

Phase 1 Archaeological Impact Assessment

Proposed construction of additional dwelling units & access road, Farm
633, Portion 10 of Farm 273 and Portion 3 of Farm 344, Swellendam,
Western Cape

FOR:

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EXECUTIVE SUMMARY

The development of 5 additional dwelling units and an associated access road is proposed for Farm 633, Portion 10 of Farm 273 and Portion 3 of Farm 344, Swellendam. No significant archaeological material was found during the foot survey of the development footprint. There is an indication of sub-surface archaeological material from the rubble associated with fence post holes. We therefore recommend that monitoring of bulk earthworks by a professional archaeologist be undertaken.

	Developer & Landowner	Municipality	Environmental Practitioner
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1. BACKGROUND INFORMATION

Pro-Active Archaeology was asked to undertake this Phase 1 Archaeological Impact Assessment of Farm 633, Portion 10 of Farm 273 and Portion 3 of Farm 344, Swellendam by PHS Consulting. The developers (Bakkelys Drift Properties (Pty) Ltd) wish to establish five dwelling units and an associated access road on the Eastern bank of the Breede River, south of Swellendam.

1.1. Stakeholders

	Developer & Landowner	Municipality	Environmental Practitioner
Name	Bakkelys Drift Properties (Pty) Ltd	Swellendam Municipality	PHS Consulting
Contact Person		Willie Hattingh	Paul Slabbert
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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 assess 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

Little is known of the prehistory the Breede River Valley, especially Later Stone Age (LSA) site distribution. Prins 2009 says that 'Stone age sites dating from all periods of the Stone age are known to occur in various localities throughout the Breede River Winelands Municipality. Unfortunately the exact location of these sites is unknown due to bad museum practice and provenance in the past.' One of the limitations of the survey mentioned is that little published information exists on the prehistoric sites of the region. Previous AIA's in the region have yielded few archaeological resources, though Kaplan 2006 found a large scatter (60–70m in extent) of LSA flakes. A 2010 survey by Van Pletzen–Vos & Rust found more flakes in the area just north of Ashton. Please refer to the bibliography for a list of previous AIA reports consulted.

The Archaeological Department of the University of Stellenbosch surveyed the area in 1970s and 1980s, but Prins (2009) reported finding no records of these surveys. However, heritage sites and various shelters with LSA deposit have been located in the Kogmanskloof area. The San still frequented the higher lying areas in the vicinity of Kogmanskloof and Montagu in the 1700s. Many Earlier Stone Age (ESA) hand axes and Middle Stone Ages (MSA) flakes (some large) made from quartzite sandstone, and some LSA material, especially bored stones are to be seen in displays in museums in Robertson, Bonnievale, McGregor and Montagu, but as mentioned this material collected is not sourced properly so origin and context are lost.

It is reported in the survey that a Boesmanspad (old pathway used by San to conduct raids into Breede river valley) descends from a mountain on the farm Boesmanspad, east of Bonnievale, close to the boundary with the farm Nooitgedacht. The San obtained pigments (ochre) by following this trail through Boesmansdrift (Riversonderend Mts) along the Boesmansrivier. Marlene Cloete from the Farm Rhebokskraal recalls the stories told by her Great-uncle that San people came here to collect flint (Hornfels or indurated shale). Depending on her age her great uncle's time could be late 1800 which is late for San still active in the areas.

3. DESCRIPTION OF THE PROPERTY & METHODOLOGY

Farm 633, Portion 10 of Farm 273 and Portion 3 of Farm 344, Swellendam, is located within the Swellendam Local Municipality, Overberg District Municipality, Western Cape Province. The location of the property is illustrated on the 1:50 000 maps 3420 AB (Swellendam) and 3420 BA (Suurbraak) (Figure). GPS tracking is shown on the satellite image in Figure . The Portion 3 of Farm 344 is on the southern area of the property and can be accessed via the Round the Bend Lodge signage. The development encompasses the development of five dwelling units and the upgrade of the extant jeep track on the eastern shore of the Breede River.

