Appendix G-6 – Archaeological

ARCHAEOLOGICAL IMPACT ASSESSMENT

PROPOSED NEW MUNICIPAL CEMETERY: LOUW'S BOS NORTH AND LOUW'S BOS SOUTH, REMAINDER FARM 502, STELLENBOSCH, WESTERN CAPE

Assessment conducted under Section 38 (3) of the National Heritage Resource Act (No. 25 of 1999)

Prepared for:

CKR & Partners

16 Rainier Street, Malmesbury
Att: Ms Anelia Coetzee
Email: leap@rumboll.co.za

Applicant:

STELLENBOSCH MUNICIPALITY

Ву



Jonathan Kaplan Agency for Cultural Resource Management 5 Stuart Road, Rondebosch, 7700 Cellular: 082 321 0172

Email: acm@wcacces.co.za

NOVEMBER 2018

Executive summary

1. Introduction

ACRM was appointed to conduct an Archaeological Impact Assessment (AIA) for a proposed new municipal cemetery on Remainder Farm No. 502 near Stellenbosch in the Western Cape.

Two proposed, alternative cemetery sites are under consideration; namely Louw's Bos North and Low's Bos South. Both sites are located alongside Annandale Road, off the R44 north between Somerset West and Stellenbosch.

The proposed cemetery will occupy a footprint area of about 30ha and will include a memorial park, perimeter fencing, parking, a memorial wall, and ablution facilities. Existing access roads will be upgraded.

2. Aim of the study

The aim of the study is to assess the sensitivity of archaeological resources in the two proposed alternative cemetery sites, to determine the potential impacts on such resources, and to avoid and/or minimise such impacts by means of management and/or mitigation measures.

The AIA forms part of a wider Heritage Impact Assessment (HIA) that will be conducted by Bruce Eitzen of New World Associates.

3. Results of the study

A field assessment of the proposed Louw's Bos North cemetery site was undertaken on the 18th October 2018, and an assessment of the proposed Louw's Bos South cemetery site was undertaken on the 13th November, 2018.

The following observations were made:

3.1 Louw's Bos North

No archaeological remains were recorded in the footprint area of the proposed cemetery site, which comprises old agricultural land covered in grazing grass and weeds. There is barely any surface stone covering the proposed development site.

Relatively large numbers of Early Stone Age (ESA) resources were, however, recorded on a portion of Rem. Farm 502, on deeply ploughed agricultural land alongside Annandale Road and the floodplain of the Bonterivier, that included chunks, cores, flakes, cleavers and several bifaces/handaxes, struck from round quartzite river cobbles. The remains all occur in a highly transformed context.

3.2 Louw's Bos South

A small number of ESA implements including chunks, cores and flakes were recorded in a large block of wheat fields on the upper slopes of the proposed cemetery site. No archaeological resources were recorded on the remainder of the proposed development

site, which comprises old, unused agricultural land covered in very dense grass, weeds, and large patches of recovering veld. The receiving environment has historically been totally transformed by agriculture.

The small numbers and highly transformed context (i. e. wheat fields) in which they were found, mean that the remains have been graded as having *low* (Grade IIIC) archaeological significance.

4. Impact statement

The results of the study indicate that the proposed development of a new municipal cemetery on Remainder Farm No. 502 near Stellenbosch, will not impact of important pre-colonial archaeological heritage. ESA resources in a highly transformed context were documented on the farm, but have been graded as having *low* (Grade IIIC) archaeological significance.

5. Conclusion

The study has identified no significant impacts to pre-colonial archaeological heritage that will need to be mitigated prior to the proposed development commencing. The receiving environment (i. e. transformed agricultural land) is not a sensitive or threatened archaeological landscape.

Insofar as a comparative study of the two proposed development sites is concerned, no one site is preferred over the other.

