Phase 1 Archaeological Impact Assessment

Proposed Commercial Development (±7ha) on Remainder 123, Witteklip, Vredenburg, Saldanha Bay Municipality, Western Cape.

Planscape

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HWC Case ID #: 120131JL02

December 2011

Pro-Active Archaeology

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EXECUTIVE SUMMARY

This report forms part of an Heritage Impact Assessment HIA) as requested by Heritage Western Cape (HWC) RoD dated 2012-02-15. The relevant Case ID is 120131JL02. Planscape approached Pro-Active Archaeology to undertake the Archaeological Specialist Assessment. The Developers, Tuscany Estate, propose the establishment of a commercial area of approximately 7 ha on Witteklip 123, adjacent to the West Coast Mall. The property is currently vacant and will need to be re-zoned from agricultural to business.

Some 28 isolated Later and Middle Age stone tools were located. This may not seem significant in itself, but the property is adjacent to the Witklip archaeological site. As such the development of the property, particularly bulk earthworks should be monitored.

	Landowner/Developer	**Municipality**	**Town Planner**
Name	Tuscany Estate, No 9, T/A Witteklip Park	Saldanha Bay Municipality	Planscape
Contact Person	Mr H van As		Martin Langenhoven
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Contents

Figures

1. BACKGROUND INFORMATION

This report forms part of an Heritage Impact Assessment HIA) as requested by Heritage Western Cape (HWC) RoD dated 2011-05-11. The relevant Case ID is 1395. Planscape approached Pro-Active Archaeology to undertake the Archaeological Specialist Assessment. The Developers, Tuscany Estate, propose the establishment of a commercial area of approximately 7 ha on Witteklip 123, adjacent to the West Coast Mall. The property is currently vacant and will need to be re-zoned from agricultural to business.

1.1. Stakeholders

	Landowner/Developer	**Municipality**	**Town Planner**
Name	Tuscany Estate, No 9, T/A Witteklip Park	Saldanha Bay Municipality	Planscape
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1.2. Terms of Reference

The Terms of Reference for the specialist Phase 1 Archaeological Impact Assessment are to:

- Identify and map pre-colonial archaeological heritage resources on the proposed sites;
- Determine the importance of pre-colonial archaeological heritage resources on the proposed sites;
- Determine and asses the potential impacts of the proposed development on the pre-colonial archaeological heritage resources, and
- Recommend mitigation measures to minimise impacts associated with the proposed development.

2. DESK TOP STUDY

The West Coast of South Africa has been settled for at least 100 000 years and shows clear evidence of earlier habitation by Early Stone Age (ESA) peoples. There are shell middens dating tothe Middle Stone Age (MSA) both on, and to the north and south of the Vredenburg peninsula (Halkett & Hart 1993, Halkett et al 2003, Klein et al. 2004, Berger and Parkington 2005a,b). Associated with these middens are MSA stone artefacts and an anatomically modern human tooth from the Sea

Harvest site (Grine & Klein 1993), and other anatomically modern post-cranial remains from Hoedjiespunt, all clearly older than 50 000 years. The presence of the so-called Saldanha skull fragment and the not infrequent finds of distinctive Early Stone Age (ESA) artefacts including handaxes, attests to a much more ancient use of the area, although, the coastal morphology has changed over time (Hendey. Hunter-gatherers living on the west coast of South Africa during the latter part of the Holocene made use of the coastal resources (perhaps seasonally (Smith 2006)).

Archaeological excavations at sites such as Duyker Eiland on the coast near Britannia Bay (Robertshaw 1979) confirm the importance of shellfish such as mussel and limpet in the diet forming a dependable and easily accessible protein resource during these times. In addition, the excavations of other sites on the Vredenburg peninsula (see Malan et al in prep) have confirmed the importance of coastal resources such as seals, marine birds, crayfish and beached whales. We know this peninsula was particularly attractive to hunter-gatherers, and later pastoralist groups because of its wealth of marine and terrestrial resources. Archaeologists have postulated that the first pastoralist groups (with cattle, sheep and pottery) entered South Africa along the West Coast some 2000 years ago (Smith 2006).

