

**HERITAGE IMPACT ASSESSMENT OF NINE PROPOSED
BORROWPIT DEVELOPMENTS FOR THE GANSBAAI-
BREDASDORP ROAD UPGRADE PROJECT, WESTERN CAPE**

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

Prepared for:
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THE INDEPENDENT PERSON WHO COMPILED A SPECIALIST REPORT OR UNDERTOOK A SPECIALIST PROCESS

I **Timothy Hart and Lita Webley** as the appointed independent specialist hereby declare that I:

- act/ed as the independent specialist in this application;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- have and will not have no vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Note: The terms of reference must be attached.


Signature of the specialist:

ACO Associates cc
Name of company:

2 August 2012
Date:

EXECUTIVE SUMMARY

ACO Associates cc was appointed by CCA Environmental (Pty) Ltd, on behalf of the client, the Department of Transport and Public Works in the Western Cape, to undertake a Heritage Impact Assessment for nine (9) proposed borrow pits for the Gansbaai-Bredasdorp road upgrade project.

The location of the proposed nine borrow pits was surveyed by Tim Hart (13 April) and Lita Webley (26 June 2012). The borrow pits are positioned in a mix of pastures and natural veld, near local farm roads. The borrow pits are to be used for sands, laterite and various surface materials.

- None of the proposed borrowpits will be visible from the Main Road 262 between Gansbaai and Bredasdorp; Some of the borrowpits are located along the Divisional Road 1205 and will be visible when open, however impacts to the landscape and setting will not occur after rehabilitation.
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- Eight of the sites contained no physical heritage resources and very low impacts to heritage resources are expected with the construction of the borrowpits;
- Borrowpit 21.0L is located in proximity to the Fourie family cemetery and it is recommended that a buffer of 50 m is implemented around the cemetery;
- Borrowpits tend to be fairly shallow in depth, and once re-vegetated would not significantly change the landscape qualities of the area. Borrow pits excavated for the 2006 road upgrade have left no impact on the rural landscape.

The position of the proposed borrow pits is supported from a heritage perspective. No further work is required.

1. INTRODUCTION

ACO Associates cc (ACO) was appointed by CCA Environmental (Pty) Ltd, on behalf of the client, the Department of Transport and Public Works in the Western Cape, to undertake a Heritage Impact Assessment for nine (9) proposed borrow pits which are required for Phase 3 of the Gansbaai-Bredasdorp Road Upgrade Project (Figure 1).

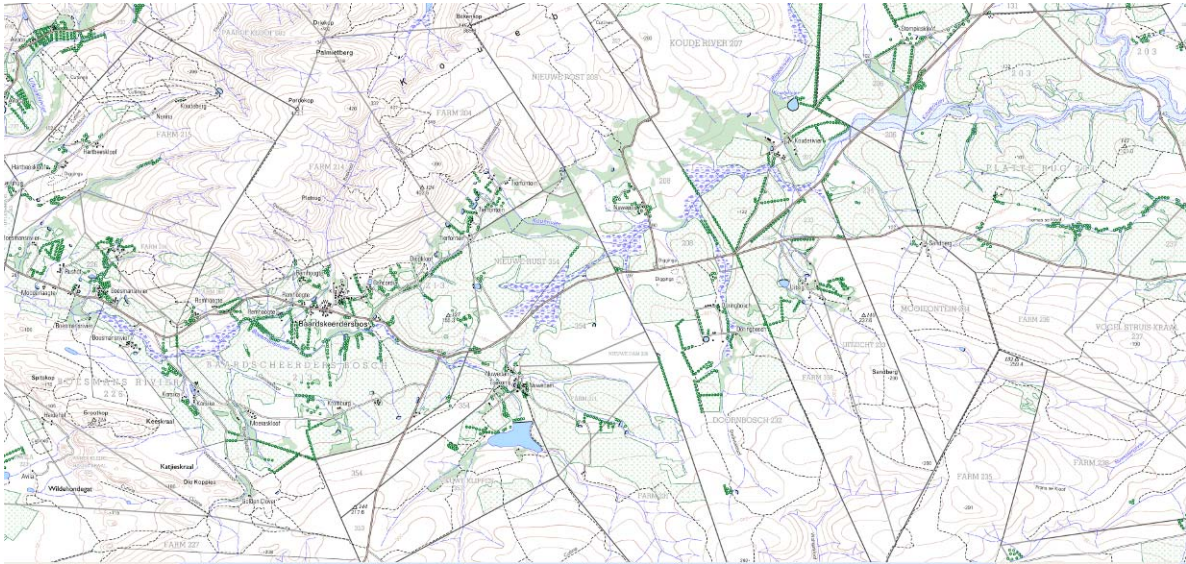


Figure 1:The study area (excerpt from 1:50 000 3148 DA Chief Directorate: Surveys and Mapping).

