

**HERITAGE STATEMENT: PROPOSED UPGRADE OF THE
TOURISM INFRASTRUCTURE AT OUDEBOSCH
(HANGKLIP 559/92), KOGELBERG NATURE RESERVE,
OVERSTRAND MUNICIPALITY, WESTERN CAPE**

(Assessment conducted under Section 38 (8) of the
National Heritage Resources Act No 25 of 1999)

Prepared for:
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EXECUTIVE SUMMARY

The Archaeology Contracts Office at the University of Cape Town was approached by Sillito Environmental Consultants on behalf of CapeNature to provide a Heritage Statement and complete a Notice of Intent to Develop form for the proposed upgrade of tourism facilities at Oudebosch (Hangklip 559/92) in the Kogelberg Nature Reserve.

Kogelberg Nature Reserve is part of the Boland Mountain Complex, one of 8 protected areas forming part of the serial declaration of the Cape Floral Region (2004) as a World Heritage Site. However, currently only the Table Mountain Park section of the Cape Floral Region has been approved as a Grade 1 site, in terms of the National Heritage Resources Act (Act 25 of 1999), by the South African Heritage Resources Agency. Thus while the Reserve contains “uncommon, rare and endangered aspects of South Africa’s natural heritage” (Section 3(3)(b)) which is considered part of the National Estate, in terms of current legislation it has not been formally proposed as a Grade 1 site by either SAHRA or SAHRA Western Cape.

Heritage Western Cape is therefore the commenting authority (see attached email comment from SAHRA and SAHRA Western Cape).

Phase 1 of the development involves the decommissioning of 6 visitor chalets and their replacement with 5 new cabins and a gathering space, all within the impacted area of the site and in a similar location to the existing cabins (a footprint of 6000m²). Phase 2 (which has not been finalized) will involve the use of an existing 600m² concrete storage area and surrounding disturbed area with a final footprint of less than 5000m² for 10 or fewer units.

There are no heritage sites on the development footprint and surrounding “low intensity leisure zone”. There are no archaeological or palaeontological sites, no buildings older than 60 years or any graves or cemeteries. Living heritage associations relate to the use of the area for leisure and recreational activities by members of the public. Impact is therefore limited to the visual impact of the development on a natural landscape of National Significance.

The mitigation measures proposed by the architect and developers to reduce the environmental and visual impact will result in the enhancement of an area currently negatively impacted by alien vegetation, out-dated septic tanks and sheet erosion. The new chalets are tucked away in the Oudebosch valley and cannot be seen from the scenic Clarence Drive. Proposals for the new chalets and surrounds include:

- Fragmented form to reduce visual impact;
- Stilted cabins to lessen impact on the vegetation and allow natural groundwater movement;
- Planted roofs to create a soft form which will better blend with the landscape;
- Exterior walls clad with lathe to soften building profiles;
- Frame-like structures to allow glimpses of the landscape;
- Limited low level lighting;
- Upgrading of the wastewater treatment system;
- Reducing the existing road and a lathe pergola for parking;
- Replacing kikuyu lawn invading nearby wetlands with indigenous vegetation.

The de-commissioning of the current chalets and their replacement by new chalets with an innovative and eco-friendly architectural design is likely to benefit local tourism initiatives resulting in social and economic benefits for the area.

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1. INTRODUCTION

The Archaeology Contracts Office at the University of Cape Town was approached by Sillito Environmental Consultants on behalf of CapeNature to provide a Heritage Statement and Notice of Intent to Develop for the proposed upgrade of tourism facilities in the Kogelberg Nature Reserve (Figure 1).

The development will be in two Phases. During the first Phase six outdated tourism dwelling units (cottages) will be decommissioned and replaced with five new cabins and a “gathering space”. During Phase 2 of the project, 10 or fewer new additional dwelling units will be situated on an existing disturbed site with some minor encroachment onto disturbed natural vegetation. All of the above will involve new bulk service infrastructure including on site sewage treatment facilities and locally sourced water. Roads infrastructure already exists for the above. Electricity supply will be sourced from an existing supply network to the reserve.

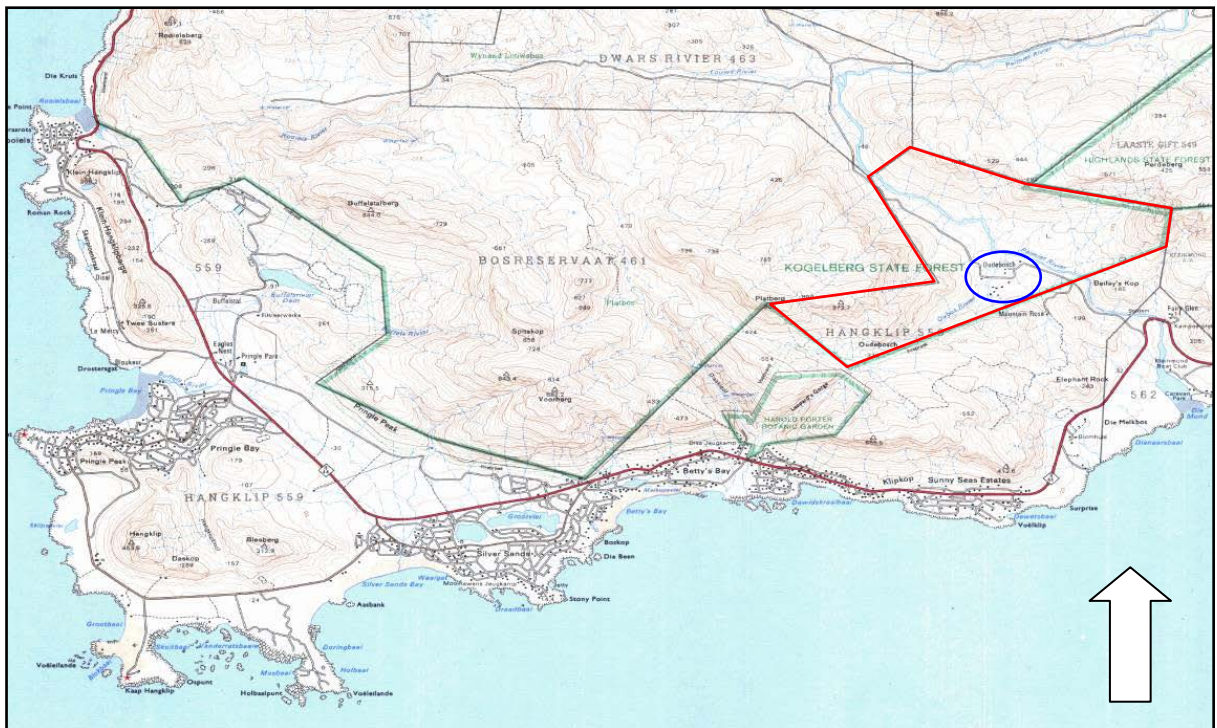


Figure 1: 1:50 000 Map of 3418 BD Hangklip showing the location of the development area (circled in blue) within the property Hangklip 559/92 (Oudebosch) outlined in red, in the Kogelberg Nature Reserve (Mapping information supplied by - Chief Directorate: Surveys and Mapping).