The development footprint was investigated by two archaeologists, on foot, on Thursday 24 November 2011. The jeep track is very disturbed and was viewed from the vehicle (windscreen survey). In general visibility was good, though restricted in some areas by vegetation growth. Data was acquired with two Garmin GPS handsets and a digital camera.

4. DESCRIPTION OF SITES & ARTEFACTS IDENTIFIED

Details of the location of the five units and the route of the jeep track can be found in Figure . GPS co-ordinates for the units are listed below

Unit	S	E
1	34°08'24.22"	20°29'55.37"
2	34°08'20.53"	20°29'58.24"
3	34°08'15.31"	20°29'59.02"
4	34°08'12.18"	20°30'01.17"
5	34°08'08.74"	20°30'01.52"

4.1. Unit 1

The southern-most unit, Unit 1, did not reveal any prehistoric archaeological material. Visibility was fairly good.

4.2. Unit 2

Again, visibility was fairly good, with a few areas showing sterile profiles. Three upper

grindstones and a weathered ESA hand axe were found. The grindstones are evidence of a defunct way of life. In prehistoric times they were used for crushing and powdering organic or inorganic materials. In particular plant food processing, where grinding would reduce the energy expended on food digestion, absorption, and assimilation. Grindstones were also used to shred substances, that would be mixed with other ingredients for the manufacturing of products that do not appear in the natural world (e.g. crushed ochre and fat for body painting or compound adhesives for the hafting of projectile points).

4.3. Unit 3

Archaeological visibility was fine and weathered ESA tools were located. Examples can be seen in Figure .

4.4. Unit 4

Shale becomes more prominent in this area and no archaeological finds were made.

4.5. Unit 5

Unit five lies on terraced shale section. No archaeological material was found.

4.6. Jeep Track

Several weathered ESA and MSA lithics were located along the old jeep track. Some were found in the rubble associated with the digging of fence post holes. This may indicate further sub-surface finds.

5. FIELD RATING

A preliminary 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

Significance Criteria	Comment
a. its importance in the community, or pattern of South Africa's history;	Whilst the presence of ESA, MSA and LSA stone tools demonstrates a continuity of prehistoric activity, finds are isolated and weathered.
b. its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;	The upper grindstone are evidence of a defunct way of life. They are however, numerous throughout the Western Cape, though under threat by development.
c. its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;	This site has little to offer archaeological research.
d. its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;	Whilst the grindstones may be slightly significant, the overall archaeological context and environment are too degraded to add much to their significance.
e. its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;	NA
f. its importance in demonstrating a high degree of creative or technical achievement at a particular period;	NA
g. its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;	NA
h. its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and	The archaeological context and environment are too degraded to add much the general significance of the site.
i. sites of significance relating to the history of slavery in South Africa.	NA

7. RECOMMENDATIONS

There are no archaeological reasons to delay the development. However, the presence of archaeological material, particularly in the rubble of the post holes, 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;
- ◆ **Burial places**, 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.

