

Heritage Statement

in support of Heritage Western Cape Notification of Intent to Develop (HWC NID
– Section 38)

(HWC Case No.: HWC? and DEA&DP Ref. No. ?)

**Proposed Development of a Farm House and Farm Manager's
House, Portion 76 of Uitzicht 216, Knysna Local Municipality,
Western Cape Province**

for

Eco Route Environmental Consultancy, Janet Ebersohn and Samantha
Teeluckdhari (EAPASA: 2023/6443), PO Box 1252 Sedgefield 6573, Cell: 072 773
5397, E-mail: samantha@ecoroute.co.za and **The Applicant, Midnight Storm
Investments 180 (Pty) Ltd**, Name, address, Telephone: ?, E-mail: ?

by



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1 November 2023

Summary - Conclusions & Recommendations

The following conclusions and recommendations are arrived at after reviewing information obtained through:

- previous heritage studies and HWC applications in the vicinity of the 76/216,
- SAHRIS PalaeoSensitivity map,
- Palaeontological Impact Statements (Pether 2023)
- previous archaeological and heritage related studies in the surrounding area,
- SG Diagrams,
- historic and Google Earth aerial photographs, and
- a site inspection (archaeological walk-through).

The SAHRIS PalaeoSensitivity map shows that the study area is white/clear meaning that palaeontological sensitivity is UNKNOWN and that “these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map” (Figure 20). Due to the UNKNOWN palaeontological sensitivity attributed to the study area a professional palaeontologist, Prof John Pether, was consulted for inputs.

Prof Pether concluded as follows: “The proposed developments are not anticipated to have impacts on fossil heritage resources of the coversands and dune sands in the footprints of subsurface disturbance. However, in case of the unexpected uncovering of fossil bones in the surficial coversands and soil, or buried archaeological material, or unmarked graves, it is recommended that a protocol for finds of potential fossil material (and buried artefacts), the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the Construction Phase of the project. Adjustments to the development plan are not expected to change this recommendation” (Pether 2023, Pg. 3).

Links to the HWC FFP are as follows:

https://www.hwc.org.za/sites/default/files/3_11%20Protocol%20Fossil%20Finds%20Final%20June%202016.pdf

https://www.hwc.org.za/sites/default/files/3_12%20Fossil%20Finds%20Poster.pdf

No colonial or pre-colonial heritage resources of significance were identified in the study area. If present on or in aeolian dune sands, then Stone Age implements are expected to be of low significance and Not Conservation Worthy. No caves or rock shelters occur on 76/216 and there are no known or declared Heritage Sites nor other significant heritage resources in the surroundings that will be impacted by the proposed activity.

Because there are no significant heritage resources associated with the property, it does not meaningfully contribute to the already altered cultural landscape of the area. For the same reason there will be negligible to no cumulative impact on the heritage value of the area.

As is evident from Figure 18, 76/216 is only barely visible in the distance from the road leading to and from Brenton-on-Sea. Consequently, the proposed development will have no visual impact on the aesthetic value of the affected area. On heritage grounds, due to the entire absence of heritage resources or themes in and around 76/216, the proposed development will have negligible to no impact on the visual or aesthetic heritage value of the area.

The positive socio-economic impact, including a few short-, medium- and long-term jobs outweigh the negligible to zero negative impacts this project may have on heritage resources.

Because of the above, and because there is no reason to believe that significant heritage resources will be impacted by the proposed activity, it is recommended that the proposed activity be approved in full, and that a Heritage Impact Assessment is not warranted for the project.

Nevertheless, it is recommended that Heritage Western Cape consider and/or require that the following be included in the Environmental Authorisation / Environmental Management Program, if the project is approved:

- although not requiring further Palaeontological investigation, Prof Pether recommends that the Fossil Finds Procedure (FFP – see links above), should be included in the Environmental Authorisation / Environmental Management Program (EMPr) for the construction phase of the project,
- due to the findings of this, geotechnical test excavations, and previous archaeological studies, archaeological monitoring is NOT recommended, but,
- if any human remains or significant archaeological materials are exposed during mining activities, then the find should be protected from further disturbance and work in the immediate area should be halted and Heritage Western Cape must be notified immediately. These heritage resources are protected by Section 36(3)(a) and Section 35(4) of the NHRA (Act 25 of 1999) respectively and may not be damaged or disturbed in any way without a permit from the heritage authorities. Any work in mitigation, if deemed appropriate, should be commissioned and completed before construction continues in the affected area and will be at the expense of the developer.

