

EXECUTIVE SUMMARY

The Archaeology Contracts Office of the University of Cape Town was appointed by CCA Environmental to conduct a Heritage Impact Assessment (as part of an EIA) of the upgrading of the road from Gansbaai to Bredasdorp. The ACO was instructed to determine impacts that may result from upgrading of bridges, creation of cuttings, deviations from the present alignment, borrow pits as well as the heritage implications of the action on the hamlet of Baardskeerdersbos and the historic mission station of Elim.

Elim

Elim, a private town and a provincial heritage site is considered to be of high heritage significance and therefore sensitive to change, not only through the direct physical impact but also the action of increased accessibility to tourism which could result in inappropriate development. While positive economic impacts of the upgrade are valued, this has to be tempered with careful development planning and heritage conservation controls otherwise high negative impacts could result.

Changes to the core conservation area of Church Street will have to be permitted by Heritage Western Cape and a specialised urban designer appointed to assist in treatment of road edges, surface and the proposed modification of the traffic island area.

Baardskeerdersbos

A small rural hamlet provisionally given grade 3 conservation status will experience very low impacts from the proposed resurfacing of the road, however, loss of remoteness and greater accessibility could give rise to increased development, some of which could be inappropriate. Development control along with appropriate heritage management measures will need to be put in place to temper this.

The route

In general terms the route is of high scenic value. The proposed upgrade will decrease its sense of remoteness, however sensitive engineering to maintain its scenic value and compliment rather than clash with the local landscape qualities should go some way towards mitigating against this and maintain its identity as a secondary road.

- The Uilenkraals River Bridge is protected by the National Heritage Resources Act therefore its demolition will have to be strongly motivated for. The existing bridge is low key and sympathetic to the landscape. It would need to be replaced by a structure of similar qualities.
- The impact of increased cuttings is considered to be low.
- The impact of limited deviations from the current alignment is considered to be low.
- Excavation of borrow pits will have a low impact of relatively short duration. Only one archaeological site was found in any of the target areas. This should be mitigated through archaeological sampling.

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1 INTRODUCTION

The Archaeology Contracts Office of the University of Cape Town was appointed by CCA Environmental to assess the possible impacts to heritage of upgrading the R317 between Gansbaai and Bredasdorp. The road is untarred and passes through a variety of scenic landscapes as well as the historic community of Elim and the small hamlet of Baardskeerdersbos. It is expected that the upgrading of the road will boost the local tourism industry as well as assist agricultural development. The proposed changes will result in some very minor changes to the alignment, lowering of some of the steeper gradients by means of cut and fill operations, as well as the upgrading of bridges and culverts. Virtually all activities will take place within the existing servitude. The road will be tarred throughout its length, but will not have a pull-over shoulder. Another physical result of the operation will be the extension and creation of borrow pits at regular intervals to provide sub-base material.

While it is expected that the direct physical impacts the heritage materials such as archaeological sites and features will be relatively limited, the impacts on the heritage qualities of the surrounding landscape and the social values attached to the communities of Baardskeerdersbos and Elim will be rather more profound.

1.1 Terms of reference

- Provide a description of the archaeology and cultural history of the study area and identify any sites of archaeological or cultural significance along the road alignment, paying specific attention to the town of Elim.
- Provide a conservation importance rating of any sites of archaeological or cultural significance along the road alignment and assess the significance of any impacts resulting from the proposed road upgrading.
- Identify practicable mitigation measures to reduce any negative impacts as a result of the proposed study and/or to enhance any potential benefits.
- Provide guidance for the requirement of any permits from the South African Heritage Resources Agency that might become necessary.
- Assess the impact of borrow pit excavation on heritage material.

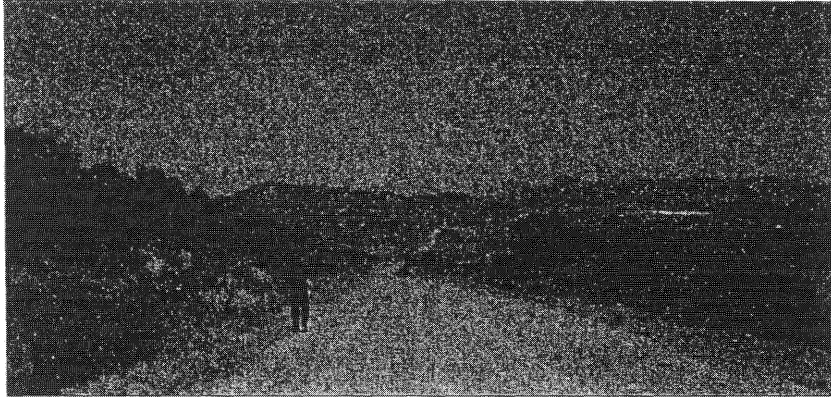
1.2 Method

The study area was inspected by ACO staff on two separate occasions specifically to visit Elim and Baardskeerdersbos and inspect each of the 15 proposed borrow pits as well as bridges, cutting and alignments. In addition, outside expertise was consulted with respect to determining impacts to the towns on the route.

No limitations to the study were encountered.

1.3 Description of the environment

The untarred road between Gansbaai and Bredasdorp is of high scenic quality,



traversing exceptionally beautiful Overberg rural countryside, and passing through such hamlets as Baardskeerdersbos and the mission settlement of Elim. The gravel road follows the contours of the landscape, is characterized by twists and bends and occasional minor cuttings (Plate 1). It passes over many minor culverts as well as the Uilenkraals River Bridge (built 1944), a typical secondary road bridge which has patinated itself into the natural environment. Towards Bredasdorp the landscape flattens somewhat creating vistas of open space and shallow wetlands. The undeveloped nature of route, the lack of modern intrusions and the dusty rural settlements along its way give the route a sense of remoteness and timelessness.

This route is clearly critical in terms of completing an important tourism route from Gansbaai to Bredasdorp (and Agulhas.) Although it is not foreseen that the road will have considerable heavy vehicle use other than day travelers and produce delivery, measures must be taken to ensure the protection of this landscape which would become more accessible by the upgrading of this dirt road. Increased accessibility could result in a variety of secondary impacts that would alter the character this rural area and threaten the very qualities for which it is currently appreciated.

1.4 Elim and Baardskeerdersbos

With new connectivity to the small rural settlements of Elim and Baardskeerdersbos, it is imperative that such management measures as are necessary are put in place to ensure that their new accessibility does not cause secondary negative impacts through inappropriate development. Furthermore the upgrading of the road within these hamlets must be carefully considered and executed.

