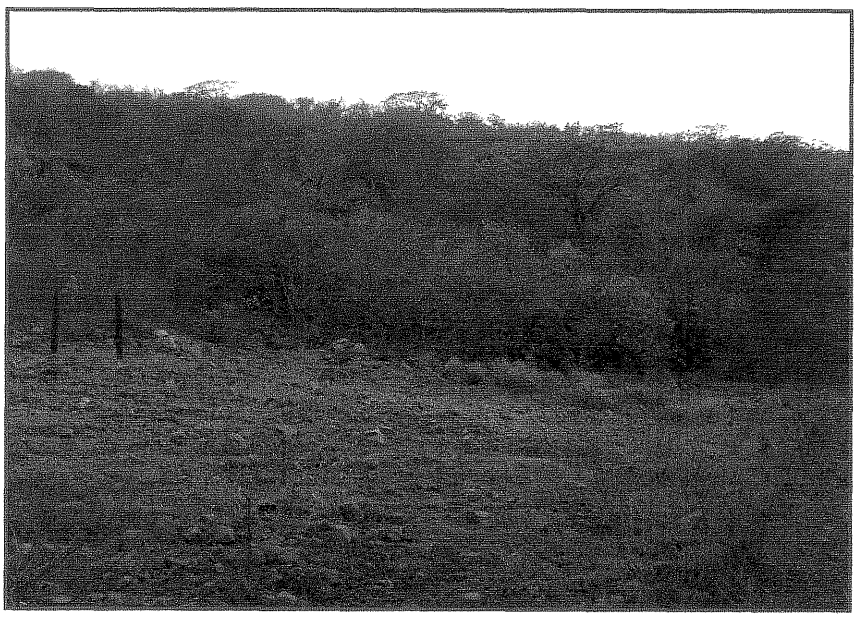

Figure 1: View of the North eastern section of the existing borrow pit proposed for the reservoir construction at Diambele village.

Figure 2: Note the bush encroachment towards the north western part of the borrow pit.

6.2. PROPOSED MASAKHANI RESERVOIR SITE

Project coordinates

S 22º.43´.59.2 E 30º 39´.29.3

The proposed Masakhani reservoir site is situated eastern section of the existing borrow pit, further east of the village stands, north of Sambandou River Bridge apposite Tshitavha village. The proposed sites is located north of the borrow pit characterized of natural rocky out crop formations on the mountain slope. On the site the Municipality has proposed to construct a100 kilolitres reservoir on the vicinity.

Figure 3: View of the proposed site for the construction of a reservoir at Masakhani village

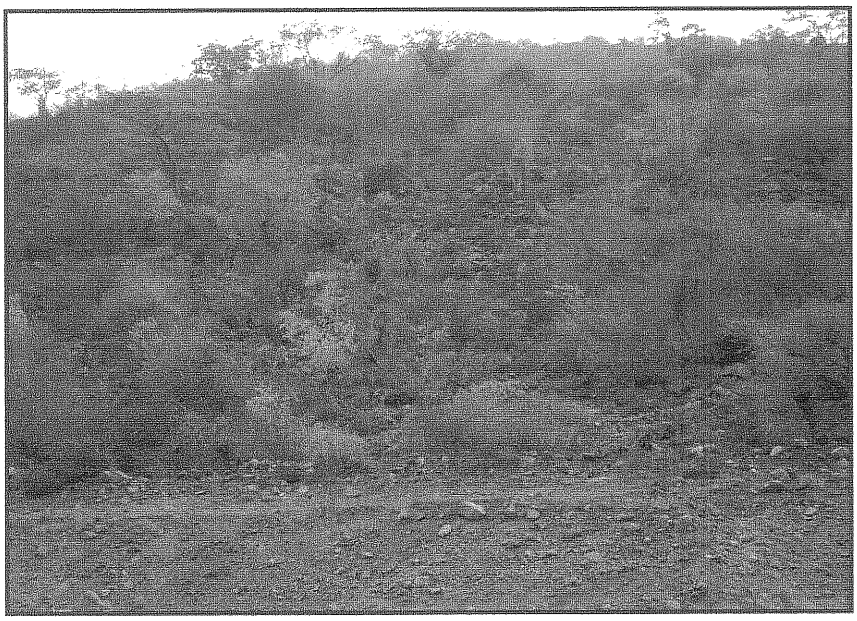

Figure 4: View of the proposed site from the existing borrow pit.

