

**A PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT OF THE
PROPOSED AMANZI COUNTRY ESTATE, UITENHAGE DISTRICT, NELSON
MANDELA BAY MUNICIPALITY, EASTERN CAPE.**

Prepared for: Public Process Consultants
P.O. Box 27688
Greenacres, 6087
Tel.: 041 - 374 8426
Fax: 041 - 373 2002
Cell: 082 4909 828
sandy@publicprocess.co.za

Compiled by: Dr Johan Binneman
Department of Archaeology
Albany Museum
Somerset Street
Grahamstown 6139

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A PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT OF THE PROPOSED AMANZI COUNTRY ESTATE, UITENHAGE DISTRICT, NELSON MANDELA BAY MUNICIPALITY, EASTERN CAPE.

Compiled by: Dr Johan Binneman
Department of Archaeology
Albany Museum
Grahamstown
6139
Tel.: 046 6222312
Fax: 046 6222398
email: J.Binneman@ru.ac.za

Note: This report follows the minimum standard guidelines required by the South African Heritage Resources Agency for compiling Archaeological Heritage Phase 1 Impact Assessment (AHIA) reports.

SUMMARY

Purpose of the study

To conduct a Phase 1 Archaeological Heritage Impact Assessment of the Amanzi Estate (several properties) Uitenhage District, to describe and evaluate the importance of possible archaeological heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

The investigation

Most of the property investigated is covered by dense thicket, grass and orchards making it almost impossible to locate archaeological sites or material. Occasional stone tools were found where the river gravels were exposed by vehicle tracks.

Archaeological sensitivity

Apart from the Amanzi Springs Acheulian occupation site, the area investigated is of low archaeological sensitivity. It is unlikely that any archaeological material of any value will be found *in situ* or of any contextual value, however, material may be exposed after the top soil is removed (for example human remains).

Recommendations

1. The spring site must be fenced off before development starts.
2. The spring site must be declared a provincial heritage site.
3. A management plan must be compiled for the Amanzi Springs Acheulian occupation site.
4. If any concentrations of archaeological material are exposed during construction, it should be reported immediately to the nearest museum/archaeologist or to the South African Heritage Resources Agency so that a systematic and professional investigation can be undertaken.

PROJECT INFORMATION

Status

The report is part of an Environmental Impact Assessment.

The type of development

The study site (4 adjoining properties) measures 1 758 hectares, of which approximately 25% is proposed for development to incorporate agricultural activities, residential units of varying densities, a hotel and wellness centre, various recreational nodes (cricket field, squash courts, bowling greens, tennis courts, equestrian centre, golf course and practice range), club house and convenience facilities as well as private open space.

The Developer

Amanzi Lifestyle Estate (Pty) Ltd trading as Amanzi Country Estate

The Consultant

Public Process Consultants
P.O. Box 27688
Greenacres, 6087
Tel.: 041 - 374 8426
Fax: 041 - 373 2002
Cell: 082 4909 828
sandy@publicprocess.co.za

Terms of reference

The original proposal was to conduct a Phase 1 Archaeological Heritage Impact Assessment of the Amanzi Estate, Uitenhage District, to describe and evaluate the importance of possible archaeological heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

BRIEF ARCHAEOLOGICAL BACKGROUND

Literature/research review

The oldest evidence of the early inhabitants are large stone tools, called handaxes and cleavers, which can be found amongst river gravels and in old spring deposits in the region. These large stone tools are from a time period called the Earlier Stone Age (ESA) and may date between 1 million and 250 000 years old. In a series of spring deposits at Amanzi Springs (see this report) excavated by Ray Inskip in 1963 and Hilary Deacon during 1964/65, a large number of stone tools were found *in situ* to a depth of 3-4 metres. Remarkably, wood and seed material preserved in the spring deposits, possibly dating to between 250 000 to 800 000 years old (Deacon 1970).

The large Handaxes and cleavers were replaced by smaller stone tools called the Middle Stone Age (MSA) flake and blade industries. Evidence of MSA sites occur throughout the region and date between 200 000 and 30 000 years old. These stone artefacts, like the Earlier Stone Age tools are also found in the gravels along the banks of the Coega River and like handaxes are mainly in secondary context. Fossil bone may in rare cases be associated with MSA occurrences. One such occurrence of fossil bone remains and Middle Stone Age stone tools was reported south of Coega Kop (Gess 1969). During excavations the remains were found in the surface limestone, but the bulk of the bone remains were found some 1-1,5 metres below the surface. The excavations exposed a large number and variety of bones, teeth and horn cores. The bone remains included warthog, leopard, hyena, rhinoceros and ten different antelope species. A radiocarbon date of greater than 37 000 years was obtained for the site.

The majority of archaeological sites found in the area date from the past 10 000 years (called the Later Stone Age) and are associated with the campsites of San hunter-gatherers and Khoi pastoralists. These sites are difficult to find because they are in the open veld and often covered by vegetation and sand. Sometimes these sites are only represented by a few stone tools and fragments of bone. The preservation of these sites is poor and it is not always possible to date them. There are many San hunter-gatherers sites in the nearby Groendal Wilderness Area and adjacent mountains. Here caves and rock shelters were occupied by the San during the Later Stone Age and contain paintings along the walls. The last San/KhoiSan group was killed by Commando's in the Groendal area in the 1880s.