2. DEVELOPMENT PROPOSALS

In October 2005 the Western Cape Government: Department of Transport and Public Works received approval from the Department of Environmental Affairs & Development Planning) DEA&DP to upgrade a portion of Divisional Road (DR) 1205 and Main Road 262 between Gansbaai and Bredasdorp to surfaced road standard. The approval also included the development of a number of borrow pits. To date two phases of the upgrade have been completed and the Heritage Impact Assessment (HIA) for this was undertaken by Hart (2006) of the Archaeology Contracts Office.

The next phase (i.e. Phase 3) of the road upgrade is anticipated to commence in the last quarter of 2012 / first quarter of 2013. In order to do so, additional road building material is required (including sub-base, selected subgrade and fill material). The Western Cape Government: Department of Transport and Public Works is thus proposing to develop an additional nine (9) borrowpits along the DR 1205 between Uilenkraalsmond (Stake Value 7.8) and Elim (Stake Value 37.4). The closest borrowpit to Baardskeerdersbos is ± 2 km and the closest borrowpit to Elim is ± 1 km (Figures 1&2).

The following nine (9) borrow pits have been identified for purposes of the upgrade.

Table 1: Location of proposed borrowpits

Borrow Number	Pit	Property Name	Property size (ha)	Volume (m³)	Co-ordinates: Latitude (S)/ Longitude (E)
BP 14R		Portion 16 of Farm Boesmans Rivier 226	88 ha	Approx. 30 000m ³	S 34 35 40.81 E 19 31 53.79
BP 14.2R		Portion 16 of Farm Boesmans Rivier 226	88 ha	Approx. 15 000m ³	S 34 35 43.05 E 19 32 00.48
BP 20.4L		Portion 7 of the Farm Baardscheeders Bosch 213	140 ha	Approx. 9 000m ³	S 34 35 15.39 E 19 35 56.80
BP 20.5L		Portion 7 of the Farm Baardscheeders Bosch 213	140 ha	Approx. 22 000m ³	S 34 35 02.87 E 19 35 49.49
BP 20.7L		Portion 5 of the Farm Tierfontein 204	34 ha	Approx. 10 000m ³	S 34 34 32.80 E 19 35 59.23
BP 21 L		Portion 9 of the Farm Baardskeedersbos 213 & Portion 7 of the Farm Baardscheeders Bosch 213	24.5 ha 140 ha	Approx. 15 000m ³	S 34 34 52.85 E 19 35 12.39
BP 28R		Farm Uitsig	600 ha	Approx. 15 000m ³	S 34 34 45.70 E 19 40 34.21
BP 28A		Farm Uitsig	600 ha	Approx. 60 000m ³	S 34 35 23.10 E 19 40 08.86
BP 34L		Remainder of Farm Vogel Struis Kraal No 237	2 476 ha	Approx. 16 000m ³	S 34 34 58.50 E 19 44 36.53

3. TERMS OF REFERENCE

The ACO was instructed to determine the impact of the proposed borrow pit excavation on heritage resources between west of the hamlet of Baardskeedersbos and the mission station of Elim.

The assessment includes:

- A site visit and desktop study to determine the heritage resources on the affected properties;
- The rating of significance of the heritage resources;
- An assessment of whether the proposed development would result in a negative impact on the heritage resources; and
- Recommendations for mitigation if necessary.



Figure 2: Location of the borrowpits with respect to Pearly Beach and Baardskeerdersbos.

4. LEGISLATION

The National Heritage Resources Act, No 25 of 1999 (Section 38 (1)) makes provision for a compulsory notification of the intent to development when any development exceeding 5000 m² in extent, or any road or linear development exceeding 300m in length is proposed.

The NHRA provides protection for the following categories of heritage resources:

- Landscapes, cultural or natural (Section 3 (3))
- Buildings or structures older than 60 years (Section 34);
- Archaeological Sites, palaeontological material and meteorites (Section 35); and
- Burial grounds and graves (Section 36).

5. RECEIVING ENVIRONMENT

The borrow pits would be located on the coastal plains in an area characterised by rolling hills and bounded to the north by the Koueberge.