6. Recommendations

The following recommendations are made:

- 6.1 Louw's Bos North
- 1. No archaeological mitigation is required prior to construction activities commencing.
- 2. The property is suitable for development.
- 6.2 Louw's Bos South
- 1. No archaeological mitigation is required prior to construction activities commencing
- 2. The property is suitable for development

Table of Contents

	Page
Executive summary	1
1. INTRODUCTION	4
2. HERITAGE LEGISLATION	5
3. DESCRIPTION OF THE RECEIVING ENVIRONMENT 3.1 Louw's Bos North 3.2 Louw's Bos South	6 6 8
4 STUDY APPROACH 4.1 Method of survey 4.2 Constraints and limitations 4.3 Identification of potential risks 4.4 Archaeology of the study area	11 11 11 11
5. RESULTS OF THE STUDY 5.1 Louw's Bos North 5.1.1 Grading 5.2 Louw's Bos South 5.2.1 Grading	12 12 13 17 17
6. IMPACT STATEMENT	19
7. CONCLUSION	19
8. RECOMMENDATIONS 8.1 Louw's Bos North 8.2 Louw's Bos South	19 19 19
9 REFERENCES	20

1. INTRODUCTION

ACRM was appointed by CKR & Partners, on behalf of the Stellenbosch Municipality, to conduct an Archaeological Impact Assessment (AIA) for a proposed new municipal cemetery on Remainder Farm No. 502 near Stellenbosch in the Western Cape (Figures 1-2).

Two proposed, alternative cemetery sites are under consideration; namely Louw's Bos North and Low's Bos South. Both sites are located alongside Annandale Road, off the R44 north between Somerset West and Stellenbosch.

The proposed cemetery will occupy a footprint area of about 30ha and will include a memorial park, perimeter fencing, parking, a memorial wall, and ablution facilities. Existing access roads will be upgraded.

The AIA forms part of a wider Heritage Impact Assessment (HIA) that will be conducted by Bruce Eitzen of New World Associates.

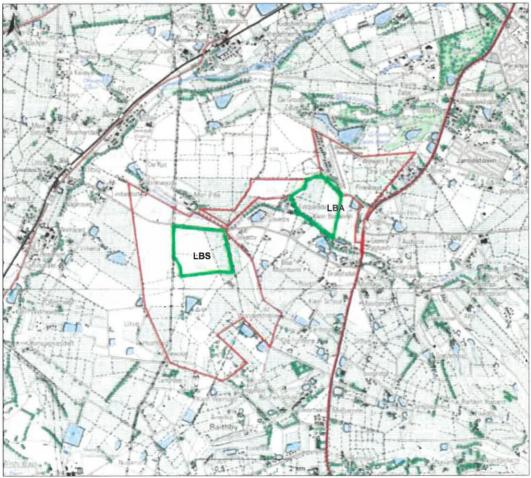


Figure 1. 1:50 000 locality map (3318DD Stellenbosch). The green polygons indicate the location of the proposed, and proposed alternative cemetery sites; namely Louw's Bos North (LBA) and Louw's Bos South (LBS)



Figure 2. Google satellite map of the proposed, and proposed alternative cemetery sites on Remainder of Farm 502 near Stellenbsoch

2. HERITAGE LEGISLATION

The National Heritage Resources Act (Act No. 25 of 1999) makes provision for a compulsory Heritage Impact Assessment (HIA) when an area exceeding 5000 m² is being developed. This is to determine if the area contains heritage sites and to take the necessary steps to ensure that they are not damaged or destroyed during development.

3. DESCRIPTION OF THE RECEIVING ENVIRONMENT

3.1 Louw's Bos North

The proposed development site is located to the north of Annandale Road, about 10kms south west of Stellenbosch (Figure 3). Access to the site is via the R44 between Somerset West and Stellenbosch. The proposed cemetery site comprises old agricultural land. There is barely any visible surface stone covering the site. Historically, for many years, vegetables such as broccoli and cauliflower were grown on the farm to supply large retailers such as Pick & Pay (Wrench Louw pers. comm. October, 2018). For the last 15 years or so, the land has been used for grazing and centre pivot farming. The site has been divided into several large grazing camps where cattle are rotated between camps. The receiving environment has therefore been totally transformed by agriculture (Figures 4-6). There are no significant landscape features on the proposed development site, although the Bonterivier runs just below the southern boundary of the proposed development site. Surrounding land use is agriculture (grazing, vineyards & strawberry farming), farm dams, guest accommodation, and the Stellenbosch North to the north east.

