PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED WATER PIPELINE FROM THE HERMANUS RIVER TO SERVE PORTIONS 7 & 8 OF THE FARM HERMANUS RIVER NO. 542 CALEDON

Prepared for

SITE PLAN CONSULTING

Client: Hermanus Valley Trust and the Erwees

Ву

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Executive summary

Site Plan Consulting, on behalf of Hermanus Valley Trust and the Erwees requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment for the proposed construction of a water supply pipeline from the Hermanus River, to serve Portions 7 and 8 of the Farm Hermanus River No. 542 (Caledon District), in the Western Cape Province.

The following works are planned:

- A proposed (informal) access road
- A proposed concrete weir at the Hermanus River
- A proposed delivery pipeline

The proposed pipeline route crosses State Land that falls within the Kogelberg Biosphere Reserve and private land that is zoned Agriculture.

An alternative pipeline route alongside the Highlands Road has also been proposed.

The proposed pipeline is nearly 2.5 kms long.

The extent of the proposed development (a linear development exceeding more than 300 m in length) falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act (No. 25 of 1999).

The aim of the study is to locate and map archaeological heritage sites and 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.

No archaeological heritage remains were located in the proposed and proposed alternative pipeline route, and among the proposed associated works.

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

With regard to the proposed construction of an underground water pipeline from the Hermanus River (including the proposed construction of a concrete weir and the proposed construction of an access road), to serve Portions 7 and 8 of the Farm Hermanus River No. 542, the following recommendation are made:

- The project should be allowed to proceed as planned.
- Should any human remains be exposed or uncovered during excavations for the pipeline, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

1. INTRODUCTION

1.1 Background and brief

Site Plan Consulting, on behalf of Hermanus Valley Trust¹ and the Erwees requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment for the proposed construction of an underground water pipeline from the Hermanus River, to serve Portions 7 and 8 of the Farm Hermanus River No. 542 (the Applicants Farm), in the Western Cape Province.

The following works are planned.

- A proposed (informal) access road
- A proposed concrete weir at the Hermanus River
- A proposed delivery pipeline

The proposed pipeline route crosses State Land that falls within the Kogelberg Biosphere Reserve and private land that is zoned Agriculture.

An alternative pipeline route alongside the existing Highlands Road has also been proposed.

The proposed pipeline is nearly 2.5 kms long.

The extent of the proposed development (a linear development exceeding more than 300 m in length) falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act.

The aim of the study is to locate and map archaeological heritage sites and 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.

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 and proposed alternative pipeline route;
- to identify and map any sites of archaeological significance within the proposed and proposed alternative routes;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed and proposed alternative routes;
- 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 and proposed alternative routes.

¹ Hermanus Valley Trust is represented by Site Plan Consulting (Att: Mr Neville van der Westhuizen) PO Box 28, Strand, 7139. Fax (021) 85 44 260.

3. THE STUDY SITE

A locality map is illustrated in Figure 1.

The site is located at S° 34 17 65.0 E° 19 97 08.2 (set on map datum WGS 84).

An aerial photograph of the study area indicating the proposed and proposed alternative pipeline routes and associated works are illustrated in Figure 2.

Water will be transported from a concrete weir on the Hermanus River (Figure 3), via an underground pipeline to the existing Mt Horeb quarry (Figures 4 & 5). From the quarry, the pipeline will transport water to a proposed storage dam on the Farm Hermanus River No. 542. The slightly downhill route across Mt Horeb Farm comprises virgin Fynbos, on highly weathered deep sandy gravels and quartzite. Across Honingklip Farm, the route is located within an existing fire-break and well-used farm roads, until the applicant's property where the final section of the route is located within an existing farm road (Figures 6-9).

A proposed alternative pipeline route (and concrete weir) is located directly alongside the existing Highlands Road (Figures 10-12 and Refer to Figure 2), and follows a course similar to the proposed route.

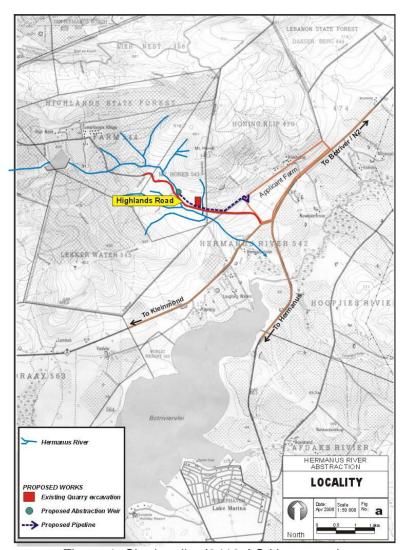


Figure 1. Site locality (3419 AC Hermanus)

