

AN ARCHAEOLOGICAL IMPACT ASSESSMENT OF THE PROPOSED GARDEN CITY NEW TOWN DEVELOPMENT ON PORTIONS 3, 4, 7, 8, 15 AND 19 OF FARM 724, AND PORTION 3 OF FARM 168, KRAAIFONTEIN

Magisterial District: Bellville

Assessment conducted in terms of
Section 38 (8) of the National Heritage Resources Act (Act 25 of 1999)

Prepared for

AURECON

On behalf of

GARDEN CITIES

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EXECUTIVE SUMMARY

An archaeological impact assessment of the proposed Garden City New Town development on Portions 3, 4, 7, 8, 15 and 19 of Farm 724, and Portion 3 of Farm 168 found little archaeological material. Finds were restricted to largely isolated artefacts characteristic of the Early Stone Age. These are apparently unconcentrated, and lack any stratification or associated finds which would make them scientifically valuable. These have been rated as having low archaeological significance.

There is no reason based on the archaeological occurrences to invoke the no-go option. Neither of the proposed layouts would have any significant impact on archaeology and the choice in that regard is left up to the proponent.

The possibility of unmarked graves or human remains being uncovered cannot be excluded, even though none were identified. The Environmental Management Plan (EMP) must contain a clear plan of action to be followed if human remains are found during the course of development.

Similarly, no sign of any historical artefacts which would be expected to be associated with early farm dwellings were found. Refuse dumps may lie buried in the vicinity of the historic Patryfontein house. The EMP must contain a clear plan of action to be followed if historic refuse dumps are found during the course of development.

1. INTRODUCTION

The Archaeology Contracts Office has undertaken an Archaeological Impact Assessment (AIA) of Portions 3, 4, 7, 8, 15 and 19 of Farm 724 and Portion 3 of Farm 168 on the outskirts of Durbanville, as a component of a broader Heritage Impact Assessment (HIA). The approximately 782 ha site, currently zoned Agriculture 1, is shown in overall local context in Figure 1 and as an aerial satellite view in Figure 2. An NID was previously submitted to BELComm by Ms M. Atwell. This study focuses specifically on the archaeology whilst Atwells' report focuses on the built environment and landscape. Some conclusions of this report have been incorporated into the main body of the HIA.