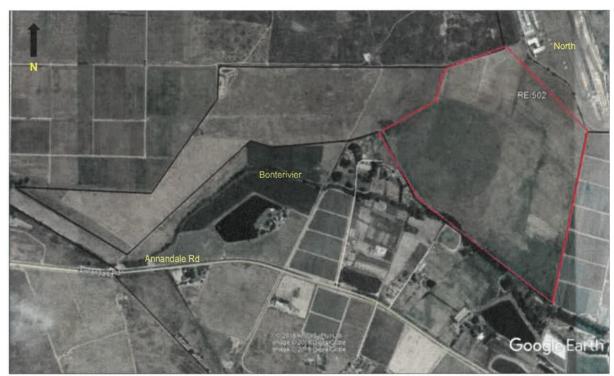


Figure 3. Google satellite map indicating the footprint area (red polygon) for the proposed Louw's Bos North Cemetery on Rem. Farm 502, Stellenbosch



Figure 4. View of the proposed cemetery site facing west



Figure 5. View of the proposed cemetery site facing south east with the Simonsig in the distance



Figure 6. View of the cemetery site facing east

3.2 Louw's Bos South

The proposed cemetery site is located directly alongside (i.e. south of) Annandale Road (Figure 7). The eastern sector of the proposed development site comprises a large block of vineyards and wheat fields (Figures 8 & 9). The remainder of the site (i. e. the western sector) comprises old agricultural lands that have not been worked for more than 10 years and are covered in a mix of extremely dense Kikuyu grass, weeds such as Lupens, natural grasses, and large patches of recovering veld, on a substrate of loose, weathered quartzitic sands (Figures 10-13). Some gravel and Koffieklip was also noted. Existing infrastructure comprises gravel farm roads, barely visible twee-spoor tracks, some farm fencing and poles. There is barely any surface stone covering the western portion of the proposed site, even alongside Annandale road, where visibility is still fairly good. There are no significant landscape features on the proposed site, and no springs, pans or sources of natural water. Surrounding land use is agriculture (vineyards, vacant agricultural lands & vegetable farming to the west), roads and farm dams.



Figure 7. Close up Google satellite map indicating the footprint area of the proposed Louw's Bos South Cemetery site (red polygon) on Rem. Farm 502, Stellenbosch

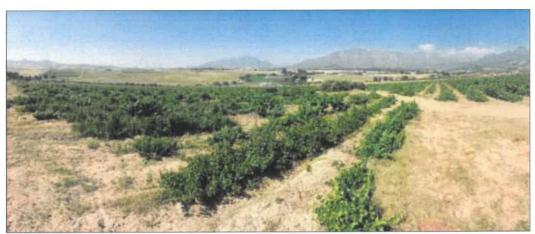


Figure 8. Vineyards in the eastern sector of the proposed cemetery site. View facing north east

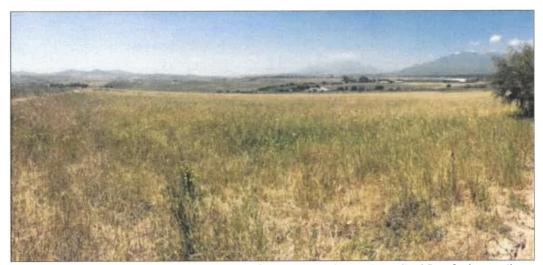


Figure 9. Wheat fields in the eastern sector of the proposed cemetery site. View facing north



Figure 10. Western sector of the proposed cemetery site. View facing north east



Figure 11. Western sector of the proposed cemetery site. View facing east



Figure 12. Western sector of the proposed cemetery site. View facing west

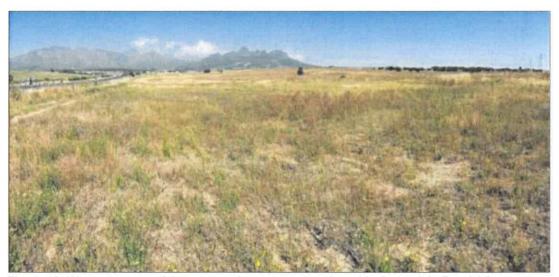


Figure 13. Western sector of the proposed cemetery site alongside Annandale Road. View east

4. STUDY APPROACH

4.1 Method

The overall purpose of the study is to assess the sensitivity of archaeological resources in the proposed two cemetery sites, to determine the potential impacts on such resources, and to avoid and/or minimise such impacts by means of management and/or mitigation measures.

The significance of archaeological resources was assessed in terms of their content and context. Attributes considered in determining significance include artefact and/or ecofact types, rarity of finds, exceptional items, organic preservation, potential for future research, density of finds and the context in which archaeological traces occur.