In the case of Elim, its heritage significance is already recognized, but in the case of Baardskeerdersbos, this still needs to be properly assessed. As such it would be recommended that a separate study of Baardskeerdersbos be undertaken that looks into the history of this settlement and assesses its heritage significance. It is, however, envisioned that the principles relating to Elim may well be applied to Baardskeerdersbos.

Since Elim has been identified as one of the critical heritage considerations in this study, this is discussed in detail in the forthcoming pages.

2 ELIM

PROPERTY: Farm 237, Bredasdorp
OWNER: The Moravian Church of South Africa

Elim, which is one of the best preserved mission settlements, is situated in the Bredasdorp district on the farm Vogelstruys Kraal. Vogelstruys Kraal was granted in the 18th century.

2.1 Background

A Swedish missionary, Hans Peter Hallbeck, who was brought out to South Africa in 1817 was to be the person most directly responsible for the establishment of Elim. Partly due to the overcrowding of Genadendal, the Moravian missionaries were looking to establish a new settlement, and the choice of the Farm Vogelstruys Kraal was made. The inventory of the farm carried out by the missionaries on their purchase of the property indicates that there was a farmhouse (this is the existing building directly below the Church), outbuildings, and a small mill on the farm.

Hallbeck drew up sixty-seven regulations for the settlement, also laying down that only proper houses should be built, and that everyman that did so would receive the timber for the roof and 25 thaler (Swedish coinage). Each house was built to predetermined standards: 3 metres by 6 metres. By 1826 there were already 16 houses erected on the erven set out along Church Street from the *werf* end. The mill and the guesthouse were constructed in 1828, allowing the old farmhouse to be converted into a church until the current church was completed in 1835.

By 1827 the population had reached 100. It was only sometime after the emancipation of the slaves in 1834 that the effect was felt in Elim. The 1837 census indicates 416 inhabitants. This was to grow to 1241 by 1853 with the social after effects of the emancipation.

By 1970 there were 354 houses in the town. The historic mission core of Elim was declared a national monument in 1975 - the declaration included all the buildings that make up the *werf*, namely, the church, mill, mission, shop, guest house, homestead and manse. The village of Elim is managed in accordance with guidelines set out in the document "Elim Riglyne vir Bewaring" by Lucien Le Grange Architects and Town

Planners, October 1995." Church Street is considered to be the Core Area, and enjoys the tightest regulation in terms of heritage resource management.

The significance of Elim, however, lies in the settlement as a whole. Elim is unique in that both the mission *werf* and the village remain largely unaltered since the nineteenth century, and is listed as a "Grade A" category mission settlement in the Department of Environmental Affairs project on mission settlements. (Japha, Todeschini, Le Grange)

The entire farm on which the mission *werf* and the village are situated is still in the hands of the Moravian Church. Most of the farm remains *fynbos*, although parts of the farm are being cultivated in small lots by the inhabitants of the village.

2.2 The heritage significance of Elim

Elim is an exceptionally rich and vulnerable heritage resource. It is a historical mission settlement with a community drawn from two hundred years of comparative isolation set within the great beauty of the Overberg. Elim is arguably the best preserved Moravian Mission in South Africa. Not only is the *werf* exemplary in its authenticity, but the town planning and architecture is such that it is one of the best preserved historical rural settlements in South Africa. Such mission settlements provided refuge for the Khoekhoen displaced by European settlement and for runaway and freed slaves. They were places of education, and spiritual teaching, and have had a major influence on the development of our society.

The Mission *werf* still forms the center of the community and architecturally and spatially the settlement with its rows of small white-washed cottages has changed little in this time. Elim will be considered for National Heritage Site status in the future.

As with many of these early Moravian Mission settlements, poverty is a major problem. Job opportunities are scarce, with pensions often being the only source of family income. Subsistence farming on agricultural erven leased to residents is an important means of sustenance.

Recognizing the uniqueness of Elim and the potential for tourism to generate a desperately needed sustainable income, the people of Elim together with the local and regional authorities have been looking at opportunities for tapping this tourism potential. To this end the watermill has been developed as an attraction, and tearoom and guesthouse facilities have been developed within the *werf*. There is the tradition of meat processing as well as wild flower drying, which immediately provides products for sale.

Ironically, the qualities of remoteness and inaccessibility of Elim that make it unique and add to the potential tourism value of the place as a destination, act as a deterrent to visitors who often prefer not to drive long distances on dirt roads. On one hand, the tarring of the roads to Elim from Gansbaai and Bredasdorp will make Elim more accessible, while on the other, it will detract from the remote nature of this mission settlement, one of its attractive qualities.

2.3 Current Legal Heritage Status of Elim

- *Elim werf* is a declared Provincial Heritage Site, previously a National Monument
- Church Street Elim forms the Core Zone for heritage management in terms of the management system that is in place for the Elim Settlement. Guidelines for this have been drawn up and are in use.
- Elim together with other mission stations has been identified by SAHRA as a potential National Heritage Site serial nomination of Mission Stations
- Elim may be proposed in the future to the World Heritage Committee as a World Heritage Site in terms of a serial nomination of South African Mission Stations.

2.4 Possible impacts to Elim

Detailed explanation follows summary table

NATURE OF IMPACT Character, place, intangible heritage qualities and streetscape.	WITHOUT MITIGATION – ie without heritage conservation measures	WITH MITIGATION – with active measure to ensure conservative approach, minimal or sensitive change
EXTENT	Regional	local
DURATION	Permanent	Permanent
INTENSITY	High	low
PROBABILITY	Highly probable	Highly probable
CONFIDENCE	High	Medium
SIGNIFICANCE	Very high - negative	Low - negative

2.4.1 Church Street

Church Street is the main street of Elim, and is at its heart. It forms the point of arrival in the settlement as well as the point of departure, and often is the total experience of this important heritage resource by the passer-through. The Mission Church dominates and terminates the streetscape. A single regular parallel line of very simple domestic vernacular cottages lines the street. Thatched, whitewashed, quiet, bucolic.

The nature of Church Street was heavily impacted in the mid 20th century with its upgrading and associated leveling and tarring which saw Church Street undergo leveling cutting filling and formalization (see Plates 2-3). This is recognized in the Elim Structure Plan (1995) – "The effect was to alter the topography and character of the street". The street however remains quiet and tranquil, despite the wide black tarred street surface cutting through it.