6.3. PROPOSED TSHITAVHA RESERVOIR SITE.

Project coordinates

S 22º.44´.53.5 E 30º 39´.06.9

The proposed Tshitavha reservoir site is situated on the bottom of the mountain sloping area western part of the local headman's stand, south of the entire village settlement. The proposed site is located south of the main tarred road from Makonde to Masisi area road P277/1 and is characterized of natural rocky out crop formations on the bottom of the mountain slope. The district municipality has proposed to construct a 400 kilolitres concrete reservoir on the proposed site.

Figure 5: View of the proposed Tshitavha reservoir site towards the south.

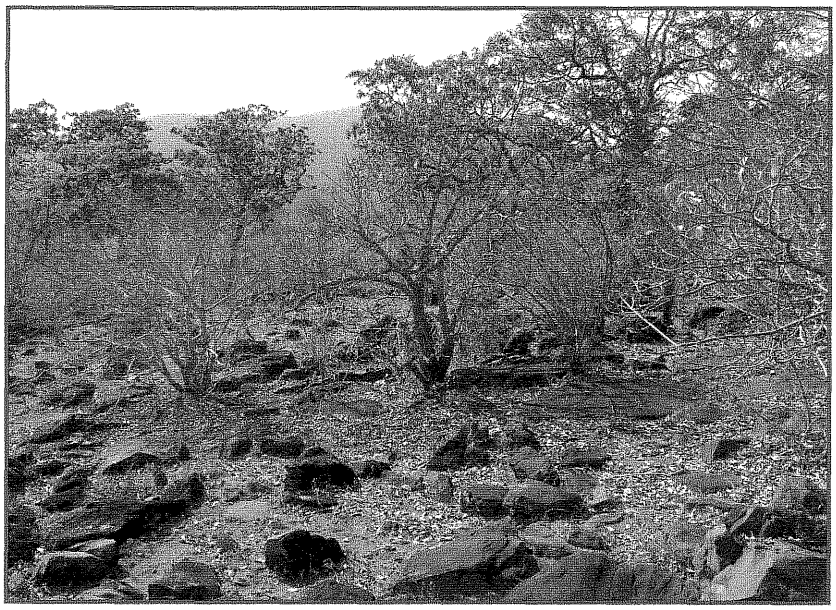

Figure 6: View of the proposed Tshitavha reservoir site towards the north.

6.4. PROPOSED TSHAMABERA RESERVOIR SITE.

Project coordinates

S 20º.21´.52.2 E 31º 48´.11.1

The proposed Tshamabera reservoir site is situated south western section of Tshamabera settlement area located on a promontory raised slope north of main access road from Makonde to Masisi road P277/1 and west of Sambandou River on the apposite side of Tshitavha village. The proposed site is characterized of natural rocky out crop formations slope with sparse vegetation. The district municipality has proposed to construct 200kilolitres concrete reservoir.

Figure 7: View of the proposed site for reservoir construction at Tshamabera village.

Figure 8: sparse vegetation on the proposed reservoir site.

6.5. PROPOSED MUTSHENZENI RESERVOIR SITE.

Project coordinates

S 22º.45´.04.8 E 30º 38´.11.4

The proposed Mutshenzheni reservoir site is situated on the flat area on the bottom of the mountain slope, south eastern part of Mutshenzeni settlement north of the mountain. The proposed site is located east of the existing reservoir and the area is characterized of flat surface. The existing infrastructures include borehole (H20R0967), reservoir and two raised Pennel tanks and few community stand pipe. The district municipality has proposed to construct a 200 kilolitres concrete reservoir on the proposed site.

Figure 9: View of the existing reservoir at Mutshenzeni area.