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1. Name, Bio-sketch and Declaration of Specialist

I, Peter Nilssen (PhD in archaeology, University of Cape Town, 2000), herewith confirm that I am a Professional member - in good standing - of the Association of Southern African Professional Archaeologists (ASAPA), including the Cultural Resource Management section of the same association since 1989 (ASAPA professional member # 097). I am an accredited Principal Investigator for archaeozoology (specialist analysis), coastal, shell midden and Stone Age archaeology; Field Director for Colonial Period archaeology; and Field Supervisor for Iron Age archaeology and Rock Art. I have worked as a professional archaeologist in Cultural Resource Management since 1989 and have completed more than 260 heritage-related impact assessments and mitigation projects as Principal Investigator.

As the appointed independent specialist (archaeologist) for this project hereby declare that I:

- act as an independent specialist in this application,
- regard the information contained in this report as it relates to my specialist input/study to be true and correct,
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act,
- have and will not have no vested interest in the proposed activity proceeding,
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act,
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2014 (specifically in terms of regulation 13 of GN No. R. 982) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification, and
- am aware that a false declaration is an offence in terms of regulation 48 of GN No. R. 982.



Signature of the specialist:

Date: **3 November 2023**

2. Introduction & Background

The applicant, Midnight Storm Investments 180 (Pty) Ltd, proposes to exercise the primary land use rights of the property, which for Agriculture Zone I implies the construction of a primary dwelling and a secondary dwelling. The Environmental Application is for the relaxation of building lines and for the construction of a road to access the south-western part of the property. The environmental application, currently a Basic Assessment process, is being facilitated by Janet Ebersohn and Samantha Teeluckdhari of Eco Route Environmental Consultancy (hereafter Eco Route) who compiled a Screening Tool Report for the project (Teeluckdhari 2023).

Because the proposed development site exceeds 5000 m² in extent and the footprint of the proposed road exceeds 300 m in length, Sections 38(1)(c)(i) and 38(1)(a) of the National Heritage Resources Act (Act 25 of 1999, NHRA) are triggered, resulting in the requirement for a Notification of Intent to Develop (NID) application to Heritage Western Cape (HWC). Through Eco Route, the applicant appointed this author to assist with the heritage process and NID application to HWC.

This document is not a Heritage Impact Assessment, but rather, is a scoping report that provides additional information in support of the NID application and motivates the recommendations made therein.

This Heritage Statement and the accompanying NID application form serve to inform HWC about the proposed development activity and to make recommendations regarding the potential impact on heritage resources and the requirement for any further specialist investigations. This report, the NID application form, and accompanying documentation should be read together as information is not always repeated.

The purpose of this Heritage Statement is to report the results of a site inspection and basic review of background information and previous heritage-related studies with the aim to:

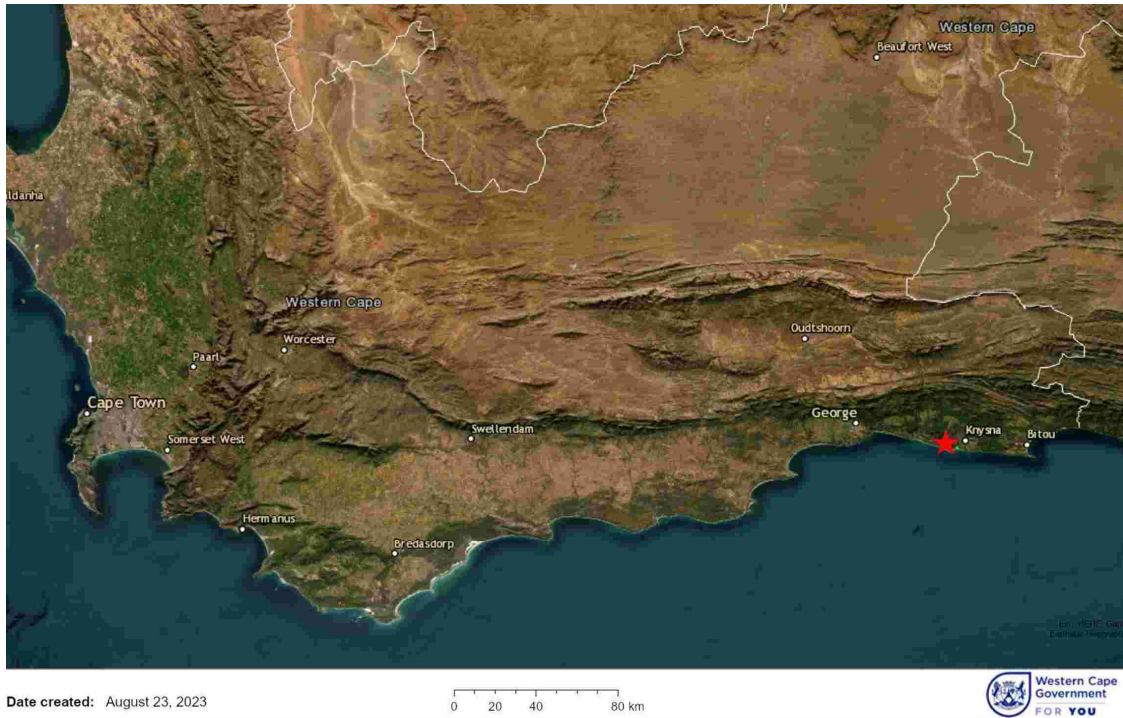
- 1) assist HWC in their decision-making process to ensure that potentially significant heritage resources are investigated and not overlooked, and that unnecessary heritage studies are not undertaken, and
- 2) to assist the applicant with the heritage application process, to avoid expenses on unnecessary specialist studies, and to avoid or minimize later delays and costs resulting from the chance discovery of previously undetected and significant heritage resources.

For the above reasons, HWC recommends that NID applications should be prepared with the assistance of suitably qualified and accredited heritage professionals.

Based on information submitted here as well as its own sources and expertise, HWC will decide and advise on the way forward regarding the protection and management of heritage resources in accordance with the NHRA.

3. Site Location and Development Proposal

Portion 76 of Uitzicht 216 (hereafter 76/216) is located immediately south of Kraal Laan, some 1.5 km west of Brenton-On-Sea, 2 km south of Belvedere and 5.5 km south-west of central Knysna on the Cape South Coast in the Western Cape Province with the centre of the property at 34° 04' 06.77" S 23° 00' 09.54" E (WGS 84, see Locality Map and Figures 1 through 3).



Locality Map. General location of the study area (red star) SW of Knysna, Western Cape Province. Courtesy of Cape Farm Mapper. (A4 version below)