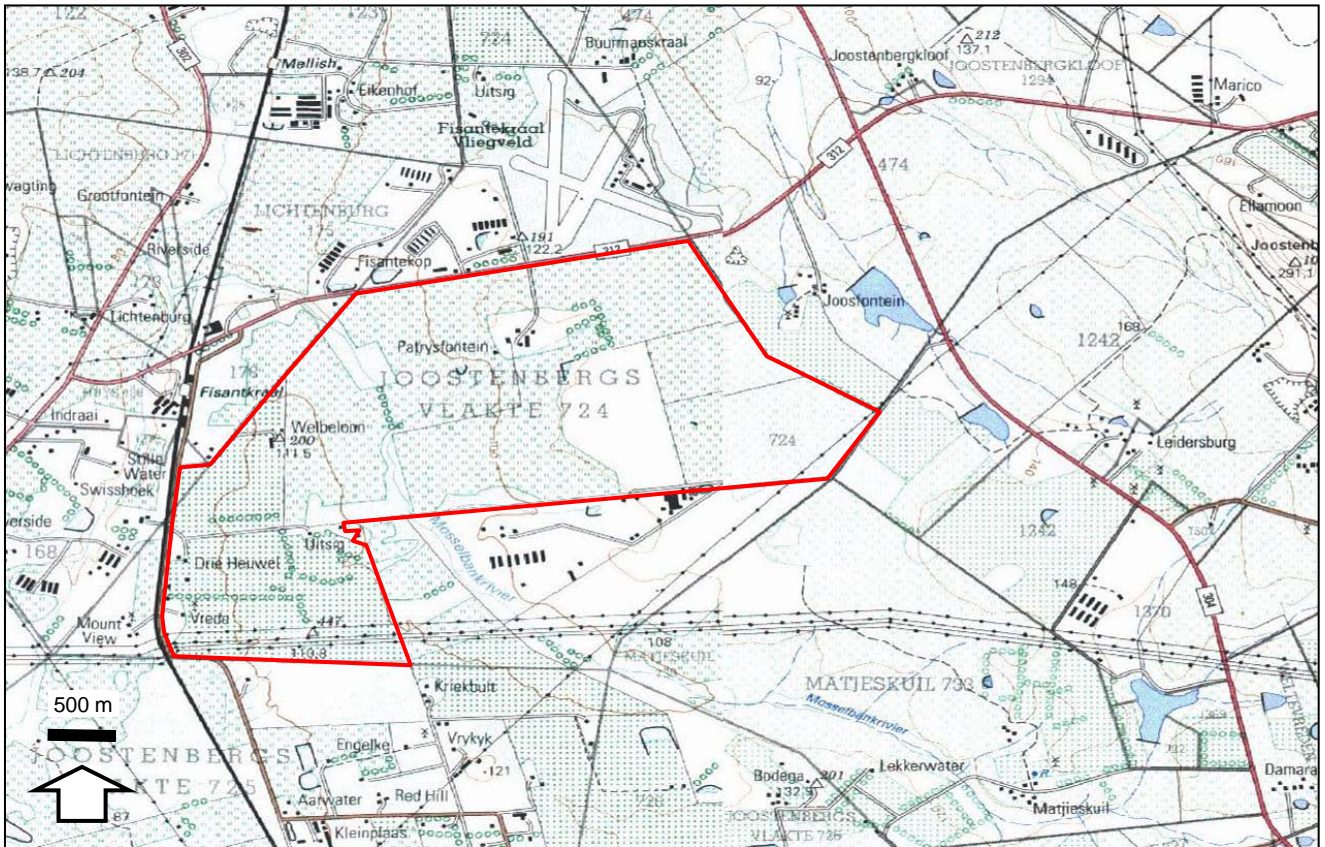


Figure 1: The property (red polygon) shown in overall local context¹

2. HERITAGE LEGISLATION

The National Heritage Resources Act (NHRA) Act No. 25 of 1999 protects a variety of heritage resources including palaeontological, prehistoric and historical material (including ruins) more than 100 years old (Section 35), human remains (Section 36) and non-ruined structures older than 60 years (Section 34). Landscapes with cultural significance are also protected under the definition of the National Estate (Section 3.1(d)). Under Section 38 (1) of the act, the affected property requires heritage assessment based on its size being greater than 5000m². Since the project is subject to an Environmental Impact Assessment (EIA), the heritage component is dealt with under section 38(8), which basically states that Heritage Western Cape (HWC) is a commenting authority and is required to provide comment on the heritage aspects of the proposed project in order to facilitate final decision making by the Department of Environmental Affairs and Development Planning (DEA&DP). While a stand-alone, full scale HIA is not required, HWC must nevertheless satisfy itself that the requirements of the NHRA have been addressed by the EIA.

¹Compilation of 3318DC Bellville and 3318DD Stellenbosch - Mapping information supplied by: Chief directorate Surveys and Mapping.

3. METHODS

The property was inspected over a period of 4 days, starting on the 12th March 2008 with a specialist briefing, and subsequently in more detail on the 11th August, and 3rd and 4th September 2009. Inspection was undertaken by Mr D Halkett and Ms E Schietekcatte via a combination of on- and off-road driving and on foot. Archaeological sites and track paths were recorded with a handheld GPS receiver using map datum WGS 84. A number of other reports compiled by the ACO from the immediate area were consulted for comparison. Since much of the landscape was uniform, transects were walked or driven as far as was possible to achieve a broad understanding of the landscape and its potential archaeological resources. Disturbed areas (dams, sand borrowing pits, erosion channels) were targeted since these usually reveal buried material, and prominent landscape features such as low hills were also inspected. In August and September 2009 grass cover was dense and surface visibility was considerably reduced. In March of the previous year however the opportunity was afforded to inspect some parts of the site under low growth conditions, and at that time a lack of material was already noted. In other words, despite the thick vegetation, the author does not believe it was a major limitation on the overall conclusions. Detailed study of the area adjacent to the informal settlement was prevented due to the considerable amount of unburied human faecal matter littering the surface. The routes of two proposed pipelines, that will be installed in the road reserves, were also inspected. The longer water pipeline will be in the road reserve of the R312 alongside the study site, and some way along the R302 in the direction of Durbanville, while the shorter sewerage pipeline will be alongside the R312 and then turning south along Roy Briers Road alongside Fisantekraal village.