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

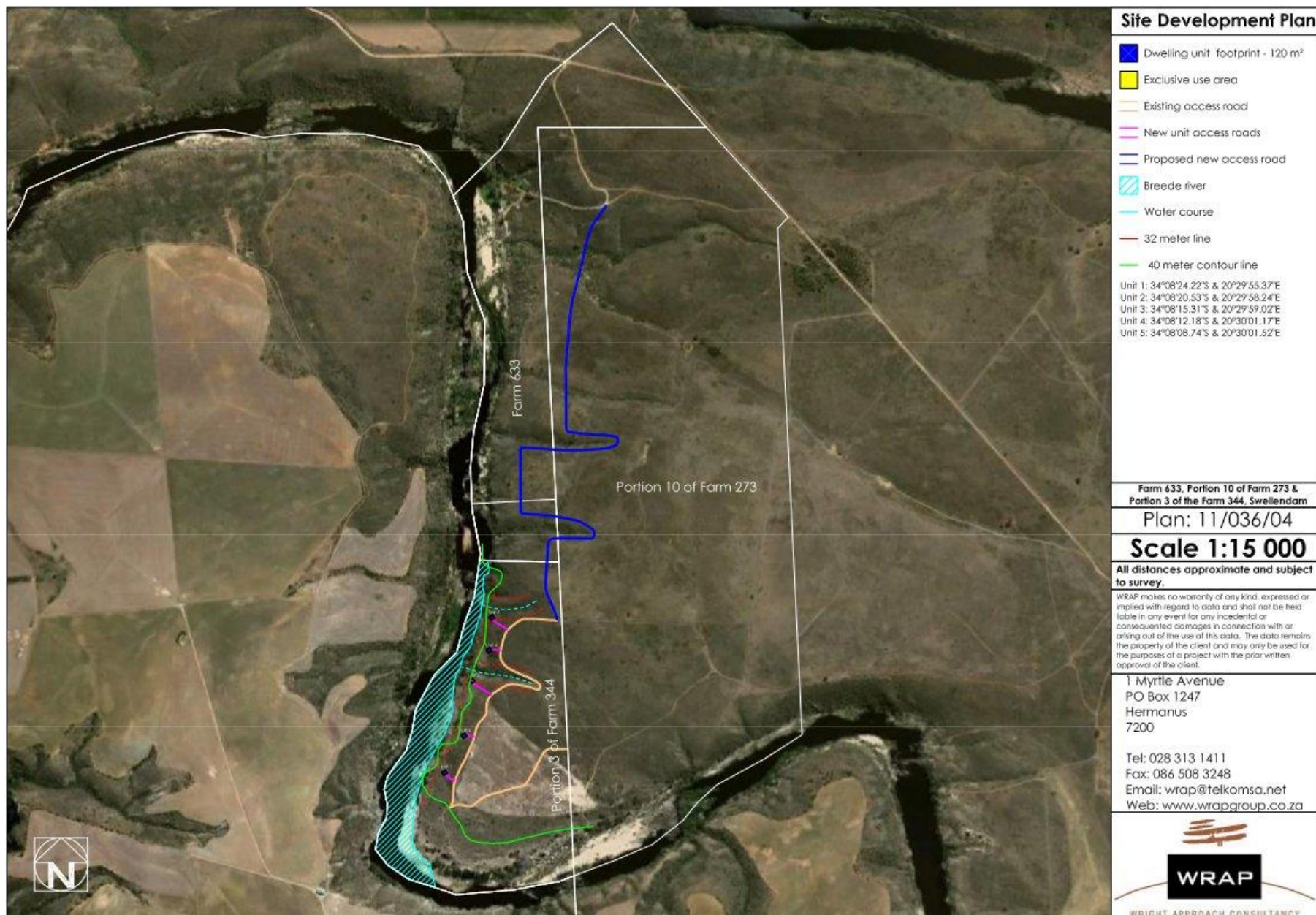
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