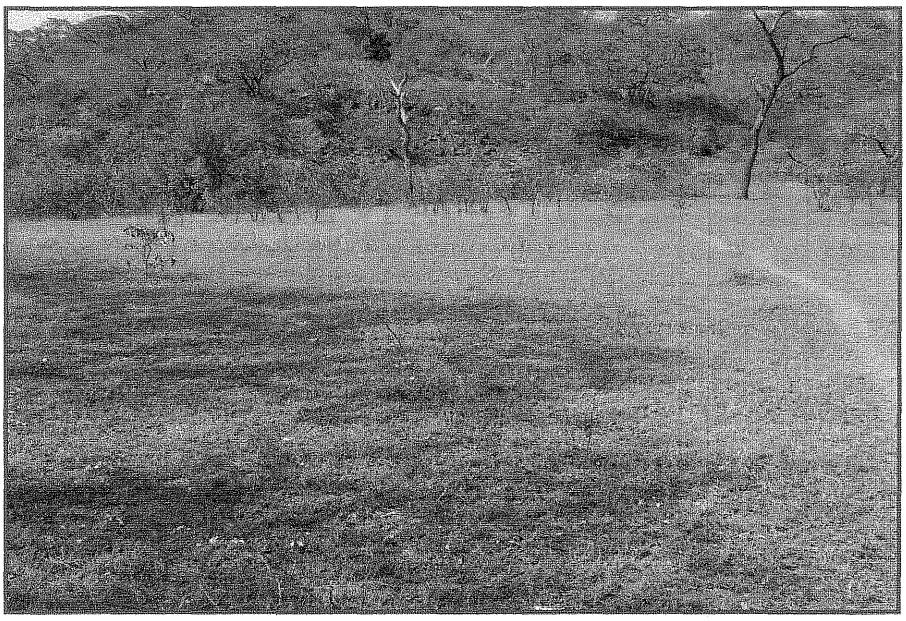

Figure 10: Flat surface are with grass cover earmarked for the construction of the reservoir.

6.6. PROPOSED TSWERA (F) RESERVOIR SITE.

Project coordinates

S 22º.45´.29.6 E 30º 36´.51.2

The proposed Tswera(F) reservoir site is situated south of the settlement located on top of a promontory hill, south of the main access road P277/1 from Makonde to Masisi area .The proposed site is characterized of natural rocky out crop formations slope with sparse vegetation. The district municipality has proposed to construct 200kilolitres concrete reservoir.

Figure 11: View of the proposed site for the construction of Tswera reservoir.

Figure 12: View of the top of the promontory hill.

6.7. PROPOSED TSWERA (E) RESERVOIR SITE.

Project coordinates

S 22º.45´.31.0 E 30º 36´.26.2

The proposed Tswera(E) reservoir site is situated south of the settlement located on top of a promontory hill, south of the main access road P277/1 from Makonde to Masisi area .The proposed site is characterized of natural rocky out crop formations slope situated above headman Netswera s kraal. The proposed site was indicated by white washed stone markings. The district municipality has proposed to construct 100kilolitres concrete reservoir.

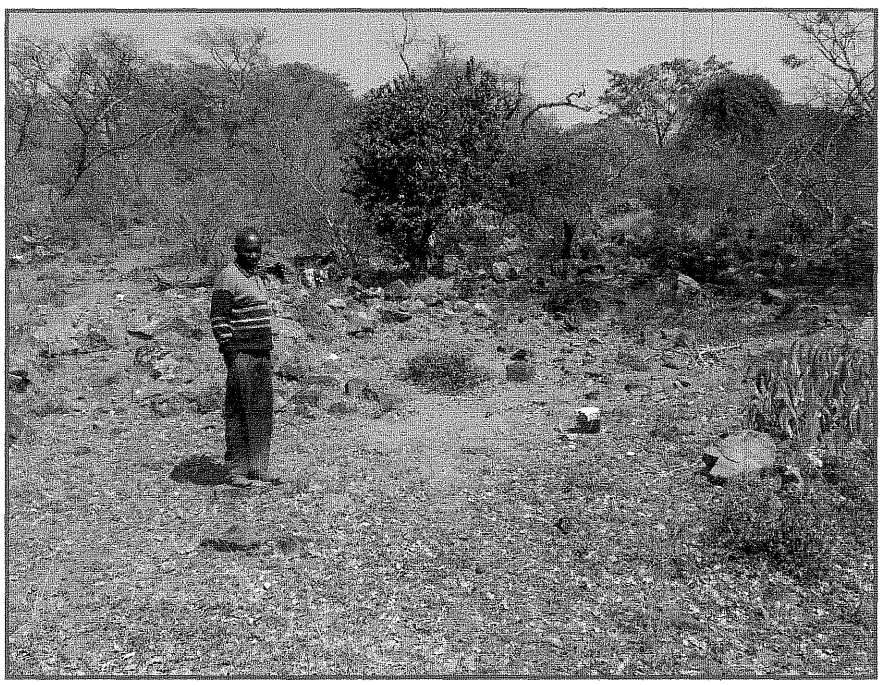

Figure 13: View of the proposed site for reservoir construction above the headman Netswera s kraal.