Some 2 000 years ago Khoi pastoralists occupied the region and lived mainly in small settlements. They were the first food producers in South Africa and introduced domesticated animals (sheep, goat and cattle) and ceramic vessels to southern Africa. Often archaeological sites are found close to the banks of large streams and rivers. Large piles of freshwater mussel shell (called middens) usually mark these sites. Prehistoric groups collected the freshwater mussel from the muddy banks of the rivers as a source of food. Mixed with the shell and other riverine and terrestrial food waste are also cultural materials. Human remains are often found buried in the middens.

References

- Deacon , H.J. 1970. The Acheulian occupation at Amanzi Springs, Uitenhage District, Cape Province. *Annals of the Cape Provincial Museums*. 8:89-189.
- Gess, W.H.R. 1969. Excavations of a Pleistocene bone deposit at Aloes near Port Elizabeth. *South African Archaeological Bulletin* 24:31-32.
- Inskeep, R.R. 1965. Earlier Stone Age occupation at Amanzi: preliminary investigations. *South African Journal of Science*. 61:229-242.

Museum/University databases and collections

The Albany Museum in Grahamstown houses collections and information from the wider region.

Relevant impact assessments

None from the immediate vicinity.

DESCRIPTION OF THE PROPERTY

Area surveyed

Location data

The Amanzi Estate is situated some 12 kilometres north-east of Uitenhage in the Uitenhage District, Nelson Mandela Municipality, Eastern Cape (Map 1). The proposed development consists of several adjoining properties:

- Farm 294 Amanzi Estate (approx 854 Ha)
- Portion 4 of the Farm 296 Amanzi Mooi Water (approx 171 Ha)
- Erf 296 Rietheuvel (approx 96 Ha), and
- Erf 296 Portion 3 Rietheuvel (approx 635 Ha)

Most of the proposed property for development is situated on the relatively flat Coega River foodplain, except for the Rietheuvel koppie area where the springs are also situated. The property is covered by dense thicket, low grass, alien vegetation and orchards (Figs 1-6).



Figs 1-2. View of the general environment from the spring towards the Coega River floodplain.



Figs 2-3. View of the vegetation in the spring area.



Figs 4-6. View of the spring hill and orchards.

Map

1:50 000 – 3325DA Addo

ARCHAEOLOGICAL INVESTIGATION

Methodology

GPS readings were taken with a Garmin Plus II

The investigation was conducted on foot and from a vehicle. Apart from the main spring site where Earlier Stone tools were found, no other *in situ* archaeological sites were located. The dense thicket, grass, alien vegetation and orchards which cover most of the property made it virtually impossible to locate archaeological sites/material (Figs 1-6). Occasional stone tools (Later, Middle and Earlier Stone Age stone artefacts were found in areas where the top soil had been disturbed and exposed the underlying river gravels, i.e. the tracks and roads.

The Amanzi Springs Acheulian site

The site is situated on a north-facing hill overlooking the Coega River (general GPS reading: 33.43.429S; 25.30.541E) (Maps 1-3) (Fig. 7). The earliest reference to the spring was made by Barrow (1801) and the discovery of the stone artifacts were first reported in 1924 in a private document by FitzPatrick (*vide* Deacon 1970). In 1963 a preliminary archaeological investigation was carried out by Ray Inskip (Inskip 1965) at the springs and during 1964 and 1965 Hilary Deacon (Deacon 1970) conducted large scale excavations. The Inskip excavation was small, only some four metres wide, while Deacon excavated 13 cuttings and seven pits at two adjacent spring centres, called Area 1 and 2 (Figs 7-9). In addition to a large number of Acheulian stone artifacts estimated to date between 800 000 and 250 000 years old (Fig. 10), remarkably well-preserved wood were also found in the lower layers of the spring deposits (Inskip 1965; Deacon 1970).

The spring hill top has been disturbed in the past by the construction of a cement well point, dam, furrows, power lines and recently a communicative tower was placed near the archaeological excavations (Figs 11-12). In general the two areas where the excavations were conducted by Deacon are badly eroded and the cuttings have been silted up (Figs 13-16). Little of the original excavations were visible and most of the excavated areas were covered by grass and vegetation (Figs 17-18). Many stone artifacts, mainly stone flakes and flaked cobbles have been exposed by running water and washed from the steep slopes. A few handaxes and cleavers were still visible, but are at risk to be collected by visitors to the site (Figs 19-20).