A field assessment of the proposed development sites was undertaken on 18th October (Louw's Bos North) and 14th November (Louw's Bos South), 2018.

A track path of both surveys was captured.

A desktop study was also carried out to assess the heritage context surrounding the proposed development sites.

4.2 Constraints and limitations

There were no constraints or limitations associated with the study, although visibility was very poor across both proposed development sites, due to dense vegetation cover. Access to both sites was unrestricted and mobility was unhindered.

4.3 Identification of potential risks

The results of the study have shown that there are no archaeological risks associated with the proposed development. Limited numbers of ESA resources were identified on the proposed Louw's Bos South site, but these occur in a highly transformed context (wheat fields).

4.4 Archaeology of the study area

Early Stone Age (ESA) implements were first discovered by the French entomologist Dr Louis Peringuey in 1899 at Bosman's Crossing at the foot of the Papagaaiberg alongside the Eerste River in Stellenbosch (Peringuey 1902, 1911; Seddon 1966). The artefacts, exposed in the railway cutting, are associated with the younger gravels of the course alluvial fan on which much of Stellenbosch is situated, and are dated to the earlier part of the Middle Pleistocene, between 700 000 and 300 000 years ago (Deacon & Goosen 1997). Among these tools was an artefact type of great antiquity recognized as an early handaxe. For many years after this, the ESA of South Africa was referred to as the `Stellenbosch Culture' until the term was re-defined in the 1960s (Goodwin & Van Riet Lowe 1929). A large sandstone boulder marks the location of the Bosman's Crossing Provincial Heritage Site (PHS) which was declared a National Monument in 1962.

Today the ESA is divided into the 'Olduwan' period, which is up to 1.7 million years old. This industry is associated with the oldest and most simple human-made artefacts. This was followed by the 'Acheleun' Tradition, a more developed stone artefact industry, characterised by the presence of specific types of stone tools such as handaxes, choppers and cleavers. Acheleun sites have been recorded throughout the country and are especially associated with river terraces, streams, and certain types of rock outcrops. Acheleun tools are also commonly found on mountain slopes, and in degraded and transformed areas such as slope washes, cuttings, excavations, and in vineyards.

ESA artefacts have been documented at numerous locations in the Stellenbosch area, on the farms Spier, Meerust, Lynedoch, Hartlands, Vlottenberg and De Wijnlanden (Kaplan 2002), and on several farms to the east of the R310, at Croyden (Kaplan 2005, 2004) and Faure (Kaplan 2006). Large numbers of tools including handaxes, cleavers, cores, and flakes have also been documented in agricultural lands and vineyards during an investigation of the De Zalze Golf Estate (Kaplan 2009), directly north of the proposed Louw's Bos North cemetery site, while a rich Acheleun site occurs on the Farm Blaauklippen, on the upper slopes of the Helderberg to the east of the R44 (Deacon and Goosen 1997). ESA flakes and angular chunks have also found on the lower slopes of the Papagaaiberg near the cemetery (Kaplan 2010) ESA tools were also recently encountered alongside Adam Tas Road, and in Devon Road, Stellenbosch during a Heritage Impact Assessment (HIA) for the proposed Plankenbrug sewer pipeline (Kaplan 2015a), and at Vlottenburg Hamlet inside the urban edge (Kaplan 2015b).

5. RESULTS OF THE STUDY

5.1 Louw's Bos North

No archaeological remains were recorded in the proposed \pm 30ha footprint area of the proposed Louw's Bos North Cemetery north of Allandale Road (Figure 14). The receiving environment is quite waterlogged across the lower slopes and covered in very thick grass. A large centre pivot field (much of it covered in Lupens) also covers a large portion of the proposed development site. There is barely any surface stone on the site, apart from a few large pieces of Koffieklip.

Relatively large numbers of ESA resources were, however, recorded in heavily ploughed fields in the south western portion of Farm 502 alongside Allandale Road, where these tools have been brought to the surface by ploughing activities (Figure 14 & Table 1). The majority of the finds comprise chunks, flaked chunks, round cores, partially modified flakes, and several cleavers. Three pear-shaped, Acheleun bifacial handaxes were also recorded. All the artefacts have been struck from round quartzite river cobbles, and occur in a highly transformed context. A number of tools were also found embedded in the gravel farm roads that ring the fields, and among large piles of quartzite cobbles and Koffieklip that have been removed from the surrounding fields. It is interesting to note that the lithics in this area are located close to the banks/floodplain of the Bonterivier, where quartzite river cobbles would have been readily available to early ESA hominins as a source material for making tools. The surrounding fields also contain many unworked cobbles of varying sizes.