The most important pastoralist site on the Vredenburg peninsula (and arguably in South Africa) is that of Kasteelberg, which is located on the farm Rooiheuwel (Smith 2006). The hill is part of a granite batholith standing some 187m above sea level and surrounded by agricultural lands. A site survey by Sadr et al. (1992) identified at least 36 discrete occupation areas around the hill ranging from Middle Stone Age scatters to Later Stone Age sites with pottery suggesting an established pattern of occupation extending back into the distant past. It would appear that Kasteelberg was particularly the focus of settlement within the last 2000 years by early pastoralist groups. At least 10 archaeological sites have been excavated around the hill and there are more than 100 bedrock grinding grooves on the flat rocks around the site. Kasteelberg was identified in the late 1990's as a site worthy of declaration as a National Monument under the old legislation (National Monuments Act of 1969, as amended), but changes in legislation at the time interrupted the process. Heritage Western Cape is in the process of declaring Kasteelberg complex surrounds a provincial heritage site.

Other important archaeological sites in the vicinity of Kasteelberg include Witklip, a small shelter below a granite boulder situated on the western outskirts of Vredenburg and near to the property assessed in this report. Excavations at the site by Smith (2006) suggest that this was a hunter-gather settlement dating to between 3000 and 500 BP. Witklip lies within an overhang opposite the water tower on top of the hill above the West Coast Mall (Smith 2012, pers com). The deposit consists of shell midden remains interspersed with ashy lenses (Smith et al 1991). Formal stone tools, pottery

Ostrich Eggs Shell beads, as well as various classes of fauna, including sheep.

The site of Heuningklip, an open shell midden site on a granite hill to the east of Vredenburg, also contains a number of bedrock grooves similar to those at Kasteelberg (Sadr et al 2003).

The archaeological sites on the Vredenburg Peninsula date predominantly to the the later part of the Stone Age, although earlier material dating to the mid - late mid Holocene is found in the area and probably represent the debris of early San hunter gatherers. The broader survey of the Vredenburg Peninsula by Sadr (2009) has identified at least 99 archaeological sites occurring predominantly around granite koppies, with many more found in open wheat fields during ongoing commercial archaeological impact assessment surveys (e.g. Halkett 2011, Orton 2010, Webley 2011). Despite the number of sites found during the Sadr survey, it was not comprehensive and more sites will continually be found (Sadr et al in press).

3. DESCRIPTION OF THE PROPERTY & METHODOLOGY

Witteklip 123 falls within the Vredenburg Magisterial District and Saldanha Bay Municipality, Western Cape. The site can be accessed via the R45 and lies to the south of the West Coast Mall. The property is located on the 1:50 000 topographic map 3217 DB & DD Vredenburg, in Figure 2. The site was assessed by two archaeologists on foot on Tuesday 6 December. The GPS bread-crumb trail is illustrated in Figure 3. Please note that whilst the property is itself is 422.4 ha only the 7 ha development footprint was assessed. The location of lithic finds is illustrated in Figure 4.

The site is currently vacant, but has been used for agricultural purposes in the past. Most recently this has been as grazing (Figure 5), but there are also indications of ploughing, which would have impacted on any sub-surface archaeological material. Dune Mole Rat activity is quite extensive and whilst most spoil heaps are sterile of archaeological material (Figure 6), some do have indications of sub-surface finds (Figure 7). Archaeological visibility ranged from very good (closer to the Granite Outcrop) (Figure 8) to very poor with grass cover nearer to the road (Figure 9).

Data was collected using GPS handsets (Datum WGS 84) and digital cameras.

4. DESCRIPTION OF SITES & ARTEFACTS IDENTIFIED

Artefacts (some 28) were limited to isolated stone tools from the Middle and Later Stone Ages. The map in Figure 3 shows where some of them were found.

N	Age	Typology	Material	Figure
1	LSA	Core	Silcrete	10
1	MSA	Core	Silcrete	11
6	MSA	Flake	Silcete	12
5	MSA	Flake	Granite	13
9	MSA	Flakes	Quartz	14
5	MSA	Flakes	Quartzite	15
1	MSA	Flake	Shale	16

5. FIELD RATING

A field rating of Generally Protected C is awarded. This site has been sufficiently recorded and requires no further recording before destruction as it has a generally Low significance.

6. STATEMENT OF SIGNIFICANCE

Whilst the property itself has a low significance, it has potentially higher significance due to its proximity to the archaeological site Witklip (Smith 2006). This proximity warrants greater care being taken whilst developing the property.

7. RECOMMENDATIONS

There are no archaeological reasons to delay the development. However, the proximity of the property to the Witklip site, the surface archaeological material, particularly in dune mole rat spoil, indicates the presence of possibly significant sub-surface material. It is recommended that bulk earthworks be monitored by a professional archaeologist.