Other areas

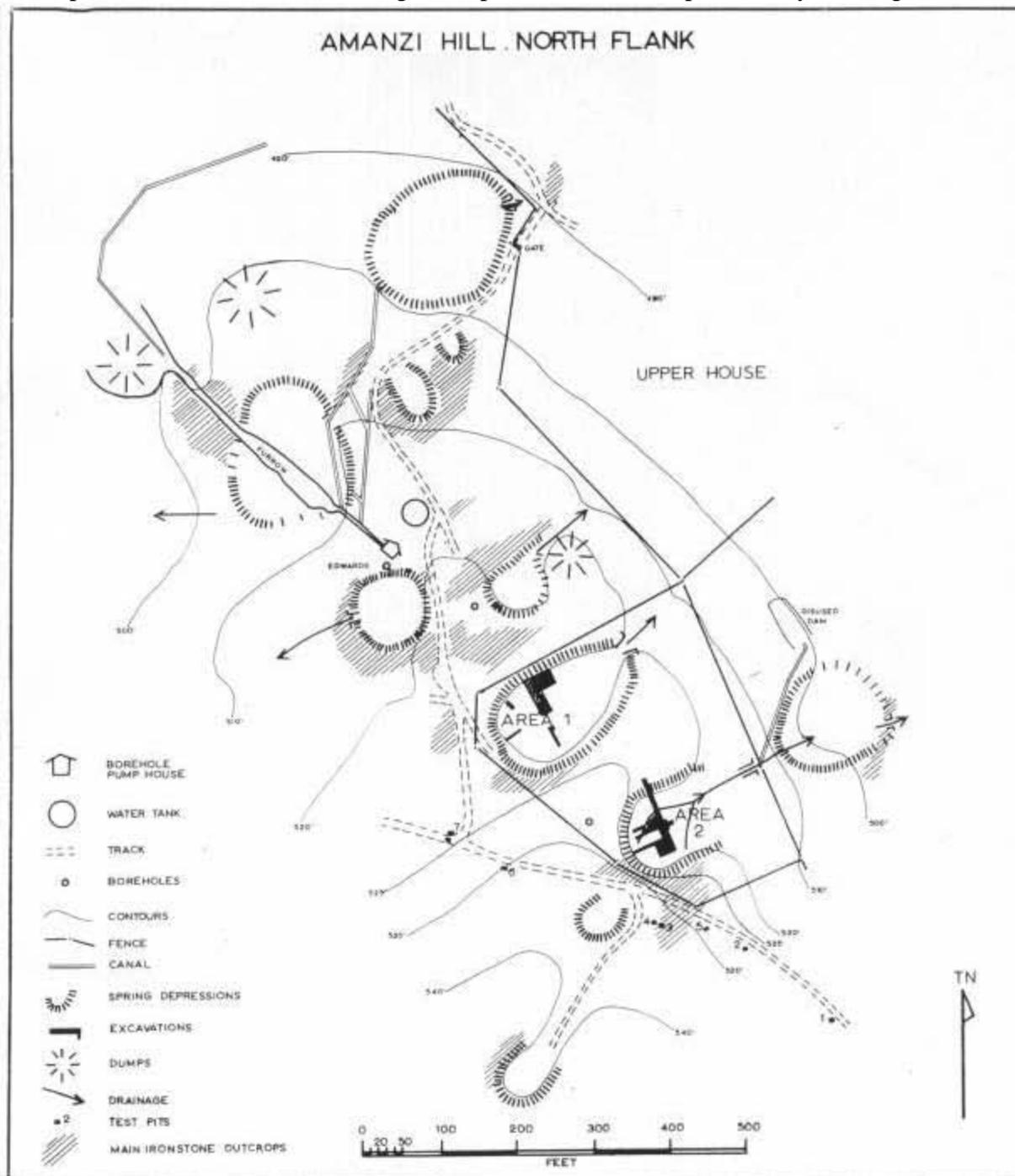
No other archaeological sites were found, but occasional stone tools were observed where river gravels were exposed in vehicle tracks. These stone tools were in secondary context and of low cultural value.

References

Barrow, J. 1801. Travels into the interior of Southern Africa in the years 1797 and 1798. London.

