

**ARCHAEOLOGICAL IMPACT ASSESSMENT  
PROPOSED HOUSING DEVELOPMENT  
ON THE FARM NIEUWEDRIFT 486  
PAARL**

Prepared for:

**ENVIRO DINAMIK**

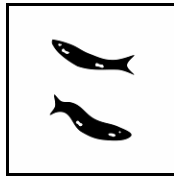
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## EXECUTIVE SUMMARY

Enviro Dinamik requested that the Agency for Cultural Resource Management conduct an Archaeological Impact Assessment for a proposed housing development on the Farm Nieuwedrift 486 near Paarl, in the Western Cape.

The proposed site is situated north east of Paarl, alongside the R45 to Malmesbury. The total area of the property is about 14 ha. The proposed development will consist primarily of between 300 and 400 housing units to accommodate farm workers from the northern Paarl region. A community hall, public open space, food gardens and internal roads and engineering services also form part of the development proposal.

The site was previously utilized as a borrow pit and much of the top soil has already been removed. The site is currently densely vegetated with Black Wattle and Port Jackson, as well as large Blue Gum trees along the site boundaries. Illegal dumping of rubble and domestic refuse is also widespread. The study site is severely degraded.

A Notice of Intent to Develop (NID) has been completed by Enviro Dinamik, but an Archaeological Impact Assessment was not done at the time.

The aim of the study is to locate and map archaeological heritage sites/remains that may be negatively impacted by the planning, construction and implementation of the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

The following archaeological findings were made:

45 Early Stone Age and Middle Stone Age stone tools were documented over the property, but these are spread thinly and unevenly over the surrounding environment and occur in a very disturbed and degraded context. No evidence of any factory or workshop site, or the result of any human settlement was identified. Each artefact has been recorded with a GPS waypoint, and photographed in-situ. The tools comprise mostly flakes, chunks and several cores, all in quartzite. One incomplete handaxe and two possible broken handaxes were also found.

**The archaeological remains have been rated as having low significance.**

The Phase 1 Archaeological Impact Assessment has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed construction activities.

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## **1. INTRODUCTION**

### **1.1 Background and brief**

Enviro Dinamik on behalf of Cape Winelands District Municipality requested that the Agency for Cultural Resource Management conduct an Archaeological Impact Assessment for a proposed housing development on the Farm Nieuwedrift 486 near Paarl, in the Western Cape.

The proposed development will consist primarily of between 300 and 400 housing units in order to accommodate farm workers from the northern Paarl region. A community hall, public open space, food gardens and internal roads and engineering services also form part of the development proposal. The total area of the property is about 14 ha. The subject property is currently zoned Indeterminate and will be rezoned to Sub divisional to provide for the proposed development activities.

The aim of the study is to locate and map archaeological heritage sites/remains that may be negatively impacted by the planning, construction and implementation of the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

A Notice of Intent to Develop (NID) has been completed by Ms Bianca Gilfillan of Enviro Dinamik, but an Archaeological Impact Assessment (AIA) was not done at the time. Heritage Western Cape requested that an AIA must be done, with a particular focus on the historical archaeology of the area<sup>1</sup>. Heritage consultant Ms Bridget O'Donoghue was appointed by the applicant to do a Heritage Impact Assessment (HIA) of the proposed development (O'Donoghue 2009). The AIA forms part of the HIA.

## **2. TERMS OF REFERENCE**

The terms of reference for the archaeological study were:

- to determine whether there are likely to be any archaeological sites of significance within the proposed site;
- to identify and map any sites of archaeological significance within the proposed site;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed site;
- to assess the status and significance of any impacts resulting from the proposed development, and
- to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the proposed site

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<sup>1</sup> Heritage Western Cape letter dated 13 August, 2009 (ROD ID 530).

### 3. THE STUDY SITE

A locality map is illustrated in Figure 1.

An aerial photograph of the study site is illustrated in Figure 2.

The proposed site is situated about 2 kms north east of the Boland town of Paarl, alongside the R45 to Malmesbury. Access to the site is gained on the southern boundary, on the Boland road which is a gravel road on Farm 486. The vacant site was previously used as a borrow pit and much of the top soil has already been removed. The source material was used for construction of the R45. The site is very visibly disturbed and degraded. The site is currently densely vegetated with wild grasses, Black Wattle and Port Jackson, as well as large Blue Gum trees along the site boundaries (Figures 3-16). There are extensive, deep, drainage channels that occur in the north western portion of the site. Several gravel roads and barely visible footpaths intersect the remainder of the property. Dumping of rubble and domestic refuse is also widespread. The remains (mainly foundations, a few building bricks and bits of plaster) of several recent buildings (probably farm worker dwellings) occur on the proposed development site. The surrounding land use is rural farmland (vineyards). The Nieuwedrift School and clinic is situated to the south of the site. There are no significant landscape features on the property, but the Berg River is located about 1 km to the east of the R45.