The monitoring strategy is divided into three phases:

1. Pre-construction;
2. On- site monitoring during construction; and
3. Report to Heritage Western Cape and developers.

7.1. Pre-construction Education and Awareness Training

Prior to construction, contractors will receive training from the Archaeologists in how to identify and protect archaeological remains that may be discovered during the project. An on-site 'Archaeological Officer' (AO) will be appointed. The pre-construction training will include some limited site recognition training for the types of archaeological sites that may occur in the construction areas. Indicators of a prehistoric archaeological site that may be encountered in

construction areas include:

- **Artefacts**, such as flaked stone tools, bone tools and loose pieces of flaked stone;
- **Middens**, which are the remains of ancient living areas identified by:
  - Shells and shell fragments;
  - Fish, bird and mammal bones;
  - Fire-altered rock;
  - Ash and charcoal; and,
  - Artefacts and cultural features (e.g. beads, hearths or pits);
- **Open-air sites**, which generally include fire altered rocks and charcoal and ash from fires. Such sites may also contain stone tools or scatters of flaked stone material from tool sharpening;
- **Human Remains**, which are indicated by the presence of light brown to dark brown bones either whole or in fragments and may include artefacts. Burial places fall under the jurisdiction of SAHRA will be approached using the guidelines set out in the NHRA 1999 Section 36. If human remains are found, please follow these guidelines:
  - Leave the remains in place;
  - Cordon off the area;
  - Contact SARHA (021 462 4502);
  - Contact an archaeologist;
  - Once an archaeologist has examined the find, the SA Police services and state pathologist must be contacted to report human remains;
  - If the remains are found to be a legitimate burial or pre-colonial burial, an emergency exhumation permit will be issued by SAHRA or HWC; and
  - If a crime is suspected, a police docket will be opened.

7.2. On-Site Monitoring

Newly identified archaeological sites during construction may be managed in a variety of ways, including avoidance, salvage or emergency excavation and the use of temporary or long term site protection measures. If an archaeological discovery is made, construction work must stop with 15 m of the find (where practical) and:

- A 15 m exclusion zone must be marked around the discovery with tape, and a sturdy barrier fence installed until the find can be assessed and mitigated;
- The implementation of necessary slope stabilization, drainage, erosion and sediment control measures to protect the discovery must be undertaken; and,
- The AO contacted if not already on-site.

The preferred long-term approach to managing archaeological discoveries in construction areas is avoidance. If avoidance is not feasible, then salvage or emergency excavations may be necessary. These operations will require permits, which are issued by Heritage Western Cape. Any salvage or emergency excavations will be conducted by the Archaeologists and qualified associates, as appropriate.

If salvage or emergency excavation operations are not feasible, and site conditions and construction requirements permit, then an alternate solution such as capping the discovery with geotextile and clean, coarse textured fill may be acceptable.

All on-site archaeological management strategies will be designed and supervised by the Archaeologists. Contractors must ensure that construction personnel and sub-contractors do not collect archaeological remains. However, if an isolated artefact is found and may be destroyed by not immediately removing it from the working area, then personnel should follow these steps:

- Collect the artefact and mark its location with flagging, a wooden stake or some other visible marker;
- Inform the Archaeologist that an artefact was found; and,
- Where practical, establish a 15 m exclusion zone around the find.

The Archaeologists will then conduct a site inspection, assess the find and recommend mitigatory steps.

7.3. Reporting

A report will be submitted to Heritage Western Cape and the developers. It will detail:

1. Any pre-historical archaeological finds;
2. Assess their significance; and
3. Make recommendations in mitigation.

Please note that whilst historical archaeological resources can be identified on site, their significance and mitigation recommendations will need to be undertaken by a specialist historical

archaeologist.

8. CONCLUSIONS

We can only agree with Halkett's (2011) summation where he says: "The large number of Archaeological Impact Assessments (SAHRA 2009 database and more recent studies - see bibliography) which have been undertaken along the Vredenburg Peninsula is a reflection of the degree to which archaeological (and palaeontological) sites have come under threat from development, and inevitably has resulted in loss of resources. From an archaeological perspective, the coastal zone is particularly sensitive, although the archaeological surveys of Sadr on both coastal and inland areas of the peninsula (Sadr 2009) and an archaeological research programme focussed on Kasteelberg, Witklip and Heuningklip (Smith 2006), indicate that the interior of the Vredenburg peninsula is equally rich in archaeological heritage. The main concentration of pastoralist sites at Kasteelberg, some of the most distinctive herder sites yet found along the coast, is soon to be declared a provincial heritage site, to signify the importance of these to the Vredenburg district. An archaeological site containing rich pre-colonial deposits at Paternoster has already been declared a Provincial Heritage Site (April 2009). The broader area has attracted international attention due to the presence of Middle Stone Age sites and those that show evidence of early use of marine resources and archaeological and palaeontological sites that contain ancient human remains."