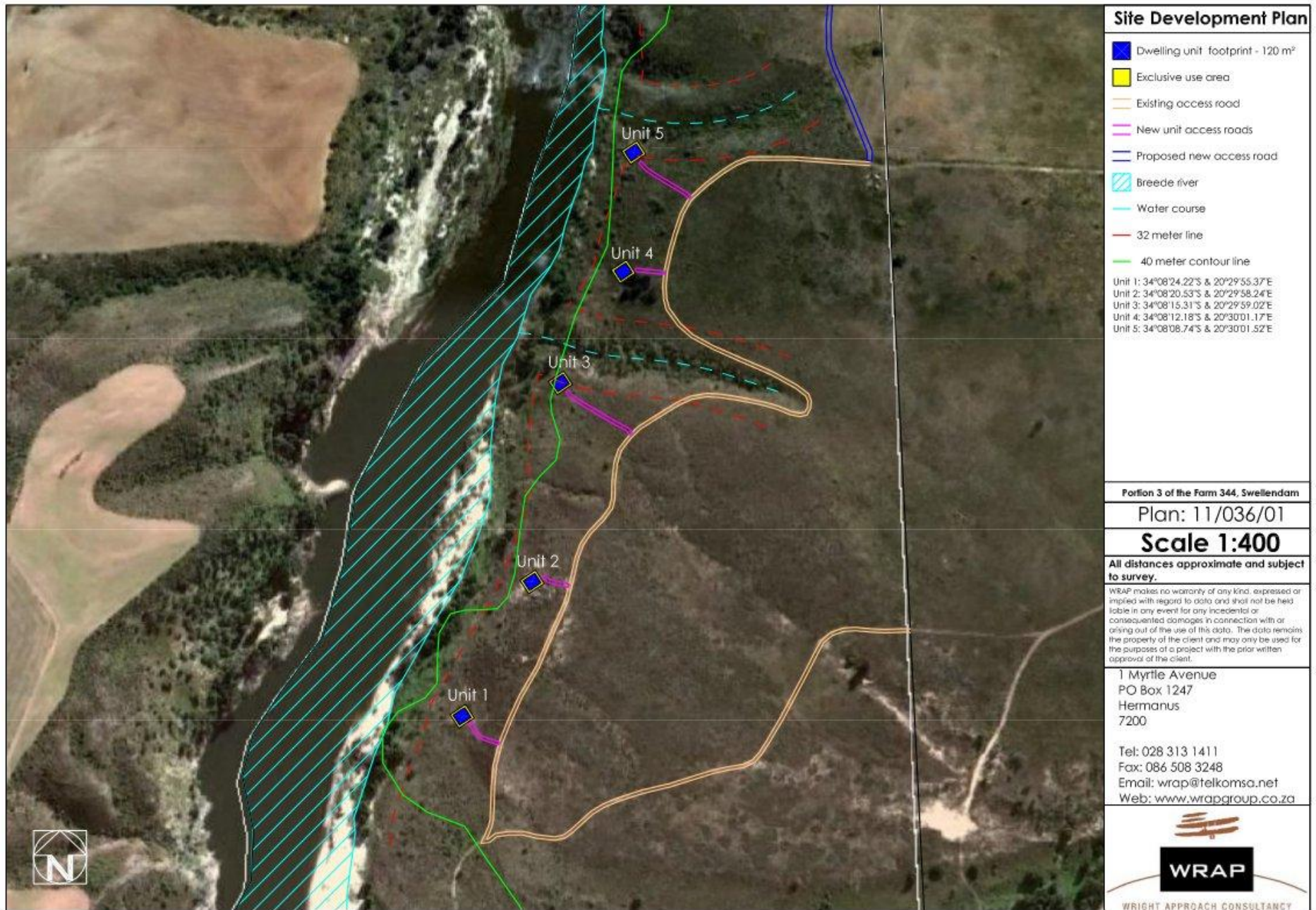
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10. FIGURES



