

Archaeological and Heritage Impact Assessment

Project Title: Low Cost Housing Project Calitzdorp

Proposal to develop 884 residential erven, 1 community facility erf, 2 public open space erven and roads covering 19.8 ha on Erf 47 at the town of Calitzdorp, Western Cape.

Author of this report:

Prof H.J. Deacon Archaeologist, 49 Van Riebeeck Street, Matieland 7602.

Tel/Fax 021 887 1540, Cell 082 682 7300, email: hjdeacon@iafrica.co.za

Environmental Assessment:

Cape Lowlands Environmental Services, Contact Person: Mr Nicolaas Hanekom, PO Box 70, Darling 7345. Tel: 022 492 343. Fax: 022 492 3435. Cell: 076 851 0476. email: nhanekom@cles.co.za

Project Consultant:

ASLA Devco. Contact Person: Mr David Douglas, PO Box 118, Gordons Bay 7151. Tel: 021 845 8330. Fax: 021 845 8552. Cell : 076 852 0475, email: david@asla.co.za

Land Owner:

Kannaland Municipality WC041. Contact Person: Mr K De Lange (Municipal Manager), PO Box 30, Ladismith 6655. Tel: 028 551 1023, Fax: 028 552 1766. email: dewet@kannaland.co.za

Municipal Jurisdiction:

Kannaland Municipality. Contact Person: Mr De Lange as above.

Date: 30 July 2009

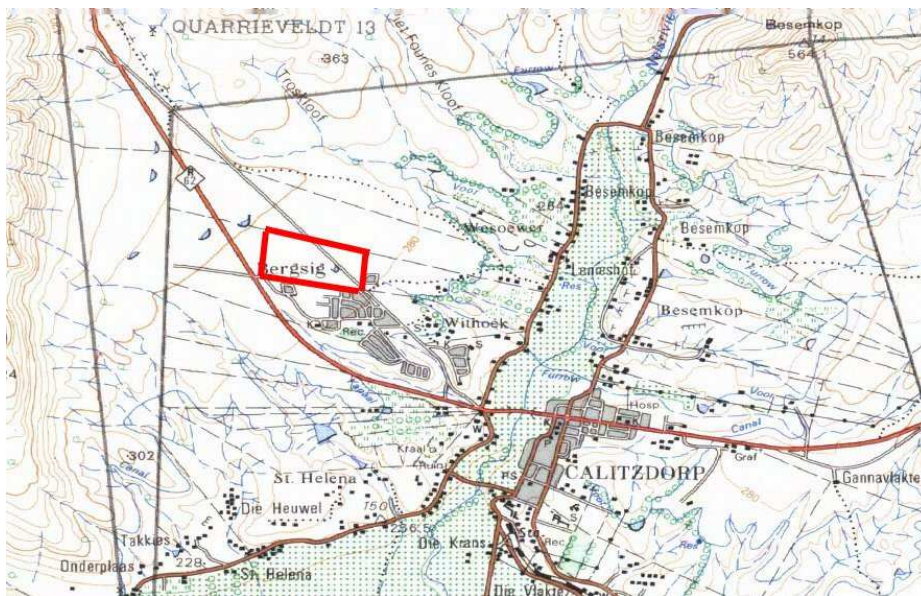


Fig. 1. Location of Erf 47 on the northwest edge of Calitzdorp, adjacent to the R62 (3321 DA; S 33.519525 E 21.670661, see Fig. 2 for co-ordinates of property)

Executive Summary

A survey of the heritage resources on some 19 ha of municipal owned vacant land, Erf 47, on the north west edge of Calizdorp, to be developed for low cost housing was undertaken. The property adjoins an existing Bergsig housing development to the south with land used for agriculture on other sides. There are no palaeontological materials or significant structures on the property. There are a low-density scatters of Acheulian and Middle Stone Age artefacts on the property, notably on the south eastern corner, that are rated as having medium to low significance. Environmental monitoring of the south east corner of the property during the construction phase is recommended to minimise the risk of impacting on any buried artefact occurrence. The report is part of a Basic Assessment EIA process.

Background Information

The development on Erf 47 will involve the construction of 884 residential erven, 2 public open space erven, 1 community facility erf and roads. The physical footprint of the development including access roads and infrastructure will be 19.8 ha.

It is a new development and rezoning will be necessary. This report is part of a Basic Assessment EIA process.