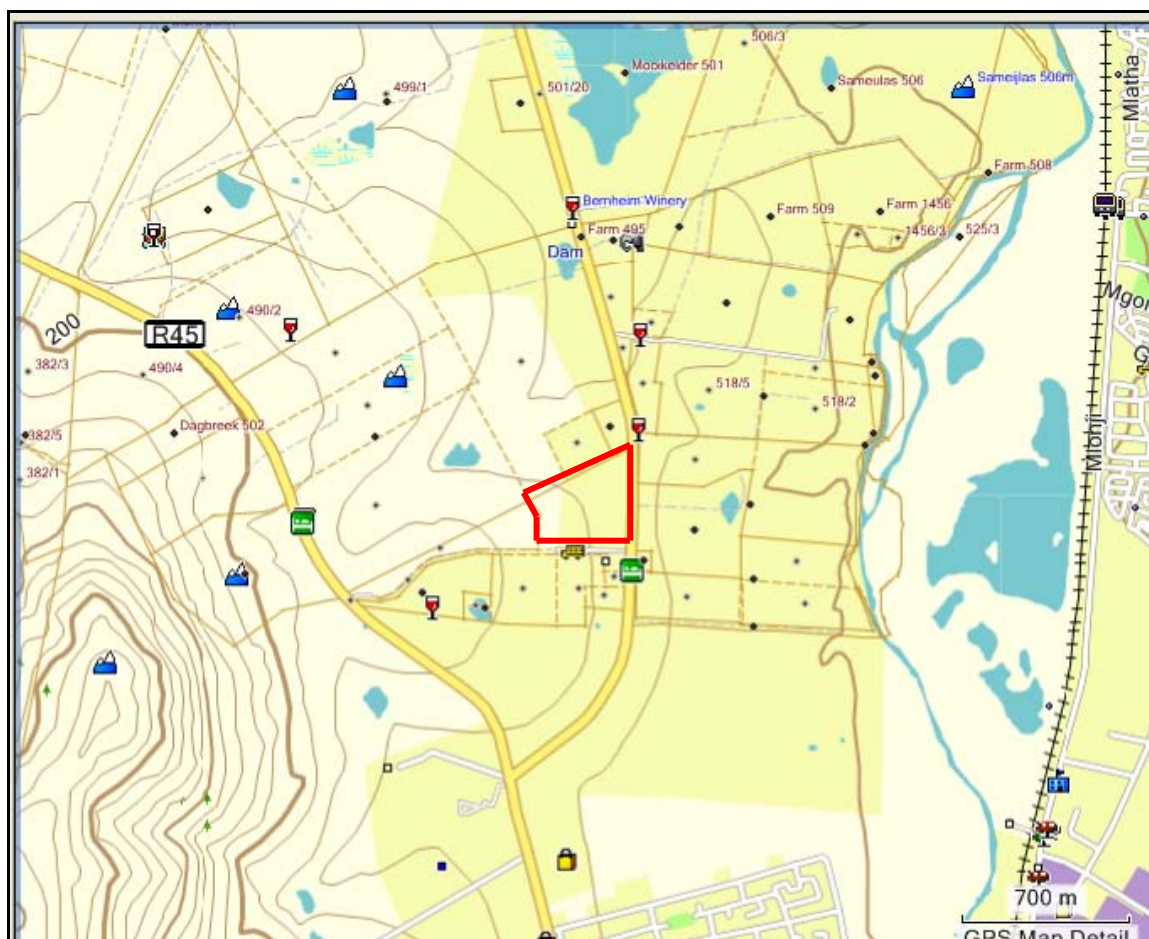


Figure 1. Locality Map





**Figure 2. Aerial photograph of the study site**



**Figure 3. View of the site facing north**



**Figure 4. View of the site facing north east**





**Figure 5. The site facing east**



**Figure 9. The site facing north**



**Figure 6. The site facing west**



**Figure 10. The site facing north east**



**Figure 7. The site facing south west**



**Figure 11. The site facing east**



**Figure 8. The site facing south**



**Figure 12. The site facing north**





**Figure 13. The site facing east**



**Figure 15. The site facing north**



**Figure 14. The site facing north**



**Figure 16. The site facing north east**

## **4. STUDY APPROACH**

### **4.1 Method**

The approach followed in the archaeological study entailed a foot survey of the proposed development site. The entire site was not covered on foot because large portions are infested with alien vegetation, and covered in thick grass and bush making much of site impenetrable. However, all the gravel roads and small footpaths were walked and the surrounding bush searched.