Any traffic between Gansbaai and Bredasdorp is funneled through Church Street. The immediate impact of the proposed road upgrade will be its effect on this important streetscape, while secondary impacts, will ripple through the community and town. There is however an opportunity for significant potential positive impacts to be maximized, while the negative impacts will need management.

2.4.2 Likely impacts of upgrading Church Street.

2.4.2.1 Option 1 The No-Go Option

The need for the upgrading of the Gansbaai-Bredasdorp road has been identified by local and provincial government for a number of years. The problems of the existing road have been of concern to members of the community for a long time, and have been documented in a number of reports carried out on Elim. (Ontwikkelingsprofiel van Elim, March 2000, Overberg Distrikraad)

While any possible upgrading must be conditional to the appropriate mitigation against negative impacts and the implementation of positive measures, any argument that the upgrading of roads between Gansbaai and Bredasdorp by means of a tarred road surface cannot be justifiable or sustainable given the broader needs of the community and the well-being and development of the region, which desperately needs economic development and job opportunities.

At the same time, insensitive upgrading of the road without identifying and implementing suitable management and mitigatory measures could be devastating to Elim and the landscape by destroying the very scenic and heritage qualities that argue for increased accessibility. In other words, it is accepted that upgrading is necessary for the well being of the community and region. What is critical is how this is achieved.

2.4.2.2 Option 2 Possible Bypass to Church Street

The landscape of Elim is recognized for its importance in the *fynbos* biome, and provides an important source of sustainable income for the community. Any new road constructed as a bypass to Church Street, Elim could in itself have significant negative impacts on this landscape and no obvious bypass route exists within Elim Settlement itself. [The Elim community is proposing Waterkant Street as an alternative to Church Street].

Given the proposed upgrading, it would also be regrettable to miss the opportunity to enhance the current situation on Church Street and to improve some of the negative impacts of the last upgrading, or to miss the economic spin-offs of bringing passers-by into the town.

The experience of Mamre demonstrates how without concerted advertisement, and adequate preparation for hosting tourism, the proximity of a route to a potential tourism destination does by no means guarantee visitorship. Provided proper management and mitigation is developed, the opportunities of having the route pass through Elim rather than around it warrants exploration.

However, should proper mitigation and management not be put in place, the effect of upgrading the road could be devastating on Church Street Elim. The example of unbridled commercialization provided by Church Street, Tuibagh (see case example) or the "Blue Book" over engineered road development in Mamre or Swellendam (See case examples) illustrate scenarios where without proper mitigation and management, a bypass would indeed be preferable.



Plates 2 and 3 show Church Street, Elim as it is today and as it was at the end of the 19th century. Levelling of the road has resulted in an undesirable cut which has very much altered the streetscape and character off the village. The Church is and always was the focal point of the village. Gutters and channels were informal.

2.4.2.3 Option 3 Upgrading of Church Street

Provided mitigation is carried out, the opportunity taken to enhance Church Street, and management systems are put in place, this would be the preferred option. Impacts of the proposed development range across a broad spectrum of issues involving the primary impacts of construction work to the secondary impacts of commercialization and community identity.

2.4.2.4 Likely Causes of Negative Impact

Negative impacts may be generally due to the following activities:

- the physical upgrading of the road and how it is treated
- the increase in vehicular traffic and
- increase in accessibility of settlement
- increase in inappropriate commercial activity which threatens the heritage significance of the "place"

While the upgrading of the road linking Elim to Bredasdorp and Gansbaai will without doubt cause an increase in traffic passing through Elim, given the physical location of Elim far south of any main route, it is likely that the nature of the additional traffic will be recreational. Apart from agriculture (dairy trucks) there is currently no heavy industry that will use this road for lorry transport to any significant degree. There will be a very likely increase in motor cars and tourist coaches, both of which with proper management have the potential to create positive benefits for the community.

2.4.2.5 Areas of Potential Negative Impact

Sense of Place

- Loss of sense of remoteness
- Loss of sense of arrival and discovery
- Loss of rural community identity

Physical Impacts

- Visual impact of road surface
- Possible widening of the road
- Over formalization of road edges
- Over formalization of pavements
- Increased traffic as an intrusion in the landscape

Secondary Impacts

- Loss of a sense of community if Elim becomes a "drive-through derp".
- Church Street losing its residential nature to business with increased pressure for quick stop journey related businesses such as cafes and service stations
- Over-commercialization of Elim
- Signage
- Advertising signs
- Increase in noise pollution
- Reduction in safety in a residential street

The extent of negative impact will depend on

- the treatment of any road upgrading carried out
- the quantity and type of traffic that will be generated by the tarring of this connecting road, and
- the mechanisms put in place to manage the negative impacts
- The mechanisms put in place to positively harness the opportunities created by the work being proposed, and by increased accessibility

2.4.2.6 Areas of Potential Positive Impact

- Greater road safety between Elim and Gansbaai and Elim and Bredasdorp
- Better accessibility to Elim, Bredasdorp and Gansbaai
- Overall better infrastructure for tourism in the region
- Greater opportunity for income generation and social and economic upliftment
- Improvement in the landscaping and treatment of the existing Church Road, Elim

2.4.3 Proposed Mitigatory Measures for Elim

It is critical that careful attention is paid to not only minimizing the physical impacts of an upgraded road through Elim, but that any upgrading improves the current unacceptable impact of the existing blacktop road. With the upgrading of the road the opportunity must be taken to look at improving the current negative qualities of the road in order to enhance the streetscape and experience of Elim. By doing this, one will be adding to the critical mass of Elim as a potential heritage tourism destination.

In the past, the National Monuments Council has tried to conserve the sense of arrival in Elim and new development in Church Street has been strongly resisted. The sense of transition from open countryside into an immediate historical surrounding without having to go through any area of new development first is considered to be very important.