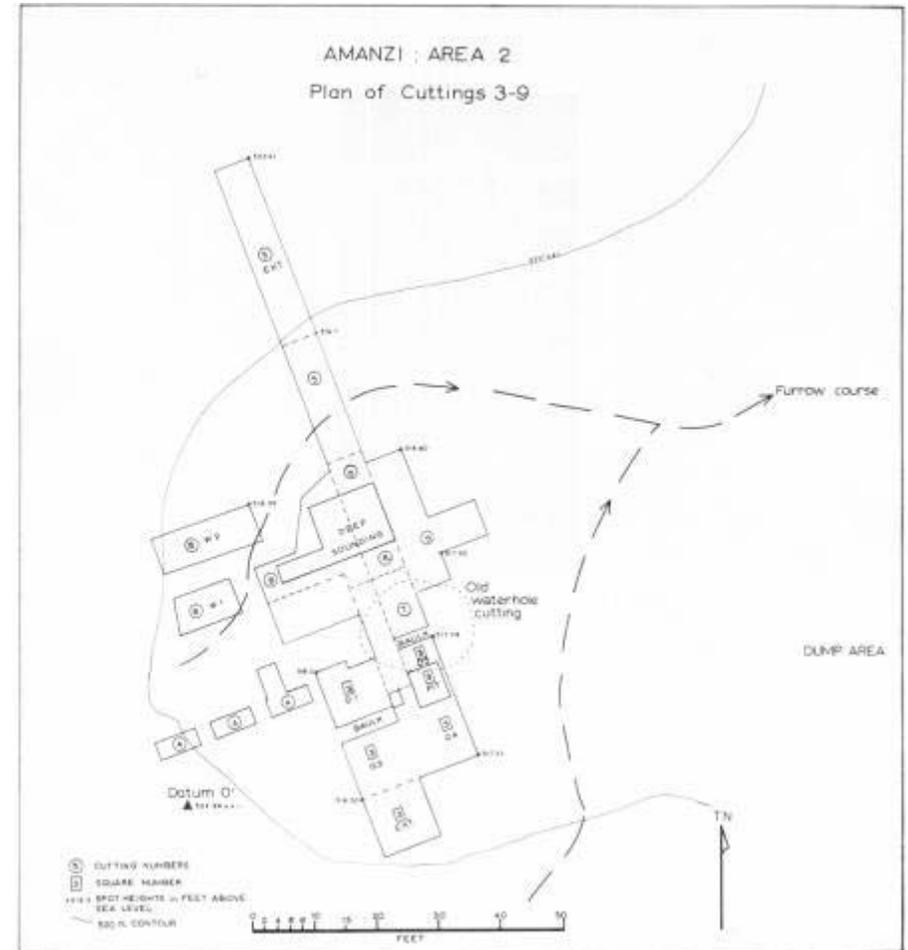
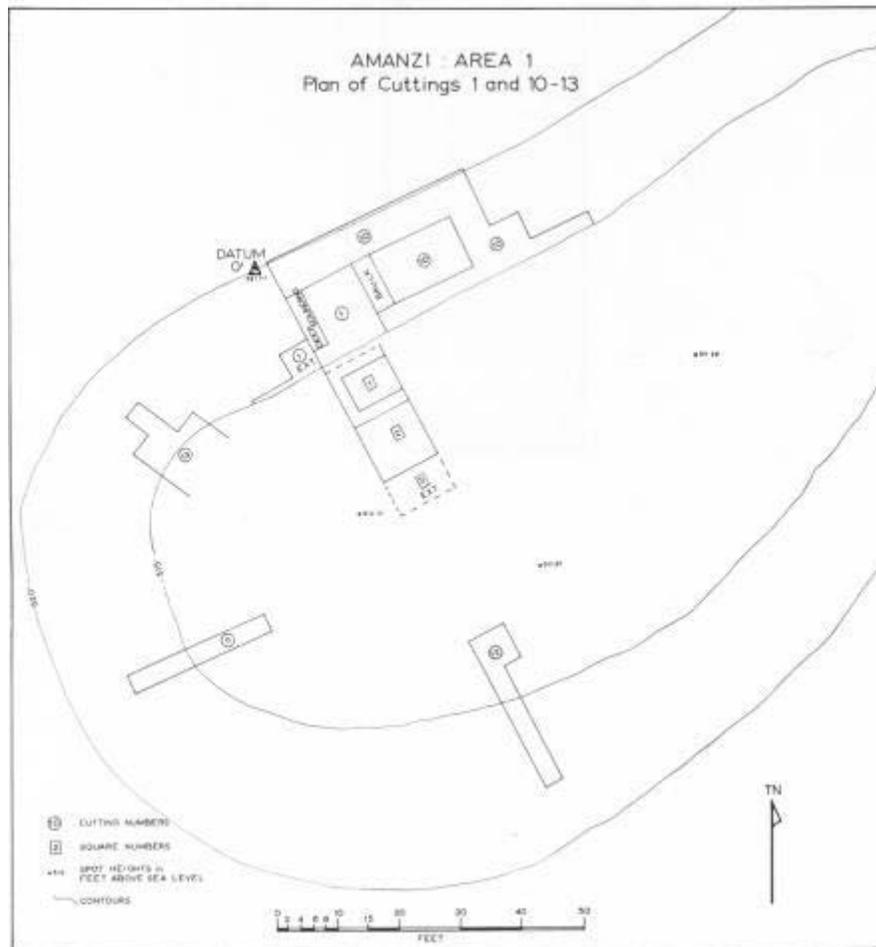
Deacon, H.J. 1970. The Acheulian occupation at Amanzi Springs, Uitenhage District, Cape Province. *Annals of the Cape Provincial Museums*. 8:89-189.

Inskeep, R.R. 1965. Earlier Stone Age occupation at Amanzi: preliminary investigations. *South*



African Journal of Science. 61:229-242.

Fig. 7. The location of the Deacon Area 1 and 2 excavations at the springs (after Deacon 1970).



Figs 8a & b. Plan drawings of Deacon's Area 1 and 2 excavations (after Deacon 1970).

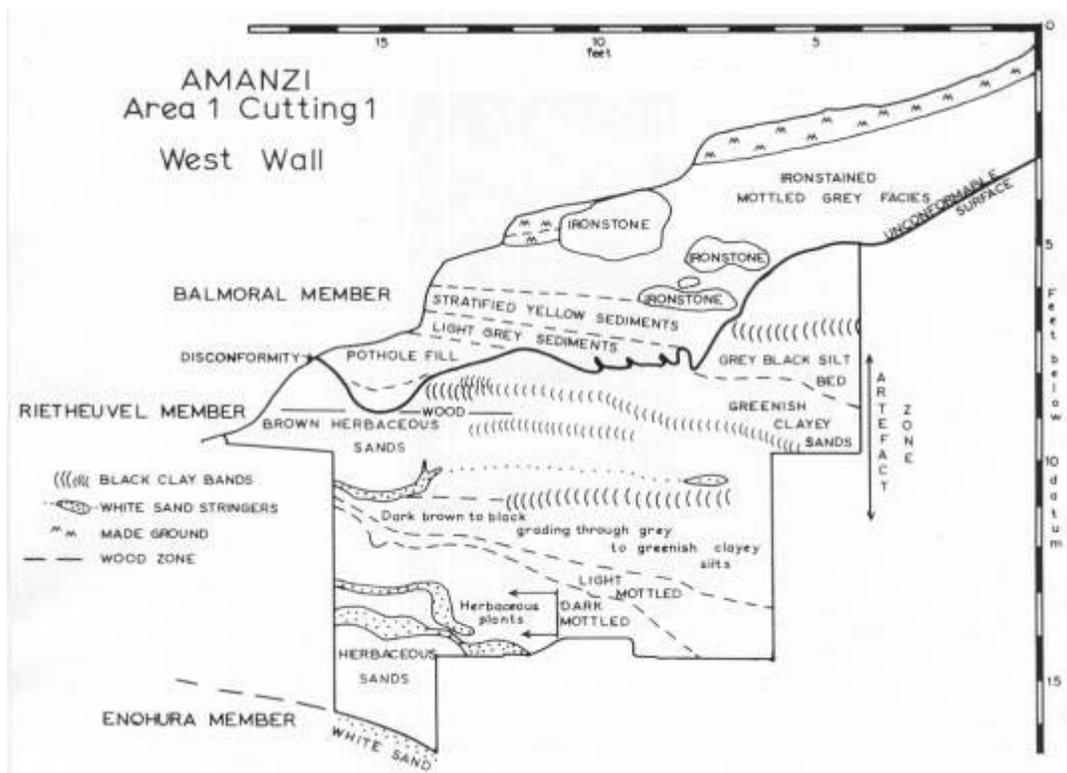


Fig. 9. Section drawing of the Area 1 excavation (after Deacon 1970).