A GPS track path of the archaeological survey was created. This track path has been saved to a DVD and submitted with a digital copy of the report.

All archaeological occurrences were plotted (and photographed) *in situ*, using a Garmin Oregon 300 GPS unit, set on map datum wgs 84. A spreadsheet of the waypoints and a description of each of the artefacts are also included with the report (Table 1).

The site visit and assessment took place on the 23<sup>rd</sup> December, 2009.



## **4.2 Constraints and limitations**

Much of the site is densely vegetated resulting in low archaeological visibility. Leaf litter is also very thick on the ground.

## **4.3 Identification of potential risks**

While much of the top soil has been removed from the site during quarrying activities, Stone Age tools may be still exposed during vegetation clearing operations and bulk earthworks. However, the site is currently very, degraded and most tools that might be exposed would mostly likely appear in a highly disturbed and secondary context.

## **5. RESULTS OF THE SURVEY**

45 Early Stone Age (ESA) and Middle Stone Age (MSA) stone tools were documented over the proposed development site, but these are spread very thinly and unevenly over the surrounding landscape and occur in a disturbed and degraded context. The majority of the tools are ESA, and assigned to the Acheulean stage. Most of the tools occur as isolated occurrences, but a few very diffuse scatters were also noted. No evidence of any factory or workshop site, or the result of any human settlement was identified. It is very likely that the flaked tools are not in primary context, but have been moved around as a result of past quarrying activities. The majority of the tools comprise flakes, chunks, flaked/broken cobbles and cores. One incomplete handaxe (ND21) and two broken handaxes (ND20 & ND28) were found.

**The archaeological remains have been rated as having low local significance.**

ESA and MSA tools have been found in several AIA's undertaken by the archaeologist in the Paarl area, and all were documented in (similar) disturbed or transformed contexts, such as agricultural lands, vineyards, quarries, dams and farm roads (Kaplan 2008, 2007a, b, c, 2006). ESA and MSA tools have also been found by the archaeologist on top of the Paarl Mountain, as well as on the farms Fairview and Seidelberg on the western side of the mountain (personnel observation). The Paarl Museum also houses a collection of Stone Age material and implements from the region.

A collection of tools from Nieuwedrift is illustrated in Figures 17-25.

As indicated, the remains (mainly foundations, a few bricks and plaster) of several recent buildings (most likely farm worker dwellings) were also noted on the proposed development site. No obvious middens or mounds containing bottles, glass, ceramics, bone or other domestic items were found associated with the ruined buildings. There were some piles of ash close by, with glass fragments, empty beer bottles, burnt metal containers, bottle tops, burnt wood, rusted metal and pieces of plastic.



**Figure 17. ND21 incomplete handaxe scale in cm**



**Figure 21. ND24 ESA core scale in cm**



**Figure 18. ND20 broken handaxe scale in cm**



**Figure 22. ND7 MSA flake scale in cm**



**Figure 19. ND28 broken handaxe Scale in cm**



**Figure 23. ND8 MSA flake scale in cm**



**Figure 20. ND15. ESA flake scale in cm**



**Figure 24. ND9 MSA flake scale in cm**

## 6. DISCUSSION

It is not surprising that ESA and MSA tools were documented on the proposed development site as it has been shown that such finds occur quite widely in the Paarl region. However, much of the archaeological landscape in Paarl and surrounding towns have already been severely altered and transformed by more than 300 years of intensive agricultural and related activities and almost all of the finds occur in disturbed, degraded or severely compromised context. As a result their scientific value has been greatly diminished.

## 7. IMPACT STATEMENT

The impact of the proposed development on archaeological heritage remains is likely to be **low**. The site was previously utilised as a borrow pit, and on the greater portion of land, the top soil has already been removed. Being a vacant piece of land, the site has also been used as an illegal dumping site for builder's rubble and domestic refuse.