The travelers arrival in Elim, the experience driving down Church Street, and the exit from Elim are all experiences which need careful consideration and treatment, and with little additional input (such as the change of surface treatment to some kind of brown top and simple landscaping improvements) can be enhanced to the benefit of the

community. At the same time the opportunities must be made for passers through to stop in Elim, and for low impact commercial activity to take place in a managed way. Any upgrading of the road should address the principles of enhancing the rural quality of the experience of Elim. As such the treatment of the road should be informal, and aimed at reducing the impact of the road:

2.4.3.1 Specific Recommendations

Road Treatment and Signage Recommendations

- There should be a change in road surface colour for Church Street, and the use of a brown surface – either a concrete aggregate surface or similar effect should be implemented
- The road should be no wider than the existing road and should be reduced where possible
- Reviewing the existing topography of the road: there are areas of severe cut that impact the informal historical nature of the street. Opportunities should be sought for improving this or for improved landscaping to improve the effect
- Traffic calming measures such as speed bumps should be put in place
- Water runoff and street edges to be carefully handled and remain informal
- If required, the provision of sidewalks should be very carefully designed and be informal
- Planting and maintenance of avenue of fig trees that traditionally lined the streets (a programme of replanting took place at the end of the 1990s. The success of this needs to be reviewed)
- Aboveground services, such as electricity and telephone should be buried underground during the upgrade process.
- Conventional street lighting should be avoided, and if necessary carefully considered low scale lighting used
- Conventional street signage must be minimized
- Provision must exist for managing tourist coaches, and special parking may need to be set aside. It would be inappropriate to allow bus parking in the *werf* or on Church Street. Such parking would have to be carefully placed and appropriately treated
- Interpretation signage and signage inviting passers-through to stop and visit Elim should be carefully designed and erected
- Signage at Bredasdorp and Gansbaai should be erected inviting people to visit historical Elim
- A 30 km/h speed limit should be considered on Church Street
- Parking should not be provided on Church Street
- Any new services that are required in Elim such as sewerage, provision for water and electricity should be coordinated with the road upgrade in order to ensure it can take place at the same time and be buried underground
- Treatment of the upgrade and landscaping must be carried out in conjunction with an urban designer/ landscaper familiar with working with such historical landscapes

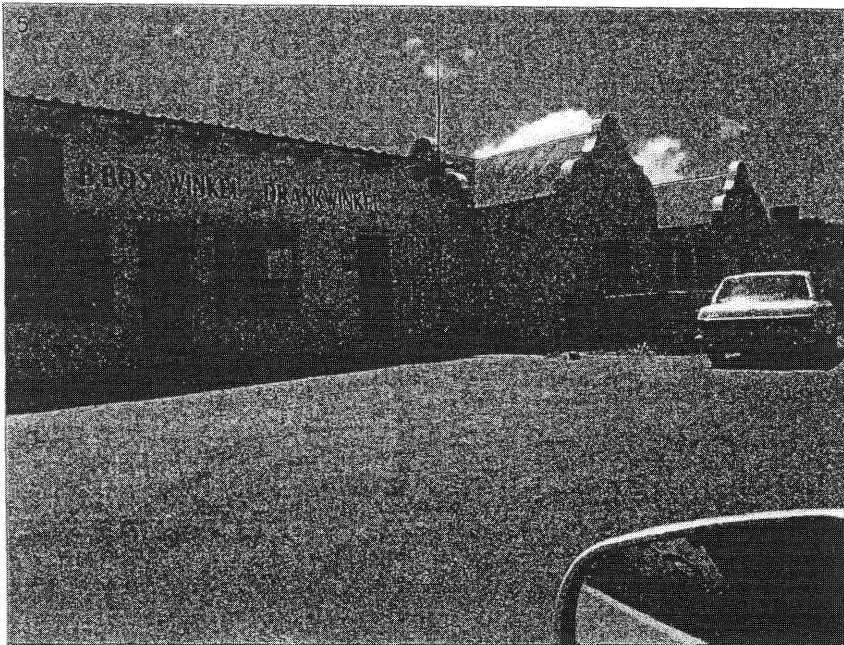
2.4.3.2 Broadening of the turn radius at east end of Church Street

An aspect of the proposal to upgrade Church Street is the broadening of the radius of the turn from Church Street to the Bredasdorp road at the east end of the town for heavy vehicles. This involves altering the traffic island and/or demolition of the Information Center building, which is incidentally a fairly recent structure. This part of the town is a critical aspect to the experience of entering and leaving the street and is directly adjacent to the historic core area. The proposed changes will need to be very carefully considered in terms of the visual impact and sense of place of this area. Large expanses of black top tarmac at this point would be visually undesirable and likely to be rejected by the heritage authority considering the amount of effort that has been invested over the years in preserving the entry and exit points to the town. Any proposed changes must be submitted to Heritage Western Cape along with a wide variety of planning options. Again the services of a specialist landscape planner with heritage experience would be needed for this task.

- Involve the Built Environment and Landscape committee of Heritage Western Cape at an early stage.
- Appoint a specialist to design appropriate options
- Adopt a conservative approach with minimal change.

2.4.3.3 Management Recommendations

- Restrictions should be developed and put in place to protect the residential nature of Church Street, and avoid it developing as a commercial strip. These restrictions should address changes in use of buildings, trading, signage etc
- Open spaces at the entrance to Church Street must be protected from development
- Parking on Church Street (other than for the existing café's) should be resisted as far as possible, and where possible resident's parking should rather happen behind the houses
- Tourism and income generation strategies should be reviewed and implemented during the upgrade, so Elim is ready to accommodate additional visitorship at the time of the possible launch of the new upgraded road
- Elim in its entirety should form part of a serial nomination of South African Mission settlements for National Heritage Site Status
- Regular monitoring of impacts by the Heritage Authority
- Given Elim is private property, a small domestic scale toll at the entrance to Elim (residents given passes) could possibly receive consideration – the proceeds of which could feed a maintenance and restoration fund.



3 BAARDSKEEDERSBOS

This small settlement has not been formally studied and its development history is relatively unknown. At present the area consists of a community of well spread out small holdings with 19th and 20th century buildings, none of which are considered to be individually unique. The Gansbaai-Bredasdorp road has been surfaced through the "town" which consists of a small general store (Plate 5) and a few other structures along the road.

3.1 The heritage significance of Baardskeedersbos

Baumann and Winter (Pers com) assigned Baardskeedersbos a 3A heritage grading for regional planning purposes which indicates that it should be considered to be a protected landscape.

Although the heritage significance of Baardskeedersbos is not very well understood, the social impacts that could result from greater accessibility will have very similar impacts to Elim. Baardskeedersbos is not a declared heritage site or heritage conservation area which means that SAHRA or Heritage Western Cape is not as

empowered to influence piecemeal development planning within any kind of conservation frame work other than protecting individual structures that are greater than 60 years of age.

3.1.1 Impacts

Detailed explanation follows summary table.