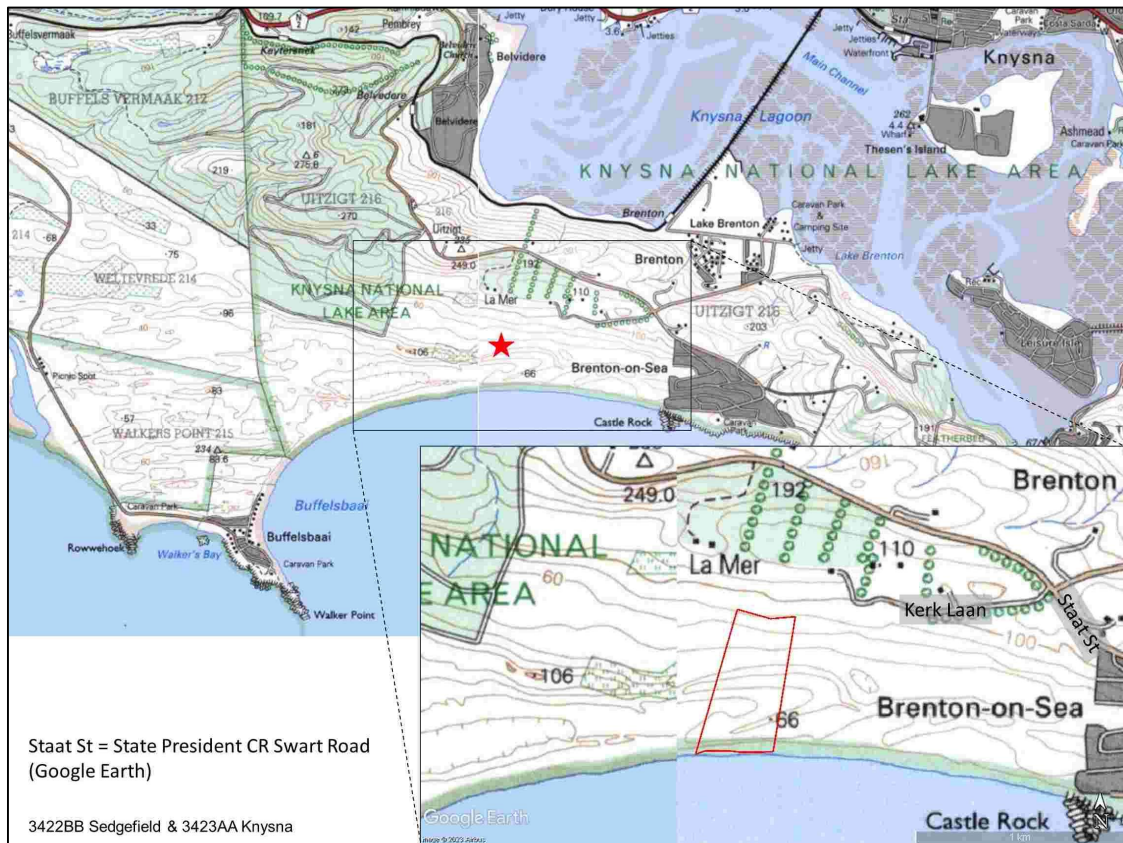


Figure 1. Enlarged portions of 1:50 000 topographic maps 3422 BB 1998 Sedgefield and 3423AA 1998 Knysna showing the location of 76/216 (red star and red polygon). Courtesy of the Chief Directorate Surveys and Mapping, Mowbray and Google Earth 2023. (A4 version below)



Figure 2. Enlarged from Locality Map showing 76/216 (green polygon) relative to Brenton-on-Sea, Belvedere and Knysna. Courtesy of Cape Farm Mapper. (A4 version below)



Figure 3. Enlarged from Figure 2 showing 76/216 (green polygon) relative to Brenton-on-Sea, Kerk Laan and surrounding properties. Courtesy of Cape Farm Mapper. (A4 version below)

The property is bordered by the servitude for Kerk Laan / 111/216, 75/216, Indian Ocean coastline and 39/216 in the north, east, south and west respectively (Figure 3). 76/216 is currently vacant while surrounding land use includes vacant, accommodation establishment and rural residential.

The property is 21,0427 ha in extent while the proposed development footprint of the two houses and road will be less than 0.5 ha in extent. 76/216 is registered to Midnight Storm Investments 180 (Pty) Ltd (Title Deed T117601/2004 and SG Diagrams SG 6821/51 - see accompanying proof of ownership and SG Diagrams).

The proposed development layout is shown in Figure 4 and includes the following:

- 1. the construction of one main dwelling house in the south-western part of the property,
- 2. the construction of one farm manager's house in the north-western corner of the property, and
- 3. the construction of a new internal road to provide access to the main house in the southern part of the property.

A more detailed description of the development proposal is given in Section D of the accompanying HWC NID application form (Vreken 2020).