The probability, therefore, of locating important archaeological remains during implementation of the project is likely to be low. While Stone Age tools may be exposed during vegetation clearing operations and bulk earthworks, it is maintained that these tools will be found in a disturbed or secondary context.

## 8. CONCLUSION

The Archaeological Impact Assessment of the proposed housing development, on the Farm Nieuwedrift 486 in Paarl has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed development activities.

Should any human remains be disturbed, exposed or uncovered during excavations and earthworks for the proposed project, these should immediately be reported Heritage Western Cape (Mr Nic Wiltshire 021 483 9692). Burial remains should not be disturbed or removed until inspected by the archaeologist.



## 9. REFERENCES

Kaplan, J. 2008. Archaeological Impact Assessment proposed development Farm 361 Paarl. Report prepared for Dirisana Environmental Consultants. Agency for Cultural Resource Management.

Kaplan, J. 2007a. Archaeological Impact Assessment proposed establishment of a cemetery on Erven 8384-8388 and 8395-8397(Vlakkeland) Wellington. Report prepared for Braaf Environmental Consultants. Agency for Cultural Resource Management

Kaplan, J. 2007b. Archaeological Impact Assessment proposed establishment of a cemetery on Erf 34 Wellington. Report prepared for Braaf Environmental Consultants. Agency for Cultural Resource Management

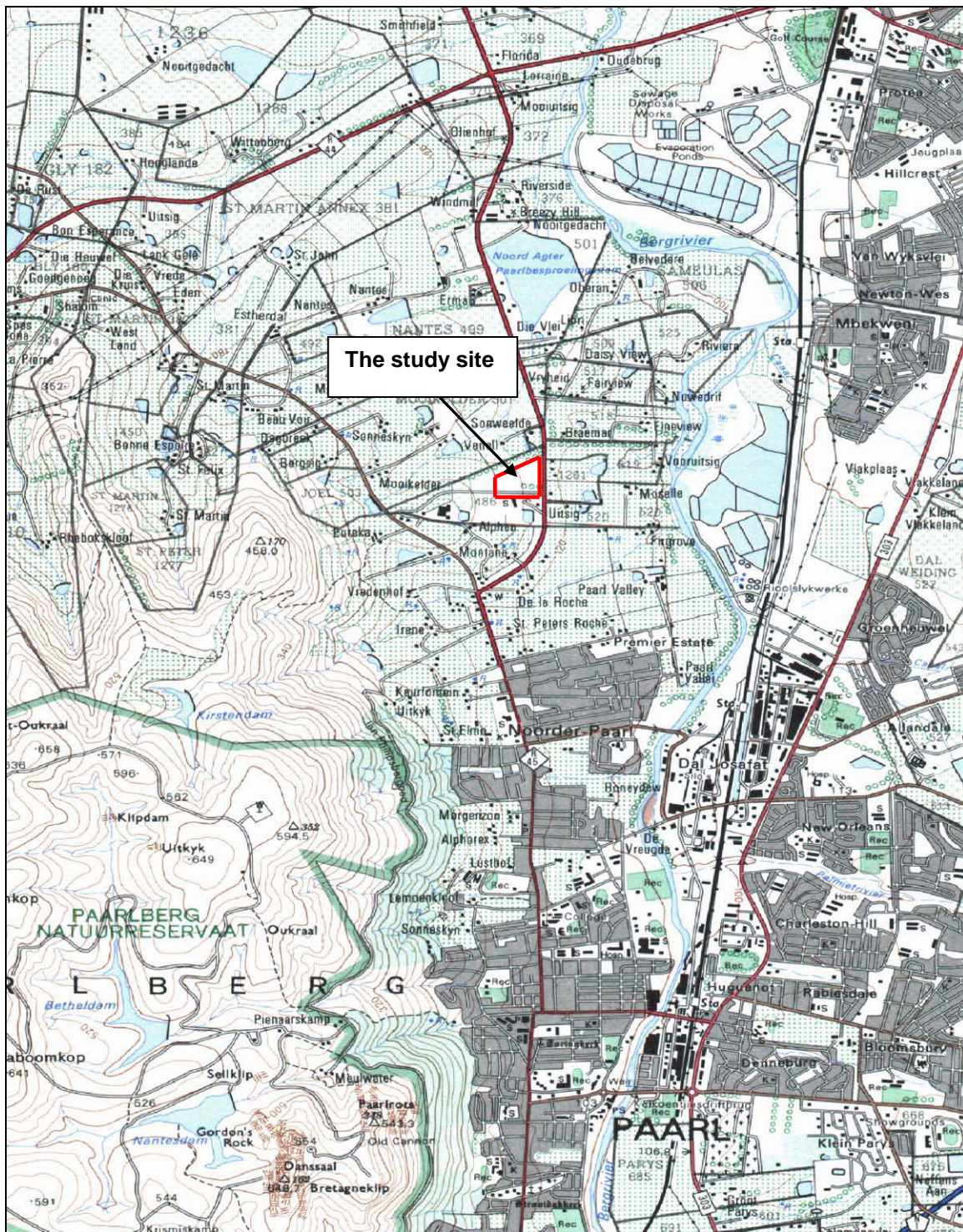
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O'Donoghue, B. Draft Phase 1 and 2 Heritage Impact Assessment Farm 486 Nieuwedrift Paarl Drakenstein District. Report prepared for Drakenstein