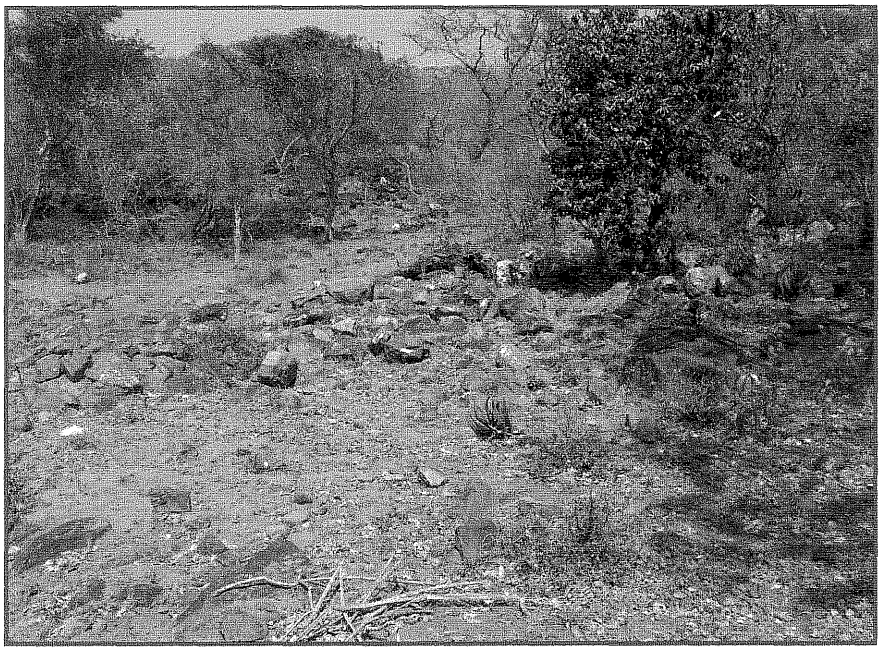

Figure14: View of the proposed site towards the south western side.

6.8. PROPOSED TSWERA (D) RESERVOIR SITE.

Project coordinates

S 22º.45´.47.6 E 30º 35´.22.0

The proposed Tswera(D) reservoir site is situated south of the settlement located on top of a promontory hill, south of the main access road P277/1 from Makonde to Masisi area .The proposed site is characterized of natural rocky out crop formations slope with sparse vegetation. The district municipality has proposed to construct 100kilolitres concrete reservoir.

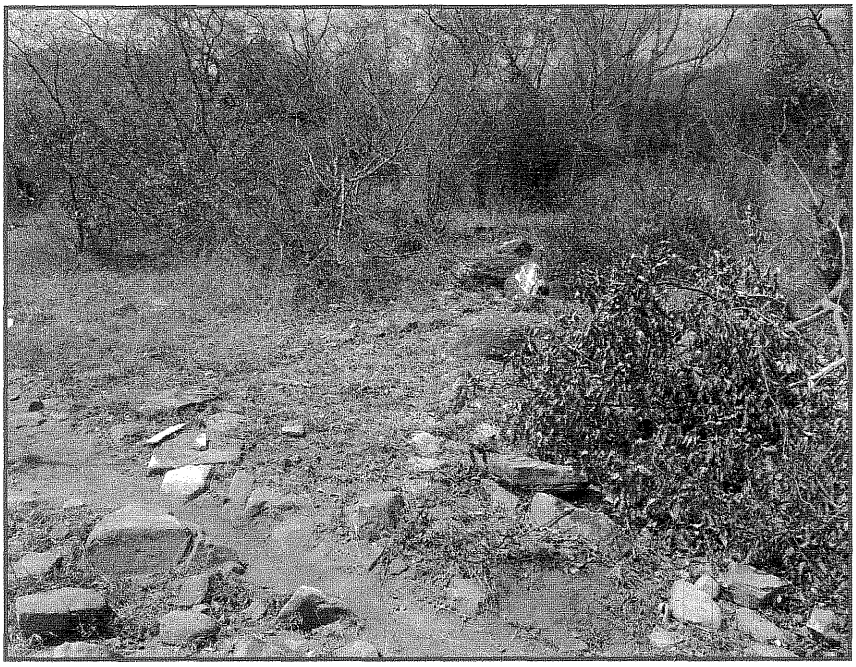

Figure 15: View of the top section of the promontory hill earmarked for the construction of a reservoir.

Figure 16: Proposed area for reservoir construction.