A collection of tools and the context in which they were found study is illustrated in Figures 14-26.

5.1.1 Grading

The highly transformed context, in which they were found, means that the remains have been graded as having *low* (Grade IIIC) archaeological significance.

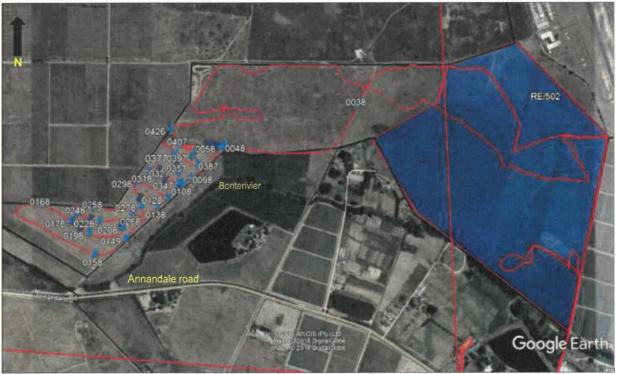


Figure 14. Trackpaths in red and waypoints of archaeological finds. The proposed cemetery site is the blue shaded area



Figure 15 Collection of tools (Points 048-068). Scale is cm.



Figure 16. Collection of tools. Scale is in cm



Figure 17. Context in which the remains were found



Figure 18. Context in which the remains were found



Figure 19. Collection of tools. Scale is in cm



Figure 20. Cleaver (Point 0218) among stones in road



Figure 21. Collection of tools. Scale is in cm



Figure 22. Collection of tools. Scale is in cm



Figure 23. Handaxe & flake. Scale is in cm



Figure 25. Classic Acheleun handaxe (0397). Scale in cm



Figure 24. Biface on pile of Koffieklip (0426).



Figure 26. 0426. Context in which the remains were found

Point	Name of farm	Lat/long	Description	Mitigation
	Rem. Farm 502,	-	All ESA	
	Stellenbosch		All in quartzite unless	
			otherwise indicated	
0038		S33° 59.056' E18° 48.765'	Retouched chunk in road	None required
0048		S33° 59.139' E18° 48.436'	Retouched flake in road	None required
0058		S33° 59.140' E18° 48.427'	Round core in road	None required
0068		S33° 59.137' E18° 48.407'	Round core in fields	None required
0078		S33° 59.137' E18° 48.392'	Chunk in fields	None required
0088		S33° 59.142' E18° 48.414'	Cleaver	None required
0098		S33° 59.203' E18° 48.356'	Biface on cortex flake in	None required
			ploughed fields alongside	
			gravel road	
0108		S33° 59.215' E18° 48.335'	Chunks and unworked	None required
			cobbles in ploughed field	