2. 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. Section 38(8) of the NHRA indicates that the provisions of the section do not apply when “an evaluation of the impact of such development on heritage resources is required in terms of the Environmental Conservation Act, 1989”, in other words when the heritage assessment forms part of an Environmental Impact Assessment (EIA).

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);
- Burial grounds and graves (Section 36);
- Public monuments and memorials (Section 37);
- Living heritage (defined in the Act as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) (Section 2 (d) (xxi)).

*Kogelberg Nature Reserve is part of the Boland Mountain Complex, one of 8 protected areas forming part of the serial declaration of the Cape Floral Region (2004) as a World Heritage Site. However, currently only the **Table Mountain Park** section of the Cape Floral Region has been approved as a Grade 1 site, in terms of the National Heritage Resources Act (Act 25 of 1999), by the South African Heritage Resources Agency. The reason for the proclamation of the Boland Mountain Complex as a World Heritage site was based on the “outstanding ecological and biological processes associated with the Fynbos vegetation, which is unique to the Cape Floral Region”. The Reserve contains “uncommon, rare and endangered aspects of South Africa’s natural heritage” (Section 3(3)(b) of the Act) which is considered part of the National Estate. However, in terms of current legislation it has not been formally proposed as a Grade 1 site by either SAHRA or SAHRA Western Cape. Heritage Western Cape is therefore the commenting authority as this is a Section 38(8) application.*

3. BACKGROUND TO THE AREA

The Kogelberg Nature Reserve (KNR), comprising around 18 000ha, forms the core of the Kogelberg Biosphere Reserve (KBR) with a total area of 103 629ha. The Reserve is situated 90 km south-east of Cape Town and is accessible from Clarence Drive, a scenic coastal road (R44) between Gordon’s Bay and Kleinmond (Figure 1). The upgrading of the tourist facilities will take place on Oudebosch (Hangklip 559/92) within the reserve.

3.1 Palaeontological Background

Geologically the whole area comprises of Table Mountain Sandstone which weathers into shallow, white sandy soils with outcrops of shale in some areas. According to Almond & Pether’s (2008) interim report on the palaeontology of the Western Cape, the Table Mountain Group is composed predominantly of fluvial sandstones with pebbly conglomerates, mud rocks, tillites and occasional shallow marine and coastal sandstones. The mud rocks of the Peninsula Formations may contain microfossils.

3.2 Archaeological Background

The coastal zone is rich in archaeological material although little systematic archaeological work has been done (see Appendix 1). No open station shell middens have been excavated and many have been destroyed during coastal development. Nothing is known of the archaeology of the Kogelberg Nature Reserve. Smith (1981:76) undertook a survey of the coast between Rooiels and the Palmiet River in 1979 and located 75 open shell midden sites which are shown in Appendix 1. In his review, Kaplan (1993) identified 101 Later Stone Age

sites, including 93 open station shell middens, four caves, one fish-trap and one burial site. Excavations at Rooiels Cave (Smith 1981) have provided a basal radiocarbon date of $6\ 100 \pm 120$ BP (Pta-3069) indicating the cave was occupied by Later Stone Age hunter-gatherers. Some of the open station shell middens contain fragments of clay pots with lugs (handles) and are generally believed to have been used by the Khoekhoen pastoralists. Devine (Smith 1981) related a legend which was being recounted in 1921 regarding Rooiels Cave “which states that in the very early days of the Caledon settlement this cave was the headquarters of a tribe of Hottentots (Khoekhoen) who used to make raids up the valley of the Rooi Els river and into the Caledon plateau”.

3.3 Historical background

Early farmers found the area between Hangklip and Kleinmond too rugged and isolated for agriculture. It was precisely this isolation however, which made the area a haven for people fleeing from the colony, e.g. bandits and slaves. This meant that the Kogelberg was left practically untouched by development during the 18th and 19th centuries. The early history of farming in this area is described in Appendix 2. Records indicate that the Hangklip Beach Estates (which included Jack Clarence and Harold Porter as members) had consolidated a number of properties into their holdings, one of the farms being Oudebosch (1714m 195sr) 1935 and this is also the date on the survey diagram for Hangklip 559/92 also known as Oudebosch (see Appendix B). This diagram does not indicate any buildings on the property but does show a quarry to the north of the Palmiet River (named Dwars River on the map).

The coastal road, named Clarence Drive after Jack Clarence, was only completed in 1942 after fears arose of a possible military invasion during World War II (Aikman et al. 2005). There is information to suggest the cultivation of fynbos in the area during the early 20th century for the commercial export market. According to the Reserve Manager, the propagation of various protea species was also pioneered on the KNR in the 1960s. Remnants of these protea types may still be seen in the area set aside as the “low intensity leisure zone”.

The Government of the Cape demarcated certain Crown Lands, which included the Kogelberg area, in 1810. In 1937 the then Department of Forestry became responsible for the area and declared it a State Forest. Kogelberg was transferred to CapeNature in 1987, and declared a nature reserve. In 1998 Kogelberg Nature Reserve was proclaimed a UNESCO Biosphere region, the first such biosphere reserve in South Africa. In 2004, the Kogelberg Nature Reserve, which forms part of the Boland Mountain Complex, became one of eight protected areas declared a World Heritage site as part of the Cape Floral region Protected Area.

3.4 Living Heritage

It is clear that the living heritage of KNR is predominantly associated with recreational activities undertaken by the public when visiting the reserve. This can include hiking and the enjoyment of the unique environment (flora and fauna).

3.5 Natural Landscape

The natural landscape of the KNR comprises dramatic mountains and deep river valleys (including the Palmiet River) covered in Fynbos vegetation. The combination of the unique qualities of the physical landscape and the botanical diversity of the reserve has resulted in the

proclamation of the KBR as a Biosphere reserve and subsequently part of a serial proclamation of the Cape Floral Region Protected Areas (2004).

4. DEVELOPMENT PROPOSALS

During Phase 1 the intention is to demolish and replace 6 existing visitor accommodation units on 6000m² of the existing footprint (housing and surrounding kikuyu). See photographs under Section 6. There would be further minor encroachment on existing vegetation during construction of the new units. This would involve less than 100m² of a disturbed wetland area (kikuyu vegetation has encroached into the wetland) where the developers want to locate one of the huts to make more space between the huts and give one a more exclusive location. Further, the current septic tank system would be removed and the wastewater system treatment upgraded to handle both phases (Figure 2).

During Phase 2 the intention is to use the site of the 600m² of existing concreted storage area with some encroachment on previously disturbed vegetation (old fields), resulting in a final footprint of less than 5000m² for ten or fewer huts. This would result in a transformed footprint. At this stage there is no formal plan for the actual footprint of Phase 2, but it would definitely be less than 5000m² and possibly more like 1000m² with planned board walks to minimize the impact.