Pro-Active Archaeology *Figure 1: Location of access road and dwelling units.*



Pro-A Figure 2: Location of dwelling units.

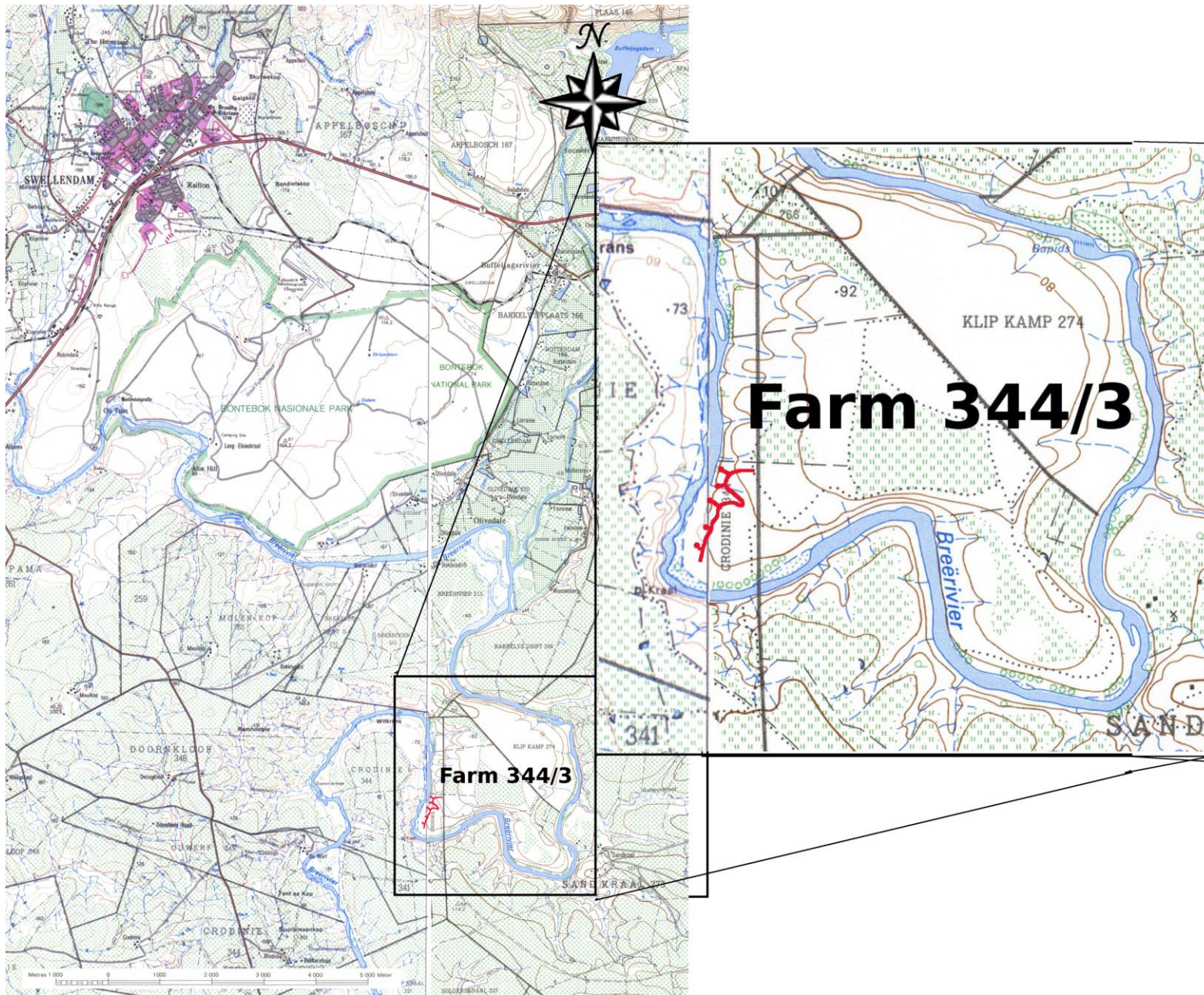


Figure 3: Location of Farm 344/3, Swellendam on 1:50 000 topographic maps 3420 AB (Swellendam) & BA