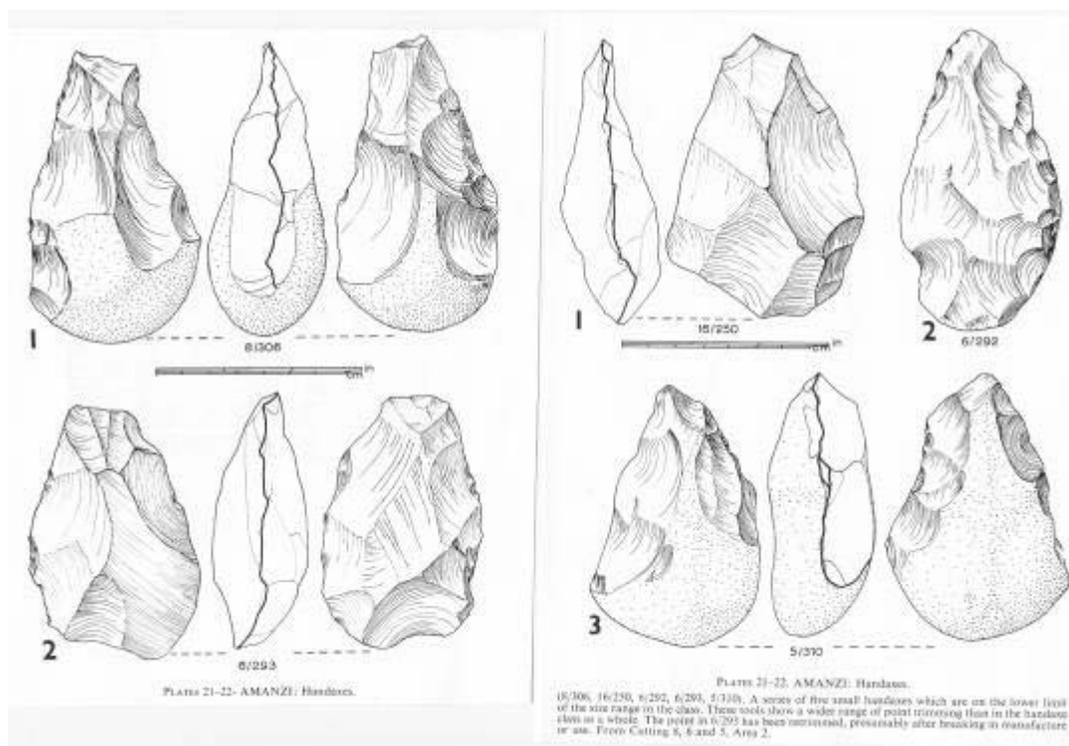


Fig. 10. Drawings of some of the Acheulian handaxes from the excavations (after Deacon 1970).



Fig. 11-12. Past and recent activities on the hilltop near the old archaeological excavations.



Figs 13-14. View of the badly eroded excavations at Area 1.



Figs 15-16. View of the badly eroded excavations at Area 1.



PLATE 2. AMANZI: Area 1.

Cuts 1 and 50 at stage near the completion of the excavation, dug into the side of the depression and deposited to the general level of the floor.



Figs 17-18. The original Deacon excavation on the left and the present view on the right.



Figs 19-20. Stone tools and a cleaver exposed by running water on the slope of the old excavations.

Assessment of Impacts and Mitigation

The section below provides an assessment of the potential impacts of the proposed development on Archaeological Heritage Resources that may be present at the site. Where appropriate, recommendations are made for mitigation or management measures to minimize potential negative impacts and maximise potential benefits as a result of the proposed development.

No-go Option

The following potential impacts may occur should development not proceed.

Potential impact on the Amanzi Spring Acheulian site.

Nature of the Impact	Should the status quo remain this will result in uncontrolled access to the site and the potential loss of artifacts and continued disturbance to the site
Extent	Site Specific
Duration	Permanent
Intensity	High
Probability	Probable
Status of Impact	Negative
Degree of Confidence	Medium
Significance (no mitigation)	High (-)

Mitigation	No mitigation
Significance (with mitigation)	High (-)

Construction Phase Impacts

The following potential impacts may occur during the construction phase of the proposed development.

Potential impact of construction activities on the Amanzi Spring Acheulian site.

Nature of the Impact	Construction activities such as excavation, vehicle or pedestrian traffic in proximity to the spring site may result in disturbance or damage to the excavations or archaeological material associated with the site.
Extent	Site Specific
Duration	Activity of a temporary nature, but result would be permanent
Intensity	High
Probability	Probable
Status of Impact	Negative
Degree of Confidence	Medium
Significance (no mitigation)	High (-)
Mitigation	This site should be clearly marked and cordoned off prior to construction commencing. Access to these areas must be strictly controlled.
Significance (with mitigation)	Neutral to Low (-)

Potential impact of construction phase activities on archaeological heritage resources on the remainder of the site.