NATURE OF IMPACT Character, place, intangible heritage qualities and streetscape.	WITHOUT MITIGATION – ie without heritage conservation measures	WITH MITIGATION – with active measure to ensure conservative approach, minimal or sensitive change
EXTENT	Local	Local
DURATION	Permanent	Permanent
INTENSITY	Medium	Very low
PROBABILITY	Highly probable	Highly probable
CONFIDENCE	High	Medium
SIGNIFICANCE	Medium negative	Low positive

It's difficult to follow how mitigation would result in a low positive impact, please clarify

There is a very real chance that making the road more accessible will result in changes to the "place" which could be both negative and positive.

3.1.1.1 Likely causes of impact

- Increased accessibility will result in increased commercial activity – tea rooms, restaurants, bed and breakfasts etc.
- The chances are that property values will increase resulting on pressure to subdivide small holdings into residential areas with subsequent pressure on infrastructural development.
- Insensitive treatment or over-design of the road edge as it runs through the town.

3.1.1.2 Areas of negative impact

- Increased traffic volume will impact local noise levels and ambience.
- Inappropriate development along the road will detract from the rural identity of the town.
- Inappropriate treatment of the road edge and run off gutters will detract from the experience of driving through the town.
- Uncontrolled subdivision may result in the rural small holding community being transformed into dense housing estates and leisure developments.

3.1.1.3 Areas of positive impact

- Increased economic activity will provide opportunity and generate income.

- Well controlled development will enhance and maintain the rural qualities of this settlement.
- Within the context of greater economic activity, the heritage potential of the area can be revealed, and sensitively developed.

3.1.1.4 Specific recommendation

- There is a clear need for a specific study on the heritage status of Baardskeedersbos so that suitable guidelines can be developed which can be incorporated into the regional structure plan and also be observed and implemented by the community at local level.
- Attention must be paid to the treatment of the road edge to ensure that the "landscape" reaches the road edge and drainage channels treated as naturally as possible.

4 THE ROUTE

This road is clearly critical in terms of completing an important tourism route from Gansbaai to Bredasdorp (and Agulhas.) Although it is not foreseen that the road will have considerable heavy vehicle use other than tourist vehicles and trucks used for transport of dairy products, measures must be taken to ensure the protection of this landscape that will be made accessible by the upgrading of this dirt road. The protection of the landscape should be carried out in terms of planning policy and regulations, while at the same time trying to secure land into nature reserves in the various forms provided for in legislation. Over and above this it is important that the declaration of the road as a scenic route be undertaken.

The design of the upgrading of the road as a scenic route should set the parameters of the approach to the work. It should also provide for opportunities for positive publicity around the opening of the new road.

In terms of the design of the upgrading, this should be carried out in a manner appropriate for a scenic route. The road should allow the experience of traveling with the landscape, rather than despite it. Maximum connectivity to the landscape should be encouraged, by allowing the road to follow the topography, rather than cutting through it. Over engineering of the road is strongly discouraged. Engineering works such as culverts and water runoff drainage should be designed in keeping with the nature of the route, making use of natural finishes with minimal impact

4.1 Impacts

Detailed explanation follows summary table

NATURE OF IMPACT Character of the landscape, sense of remoteness, scenic qualities.	WITHOUT MITIGATION – ie without aesthetic or environmentally sensitive engineering.	WITH MITIGATION – with active measure to ensure sensitive approach to landscape, road verges, culverts, minimal or
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		sensitive changes
EXTENT	Regional	Regional
DURATION	Permanent	Permanent
INTENSITY	High	Very low
PROBABILITY	Highly probable	Highly probable
CONFIDENCE	High	High
SIGNIFICANCE	Very high - negative	Low - negative

4.1.1 General possible negative impacts

- Degradation of aesthetic value of the landscape
- Visual impact of the upgraded road
 - Colour
 - Width
 - Edge treatments
 - Cuts and fills
 - Above ground services
- Loss of sense of traveling with the landscape
- Loss of rural character through secondary development and future inappropriate subdivision and development of scenic landscape
- Poor construction phase planning and management

General possible positive impacts

- Positive impacts are of a general economic nature rather than specific to heritage
- Opening of the heritage area of Elim to increased tourism may with suitable control, assist the local community to maximize the resource they have at hand to enhance the heritage value of the place along with bringing more money into the community.

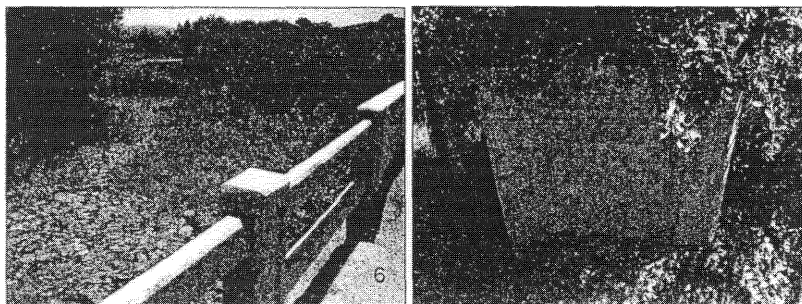
4.1.3 General mitigatory recommendations

- Formal recognition of the road as a scenic route should take place
- The protection of scenic landscape now being made accessible, and thus vulnerable to potential inappropriate development and commercialization, should be carried out in terms of planning policy and regulations
- Over and above this every effort should be made to secure land into nature reserves in the various forms provided for in legislation.
- The design of the upgrading of the road as a scenic route should set the parameters of the approach to the work and this should be carried out in a manner appropriate to a scenic route.
- The road should allow the experience of traveling with the landscape, rather than despite it. Maximum connectivity to the landscape should be encouraged, by allowing the road to follow the topography, rather than cutting through it.

- Over engineering of the road is strongly discouraged. Engineering works such as culverts and water runoff drainage should be designed in keeping with the nature of the route, making use of natural finishes with minimal impact.
- Special heritage and urban design treatments need to be put in place in Elim and similar treatments should be considered for Baardskeedersbos
- Management and regulations need promulgation for the protection of landscape and for the townscapes of Elim and Baardskeedersbos
- An urban design and landscaping professional should be appointed to deal with the design issues in Elim and Baardskeedersbos; as well as to oversee the general treatment of the upgrade.
- Positive publicity for the recognition of the scenic road and the upgrade needs to be maximized.
- Any required tourism infrastructure in Elim should be in place by the time of the opening of the road.
- An Environmental Management plan for the construction phase should be drawn up and implemented

4.2 Bridges

The Uilenkraals River Bridge built in 1944 (Plate 6) falls within the protection of the National Heritage Resources Act (section 34). This is a typical rural cast concrete bridge of the mid-20th century which has become integrated into the surrounding landscape by thick riverine vegetation growing alongside tranquil pools. The proposal is to demolish this bridge in its entirety and rebuild it.