Site	Name	Long	Lat	Finds
ND	Nieuwedrift 486, Paarl			
ND1		S33 41.163	E18 57.605	ESA quartzite chunk
ND 2		S33 41.164	E18 57.608	ESA quartzite core
ND 3		S33 41.158	E18 57.612	ESA quartzite core
ND 4		S33 41.158	E18 57.618	ESA quartzite chunk
ND 5		S33 41.189	E18 57.648	MSA quartzite flake
ND 6		S33 41.170	E18 57.649	MSA quartzite flake
ND 7		S33 41.163	E18 57.651	MSA quartzite flake
ND 8		S33 41.165	E18 57.650	MSA quartzite flake
ND 9		S33 41.158	E18 57.651	MSA quartzite chunk
ND 10		S33 41.148	E18 57.615	ESA quartzite flake
ND 11		S33 41.139	E18 57.620	ESA quartzite flake
ND 12		S33 41.155	E18 57.591	MSA quartzite blade
ND 13		S33 41.153	E18 57.594	ESA quartzite cobble/core
ND 14	GPS reading not captured			ESA quartzite flake
ND 15		S33 41.150	E18 57.597	ESA quartzite flake
ND 16		S33 41.150	E18 57.596	ESA quartzite flake
ND 17		S33 41.134	E18 57.585	ESA quartzite chunk
ND 18		S33 41.112	E18 57.601	Quartzite chunk
ND 19		S33 41.117	E18 57.585	ESA quartzite chunk
ND 20		S33 41.136	E18 57.674	Broken unifacial handaxe
ND 21		S33 41.074	E18 57.720	Incomplete handaxe
ND 22		S33 41.102	E18 57.705	ESA quartzite chunk
ND 23		S33 41.066	E18 57.699	ESA quartzite chunk
ND 24		S33 41.068	E18 57.701	ESA quartzite core
ND 25		S33 41.062	E18 57.722	ESA quartzite chunk
ND 26		S33 41.043	E18 57.812	ESA quartzite flake
ND 27		S33 41.082	E18 57.817	ESA quartzite chunk
ND 28		S33 41.094	E18 57.811	ESA quartzite flake or possible broken h.axe
ND 29		S33 41.115	E18 57.816	ESA quartzite flake
ND 30		S33 41.129	E18 57.814	Quartzite core
ND 31		S33 41.132	E18 57.815	MSA quartzite flake
ND 32		S33 41.140	E18 57.814	MSA quartzite flake
ND 33		S33 41.149	E18 57.816	ESA quartzite chunk
ND 34		S33 41.151	E18 57.814	ESA quartzite flake
ND 35		S33 41.205	E18 57.809	ESA quartzite core
ND 36		S33 41.220	E18 57.809	MSA quartzite flake
ND 37		S33 41.225	E18 57.807	MSA quartzite blade
ND 38		S33 41.236	E18 57.808	ESA quartzite chunk
ND 39		S33 41.179	E18 57.705	ESA quartzite flake
ND 40		S33 41.149	E18 57.723	ESA quartzite chunk
ND 41		S33 41.126	E18 57.807	ESA quartzite flake
ND 42		S33 41.166	E18 57.806	Quartzite core
ND 43		S33 41.035	E18 57.800	ESA quartzite chunk
ND 44		S33 41.059	E18 57.734	ESA quartzite flake
ND 45		S33 41.168	E18 57.610	ESA quartzite chunk

**Table 1. Spreadsheet of site observations**



1:50 000 Locality map (3319DB Paarl)