6.9. PROPOSED TSWERA (C) RESERVOIR SITE.

Project coordinates

S 22º.45´.58.5 E 30º 35´.01.7

The proposed Tswera(C) reservoir site is situated south of the settlement located on top of a promontory hill, south of the main access road P277/1 from Makonde to Masisi area .The proposed site is characterized of natural rocky out crop formations slope close to the last raw of settlement stands. The district municipality has proposed to construct 100kilolitres concrete reservoir.

Figure 17: View of the proposed site for reservoir construction.

Figure 18:

6.10. PROPOSED TSWERA (B) RESERVOIR SITE.

Project coordinates

S 22º.46´.14.6 E 30º 34´.30.5

The proposed Tswera (B) reservoir site is situated south of the settlement located on top of a promontory hill, south of the main access road P277/1 from Makonde to Masisi area. The proposed site is characterized of natural rocky out crop formations slope with sparse vegetation. The district municipality has proposed to construct 100kilolitres concrete reservoir.

Figure 19: Proposed site for reservoir construction.

Figure 20: View of the proposed area toward the west

6.11. PROPOSED TSWERA (A) RESERVOIR SITE.

Project coordinates

S 22º.46´.49.0 E 30º 33´.57.2

The proposed Tswera(A) reservoir site is situated south of the settlement area located on mountain slope, south of the main access road P277/1 from Makonde to Masisi area .The proposed site is characterized of natural rocky out crop formations slope with sparse vegetation. The district municipality has proposed to construct 100kilolitres concrete reservoir.

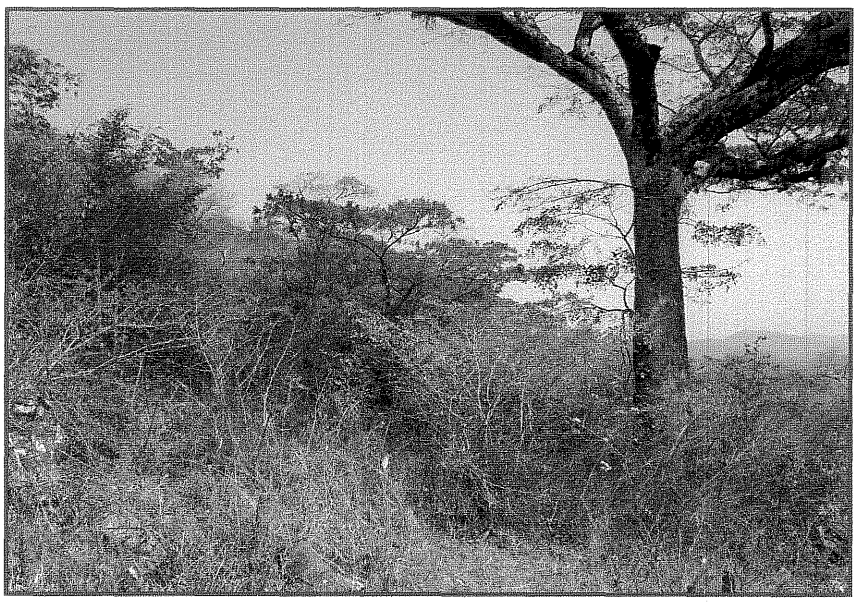

Figure 21: View of the proposed area for reservoir construction towards the west.

Figure 22: View of the proposed slope earmarked for the construction of the reservoir.

6.12. PROPOSED SHADANI RESERVOIR SITE.

Project coordinates

S 22º.47´.07.8 E 30º 33´.45.6

The proposed Shadani reservoir site is situated on the north facing slope south of the settlement, south of the main access road P277/1 from Makonde to Masisi area situated at approximately 400m from Shadani,Tshilamba tarred road T junction .The proposed site is characterized of natural rocky out crop formations slope with sparse vegetation as the current land use of the site is ploughed fields.. The district municipality has proposed to construct 100kilolitres concrete reservoir.