4.2.1 Impacts

Detailed explanation follows summary table

NATURE OF IMPACT Character, place, intangible heritage qualities landscape, demolition of protected structure.	WITHOUT MITIGATION – ie without heritage conservation measures	WITH MITIGATION – with active measure to ensure conservative approach, sympathetic contemporary construction or retention of existing bridge.
EXTENT	Local	Local
DURATION	Permanent	Permanent

INTENSITY	High	Low
PROBABILITY	Highly probable	Highly probable
CONFIDENCE	High	Medium
SIGNIFICANCE	High - negative	Low - negative

4.2.2 Possible negative impacts

- Loss of a protected heritage structure
- Disturbance of the riverine landscape associated with the bridge
- Alienation of the traveler from the riverine environment (depending on extent and scale of the replacement bridge).

4.2.3 Possible positive impacts

- None from a heritage perspective.

4.2.4 Mitigation

- The structure falls within protection of the NHRA Act 25 and is protected by Heritage Western Cape, therefore demolition of the structure will have to be motivated to HWC and a permit application submitted for its destruction. The replacement structure will need to be approved by HWC.
- The new bridge needs to be built in such a way that large expanses of concrete are avoided and that local landscaping ensures that the plant growth around the bridge is encouraged.
- Scarring of the ground surface should be kept to a minimum.
- Damage to the local riverine environment should be avoided.

4.3 Cuttings and realignments

Cuttings and re-alignments are limited in extent and number. All of these were inspected for heritage material and found to be clear. The limited extent of realignments does not significantly threaten the feel of the road. Cutting will take place into steep hilltops to create easier gradients, especially for heavy vehicles.

4.3.1 Impacts

Detailed explanation follows summary table

NATURE OF IMPACT Character of the route, archaeology, landscape	WITHOUT MITIGATION – ie without heritage conservation measures	WITH MITIGATION – with active measure to ensure conservative approach, minimal or sensitive change and landscaping with natural materials
EXTENT	Local	local
DURATION	Permanent	Permanent

INTENSITY	Low	Very low
PROBABILITY	Highly probable	Highly probable
CONFIDENCE	High	High
SIGNIFICANCE	Very high - negative	Low - negative

4.3.2 Possible negative impacts

- Visual impacts associated with expanses of newly exposed rocks
- Destruction of hilltops and hill slopes on the landscape.
- Impacts on the identity of the road – a change from being a secondary rural road which flows with the contours of the land to a high speed destination orientated road.

4.3.3 Possible positive impacts

- With good mitigation impacts would best be described as reduced or neutral

4.3.4 Mitigation

- Limit the depth of cuttings to that which is absolutely necessary for the road to function efficiently.
- Avoid excessive use of concrete, use natural materials to stabilize cutting sides, re-vegetate as much as possible.
- Conduct engineering and design with the premise that a “scenic route” is being created.

4.4 Quarries and borrow pits

Very thin scatters of Early and Middle Stone Age archaeological material were located in three borrow pits along the route, while one proposed site (BP55,3L) revealed significant quantities of archaeological material. All the others that were inspected are clear. The observations with respect to the borrow pits is presented in tabular form. It is expected that impacts to heritage material will generally be very low and easily mitigable through archaeological sampling. The borrow pits are of fairly limited in extent and set well out of line of sight of the road. They tend to be fairly shallow in depth, and once re-vegetated will not significantly change the landscape qualities of the route.

4.4.1 Impacts

Detailed explanation follows summary table

NATURE OF IMPACT Character of the route, archaeology, visual scarring	WITHOUT MITIGATION – ie without heritage conservation measures	WITH MITIGATION – with active measure to ensure where necessary, collection of archaeological material, rehabilitation of borrow pits
EXTENT	Local	Local

DURATION	Long term	Short term
INTENSITY	Low	Very low
PROBABILITY	Highly probable	Highly probable
CONFIDENCE	High	High
SIGNIFICANCE	Very high - negative	Very low – negative - neutral

4.4.2 Sources of negative impact

- Archaeological material will be impacted at proposed borrow pit *
- Excavation will cause unsightly scarring which will endure until re-habilitation is complete.

4.4.3 Possible positive impacts

- None from a heritage perspective

4.4.4 Mitigation

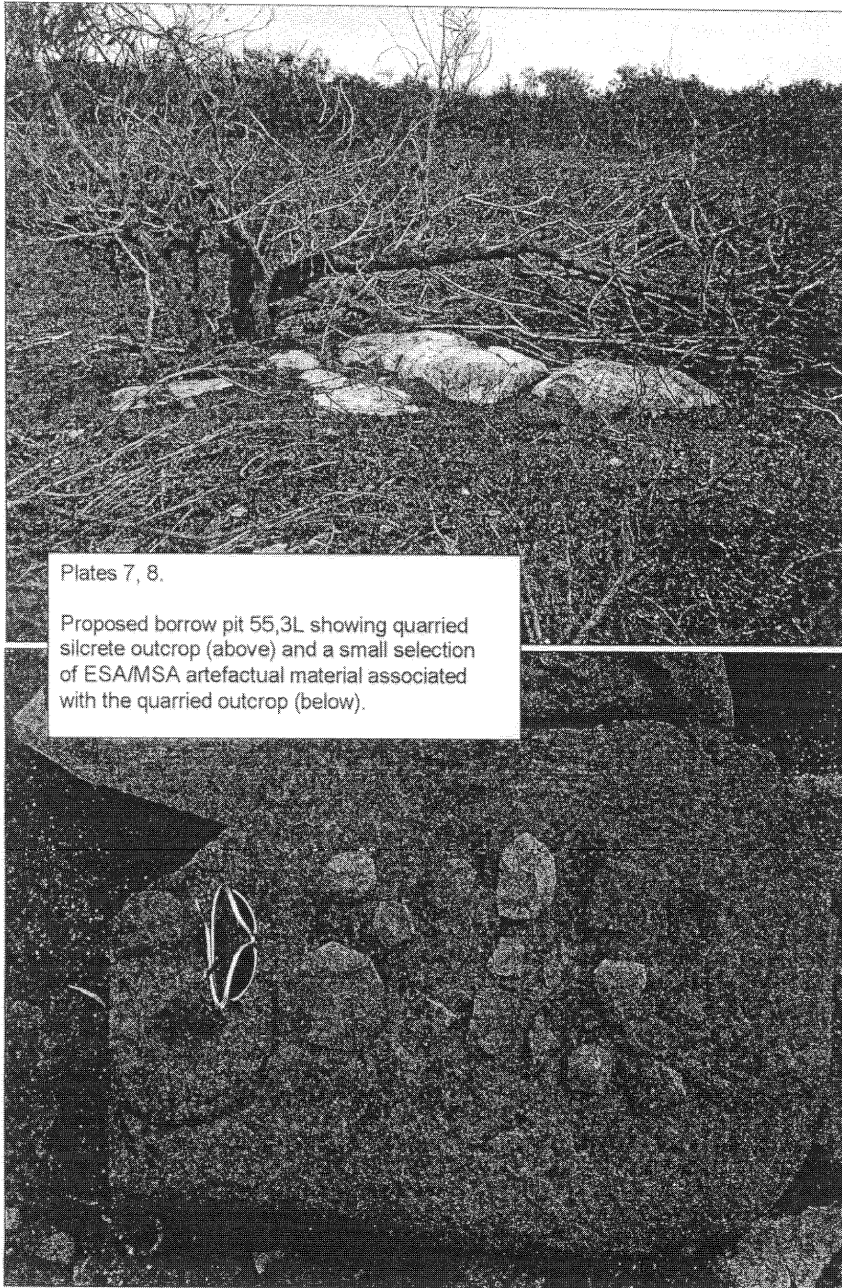
- Mitigation should be of a general nature to ensure that borrow pits are rehabilitated, and alien growth is controlled.
- Heritage issues with respect to the borrow pits are not of major concern, however the Early Stone Age quarry site at Borrow Pit 55,3L (Located at 34° 45' 33.8" S 19° 54' 49.5" E) would need to be thoroughly described and collected after which a permit could issued by Heritage Western Cape for its destruction.