The ecological footprint may well be higher than 1000m² as this is a fire prone landscape and some management of biomass such as a firebreak may be required but this would not be clear cut. The wastewater treatment for the existing cottages currently consists of separate septic tanks with soakaways clearly contaminating the adjacent wetland (vigorous kikuyu growth evident). The current proposal is a single bio-digester for both phases, mostly gravity flow for reliability, with final nutrient removal by artificial wetland in old flower fields between the 2 sites. The sites are both serviced by existing roads and no new roads will have to be constructed.

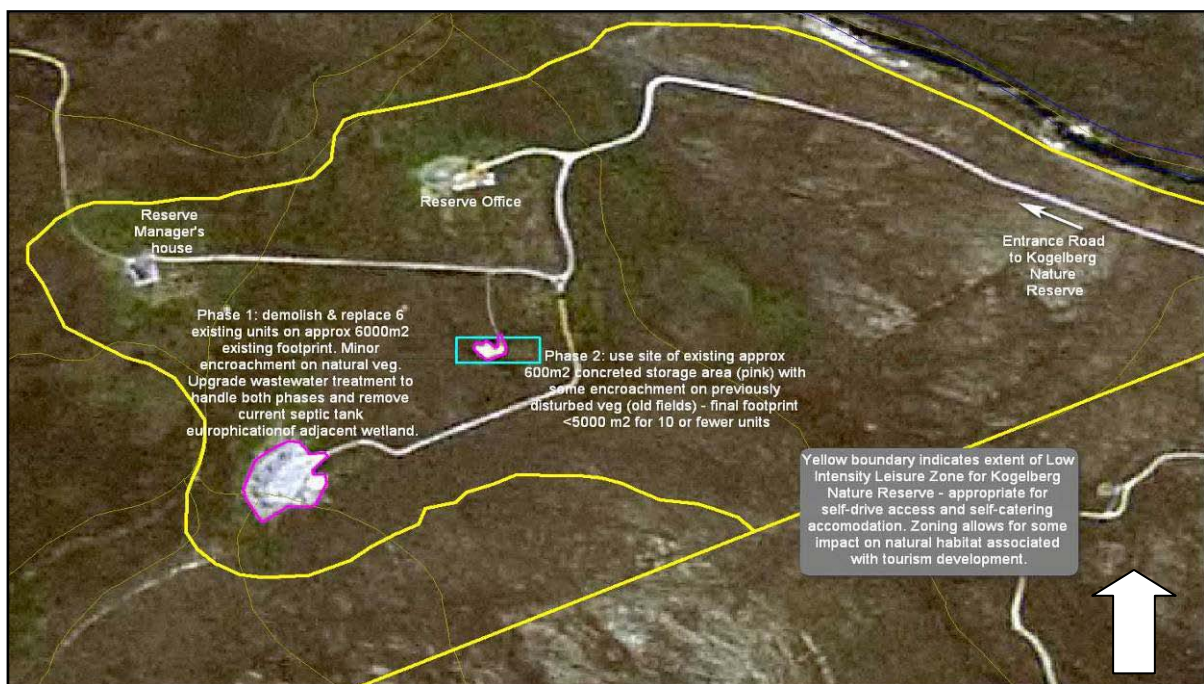


Figure 2: The location of Phase 1 and Phase 2 developments on Oudebosch (Hangklip 559/92) with the yellow boundary showing the extent of the Low intensity Leisure Zone.

5. METHODOLOGY

A site visit was undertaken on the 3 December 2008 and the property was surveyed from a vehicle and on foot. The sites for the development of Phase 1 and Phase 2 were looked at in some detail, while the buildings of the reserve manager, reserve office and entrance gate were also investigated. A section of the land between the road and the Palmiet River within the area of “low intensity leisure activities” was also surveyed for possible heritage/archaeological sites.

All buildings, features and possible archaeological sites were photographed and their coordinates taken using a handheld Garmin GPS. In addition, a short interview was conducted with the Reserve Manager, Mr. Mark Johns.

5.1 Limitations

The vegetation in the “zone of low intensity leisure activities” (Figure 2) is predominantly disturbed fynbos. The vegetation between the various structures (chalets, reserve office, entrance gate and manager’s house) is extremely dense and in some cases over 2m high. Access to the various buildings mentioned above is via gravel roads. It was therefore not possible to survey the “low intensity leisure zone” in any detail for archaeological remains or the ruins of historical structures.



Left: gravel road in the Low Intensity Leisure Zone, showing the height of the vegetation on both sides of the road. Right: much of the vegetation is at least 1-2m in height, making detailed surveying difficult.

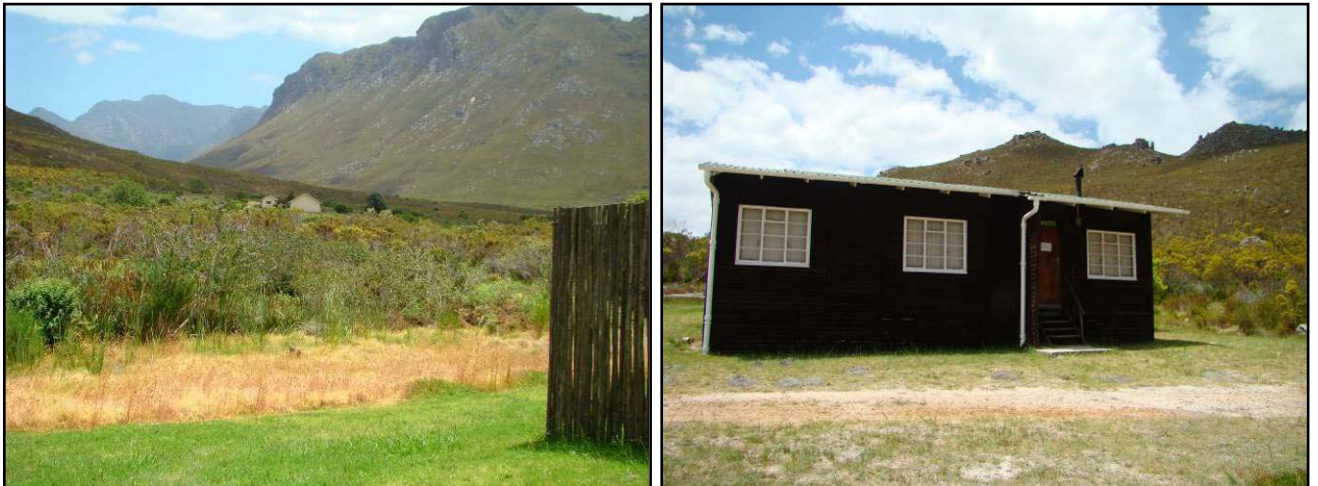
6. RESULTS OF SURVEY

6.1 Phase 1

The 6 (six) existing chalets will be de-commissioned and replaced with 5 new chalets and a “gathering space”. The new designs are outlined in Section 8.



Left: Existing chalets looking down the Oudebosch valley (south-west); Right: looking towards the Palmiet River (north-east). The area of vegetation disturbance is clearly visible around the chalets. The area is planted in Kikuyu lawn, the road forms a loop between the chalets, and there is no parking area.



Left: view to the north, with the area of wetland in the foreground, and the Manager’s house visible in the distance. Right: Close-up view of one of the chalets, looking southward.