Plate 1: View of the general area around Baardskeerdersbos.

5.1 Archaeological Background

The coastal plain of the Overstrand is considered to have a very rich archaeological heritage with the range of archaeological sites including shell middens, open sites, cave sites and fish traps. Evidence indicates that this coastline and the adjacent interior were occupied by humans from at least the Middle Stone Age (Die Kelders) through the Later Stone Age to the historic times.

Archaeological evidence indicates that the San were the original inhabitants of the area and they and their ancestors occupied the region for more than 30 000 years. Around 2000 years ago the Khoekhoen, a pastoralist group with cattle and sheep, settled in southern Africa. The Khoekhoen traded livestock with the VOC Company outposts established in the Overberg during the early 18th century.

Research during the 1970s by archaeologists at the South African Museum provided the first detailed insights into the prehistory of the area. Excavations by F Schweitzer (1979) at Die Kelders near Gansbaai produced early evidence for the introduction of pottery and domestic stock around 2000 years ago. Other excavations were carried out at Byneskranskop 1 (Schweitzer & Wilson 1982) at Uilenkraals River and again revealed a sequence of occupation extending back several thousand years.

Excavations of shell middens at Pearly Beach by Avery (1974) showed that the remains of early domestic sheep were to be found in some of the coastal middens as well. During a survey for the Bantamsklip Nuclear 1 site, Hart (2010) noted that Later Stone Age sites were observed in caves and rock shelters in the limestone complex inland of Bantamsklip and therefore more sites like Byneskranskop in this general area can be anticipated.

The Overstrand Heritage Survey (OHLG 2009) notes that due to a lack of any systematic surveys, very little is known about the archaeology of the inland areas.

5.2 Historical Background

Stock posts were granted east of Hermanus by the 1730's while the first hunting licences were granted in the Baardskeerdersbos area by the early 18th century. Baardskeerdersbos is located on the tributary of the Boesmans river. The abundance of water and good grazing in the valley would have made it a good place for temporary Khoekhoen stock settlements, and for the original loan farm granted around 1729/30. It is considered a rural settlement of historical significance illustrating the expansion from a modest VOC loan farm into a town (OHLG 2009:106).

By the mid 18th century, European farmers were distributed across the landscape and the Khoekhoen, who had been using the coastal plains to graze their livestock were gradually forced out of the most desirable areas. Their numbers were decimated by smallpox and by the mid 19th century their social structure had collapsed and they were either living on mission stations (such as Elim, Genadendal and Suurbraak) or had become employed on farms. The area is strongly linked to the coast, with a tradition of the utilization of coastal resources such as fishing, cobble, shell fish collecting and guano collecting as well the collection of shipwrecked material. The latter was often used in the construction of vernacular buildings in the area.

Should we not include more about Elim?

5.3 Cultural Landscape

Part of the Overstrand Heritage Survey (OHLG 2009) consists of a landscape character assessment by Bernard Oberholzer Landscape Architect. In his baseline survey of landscape type and character, he mapped prominent landscape features and scenic resources, scenic routes, protected areas such as nature reserves, rural farmland and settlement patterns forming part of the cultural landscape.

He has characterised the Overstrand as having 3 generic landscape types. The geology of the area around the proposed borrow pits has resulted in landforms which are described as "Mostly rolling topography with gentle slopes, incised by small rivers" (OHLG 2009:33).

The settlement pattern is described as "Mainly agricultural use in response to the productive soils and gentle slopes. Small, scattered settlements, such as those found at the Baardskeerdersbos". The farms in this valley include dairy and some are involved in tourism initiatives such as guest accommodation (OHLG 2009:34). This rural farmland contributes to the character and ambience of the Overstrand and has historical meaning relating to the origins of the region.

6. SURVEY METHODS

The property was visited by Tim Hart on the 13 April 2012 (as part of a team site visit) and Lita Webley on the 26 June 2012. The survey was conducted on foot, and a Garmin GPS unit (60CSx) was used to record sites. All heritage site locations were recorded with the GPS, photographed and their significance rated. No archaeological material was removed from the project area, but recorded and photographed *in situ*.

6.1 Limitations

There were no limitations to the survey. In some cases the survey area was covered in fairly dense vegetation cover (e.g. BP 28.OA) but it was still possible to obtain an impression of the archaeological potential.

7. RESULTS OF THE SURVEY

The summary of findings is presented in Table 2. No archaeological material was identified. A single family cemetery, belonging to the Fourie family, was located in proximity to BP 21.OL. The cemetery is not directly threatened by the proposed borrowpit but it is recommended that a suitable buffer should be implemented to prevent damage.