Fig. 2. Satellite view of the property, the R62 is on the west and the existing township Bergsig is to the south. Numbered GPS waypoints are flagged.

Property polygon:

SW: 33.520615 S; 18.667243 E.

NW: 33.517467 S; 21.667550 E.

NE: 33.519163 S; 18.675268 E.

SE: 33.521661 S ; 21.674756 E.



Fig. 3. The draft layout of the proposed low cost housing development with 840 residential erven, mostly 10 m by 15 m in size. The public and community spaces are shown in red and green and together constitute approximately 1% of the area of the development which seems inadequate to promote community well being.

Archaeological Background

There are no major archaeological or palaeontological sites in proximity to the property. However, the possibility of the occurrences of such heritage resources at this location has been considered.

Description of the property

The proposed development will be on a pediment that slopes gently southwards towards the deeply incised Nels River. Land use is agricultural on all sides other than the Bergsig housing development to the south. It is degraded land that is used for community grazing and pens for pigs.

Part of the site housed a dried fruit factory that closed through bankruptcy. The associated structures were demolished except for a rectangular brick ‘smoke house’ that later served as a store during the construction work on the Bergsig housing development and currently houses 10 squatter families. Erected in the last 20 years and the only standing structure it has no heritage significance. It is due for demolition with the residents promised alternative accommodation.



Fig. 4. View of the Bergsig township from across the property.



Fig. 5. The brick 'smoke house' the only standing structure, due for demolition

Methodology

The property was traversed and exposures and surface disturbances were examined for archaeological, palaeontological and other heritage materials.

Observations and Results

On a pediment slope without defined drainage lines runoff is by sheet flow. There are surface indications of such flow. There are lags of clasts of quartz forming patches where denuded of vegetation. No palaeontological remains associated with such exposures but there are some stone artefacts, all in quartzite none in quartz, visible in essentially two areas.

The first in the north west (Waypoints 405-410, Fig. 2) is a low-density dispersed scatter in which some six worked pieces were noted, none of distinctive typological form. One piece, a flake lacking a platform has scars showing a bladelike removal on the dorsal surface (Fig. 6), which is more typical of the Middle rather than the Earlier Stone Age. The second area in the south east corner of the property appears a more extensive scatter (Waypoints 412-416 with isolated outliers at Waypoints 421 and 422, Figs. 7-10). The scatter marked with abundant non-artefactual quartz clasts includes definitive Acheulian and Middle Stone Age artefacts that are of very different ages. The apparent densities are not at a level that would make the collection of a representative sample worthwhile nor, after close study of the context in the field, does the occurrence of artefacts suggest the presence of a significant site that would warrant further archaeological investigation. The mix of ages suggests a secondary context, which potentially lessens significance and

suggests a degree of transport by surface flow. The lack of associated organic remains also reduces significance.

The setting close on the margins of a major river valley is the typical situation where Acheulian artefact scatters with distinctive large bifacial artefacts widely in the Western Cape. Such occurrences, which are everywhere older than 250 000 years, would be predictable in surrounds of the Nels River at Calitzdorp and this occurrence can be noted as confirmation. The typologically classic Middle Stone Age piece is a triangular point with a thick faceted platform (Fig. 7) in a style suggestive of an age of some 80 000 years, evidencing a later human presence. Similar Middle Stone Age artefacts can occur in any landscape positions including valley surrounds because their makers were eurytopic (not terrain specialists). Again the find is worth noting.

Sources of Risk and Statement of Significance

It is unlikely that development will impact on any palaeontological or historical resources. The development will destroy any surficial scatters of Stone Age artefacts. The significance of the occurrences located in this survey is rated as medium to low, worthy of recoding but not of further investigation. However, the scatter marked by WP 411-16 is a specific area that can be monitored by the environmental monitor for any increase in the density of artefact finds when construction starts.

Recommended Mitigations

The specific recommendation is made that environmental monitoring during development give specific attention to the south east corner of the property and any possibility that the artefact occurrence there may prove denser and more extensive than seems probable from surface indications.

The general recommendation is that should any excavations by chance uncover buried palaeontological or archaeological materials including human remains that Heritage Western Cape is notified (Mr N Wiltshire, Heritage Resource Management Services, HWC, Private Bag X9067, Cape Town 8000, Tel:021 483 9743, Fax:021 483 9842, nwiltshire@pgwc.gov.za).