No heritage remains were found in the footprint area. The GPS location for the chalets is:

S 34 19 34.4
E 18 57 52.0

6.2 Phase 2

The development for Phase 2 will be the construction of 10 (ten) or fewer new chalets on an existing concrete slab, currently used for storing material. There are currently no plans for the development of Phase 2, and this is very much still in the conceptual stage.



Left and Right: Concrete slab with storage material (looking south-west, and northward).

No heritage sites were found in the footprint area. The GPS for the concrete slab are:

S 34 19 28.2
E 18 58 00.2

1. SIGNIFICANCE OF LANDSCAPES AND SITES

The footprint area, and indeed the entire KNR, is highly significant because of the natural environment.

1.1 Natural Environment

The Kogelberg Biosphere Reserve was the first Biosphere Reserve to be declared in southern Africa (1998) and forms part of UNESCO's world-wide network of Biosphere Reserves. The reason for its declaration is the very high percentage of endemic fynbos species (about 150 are endemic out of a species list of 1 654). *The Reserve is part of the Boland Mountain Complex, one of 8 protected areas forming part of the serial declaration of the Cape Floral Region (2004) as a World Heritage Site. However, currently only the Table Mountain Park section of the Cape Floral Region has been approved as a Grade 1 site, in terms of the National Heritage Resources Act (Act 25 of 1999), by the South African Heritage Resources Agency.* The reason for the proclamation of the Boland Mountain Complex as a World Heritage site was based on the “outstanding ecological and biological processes associated with the Fynbos vegetation, which is unique to the Cape Floral Region”. It is not only the botanic diversity of the reserve which needs to be considered. The reserve is also characterised by high mountain peaks and deep valleys creating a sense of remote wilderness. While the reserve has **not** been declared a Grade 1 heritage site, the Aikman et al. (2005) report supports a Grade 1 status due to its scenic natural beauty, biodiversity status and recreational value.

1.2 Palaeontology

According to Almond and Pether's (2008) interim report on the palaeontology of the Western Cape, the Table Mountain sandstone of the reserve may contain fossils of significance but it is considered a low possibility in terms of this development proposal.

1.3 Archaeology

The coast between Rooiels and Kleinmond is of archaeological significance because of the number of archaeological sites such as shell middens. However, there are no archaeological sites in the footprint area or in the immediate surrounds.

1.4 Built Environment

The built environment presently consists of an office, shed, gatehouse, manager's house and chalets all located in the recreational zone. None are more than 60 years old. The visitor chalets were built, according to the Reserve Manager, for labourer's accommodation in the 1970's. There are no issues of significance related to the current built environment.

1.5 Living Heritage

KNR can be considered to be of high recreational value for local, national and international visitors to the area. The high scenic value of the reserve is related to the mountains and river valleys and the unique botanical significance of the fynbos vegetation.

1.6 Scenic Drive/Cultural Landscape

It is important to point out that the proposed development in the KNR cannot be seen from the scenic coastal route known as Clarence Drive

Clarence Drive is a significant route as a result of:

- its association with the WWII period and its construction by Italian prisoners-of-war;
- intrinsic importance as “the dramatic interface between the mountain slope and the coastline”;
- “high quality of coastal and mountain fynbos” adjacent to the route.

2. DEVELOPMENT DESIGN AND MITIGATION

2.1 Phase 1

The five new chalets and the “gathering space” will be located on the same footprint as the existing chalets. There will be a slight encroachment into some disturbed vegetation to the south of the current site. The design layout is reflected in Figure 3 below.



Structure + Material Description

- * Foundations: Pad foundations set on Gabions or 600x600x300mm concrete in situ.
- * Retaining walls: Gabions, facing stone in front of baskets, rubble internally
- * Paved terraces: Locally sourced stone paving on gabion sub structure to detail where required
- * Posts: Treated pine pole posts with GMS shoe connection brackets to foundations
- * Timber decks: Generally 38/40 or 108mm PAR deck planks with twin G3 screwed fixing to 150x50mm treated SAP joists at 500mm ccs on 228x50mm bearers at max 1,8m ccs.
- * Boardwalks: As per decks secured to SAP pole posts to detail
- * Timber floors: SAP T and G on substructure similar to Decks with 100mm Isotherm between joists with rough out boards under.
- * Tile floors: To bathroom areas to detail
- * Walls: Lattice clad fibre cement board on 114x38 SAP studs at 600mm ccs, top and sole plates doubled up and around openings. 100mm Isotherm between studs with vapour barrier to detail. Fibre cement inner lining with skirting, cornice and cover strips. Special painted SAP T and G timber panels to detail.
- * Timber posts and beams: Sealed SAP posts and beams to detail
- * Timber handrail: 108x69mm uprights at max 1.2m ccs with composite handrail + support & wire cable inf.
- * Trombe walls: Selected areas to have glazed panel set against a solid masonry element. This will provide thermal mass which radiates heat in winter and acts as a heat sink in Summer.
- * Doors and windows: Sealed timber Meranti to Swartland Cape Culture range to detail
- * Ceilings: Painted T and G, 100mm Isotherm insulation
- * Roof: Exposed SAP rafters at 1200mm ccs bolted to stud walls to detail. SAP Fascia boards as required. Zincalume profiled roof with rainwater goods to match.
- * Rainwater Tanks: to later specification
- * Pergola, sun shade, screens: SAP lattice and SAP structure to detail.
- * Fireplace: Almost closed combustion fire place, flue and cook.
- * Cabinets: Kitchen: stone counter + painted timber doors. Bedrooms: painted SAP open shelving unit.
- * Sanitaryware + fittings: Locally manufactured such as Cobra or Vaal.
- * Ironmongery: Stainless steel Cisa or similar approved

site strategy: layout plan 1:200

STAGE 3: DESIGN DEVELOPMENT - Oudebosch mountain cabins - Kogelberg Nature Reserve

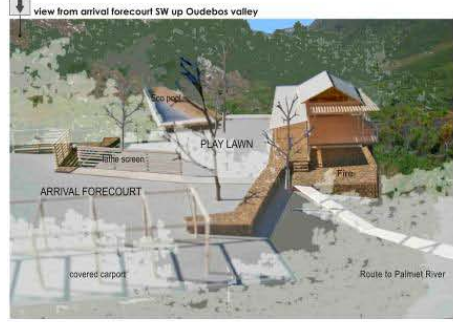
01 September 2008 dwg no.:110-3-003

PROJECT NO. 110: SKETCH DESIGN: site strategy layout plan

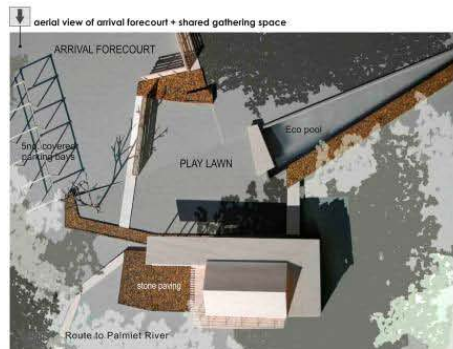
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ARCHITECTURE
coop

Figure 3: The new layout for the 5 chalets and gathering space, showing the arrival forecourt and parking, and eco pool.



shared gathering space: arrival + recreation areas



STAGE 3: DESIGN DEVELOPMENT - Oudebosch mountain cabins - Kogelberg Nature Reserve

06 August 2009: dwg no.: 110-3-001

PROJECT NO. 110: SKETCH DESIGN - shared recreational space

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Figure 4: The design of the gathering space and eco pool.