Nature of the Impact	Vegetation clearing and excavation activities during the construction phase may expose and disturb important archaeological material, remains or artifacts that may be present at the study site but currently not visible.
Extent	Site Specific
Duration	Activity of a temporary nature, but result would be permanent
Intensity	Medium
Probability	Probable
Status of Impact	Negative
Degree of Confidence	Medium
Significance (no mitigation)	Low (-)
Mitigation	The environmental control officer for the development should be immediately notified in the event of such an occurrence and a qualified archeologist consulted.
Significance (with mitigation)	Very Low (-)

Operational Phase Impacts

The following potential impacts may occur during the operational phase of the proposed development.

Potential impacts of operational phase activities on the Amanzi Spring Acheulian site.

Nature of the Impact	Residents, visitors or employees at the proposed development may collect or disturb archaeological material associated with the Amanzi Spring Acheulian site.
Extent	Site Specific

Duration	Long Term
Intensity	Medium
Probability	Probable
Status of Impact	Negative
Degree of Confidence	Medium
Significance (no mitigation)	High (-)
Mitigation	Appropriate signage should be erected at the site, the site should be suitable cordoned off in such a manner as to prevent access to the site.
Significance (with mitigation)	High (+)

Potential impacts of operational phase activities on archaeological heritage resources on the remainder of the site.

Nature of the Impact	Residents, visitors or employees at the proposed development may collect or disturb archaeological material occurring at various localities at the site.
Extent	Site Specific
Duration	Long Term
Intensity	Low
Probability	Improbable
Status of Impact	Negative
Degree of Confidence	Medium
Significance (no mitigation)	Low (-)
Mitigation	Residents should be suitably educated regarding the importance of archeological remains, should such be found they should be reported to the project manager for the development.
Significance (with mitigation)	Very Low (-)

Conclusions

Apart from the important Amanzi Springs Acheulian site, only the occasional stone tools were found where river gravels were exposed in tracks on the property. In general the property is of low archaeological sensitivity. Collecting of the stone tools is not considered because they are in secondary context and there are similar stone tools in the collections of the Albany Museum from the wider region. It is unlikely that any other archaeological remains of any value will be found *in situ* or of any contextual value, but material may be exposed after the top soil is removed, such as human remains.

RECOMMENDATIONS

The proposed development will take place close to the Amanzi Spring Acheulian Site and therefore the following recommendations are proposed to protect and conserve the site:

1. The spring area must be fenced off before the development starts to prevent further damage to the site and possible collecting of artifacts. Signs to inform people about the importance of the site should also be erected.
2. The spring site is an important archaeological site and should be declared a provincial heritage site.
3. A management plan must be compiled for the spring site. The preferred option is complete closure to protect the site against further damage.
4. If any concentrations of archaeological material and/or burials are exposed during construction, all work in that area should stop and it should be reported immediately to the nearest museum/archaeologist or to the South African Heritage Resources Agency so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to remove/collect such material (See appendix 1 for a list of possible archaeological sites that maybe found in the area).

GENERAL REMARKS AND CONDITIONS

Note: This report is a phase 1 archaeological heritage impact assessment/investigation only and does not include or exempt other required heritage impact assessments (see below).

The National Heritage Resources Act (Act No. 25 of 1999, section 35) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must be emphasised that the conclusions and recommendations expressed in this archaeological heritage sensitivity investigation are based on the visibility of archaeological sites/features and may not therefore, reflect the true state of affairs. Many sites/features may be covered by soil and vegetation and will only be located once this has been removed. In the event of such finds being uncovered, (such as during any phase of construction work), archaeologists must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed. The onus is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999.

It must also be clear that Archaeological Specialist Reports (AIAs) will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should grant a permit or a formal letter of permission for the destruction of any cultural sites.

APPENDIX 1: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM INLAND AREAS: guidelines and procedures for developers

1. Human skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general the remains are buried in a flexed position on their sides, but are also found buried in a sitting position with a flat stone capping and developers are requested to be on the alert for this.

2. Fossil bone

Any concentrations of bones, whether fossilized or not, should be reported.