4.4.5 Table of borrow pit findings.

Borrow Pit no	Description of findings	Heritage significance	Significance of impact
BP1,8R	Not applicable	None	Neutral
BP6,5L	Isolated MSA artefacts	Very low	Very low (neg)
BP9,7L	Isolated MSA artefacts	Very low	Very low (neg)
BP13,5L	Not applicable	None	Neutral
BP19,7R	Not applicable	None	Neutral
BP21,3L	Not applicable	None	Neutral
BP25,9L	Not applicable	None	Neutral
BP29,3R	Possible isolated ESA/MSA artifacts**	Very low	Very low (neg)
BP34,5R	Possible isolated ESA/MSA artifacts**	Very low	Very low (neg)
BP36,4L	Not applicable	None	Neutral
BP39,7R	Not applicable	None	Neutral
BP48,6L	Isolated MSA artefacts	Very low	Very low (neg)
BP53,5L	Possible isolated ESA/MSA artifacts**	Very low	Very low (neg)
BP55,3L	ESA/MSA quarry*	Low	Low (with mit.)
BP62,5R	Not applicable	None	Neutral

* Requires mitigation by archaeological sampling.

**Requires ground proofing.



Plates 7, 8.

Proposed borrow pit 55,3L showing quarried silcrete outcrop (above) and a small selection of ESA/MSA artefactual material associated with the quarried outcrop (below).

5 PERMITTING PROCEDURES WITH RESPECT TO THE NATIONAL HERITAGE RESOURCES ACT 25 OF 1999

5.1 Protected areas and resources

5.1.1 Elim

The farm that makes up the hamlet of Elim is a Provincial Heritage Site which may shortly be upgraded to a National Heritage Site. As it is a Provincial Heritage Site, the relevant compliance agency is Heritage Western Cape.

- Any proposed change to any part of Elim must be permitted by the Built Environment and Landscape Committee (Belcom) of HWC, who must be informed at the proposal stage of the project through the completion of an "intention to develop" form.
- Draft plans for the changes to Church Street must be drawn up along with relevant illustrations and submitted to Belcom (possibly in the form of an oral presentation) along with application to alter a heritage site as well as supporting documentation. Belcom will issue the permit subject to whatever design changes or restrictions it deems appropriate.

5.1.2 Baardskeedersbos

This area is not a protected heritage site, however the landscape is considered to be of heritage importance. It is suggested that Heritage Western Cape be considered to be an interested and affected party and be asked to comment on any proposed changes.

5.1.3 Uilenkraals River Bridge

This structure is protected by Section 34 of the NHRA by virtue of the fact that it is over 60 years old. It is the only structure identified so far that falls within the protection.

- A permit application must be submitted to HWC Belcom along with design plans for the replacement structure and supporting documentation/motivation.
- Belcom has the right to refuse a demolition permit, or make conditions with respect to the replacement structure.

5.1.4 Borrow Pits

The ESA quarry situated at BP 55,3L is protected under Section 35 of the NHRA.

- An application permit for its destruction must be submitted to the Provincial Archaeologist (Dr A Jerardino) at HWC who will in all likelihood ask for some

form of mitigatory archaeological sampling to take place before such a permit is issued.

6 GENERAL CONCLUSIONS

While the upgrading of the Gansbaai –Bredasdorp road will no doubt produce economic benefits for the area, in heritage terms if this work is not undertaken carefully, it could be a double edge sword.

While the actual upgrading of the route itself will have few direct physical impacts (excluding Elim), the opening of the route to increased tourism and economic activity could result in increased urbanization of Baardskeerdersbos and possible inappropriate development at Elim. It is clear that along with the upgrading of the road, development controls and guidelines need to be in place in both Baardskeerdersbos and Elim.

Elim needs to be treated very carefully as Church Street is the focal point of the heritage area and impacts here could deeply affect the character of the place. In the short term a conservative approach is recommended involving as little change as possible apart from upgrading the road surface and using a different colour of chip which would be of benefit to the character of the place. The issue of widening the traffic triangle needs to be debated at HWC along with input from an urban designer with heritage experience.

It is the stated intention of the proponent that the actual route will differ very little from that which exists today apart from a new bridge at Uilenkraals River and some limited deviations. The intention is to use as much natural stone as possible in cuttings and culverts. The road will not have a broad pull over shoulder. These factors will go some way to allaying the fears that the road will be "over engineered" with use of excessive concrete that will detract from its scenic qualities. We assert that the design work should take place on the premise that the road be considered to be a scenic route.