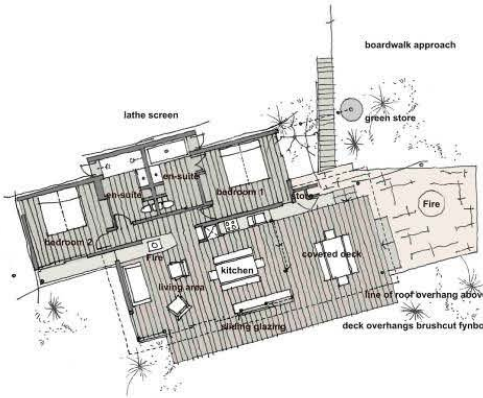
view through linked cabin 2 towards Platberg



view from fire area of cabin 2 towards Perdeberg



aerial view from NE face of linked cabin 2



OPTION 1: linked layout area schedule

cabin interior:		internal area	internal area	(incl)
		(best exterior walls)	walls)	
living room		28.5 m ²		31.5 m ²
bedroom wing		37.5 m ²		41.5 m ²
bath box		3.5 m ²		4.5 m ²
cabin total		69.5 m²		77.5 m²
cabin exterior:				
covered deck				21.5 m ²
uncovered deck				9.5 m ²
fire pit + store				23 m ²
exterior total				54 m²

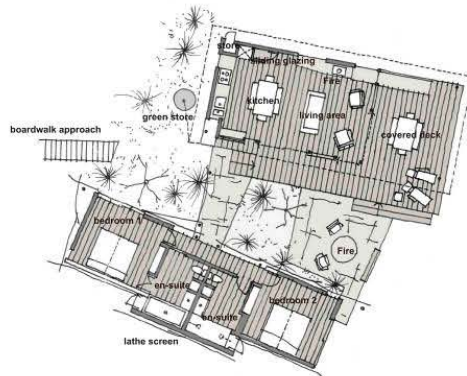
OPTION 1 linked cabin layout

NOTE: Dimensions as indicated on photographs are from finished floor level to underside of eaves height

linked layout plan 1:100

OPTION 3 courtyard cabin layout

aerial view from approach to courtyard cabin 2



courtyard plan 1:100

OPTION 3: courtyard layout area schedule

cabin interior:		internal area	internal area	(incl)
		(best exterior walls)	walls)	
living room		28.5 m ²		31.5 m ²
bedroom wing		37.5 m ²		41.5 m ²
bath box		3.5 m ²		4.5 m ²
cabin total		69.5 m²		77.5 m²
cabin exterior:				
covered deck				20.5 m ²
uncovered deck				9.5 m ²
fire pit				16 m ²
exterior total				46 m²

view from fire area through courtyard cabin 2 towards Palmiet valley



view through courtyard cabin 1 on an approach up Oudebos valley



STAGE 3: DESIGN DEVELOPMENT - Oudebosch mountain cabins - Kogelberg Nature Reserve

06 August 2008 dwg no.:110-3-002

PROJECT NO. 110: SKETCH DESIGN: preferred options 1+3 cabin layouts

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Figure 5: The designs for two of the chalets.

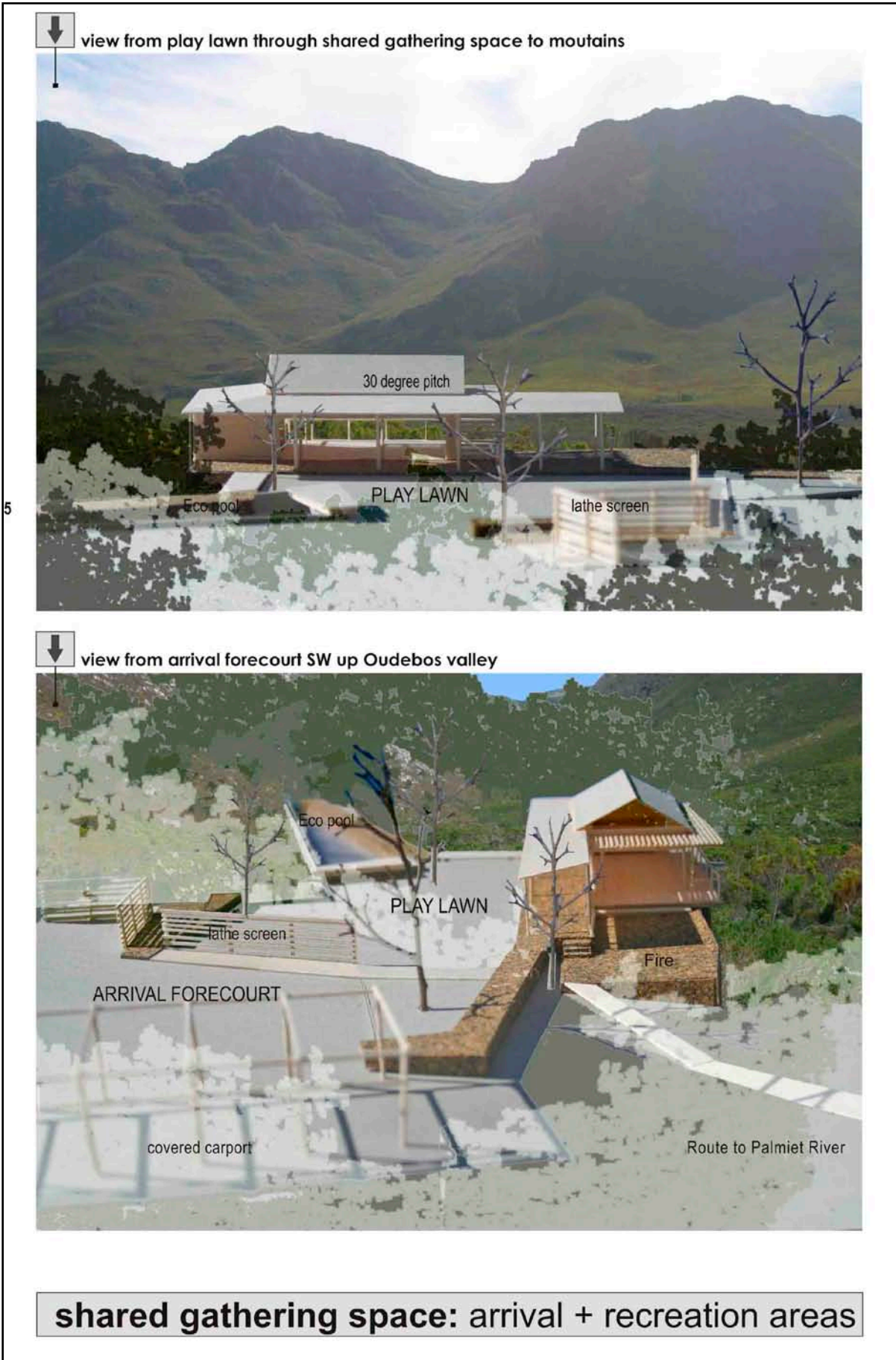


Figure 6: An enlarged view of the gathering space.