0440	0000 50 0001 5400 40 0001		1.1
0118	S33° 59.226' E18° 48.322'	Same as above	None required
0128	S33° 59.245' E18° 48.295'	Same as above	None required
0138	S33° 59.262' E18° 48.272'	Same as above	None required
0149	S33° 59.329' E18° 48.195'	Chunk and flake among	None required
		pile of cobbles alongside	
0.4.50	2000 50 0501 5400 40 4401	gravel ring road	
0158	S33° 59.359' E18° 48.118'	Core	None required
0168	S33° 59.259' E18° 47.988'	Chunk	None required
0178	S33° 59.292' E18° 48.058'	Several chunks and flakes son large patch/scatter of	None required
		stone in fields.	
0189	S33° 59.306' E18° 48.081'	Same as above	None required
0198	S33° 59.316' E18° 48.103'	Same as above	
0208	S33° 59.306' E18° 48.187'	Core in gravel road	None required
0218	S33° 59.299' E18° 48.183'	Cleaver & core in packed	None required
		cobble bed in gravel road	
0228	S33° 59.293' E18° 48.130'	Chunks and several	None required
		flakes among scatter of	
		river stone in ploughed	
		fields	
0238	S33° 59.290' E18° 48.107'	Same as above	None required
0248	S33° 59.276' E18° 48.075'	Chunk	None required
0258	S33° 59.265' E18° 48.117'	Pointed flake/biface in gravel farm road	None required
0268	S33° 59.276' E18° 48.211'	Core, x 2 chunks in fields	None required
0278	S33° 59.260' E18° 48.231'	Core in fields	None required
0288	S33° 59.246' E18° 48.226'	Several chunk, flake in	None required
0200	033 33.240 £10 40.220	fields - lots of surface	None required
		river stone	
0298	S33° 59.211' E18° 48.223'	Core	None required
0308	S33° 59.208' E18° 48.288'	2 chunks, flaked chunk in	None required
		fields	•
0318	S33° 59.201' E18° 48.271'	Incomplete core	None required
0327	S33° 59.189' E18° 48.249'	Chunk	None required
0337	S33° 59.189' E18° 48.274'	Large Cutting Tool (LCT),	None required
		3 chunks, core – scatter	
		of stone in fields	
0347	S33° 59.214' E18° 48.323'	Core/flaked chunk	None required
0357	S33° 59.191' E18° 48.324'	Core	None required
0367	S33° 59.177' E18° 48.318'	Pointed flake/biface	None required
0377	S33° 59.158' E18° 48.311'	X 2 chunks and flake	None required
0387	S33° 59.176' E18° 48.370'	Retouched flake/LCT	None required
0397	S33° 59.159' E18° 48.357'	Handaxe	None required
0407	S33° 59.137' E18° 48.325'	Small core	None required
0417	S33° 59.146' E18° 48.366'	Handaxe	None required
0426	S33° 59.104' E18° 48.303'	Biface/core among pile of	None required
		Koffieklip and cobbles	
		removed from fields	

Table 1. Spreadsheet of waypoints and description of archaeological finds

5.2 Louw's Bos South

A small number of ESA implements including chunks, cores and modified flakes were recorded in the highly transformed wheat fields on the upper slopes of Farm No. 502 (Figure 27 & Table 2). A few tools were also recorded embedded in the gravel farm roads as well.

No archaeological remains were recorded in the western sector of the proposed Louw's Bos site, which comprise old agricultural land covered in very dense grasses, weeds, and large patches of recovering natural veld.

A collection of tools recorded during the study is illustrated in Figures 28 and 29.

5.2.1 Grading

The limited numbers and highly transformed context in which they were found mean that the remains have been graded as having *low* (Grade IIIC) archaeological significance.



Figure 27. trackpaths (in red) and waypoints of archaeological finds

Point	Name of farm	Lat/long	Description	Mitigation
	Rem. Farm 502,		All ESA	
	Stellenbosch		All in quartzite unless	
			otherwise indicated	
				None required
0369		S33° 59.830' E18° 48.017'	Retouched flake/biface in gravel farm road	None required
0379		S33° 59.832' E18° 48.028'	Small, thin snapped cortex flake	None required
0389		S33° 59.837' E18° 48.076'	MSA flake/prepared platform in gravel farm road	None required
0399		S33° 59.731' E18° 48.046'	Heavy chunk/core in wheat fields	None required
0409		S33° 59.770' E18° 47.987'	Flaked chunk	None required
0419		S33° 59.815' E18° 48.030'	Core	None required
0428		S33° 59.817' E18° 48.035'	Chunk	None required
0438		S33° 59.817' E18° 48.039'	Chunk/core	None required
0448		S33° 59.820' E18° 48.045'	Chunk	None required
0458		S33° 59.820' E18° 48.045'	Flake	None required
0468		S33° 59.815' E18° 48.091'	Flake/biface	None required
0478		S33° 59.831' E18° 48.078'	Chunk	None required
0488		S33° 59.831' E18° 48.068'	Broken flake	None required
0498		S33° 59.831' E18° 48.047'	Flake	None required
0508		S33° 59.700' E18° 47.886'	Chunk embedded in road	None required
0517		S33° 59.801' E18° 47.977'	Chunk embedded in road	None required
0528		S33° 59.560' E18° 47.866'	Flake embedded in road	None required
0538		S33° 59.607' E18° 47.887'	Chunk	None required
0548		S33° 59.628' E18° 47.896'	chunk	None required

Table 2. Spreadsheet of waypoints and description of archaeological finds



Figure 28. ESA tools. Scale is in cm



Figure 29. ESA tools. Scale is in cm

6. IMPACT STATEMENT

The results of the study indicate that a proposed new municipal cemetery on Remainder Farm No. 502 will not have an impact of great significance on pre-colonial archaeological heritage.