Plates 2 & 3: View of the Fourie family cemetery near BP 21.OL.

Table 2: Summary of borrow pits and their significance

Borrow pit number	Description of Findings	Heritage Significance	Mitigation
BP 14R	Mostly ploughed land, steep slope, loose surface stone is non-artefactual.	Low	None

BP 14.2R	Dense natural and alien vegetation, steep slope. No artefactual material identified.	Low	None
BP 20.4L	Partly under pasture and partly under natural veld. No artefactual material identified.	Low	None
BP 20.5L	Newly ploughed field, visibility poor due to loose soil, no artefactual material identified.	Low	None
BP 20.7L	Mixture of alien and indigenous vegetation. No artefactual material identified.	Low	None
BP 21.0L	Mixture of alien and indigenous vegetation, dense in places, on a hill slope, no artefactual material identified. Existing gravel quarry. Cemetery present. A protected vernacular building present on the farm, but will not be affected by the proposed activity.	Cemetery = High	Implement a 50m buffer from Fourie family cemetery
BP 28R	Mostly ploughed land, loose surface stone, no artefactual material identified.	Low	None
BP 28A	One half of the borrow pit under a mixture of indigenous and alien vegetation, the other half under pasture. No artefactual material identified.	Low	None
BP 34L	Agricultural land, no artefactual material identified.	Low	None

8. ASSESSMENT OF SIGNIFICANCE AND RECOMMENDATIONS

An assessment was conducted of the nine borrow pits required for the upgrade of the road.

The following was considered:

Sources of negative impact

- Borrow Pit 21.0L will be located in proximity to the Fourie family cemetery (please indicate distance). This has the potential to result in damage to the cemetery;
- Excavation of the landscape for the borrow pits would cause unsightly scarring which will endure until re-habilitation is complete. Judging by the high success of the rehabilitation earlier borrowpits in the area, this impact should be considered of low significance.

Possible positive impacts

- Neutral

Mitigation

- A 50 m buffer should be implemented around the Fourie family cemetery to ensure that there is no impact;

- Mitigation should be of a general nature to ensure that borrow pits are rehabilitated, and alien growth is controlled.

Heritage issues with respect to the borrow pits are not of major concern as no significant material has been located or issues identified on any of the borrow pits.

Table 3: Assessment of Impact on Heritage Resources for all nine borrowpits

CRITERIA	WITHOUT MITIGATION	WITH MITIGATION
Extent	Local	Local
Duration	Short term	Short term
Intensity	Low	-
Probability	Improbable	Improbable
Confidence	High	High
Significance	Insignificant	Insignificant
Cumulative impact	Low	Very Low
Nature of cumulative impact	Scarring of the landscape, resulting in visual impact	Low
Degree to which impact can be reversed	Low	High
Degree to which impact may cause irreplaceable loss of resources	Visual scarring of the landscape will persist for medium to long term without rehabilitation. Physical damage to cemetery is possible.	Rehabilitation will ensure that landscape qualities are retained. Buffer zone will protect cemetery
Degree to which impact can be mitigated		Mitigation is likely to be successful

It is expected that impacts to heritage resources will generally be of very low significance. The borrow pits are of fairly limited in extent. They tend to be fairly shallow in depth, and once re-vegetated and contoured would not significantly change the landscape qualities of the route. The overall impact to the landscape and setting is considered to be of low significance.

- Excavation of borrow pits would have a low intensity impact of relatively short duration. Impacts are considered to be very low and do not require mitigation, apart from in the case of BP 21.0L which will require a setback to buffer it from a nearby cemetery.

9. CONCLUSIONS

The location of the proposed nine borrowpits was surveyed by Tim Hart and Lita Webley. The borrow pits are positioned in a mix of pastures and natural veld, near local farm roads.

None of the proposed borrowpits will be visible from the Main Road 262 between Gansbaai and Bredasdorp, but some of those along the DR1205 will be visible during the period of operation of the borrowpits.

None of the sites contained any physical heritage resources. An overall low and reversible impact to landscape and setting is expected. Once the borrowpits have been contoured and re-vegetated, they will not significantly change the landscape qualities of the area. Borrowpit

21.0L is located in proximity to the Fourie family cemetery and it is recommended that a buffer of 50 m is implemented around the cemetery.

The position of the proposed borrowpits is supported from a heritage perspective. No further work is required.

10. REFERENCES

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