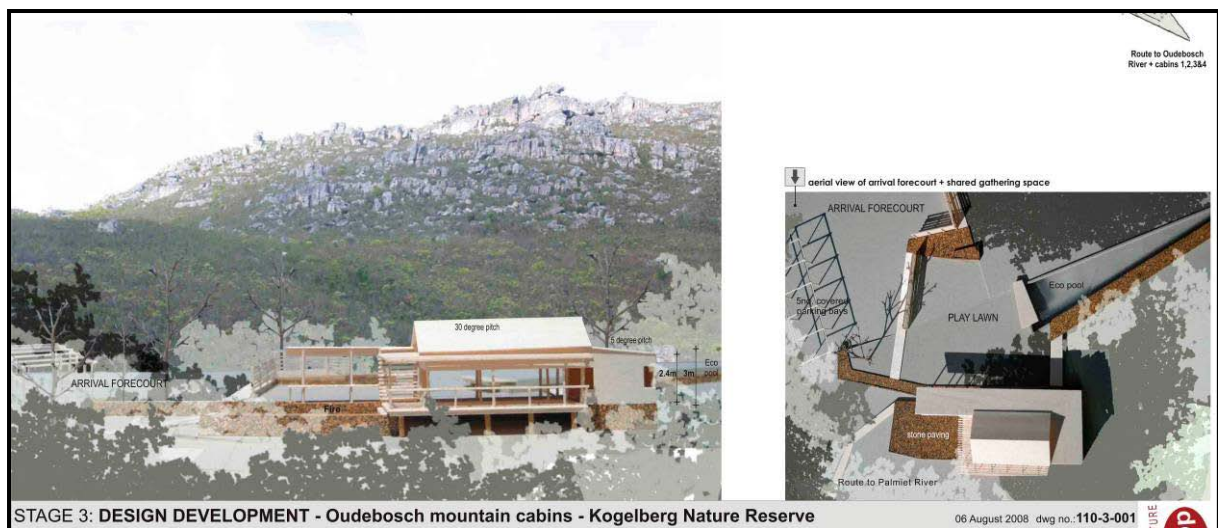


Figure 7: View of one of the chalets.

The following measures have been proposed to *mitigate* any possible adverse impact on the visual aspects of the development:

2.2 Site restoration

The site for the Phase 1 development has been substantially transformed. The gravel loop road which connects the chalets, as well the area around the chalets is currently under alien kikuyu grass. Some of the kikuyu has encroached on the surrounding wetland area.

- The kikuyu grass will be replaced by low level mountain fynbos and a succulent mosaic. This mosaic needs to be fire resistant to minimize the dangers of fire. The vegetation restoration will contribute towards the spatial continuity of the landscape.
- The area around the ecological pool and gathering space will have endemic grass which can be mown.
- The use of board walking to retain conserve the vegetation and maintain a natural feel.

2.3 Roads

The existing road will be reduced and cars will be parked under a lathe pergola, limiting the visual impact of vehicles on the site and landscape.

2.4 Water Systems

The donga to the rear of the site will be restored and the natural topographical sheet flow reinstated. This will assist in restoring the natural spatial qualities of the landscape.

The current septic tank system, which is impacting on the vegetation around the chalets, will be replaced by on site sewage treatment facilities.

2.5 Cabins and Gathering Place

The following measures have been proposed for the construction of the chalets so that they blend into the landscape:

- The layout of the chalets and gathering place will follow a “fragmented form” to minimize the use of large or monolithic elements;

- The frame-like structures will allow glimpses of the landscape through the buildings;
- The chalets will be placed on stilts so that their impact on the vegetation and ground water is minimized, allowing the natural ground water movements in the wetland area to be re-established;
- The roofs of the chalets will be planted with succulents which will create a soft natural coloured and textured roof form which will blend into the landscape better than profiled steel or tiled roofs;
- The exterior walls of the chalets will be clad with lathe to give a basket effect, allowing light to be striated, thereby softening the visual aspects of the buildings;
- Some of the walls and terracing will be supported by gabions which allows the growth of vegetation and the flow of water;
- Limited low-level lighting will be applied to avoid light pollution.

3. CONCLUSIONS

The de-commissioning of the present chalets and their replacement by new chalets with an innovative and eco-friendly architectural design will have a number of benefits. The social and economic benefits include upgraded visitor accommodation to international standards which will benefit local tourism initiatives thereby contributing to job creation. The present chalets were constructed in the 1970s and did not take environmental requirements into consideration. The new design replaces the current septic tank system with a more environmentally friendly wastewater process. The current kikuyu lawn between the chalets will be replaced by indigenous vegetation and the chalets will be raised on stilts to limit their impact on the vegetation and possible sheet wash.

The small scale of the development, the fact the accommodation takes the form of chalets on stilts, and the absence of rocks in the vicinity of the campsite makes it unlikely that palaeontological remains will be found. No archaeological remains were found in the recreational zone and it seems unlikely that the development will impact on below ground archaeological remains. There are no historical buildings which will be impacted. It is possible that there may be below-ground graves and although the likelihood of graves being uncovered due to the restricted nature of the development makes this unlikely.

However, it is important to note that the “low intensity leisure zone” which lies in the Oudebosch valley between a number of mountains, is characterised by its significant visual qualities. The proposals for upgrading the visitor facilities have taken this into consideration in the new designs and every effort has been made to reduce the environmental and aesthetic impact. The materials include lathe cladding on the walls and planted roofs to allow the chalets to blend with the surroundings. Further, the secluded nature of the valley means that it is not visible from adjoining properties or the scenic R44 (or Clarence Drive).

Finally, it is important to remember that heritage material (archaeological, palaeontological, and historical and graves) may be buried beneath the surface and therefore it is recommended that the contractor on site should be advised to be on the look out for the following. *In this instance however, we believe that the possibility of such finds occurring would be low.*

- 1) Fossilised bone;
- 2) Unmarked graves or human remains;
- 3) Historical archaeological material such as ceramics, glass, old bottles, etc which may signify historic occupation;
- 4) Stone artefacts.

If any of these remains are discovered, construction at that specific location should cease immediately and Heritage Western Cape should be alerted so that an archaeologist and/or a palaeontologist can investigate.

4. REFERENCES

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5. GLOSSARY

Later Stone Age: LSA peoples were ancestral to the San (Bushmen) and lived in South Africa between 40 000 years ago and colonial times. During most of the Holocene (last 10 000 years) southern Africa was inhabited by small bands of mobile hunter-gatherer groups. Where these groups lived at the shore they generally exploited coastal resources such as marine shell and marine mammals. Sheep and pottery first occur in archaeological sites around 2000 years ago and they point to the arrival of a new economy in South Africa, that of pastoralism. These groups were probably the ancestors of the colonial Khoekhoen. Later Stone Age deposits often include microlithic tools, faunal remains, bone and shell tools and ornaments, ostrich eggshell beads, etc.