Fig. 6. Waypoint 406, on the north west margin of the property, flake with blade-like dorsal removals that is typologically Middle Stone Age.



Fig. 7. Waypoint 415, on the south east corner of the property, typologically diagnostic short triangular point with patterned dorsal scars and faceted platform in quartzite resting on a surface among clasts of unworked quartz.



Fig. 8. Waypoint 416, on the south west corner, large discoidal bifacial artefact that together with other bifacial pieces in the area of the scatter can be referred to the Acheulan of the Earlier Stone Age. Again the surrounding material is quartz clasts and the context appears to be the result of a wash of material due surface runoff.

List of numbered Waypoints associated with artefact finds:

North west area (Fig. 2)	Co-ordinates
405 Quartzite flake with plain platform –	S33.51761 E21.66685
406 Quartzite flake with no platform, blade-like dorsal scars-	S33.51843 E21.66782
408 Quartzite pointed flake, dorsal scars –	S33.51842 E21.66782
South east area (Fig. 2, 9)	
412 Quartzite, butt of bifacial Acheulian handaxe –	S33.52119 E21.67449
413 Quartzite, spit cobble –	S33.52123 E21.67445
414 Quartzite, large cortical flake (Acheulian) -	S33.52108 E21.67478
415 Quartzite, (Fig. 7), Middle Stone Age point –	S33.52105 E21.67484
416 Quartzite, (Fig. 8), discoidal biface (Acheulian) –	S33.52111 E21.67503
Outliers on the western side (Fig. 2, 10)	
421 Quartzite, fragment of small biface (Acheulian) –	S33.51874 E21.67276
422 Quartzite, flaked chunk (Acheulian) –	S33.51845 E21.67252

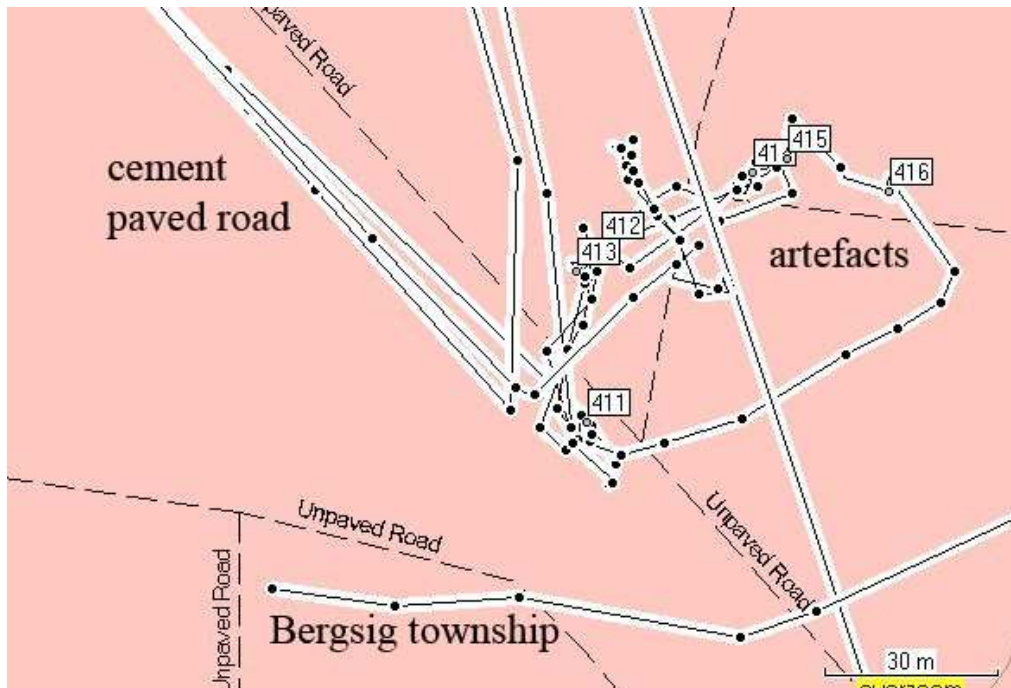


Fig. 9. Detailed view of numbered Waypoints related to the scatter of artefact finds on the south west corner of the property (412-416). This is the location that merits environmental monitoring in the construction phase.



Fig. 10. Shows the relationship of the artefact scatter (WP412-416) and outliers (WP421 & 422) to the Bergsig township and the south west corner of the property