As such every effort should be made to conserve those archaeological resources still available to us.

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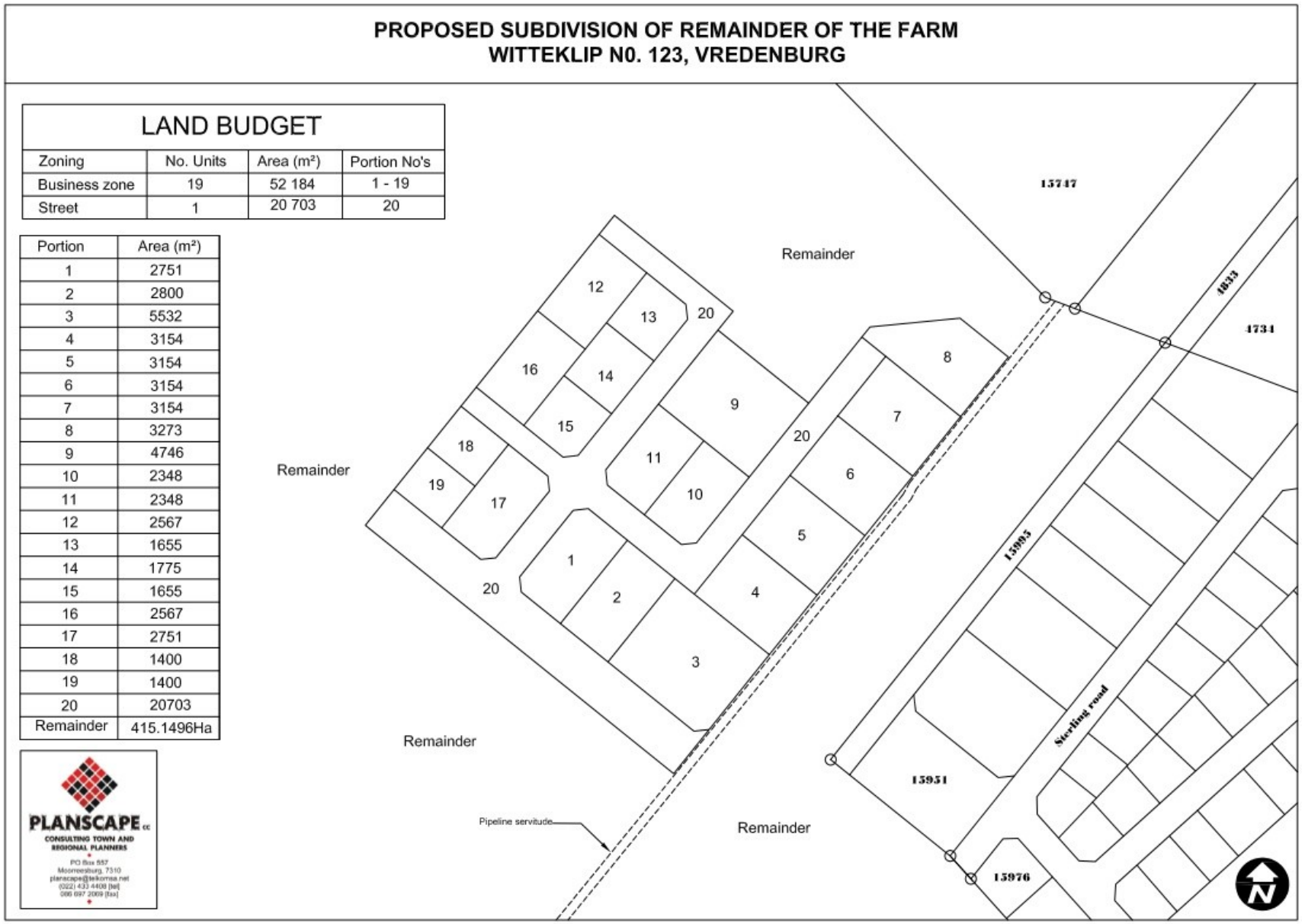
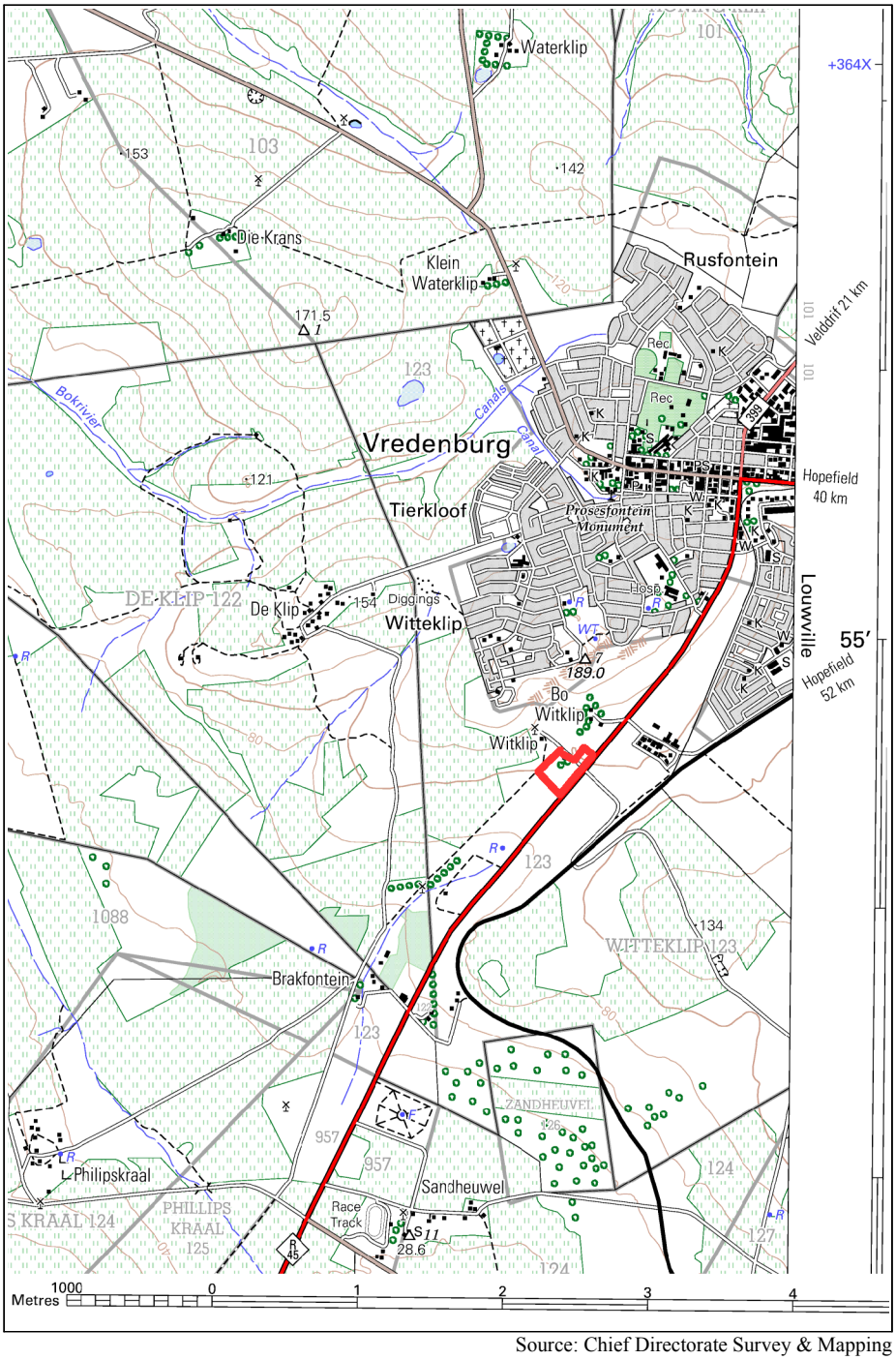
10. FIGURES



Source: Planscape

Figure 1: Plan of proposed Commercial development, Witteklip 123, No 9.



Source: Chief Directorate Survey & Mapping

Figure 2: 1:50 000 3217 BD & DD Vredenburg, showing the locationof Site 1, Farm Witteklip 123.

Figure 3: GPS tracking on Witteklip 123, No 9.

Figure 4: Location of lithic finds.

Figure 5: General view of the property towards Witklip Site.

Figure 6: Dune mole rat activity, showing archaeologically sterile subsurface.

Figure 7: Dune mole rat activity showing subsurface archaeological material brought to the surface.

Figure 8: General view of the property showing an area with good archaeological visibility.

Figure 9: General view of the property showing very poor archaeological visibility

Figure 10: LSA Silcrete core.

Figure 11: MSA Silcrete core

Figure 12: MSA Silcrete flake.

Figure 13: MSA notched Granite flake.

Figure 14: MSA Quartz flake.

Figure 15: MSA Quartzite flake.

Figure 16: MSA Shale flake.