Middens: are open-air shell accumulations, which have resulted from human occupation along the coast. They may date between 60 000 years ago and 300 years ago. Middens may measure between 1 m and 20 m in diameter. Generally there is a correlation between the shellfish in the midden and what is available on the rocks of the seashore nearby. Middens often contain limpets, mussels, periwinkles, alikreukel and perlemoen. However, in the absence of a rocky shore, early peoples also exploited the white sand mussel as well as pencil bait. Middens consist primarily of shellfish but may also contain bone remains and cultural artifacts. They are the most common type of archaeological site is found within 5 km from the coast.

Burials: Pre-colonial human remains are often buried in a flexed position with a cairn or capping of stone. These may be associated with ostrich eggshell bead necklaces and other grave goods. Colonial style graves include shaft and niche burials.

APPENDIX 1: ARCHAEOLOGICAL BACKGROUND

The coastal zone is rich in archaeological material although little systematic archaeological work has been done. No open station shell middens have been excavated and many are threatened or have been destroyed during coastal development. The Archaeology Contracts Office has only been involved in a single project along this section of the coast, and that involved the old whaling station at Stony Point near Betty's Bay (Halkett 1998). Nothing is known of the archaeology of the Kogelberg Nature Reserve. While it is possible that archaeological/historical surveys of the reserve may have been undertaken in the past, these are not common knowledge.

In his analysis of the pottery from the South African coastal sites Rudner (1968) described pottery from shell middens at Rooiels, Hangklip, Silverstrand Bay, Pringle Bay and the Palmiet River. These pots are described as "typically Cape Coastal ware with lugs" – a reference to the pots which are generally believed to have been used by the Khoekhoen pastoralists.

Smith (1981:76) undertook a survey of the coast between Rooiels and the Palmiet River in 1979 and located 75 open shell midden sites which are shown on the figure below. He records that they were all above the high water mark "with the exception of two middens on top of the dunes on the eastern edge of Blesberg". He also reported on two caves, Easter Cave in the Klein Hanggklipberge and another in a kloof south of Cape Hangklip. In his excavation report he remarks that "the dense vegetation cover inland between the high-water mark and the base of the mountains may well conceal other sites that would only be exposed by erosion or excavation".

When Kaplan (1993) provided his review of the current knowledge of coastal archaeological sites, he was able to draw on Smith's survey and supplement this with records from the South African Museum to provide a list of around 101 Later Stone Age sites (map sheet 3418 BD Hangklip) between Rooiels and the mouth of the Palmiet River. These 101 Later Stone Age sites include 93 open station shell middens, four caves, one fish-trap and one burial site.

Smith (1981) went on to undertake an excavation of Rooiels Cave, which had initially been "excavated" in 1921 by Devine and van der Byl, and later in 1922 by Barnard. There are more than 2m of deposit in the cave. The inhabitants of the site supplemented their diet of shellfish with terrestrial fauna such as steenbok/grysbok, duiker, klipspringer, eland/buffalo and haartebeest. They also caught a wide range of fish species. The low frequency of formal stone tools from the site led Smith to speculate that the assemblage dated to the last 3000 years and he was surprised to obtain a basal date of $6\ 100 \pm 120$ BP (Pta-3069). This suggests the cave was occupied by Later Stone Age hunter-gatherers. According to Morris (1992) the remains of four individuals were found in Rooiels Cave.

The archaeological remains suggest that the coast was settled by hunter-gatherer groups and the pottery is an indication that Khoekhoen pastoralists may also have utilized the region during the last 2000 years. Devine (Smith 1981) related a legend which was being recounted in 1921 regarding Rooiels Cave "which states that in the very early days of the Caledon settlement this cave was the headquarters of a tribe of Hottentots (?) who used to make raids up the valley of the Rooiels river and into the Caledon plateau". Devine speculated on whether this story would be substantiated by the Caledon records.

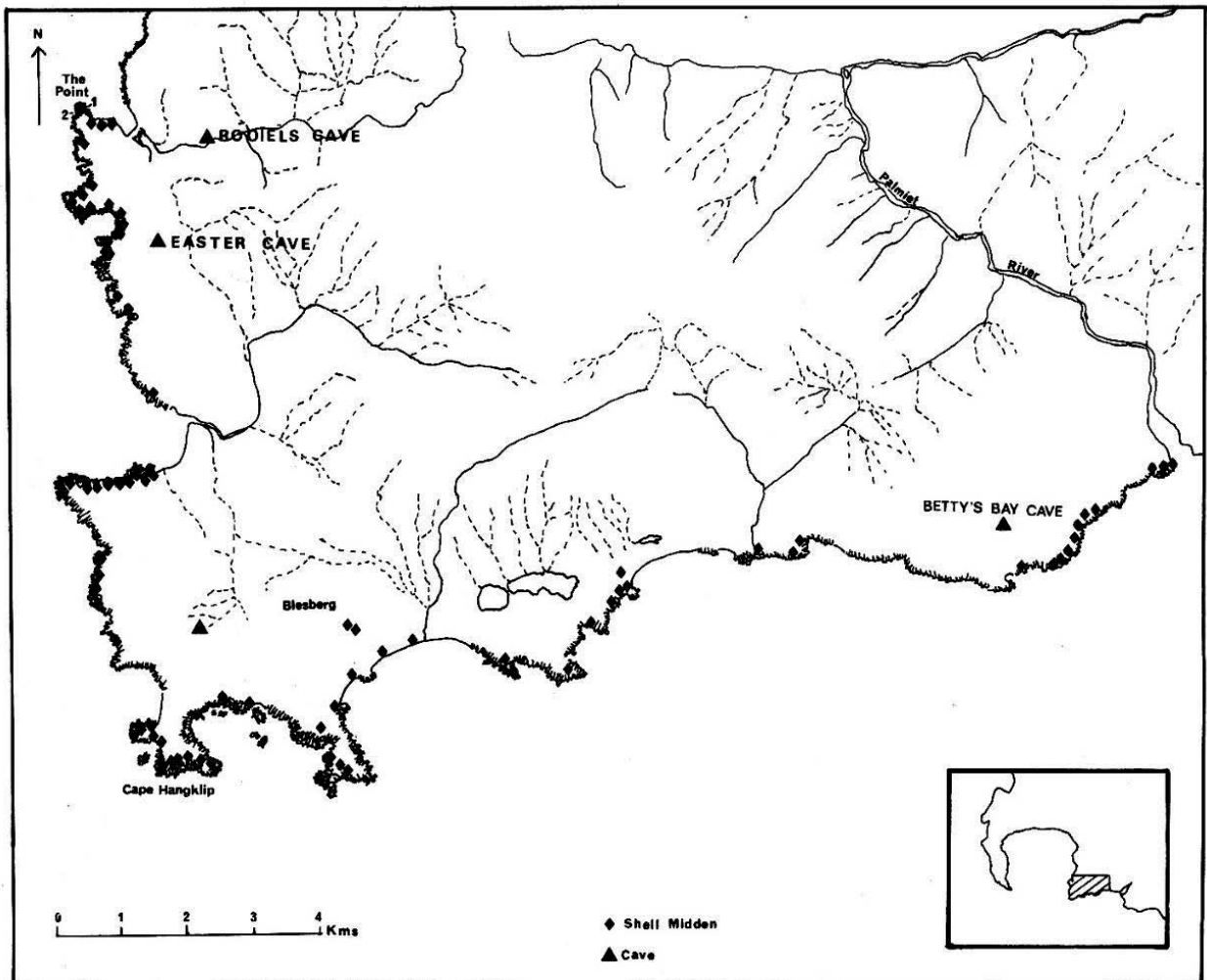


Fig. 1: Sites located during survey.