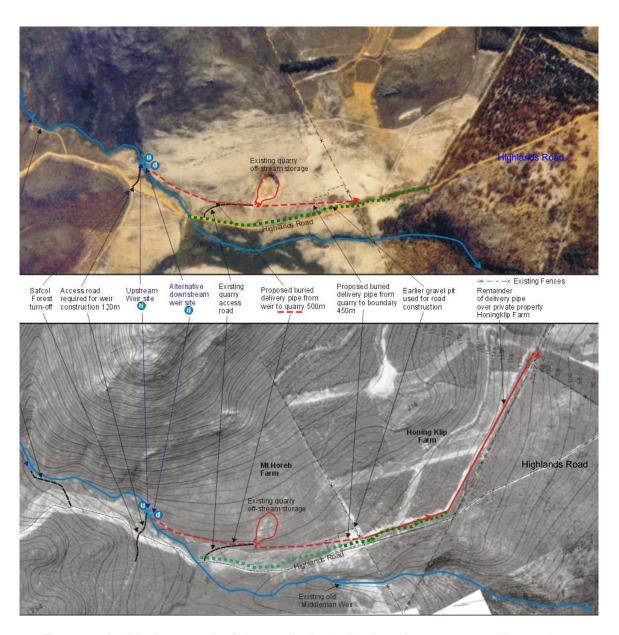


Figure 2. Aerial photograph of the study site indicating, the extent, position and alignment of the proposed works. The proposed alternative pipeline route (in green) alongside the Highlands Road is also indicated.



Figure 3. View of route facing southeast from the proposed concrete weir. Arrow indicates Highlands Road



Figure 4. View of route facing west from Mt Horeb Quarry.

Arrow indicates Highlands Road



Figure 5. Mount Horeb Quarry.



Figure 6. View of route facing south east from Mt Horeb Quarry. Highlands Road is to the right of the plate.



Figure 7. Proposed route in fire break on Honing Klip Farm



Figure 8. Proposed route in farm road on Honingklip Farm.



Figure 9. Proposed route in farm road on Honing Klip Farm



Figure 10. Proposed alternative route alongside Highlands Road



Figure 11. Proposed alternative route alongside Highlands Road



Figure 12. Proposed alternative route alongside Highlands Road

4. APPROACH TO THE STUDY

4.1 Method of survey

The approach followed in the archaeological study entailed a foot survey of the proposed and proposed alternative pipeline routes, including and assessment of the associated infrastructure.

A desktop study was also undertaken.

The site visit and assessment took place on the 8th of May 2006.

4.2 Constraints and limitations

There were no constraints or limitations associated with the proposed project, although a 950 m long portion of the proposed route across Mt Horeb Farm comprises fairly thick Fynbos, resulting in relatively low archaeological visibility.

4.3 Results of the desk-top study

Several archaeological studies in the Bot River area have yielded mixed results.

Low-density scatters of ESA tools were located during an assessment of the Arabella Fynbos Golf Resort (Kaplan 2002). An assessment of an overhead powerline between Bot River and Hermanus yielded a handful of ESA and MSA tools in farmlands east and west of the R43 (Kaplan 2004), while a study of Benguela Cove, a housing development on the east bank of the Bot River recorded high density scatters of ESA tools, including hand axes and other formal tools (Kaplan 2003a). A rare Stone Age silcrete quarry site was also located alongside the R43, on land set aside for a proposed Equestrian and Polo Estate (Kaplan 2003b). Low-density scatters of ESA tools were also located during the same study.

5. LEGISLATIVE REQUIREMENTS

5.1 The National Heritage Resources Act (Act No. 25 of 1999)

...the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development exceeding 300 m in length, requires an archaeological impact assessment in terms of Section 38 of the National Heritage Resources Act (No. 25 of 1999).

5.1.2 Archaeology (Section 35 (4))

No person may, without a permit issued by the SAHRA or Heritage Western Cape, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

5.1.3 Burial grounds and graves (Section 36 (3))

No person may, without a permit issued by SAHRA or Heritage Western Cape, destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority.

6. RESULTS OF THE IMPACT ASSESSMENT

No archaeological heritage remains were located during the study of the proposed and proposed alternative pipeline route, and the associated works (i.e. access road and concrete weirs).

7. IMPACT STATEMENT

The impact of the construction of a proposed water supply pipeline (including associated infrastructure) from the Hermanus River to serve Portions 7 and 8 of the Farm Hermanus River No. 154, on important archaeological heritage remains is likely to be very low.

The probability of locating significant archaeological heritage remains during implementation of the project is likely to be improbable.

It is unlikely, but human burials may be exposed or uncovered during proposed bulk earthworks and excavations for the pipeline.

8. CONCLUDING STATEMENT

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 development activities.

9. RECOMMENDATIONS

With regard to the proposed construction of a water supply from the Hermanus River to Portions 7 and 8 of Hermanus River Farm (Caledon District), the following recommendations are made.

- The project should be allowed to proceed as planned.
- Should any human remains be disturbed, exposed or uncovered during excavations for the proposed pipeline, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

10. REFERENCES

Kaplan, J. 2004. Archaeological scan of the proposed Houhoek to Hermanus double circuit 66Kv overhead powerline and extension to the Afdaks switching station. Report prepared for Eskom Land Development. Agency for Cultural Resource Management.

Kaplan, J. 2003a. Phase 1 Archaeological Impact Assessment proposed rezoning and subdivision Portion 4 of the Farm No. 781 Caledon. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Kaplan, J. 2003b. Phase 1 Archaeological Impact Assessment. Proposed rezoning and subdivision Portion 8-10 of the Farm Afdaksrivier, No. 575 Caledon. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Kaplan, J. 2002. Archaeological study, Arabella Fynbos Golf Resort. Report prepared for Dennis Moss Partnership. Agency for Cultural Resource Management.