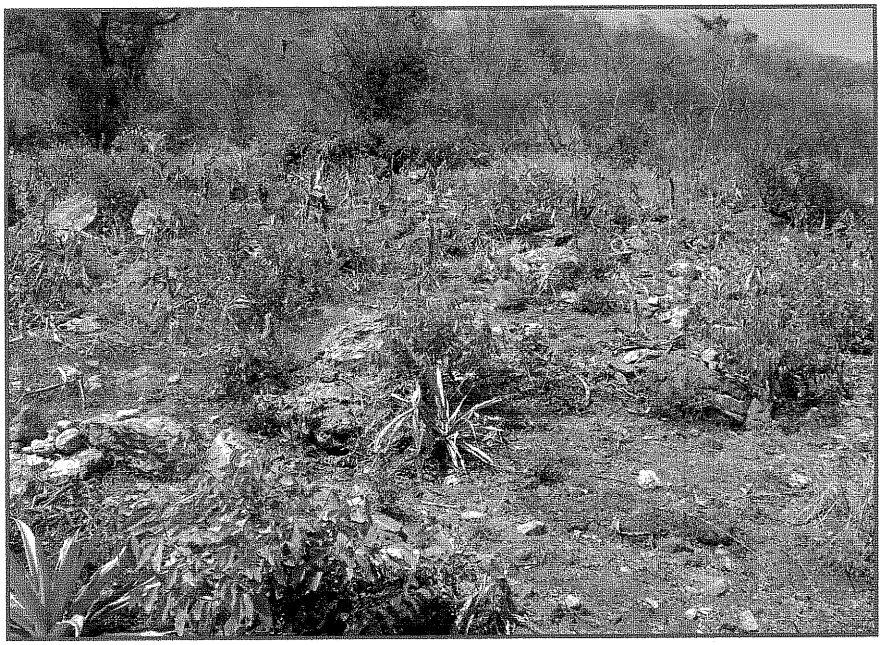

Figure 23: View towards the Southern section of the ploughing field one can clearly see few planted pine apple plants.

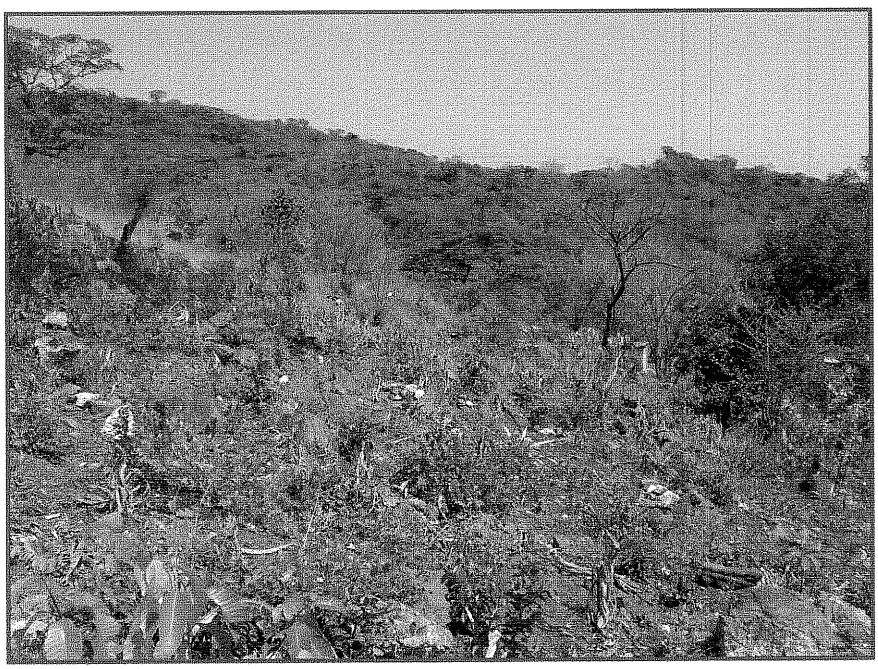

Figure 24: view of the area proposed for reservoir construction at Shadani demarcated inside the ploughing field.

7. SURVEY FINDINGS

No signs of heritage resources such as archaeological sites were found that would be significantly impacted on by the development. However, there is a probability of encountering chance finds during earth-moving and construction activities.

The discovery of previously undetected subsurface heritage remains on the site during construction must be reported to the South African Heritage Resources Agency (SAHRA) or the archaeologist, and may require further mitigation measures.

8. RECOMMENDATIONS

- No further pre-development study or mitigation is necessary in respect to archaeological and/ or physical cultural heritage resources associated with the proposed reservoirs
- Should archaeological or any other cultural heritage materials be discovered during the proposed construction development, the heritage authorities must immediately be informed.
- From a heritage perspective, there are no cultural heritage resources reasons why the proposed development should not proceed as planned.
- We recommend to the heritage authorities to approve the project accordingly.

9. REFERENCE

1.The National Heritage Resources Act (Act No 25 of 1999)

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10. STUDY TEAM

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