3. Stone artefacts

These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

4. Freshwater mussel middens

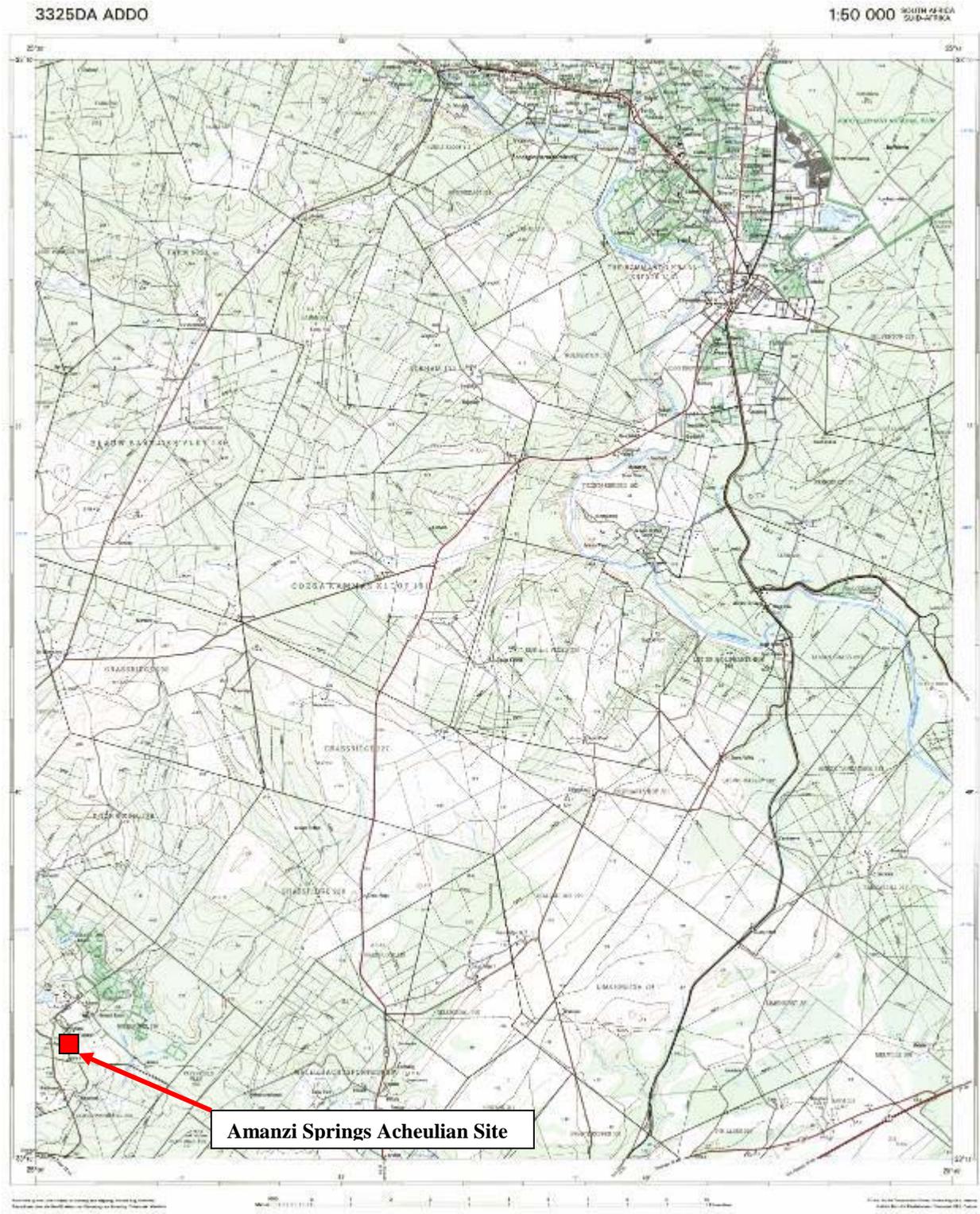
Freshwater mussels are found in the muddy banks of rivers and streams and were collected by people in the past as a food resource. Freshwater mussel shell middens are accumulations of mussel shell and are usually found close to rivers and streams. These shells middens frequently contain stone tools, pottery, bone and occasionally also human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds 1 m² in extent, should be reported to an archaeologist.

5. Large stone cairns

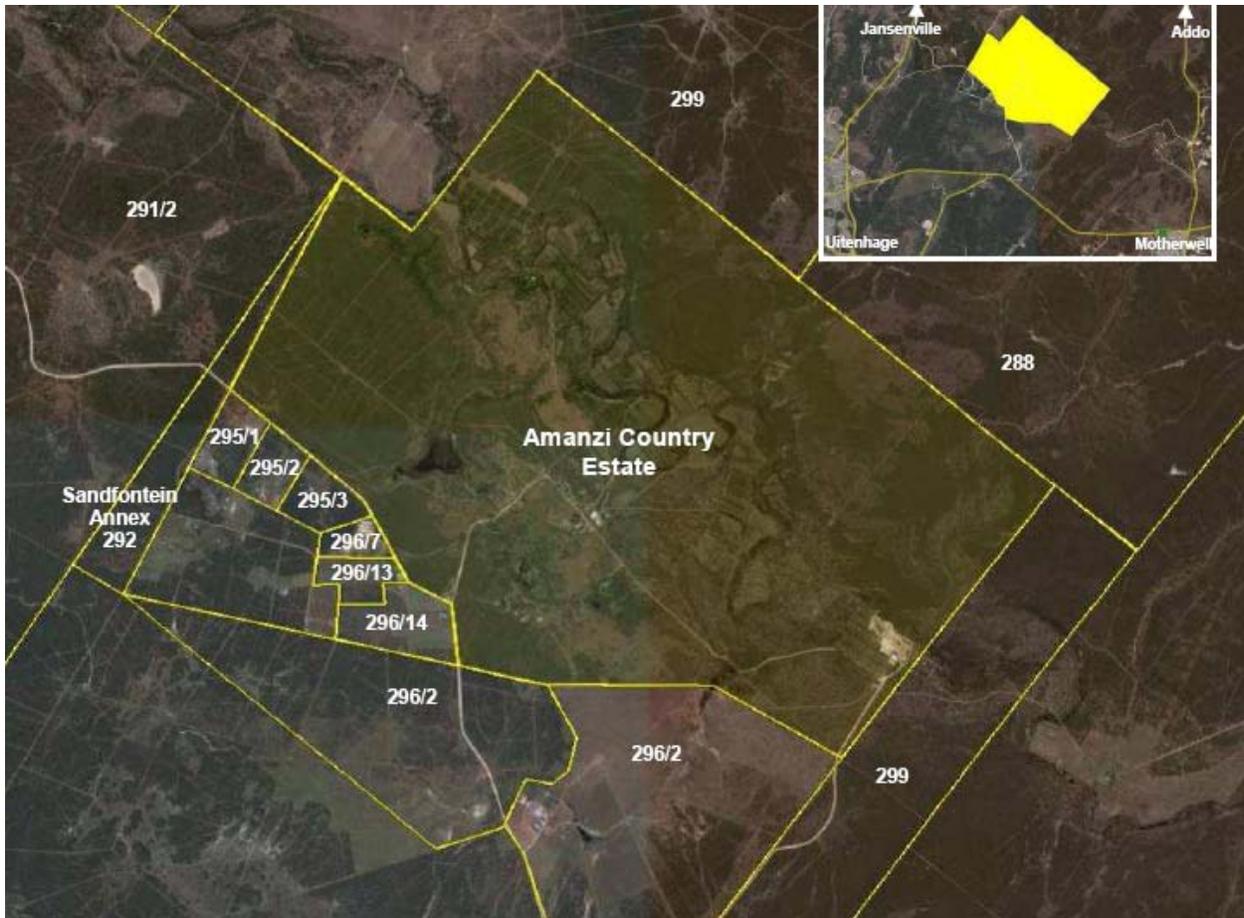
These features are also known as *isisivane* and easy to recognise. They consist of large piles of stones of different sizes and heights. They are usually near river and mountain crossings. Their purpose and meaning is not yet fully understood, but some may represent burial cairns while others may have symbolic value.