4. NATURE OF THE RECEIVING ENVIRONMENT

Although the site has been intensively ploughed in the past, nowadays the land is used primarily as cattle grazing. Three earth dams supply water for agriculture, while the Mosselbank River runs through the western portion of the site in more or less a south to north direction. Several small-holdings are scattered throughout the site but these serve more in a residential rather than farming capacity. The cattle farming is centred on the Patryfontein complex which also serves a number of small commercial activities. A roll-on lawn enterprise occupies much of the south eastern section. Surrounding land use is mainly agricultural, including chicken farming and a chicken abattoir (County Fair). Portion 15 is occupied by an informal settlement which in turn lies immediately adjacent to the Fisantekraal village. The village borders the north western section of Portion 4. To the north lies the R312 and Fisantekraal airfield. An ESKOM servitude runs more or less east to west across Portion 7.

Despite the large size of the property, it is fairly uniform in nature and gently sloping. The surface is generally sandy (shallow), and at this time of the year (August/September) very wet due to the underlying ferruginous strata, and thick grass cover abounds. Small wetlands and marshy areas are numerous, with the south eastern section being particularly marshy. High ground is found to north, east and west dipping gently towards the course of the Mosselbank stream. No significant rock outcrops were observed although in places hillocks have formed due to the uneven sub-surface ferricrete concentrations. One significant well formed ferricrete mass was found that had been quarried for building stone. No *in situ* silcrete rafts, which are fairly common in the broader area, were noted.

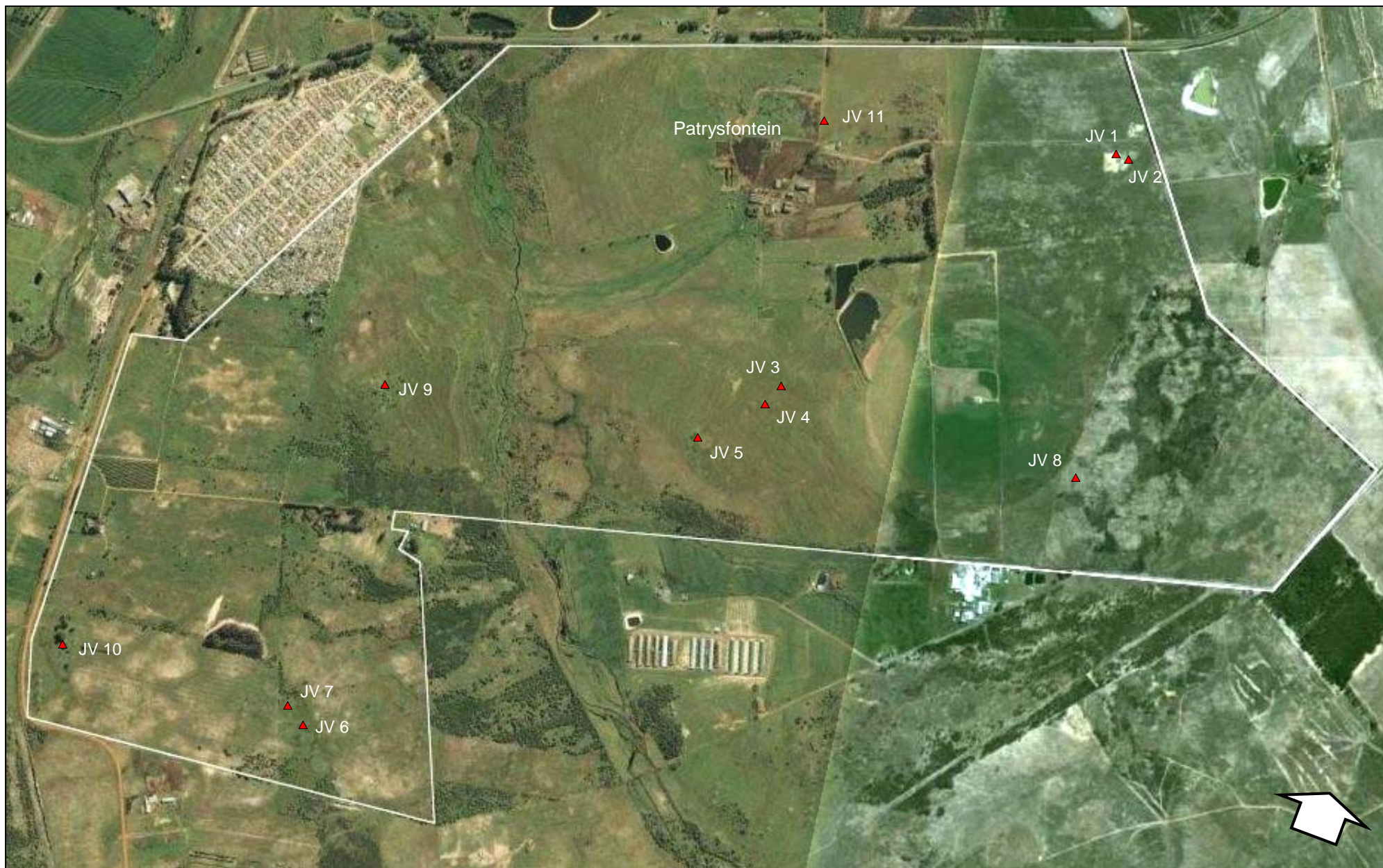


Figure 2: An aerial view of the site with the boundary marked in white. Archaeological occurrences indicated by red triangles.