Archaeological sites located during the Smith survey of 1981.

APPENDIX 2: HISTORICAL BACKGROUND

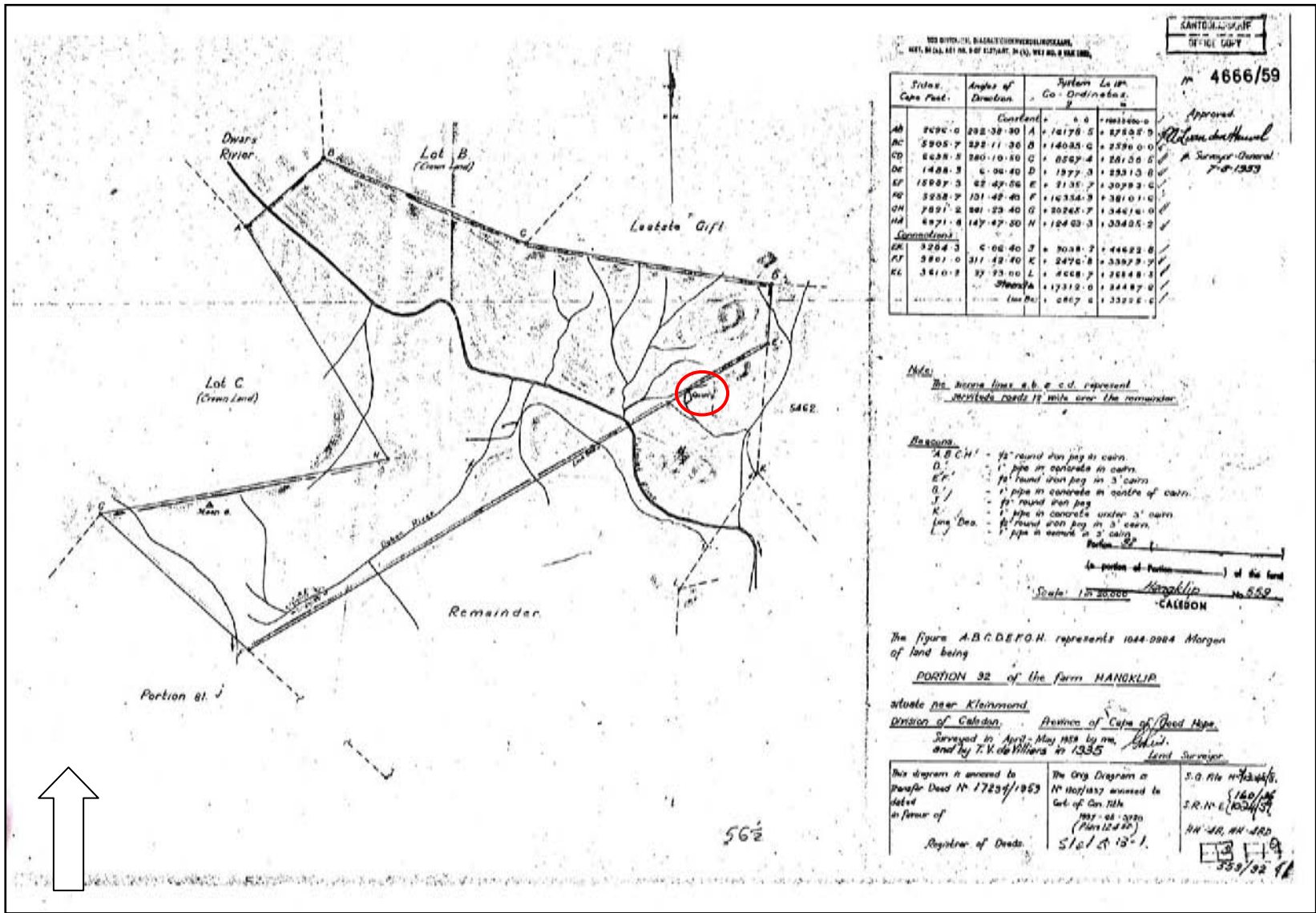
Early farmers found the area between Hangklip and Kleinmond too rugged and isolated for agriculture. It was precisely this isolation however, which made the area a haven for people fleeing from the colony, e.g. bandits and slaves. This meant that the Kogelberg was left practically untouched by development during the 18th and 19th centuries. A number of fishermen appear to have established themselves in the vicinity of Kleinmond around 1850, but the town was only proclaimed in 1908 (Aikman et al. 2005).

According to Halkett (1998) the farms of “Waaigat” (Rooiels) and “Welgemoet” (Pringle Bay) were owned by Jacobus Louw (1780) and were not permanently occupied. In 1917 the Kaplan brothers of Botrivier and others formed the Kleinmond Syndicate and bought most of the land, excluding the area around the Palmiet Mouth northwards, which was the official Outspan. In the 1930s, John Welsh died and all his farms were sold to the Hangklip Beach Estates (which included as members Jack Clarence and Harold Porter). They obtained planning permission to establish Rooiels, Pringle Bay and Betty’s Bay. One of the farms listed as belonging to Hangklip Beach Estates was Oudebosch (1714m 195sr). This appears to be the farm on which the present development is taking place.

Jack Clarence started construction of the coastal road in the 1930’s but was not able to complete the project. Access to the area remained extremely difficult. Clarence Drive was only completed (1941/2) after fears arose of a possible military invasion during World War II (Aikman et al. 2005). After the construction of the road, the coastal area slowly became more developed.

There is information to suggest the cultivation of fynbos in the area during the early 20th century for the commercial export market. Apparently a protea nursery was started on Honingklip farm in 1947 (Aikman et al. 2005). According to the Reserve Manager, the propagation of various protea species was also pioneered on the KNR in the 1960s. Remnants of these protea types may still be seen in the area set aside as the “low intensity leisure zone”.

The Government of the Cape demarcated certain Crown Lands, which included the Kogelberg area, in 1810. In 1937 the then Department of Forestry became responsible for the area and declared it a State Forest. Kogelberg was transferred to CapeNature in 1987, and declared a nature reserve. In 1998 Kogelberg Nature Reserve was proclaimed a UNESCO Biosphere region, the first such biosphere reserve in South Africa.



The Survey Diagram of 1935 showing the extent of the property. There are clearly no houses on the affected area but there is a “quarry” circled in red (SG4666/59).