7 Additional notes:

Mission Settlements in South Africa. Final Report, Japha et al:

Pg 74

"It is essential that agencies and their consultants responsible for planning fully understand the context and the effect of proposals on the historic environment". Conservation and enhancement of significant environmental and cultural attributes should be an integral part of planning for development and upgrading mission stations"

Pg 75 - 76

"The upgrading of (such) services should be considered contextually in relation to the total environment rather than a series of ad hoc decisions, so that the benefit of modernisation can be attained without destroying the character of the settlement."

"A Streetscape is comprised of a combination of built and natural elements. These include the buildings themselves (their forms, materials, proportions, openings etc.); their relationships to the streets...gardens, hedges, boundary walls, fences, water channels, roads, pavements, trees, agricultural lands, mountain vistas, etc. Modernization and upgrading to any of these features, if done insensitively, can be destructive to the qualities of historic landscapes".

Pg 76

"The complexity of the streetscape is enhanced by features along the road edge such as stoeps, pergolas, stepped terraces...trees, low walls and stairs...Often water furrows run past the entrances to sites, and accesses afforded by means of low footbridges..."

pg 77

"Retaining the historic identity of the street edge depends on the way in which the interface is made between buildings and roads. New storm water channels, kerbstones, and tarmac are often built to standards not appropriate to small rural settlements..."

8 Bibliography

The Pear Tree Blossoms. The History of the Moravian Church in South Africa 1737 – 1869 Bernhard Krüger, Genadendal 1966

Mission Settlements in South Africa Final Report May 1995 Vols 1-3 Report on a project executed on behalf of the Department of Environmental Affairs and Tourism by Derek Japha, Vivienne Japha, Lucien Le Grange, Fabio Todescini

8.1 Relevant Publications

Elim/Wolwegat: An Investment Profile, Prepared for Wesgro by Linda Pilthers, Clovelly Communications, December 1997

Elim Structure Plan, Overplan Town and Regional Planner, 1995

Elim Riglyne vir Bewaring, 1995, Lucien Le Grange, 1995

Ontwikkelingsprofiel van Elim, Concept Document, March 2000 by Dr Joan Prins, GOP

Coordinator, Overberg District Council

Die Landbou, Fynbos en Toerisme Potensiaal van Elim by LANOK (Pty) Ltd in association with A Brand New World, Doug Jeffrey, Afrosearch, LANOK

9 CASE STUDIES

9.1 Mamre

Mamre Mission Station outside Atlantis provides an example where inappropriate "Blue Book" road planning has detracted from the rural nature of the settlement. The Werf area of the mission settlement has been cut off from the village by an over designed wide blacktop road with a large traffic circle. This detracts significantly from the sense of arrival in the historical area, and its repetition in Elim must be avoided at all cost.

Mamre also offers an example of how an extraordinarily important historical precinct can be highly accessible from a main route, but without good publicity and signage as well as opportunities to attract visitors to spend money, the tourism and economic potential of this historical site remains untapped. The Moravian Church relies on donations to maintain the buildings in the Werf, and has still not realized any kind of sustainability from its tourism potential and its proximity to a main route.

9.2 Church Street, Tulbagh

The development of Church Street, Tulbagh as a heritage resource after the earthquake of 1969 illustrates how, despite being protected as a national monument from its time of declaration, the street has changed significantly, from a rural semi agricultural residential lane, to a commercial hub of restaurants and galleries. Very few properties remain residential, and there is an extremely high turnover of ownership, with little sense of a lasting community. Such development would detract significantly from the heritage and community value of Church Street, Elim and the retention of its residential nature must be reinforced in bylaws and regulations.

Heavy vehicular traffic has been kept off Church Street, Tulbagh by the alternative main road, Voortrekker Street. As such, consideration is being given to pedestrianising Church Street. In the case of Elim, should there be no alternative, Church Street, with the tarring of the roads between Gansbaai and Bredasdorp might find itself carrying more heavy traffic.

9.3 Swellendam and Paarl

The "Upgrading" of the main road through Swellendam to a wide tarmac road had a devastating impact on the heart of Swellendam. The transformation of a historically intact environment to a down town commercial strip was to result in the National Monuments Council embarking on mass declarations of properties forming historical streetscapes. These streetscapes include Paarl Main Street and Main Road, Muizenberg to Kalk Bay. The protection of these streetscapes by the National Monuments Council has to a very large degree been successful, and both these streetscapes form an integral part of the Western Cape's heritage and tourism assets.

16th February 2005

Ms Denelle Fourie
CCA Environmental (Pty) Ltd
Unit 35 Roeland Square
30 Drury Lane
Cape Town 8001

(Fax: 021 461 1120)

RECORD OF DECISION
PHASE 1 HERITAGE IMPACT ASSESSMENT: UPGRADING OF THE ROAD FROM
GANSBAAI TO BREDASDORP, OVERSTRAND AND CAPE AGULHAS
ADMINISTRATIONS (HWC Ref. No. C13/3/6/21/1/1/1/C12, C13)

A Phase 1 Heritage Impact Assessment of the above road and surrounding settlements undertaken by the Archaeology Contracts Office was discussed by the Archaeology, Palaeontology and Meteorites Committee of the Western Cape provincial heritage resources authority, Heritage Western Cape (HWC), at a meeting on 08 February 2005.

The following was noted and decided:

- 1) One archaeological site was observed in the location of Borrow Pit 55,3L and a small number of archaeological occurrences of low heritage significance were observed on other borrow pit locations.
- 2) It is recommended that the archaeological site found in the location of Borrow Pit 55,3L be mitigated in the form of archaeological surface sampling and mapping.
- 3) A professional archaeologist must monitor all earth-moving activities for the possibility of buried archaeological sites and human remains.
- 4) A professional palaeontologist must be appointed to assess the possible palaeontological significance of fossiliferous material at each borrow pit.
- 5) If any human remains are discovered, they must be treated with respect and SAHRA (Mrs Mary Leslie, ph: 021-462 4502) must be notified immediately. An archaeologist must be contracted to remove the remains at the expense of the developer.
- 6) An archaeological display with educational information on cultural heritage resources in the Overstrand and Cape Agulhas regions, including information on their legal protection and the need for their conservation, must be incorporated into the development of this road and landscaping at any of the affected towns and settlements.
- 7) Aspects relating to the cultural landscape of this road and adjacent towns and settlements will be reviewed by the Built Environment and Landscape Committee (BELCOM). A copy of the above report will be forwarded to Mr. Kaizer Makati (tel: 021-483 9691).


Dra. Jerardino
SENIOR HERITAGE OFFICER: ARCHAEOLOGIST

Cc: Mr. Timothy Hart, Archaeology Contracts Office, UCT, Fax: 021-650 2352