(l) looking east across the fields adjacent to the Eskom servitude (r) looking east across the Mosselbank River



(l) looking east over the Patryfontein farm (r) looking west towards Fisantekraal village from the farm



(l) looking north west from the main dam to Patryfontein farm (r) looking north across marshy ground at the eastern edge of the site near the County Fair abattoir.

5. RESULTS

In terms of the archaeology, the issues as identified are straightforward and are summarised in Table 1. A series of photographs showing examples of the types of artefacts that have been identified follows.

Table 1: Summary of archaeological observations

Site	Lat/Lon°	Type	Description
JV 1	S33.77811 E18.74770	isolated artefact	ESA ² flake, sandstone, in disturbed area where sand removed
JV 2	S33.77818 E18.74785	isolated artefact	ESA core, silcrete, in disturbed area where sand removed
JV 3	S33.78806 E18.73663	isolated artefact	ESA flake, sandstone, surface in old ploughed land
JV 4	S33.78845 E18.73623	isolated artefacts	ESA flakes and chunks, silcrete, surface in old ploughed land
JV 5	S33.79012 E18.73391	quarry	Quarried ferricrete outcrop, age unknown (historic)
JV 6	S33.80204 E18.72079	isolated artefact	ESA flake, silcrete, surface in old ploughed land
JV 7	S33.80168 E18.72023	isolated artefact	ESA core, silcrete, surface in old ploughed land
JV 8	S33.78868 E18.74882	isolated artefact	ESA flakes and chunks, silcrete and sandstone, MSA ³ blade, fine grey silcrete, in disturbed area where sand removed
JV 9	S33.79052 E18.72089	isolated artefact	ESA flake, sandstone, on small hill with ferricrete nodules
JV 10	S33.80081 E18.71113	ruin	Ruins of a farm werf (less than 60 years old)
JV 11	S33.77886 E18.73604	isolated artefacts	ESA flakes, silcrete and sandstone, in erosion gully in farm road



(l) JV 1 - ESA weathered sandstone flake, (m) JV 2 - ESA silcrete core (r) JV 3 - ESA sandstone flake

² Early Stone Age ~1 my - 250 ky

³ Middle Stone Age ~ 250 ky - 30 ky



(l) JV 4 - ESA silcrete flakes and chunks (r) JV 5 Quarried ferricrete outcrop



(l) JV 7 - ESA silcrete core (r) JV 8 - ESA artefacts on sandstone and silcrete, one blade (top row 2nd from left) made on fine grey silcrete has MSA characteristics



(l) context of the finds at JV 8 - sand mining exposing hard ferricrete sub-strata (r) JV 10 ruins of a small relatively recent farm werf with the ever present eucalyptus trees

5.1 Pre-colonial archaeology

Our observations were limited mostly to isolated ESA artefacts exposed by either ploughing or sand borrowing. We believe that this results from material having collected over time on the hard ferricrete surface buried beneath the sand that now covers most of the property. In some cases ferricrete nodules were found still adhering to the artefacts. The lack of prominent physical landscape features such as rocky outcrops, caves, shelters or raw material sources such as silcrete outcrops, probably explains the overall absence of material traces. Even around the dams which are cut deep into the underlying strata, no conclusive if any artefacts were observed.

One single blade on silcrete displayed characteristics consistent with it having been produced during the MSA but it was found along with distinctive ESA material. No LSA⁴ material of any kind was seen.

Included for comparison in Table 2 are archaeological observations from several projects undertaken by the ACO in the vicinity of the study area. The locations of those surveys are shown on Figure 3. Only one out of the eight investigations produced significant archaeological remnants (Number 6 on Table 2). Although some surveyed areas were small, it nevertheless indicates a general lack of archaeological material in this regional context.