6. Historical artefacts or features

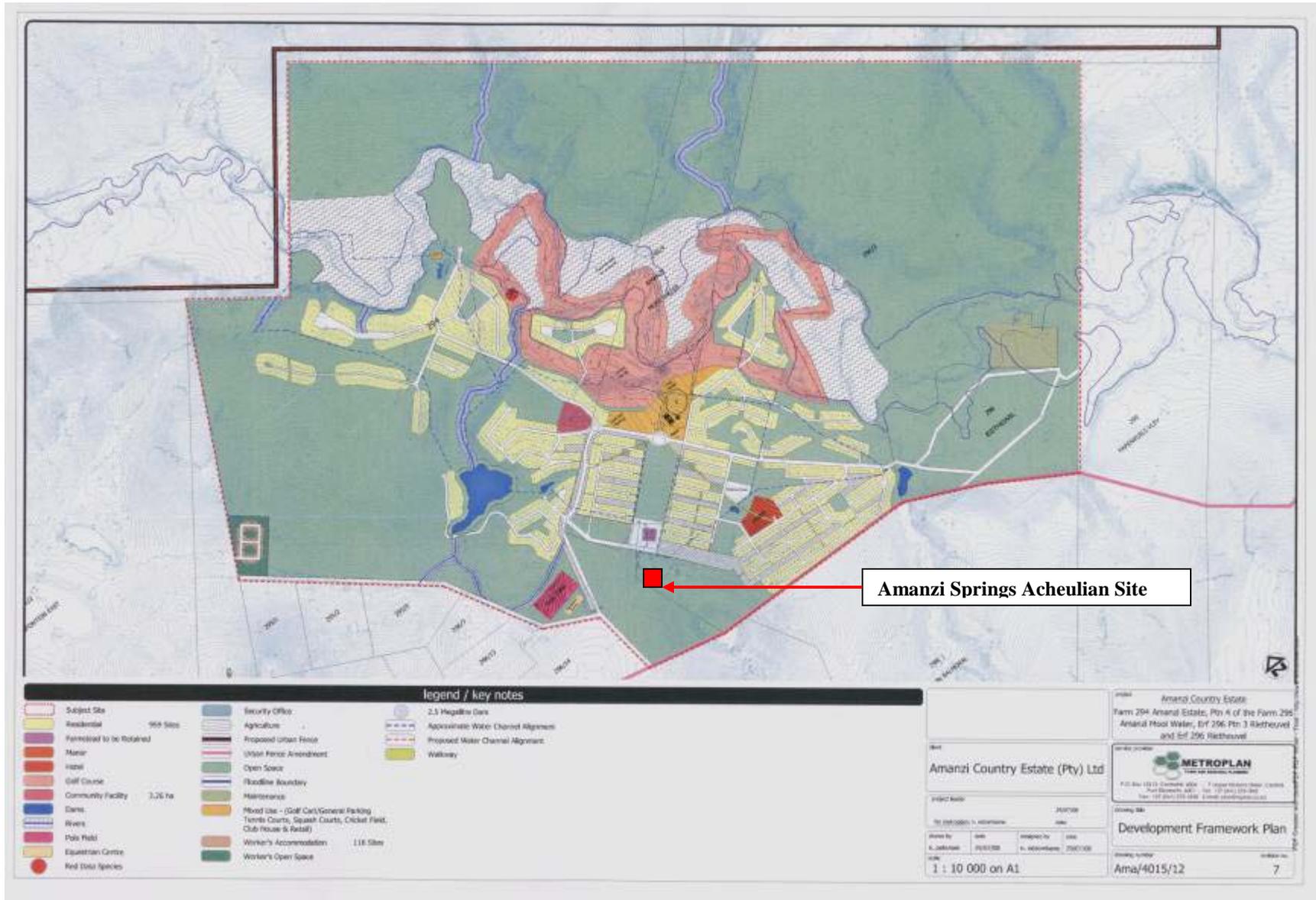
These are easy to be identified and include foundations of buildings or other construction features and items from domestic and military activities.



Map 1. 1:50 000 map of the location of the Amanzi Springs Acheulian Site.



Map 2. An aerial photograph of the location of the Amanzi Springs Acheulian Site (map courtesy PPC/developers).



Map 3. Proposed development plan and the location of the Amanzi Springs Acheulian Site (map courtesy PPC/developers).