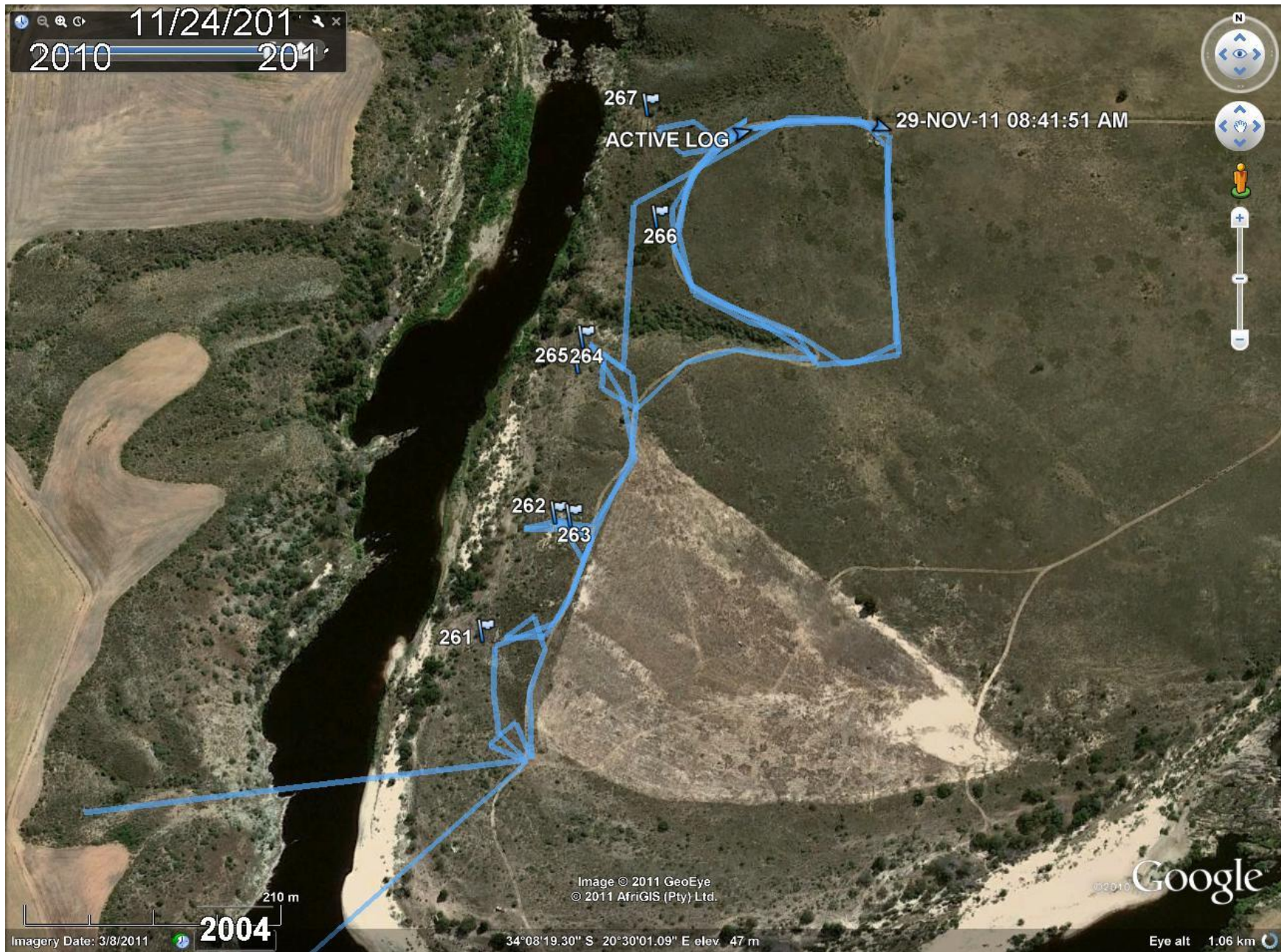


Figure 4: GPS tracking of the proposed development area.



Figure 5: Unit 1 - View West to Breede River.



Figure 6: Unit 1 - View East.



Figure 7: Unit 1 - General view of ground



Figure 8: Unit 2 - View West to Breede River.



Figure 9: Unit 2 - Sterile profile.



Figure 10: Unit 2 - Utilised upper grindstone



Figure 11: Unit 2 - Utilised upper grindstones,



Figure 12: Unit 2 - Weathered ESA hand axe.



Figure 13: Unit 3 - View westward to Breede River.



Figure 14: Unit 3 - View Eastward



Figure 15: Unit 3 - Extremely weathered ESA tools.



Figure 16: Unit 4 – View northward, up river.



Figure 17: Unit 5 – Shale terrace.



Figure 18: Unit 5 – View westward to Breede River.



Figure 19: Jeep Track – rubble from fence post holes with ESA tool circled.