Table 2: Summary of archaeological observations from similar surveys undertaken in the vicinity by the ACO

	Property	Size (Ha)	Archaeology
1	Portion 13 of Farm 168	±7.3	Nil
2	Portion 3 and Remainder of Farm 180	±39	Nil
3	Erf 1690	±8.44	1 ESA flake
4	Erf 1693 and Erf 1868	±5	Nil
5	Erf 1691 and Erf 1740	±17	Nil
6	Groot Phesantekraal 1165 and Joostenbergs Vlake 725	±330	ESA, MSA and LSA (extensive), silcrete outcrop
7	Portions 1 and 2 of Farm 123	±370	1 ESA scatter, silcrete outcrop
8	Portion of Erf 1165	±35	1 ESA scatter, silcrete outcrop

5.2 Historical archaeology

A small quarried ferricrete mass was the only feature (other than some structures) that suggested some early historical use of the landscape. It is possible that the ferricrete blocks may have been used for construction of foundations or kraal walls. The former is more likely given the apparently limited nature of the activity. We saw no evidence of dumps, and old glass and ceramics were not in evidence anywhere on the site. No identifiable graves or graveyards were noted.

Although JV10 represents the remains of a small farm werf (Vrede), judging by the construction materials is very unlikely to be older than 100 years and in fact is unlikely to be older than 60 years (see also Ms M Attwell's report with regards to the ages of the small-holdings).