In the case of the proposed Louw's Bos North cemetery north of Allandale Road, relatively large numbers of ESA implements were recorded outside the proposed cemetery footprint area alongside Annandale Road, while limited numbers of similar types of tools were recorded in transformed wheat fields in the footprint on the proposed Louw's Bos South cemetery site, south of Allandale Road.

The overall impact significance of the proposed development on archaeological resources is therefore rated as being LOW, and indications are that the receiving environment is not a sensitive or threatened archaeological landscape.

7. CONCLUSION

The study has identified no significant impacts to pre-colonial archaeological heritage that will need to be mitigated prior to the proposed development commencing.

The receiving environment (transformed agricultural land) is not a threatened archaeological landscape.

Insofar as a comparative study of the two proposed development sites is concerned, no one site is preferred over the other.

8. RECOMMENDATIONS

With regard to the proposed establishment of a proposed and proposed alternative municipal cemetery on Remainder Farm 502 near Stellenbosch, the following recommendations are made:

8.1 Louw's Bos North

- 1. No mitigation is required prior to construction activities commencing.
- 2. The site is suitable for development.

8.2 Louw's Bos South

- 1. No mitigation is required prior to construction activities commencing.
- 2. The site is suitable for development.

9. REFERENCES

Deacon, H.J. and Goosen, R.J. 1997. Phase 1 Archaeological investigation De Zalze Golf and Agricultural Estate. Report prepared for De Zalze Development (Pty) Ltd. Department of Archaeology, University of Stellenbosch.

Goodwin, A.J.H. & Van Riet Lowe, C. 1929. The Stone Age Cultures of South Africa. Annals of the South African Museum. 27.

Kaplan, J. 2015a. Kaplan, J. 2015. Heritage Impact Assessment, proposed, Plankenbrug Sewer Outfall Pipeline, Stellenbosch. Report prepared for Withers Environmental Consultants. ACRM Cape Town

Kaplan, J. 2015b. Archaeological Impact Assessment, the proposed Vlottenburg Settlement near Stellenbosch. Report prepared for Withers Environmental Consultants. ACRM Cape Town

Kaplan, J. 2012. Heritage Impact Assessment, the proposed Adam Tas Anaerobic Waste Water Treatment Facility on Erf 2684, Stellenbosch. Report prepared for Resource Management Services. ACRM Cape Town

Kaplan, J. 2010. Archaeological Impact Assessment proposed establishment of a new cemetery on the Onder Papagaaiberg (Farm 183) Stellenbosch, Western Cape. Report prepared for Cape Lowlands Environmental Services. ACRM Riebeek West

Kaplan, J. 2009. Archaeological Impact Assessment De Zalze Winelands Golf Estate, Southern Extension. Erf 4 de Zalze and Portion 10 of Farm 502 Stellenbosch. Report prepared for DJ Environmental Consultants. ACRM Riebeek West

Kaplan, J. 2006. Archaeological heritage assessment pre-feasibility study Faure Farms Faure (Helderberg). Report prepared for Chand Environmental Consultants. ACRM Riebeek West.

Kaplan, J. 2005. Archaeological report Croyden Olive Estate. Report prepared for Ecosense Consulting Environmentalists and Ecologists. ACRM Riebeek West

Kaplan, J. 2004. Archaeological scoping for the proposed Croyden Vineyard Estate Farm 654 Croyden. Report prepared for Ecosense Consulting Environmentalists and Ecologists. ACRM Riebeek West

Kaplan, J. 2002. Phase 1 Archaeological Impact Assessment proposed development De Wijnlanden Residential Estate. Report prepared for Greenfield Consultants. ACRM Riebeek West

Péringuey, L. 1902. Stone Implements from Paarl and Stellenbosch. Transactions of the South African Philosophical Society 11 (4).

Péringuey, L. 1911. The Stone Ages of South Africa as represented in the collection of the South African Museum. Annals of the South African Museum 8:180-201

Seddon, D. 1966. Some Early Stone Age surface sites around Stellenbosch, S.W. Cape. South African Archaeological Bulletin 22:57-59.