⁴ Late Stone Age ~ 30 ky - 200 y

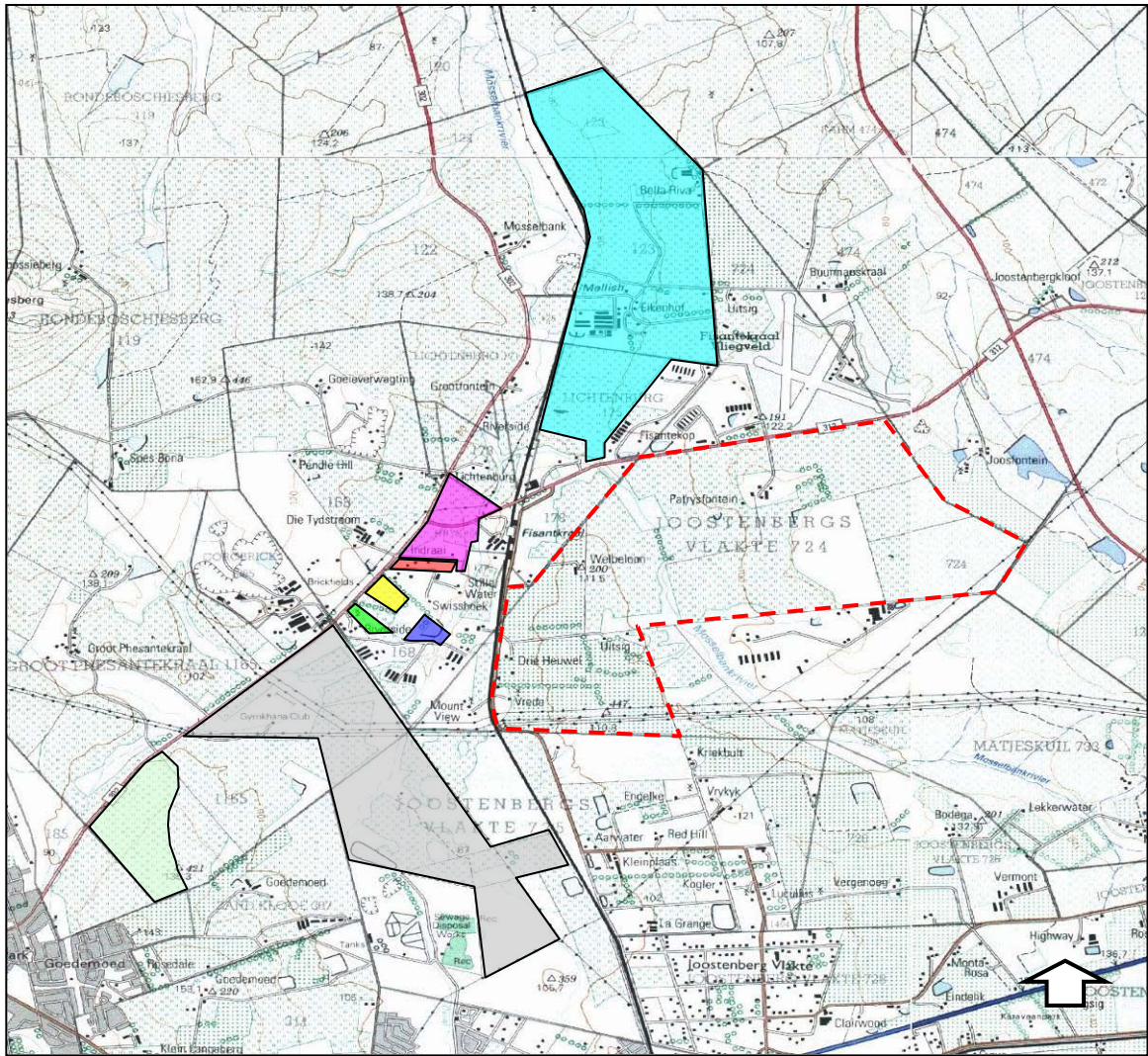


Figure3: The locations of the surveys referred to in Table 2 in relation to the proposed development of Farm 724 (dashed red outline)⁵

6. PIPELINE ROUTES

The routes are shown in Annexure 3. No archaeological sites were identified along either of the routes.

7. CONCLUSIONS

No significant archaeological remains were found on the site. The sparseness of material is probably due to the lack of significant landscape features known to have been attractive to the pre-colonial inhabitants of the area. There are no prominent rock outcrops with caves or shelters, nor are there any sources of raw material to make artefacts. The apparently isolated nature of the finds which are virtually all from the ESA, suggests infrequent use of the site. One building in the Patryfontein farm werf appears to date to the late 19th century and is, despite being highly modified, virtually the only link with the historical past. Ms M Attwell’s report has dealt with this in more detail in the built environment assessment.

⁵ Compilation of 3318DA Philadelphia, 3318DB Paarl, 3318DC Bellville, 3318DD Stellenbosch, - Mapping information supplied by: Chief directorate Surveys and Mapping.

dwelling. If such dumps are found in the course of development, an archaeologist should be notified. Contractors working in the area should be informed what to look out for and who to contact if necessary.

- The author does not believe that the site warrants an archaeological watching brief being written into the conditions of the Environmental Management Plan. A clear plan of action must however be in place in the event that either graves or historic refuse dumps are uncovered in the course of development.
- No archaeological issues were identified for either of the proposed pipelines (water and sewerage) and these may proceed without further intervention.

10. BIBLIOGRAPHY

Halkett, D. 2008. Heritage feasibility study for proposed development on Portions 3, 4, 7, 8 and 19 of the farm Joostenbergs Vlakte 724, Bellville Magisterial District. Unpublished report prepared for Ninham Shand Consulting. Archaeology Contracts Office, University of Cape Town.

Halkett, D. & Hine, P. 2008. Archaeological Impact Assessment of proposed development on Portions 1 and 2 of Farm No 123 (Bella Riva & Farmika), Fisantekraal, Bellville Magisterial District. Unpublished report prepared for Withers Environmental Consultants. Archaeology Contracts Office, University of Cape Town.

Hart, T. 2000. Archaeological Impact Assessment of proposed rezoning of Erf 1165, a Portion the Farm, Groot Phesantekraal, Durbanville. Unpublished report prepared for Terraplan. Archaeology Contracts Office, University of Cape Town.

Hart, T. Attwell, M and Orton, J. 2008. Heritage Impact Assessment of the proposed subdivision of the Remainder of the Farm Radio 918, Klipheuwel. Unpublished report prepared for Terraplan on behalf of TFMC Professional Services. Archaeology Contracts Office, University of Cape Town.

Orton, J. 2008. Heritage statement for Portion 13 of Farm 168 Durbanville. Unpublished report prepared for Guillaume Nel Environmental Consultants. Archaeology Contracts Office, University of Cape Town.

Orton, J. 2008. Heritage statement for Erf 1693 and Erf 1868 Durbanville. Unpublished report prepared for Guillaume Nel Environmental Consultants. Archaeology Contracts Office, University of Cape Town.

Orton, J. 2008. Heritage statement for Portion 3 of Farm 180 & Remainder farm 180, Durbanville. Unpublished report prepared for Guillaume Nel Environmental Consultants. Archaeology Contracts Office, University of Cape Town.

Orton, J. 2008. Heritage statement for Erf 1691 and Erf 1740, Fisantekraal (Durbanville). Unpublished report prepared for Guillaume Nel Environmental Consultants. Archaeology Contracts Office, University of Cape Town.

Smuts, K and Orton, J. 2008. Heritage statement for Erf 1690, Durbanville. Unpublished report prepared for Guillaume Nel Environmental Consultants. Archaeology Contracts Office, University of Cape Town.