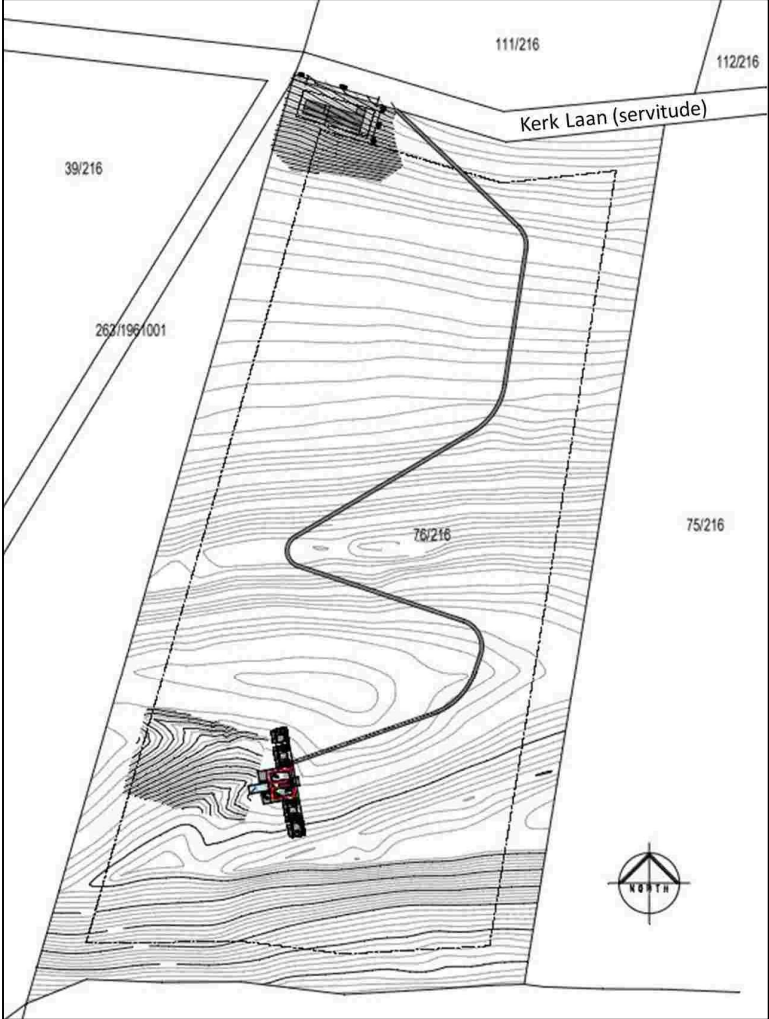


Figure 4. Proposed Site Development Plan. Courtesy of the applicant (annotated after Vreken 2020, Plan 7) (A4 version below)

4. Study Area

The southern boundary of 76/212 follows the sandy high-water mark of the Indian Ocean while the northern boundary is about 650 m north of the high-water mark. The proposed location of the main dwelling is about 120 m from the sandy shoreline and immediately inland of a large, 60 m high and a very steep south-sloping coastal dune (Figure 5). A second, roughly 70 m high dune runs through the middle of the property in a WE direction while the elevation of the site for the second house in the north is about 80 m above mean sea level. Both parabolic coastal dunes have steep slopes with coversands of the Strandveld Formation consisting of Holocene aged aeolian sands that accumulated over the last 6000 years or so (Pether 2023). These Holocene coversands are underlain by aeolianites of the Waenhuiskrans Formation which accumulated between 80 000 and 130 000 years ago (Pether 2023). No hard rock geological sediments were seen and there are no rock shelters on the property. The nearest rocky intertidal zones are more than 1.5 km to the east and more than 3 km to the west. While there are some roads and modern structures on surrounding properties, there is no built environment on 76/216.



Figure 5. Oblique easterly view of 76/216 (red polygon) showing the two sites for houses (white ellipses), steep parabolic coastal dunes, and Brenton-on-Sea in the background to the right. Courtesy of Google Earth 2023.

Vegetation in the northern part of the property is dense, severely transformed and includes a variety of exotic species (e.g., black wattle, pine, blue gum and rooikrans trees). While the vegetation on the remainder of the property is less transformed, exotic species are present in the lower lying areas with thicket. Large parts of the property are not open to archaeological inspection due to dense vegetation and ground cover. Nevertheless, tracks, exposed surfaces and widespread mole activity allowed for adequate observations for the purpose of this baseline investigation.

Examples of the study area and affected environment are shown in Figures 6 through 18. Further locational and contextual information is shown in Figures 3 & 5. Directions of views

are indicated on photographs with abbreviated compass bearing names such as S = South, WSW = West-South-West, W = West, SW = South-West, and so on.

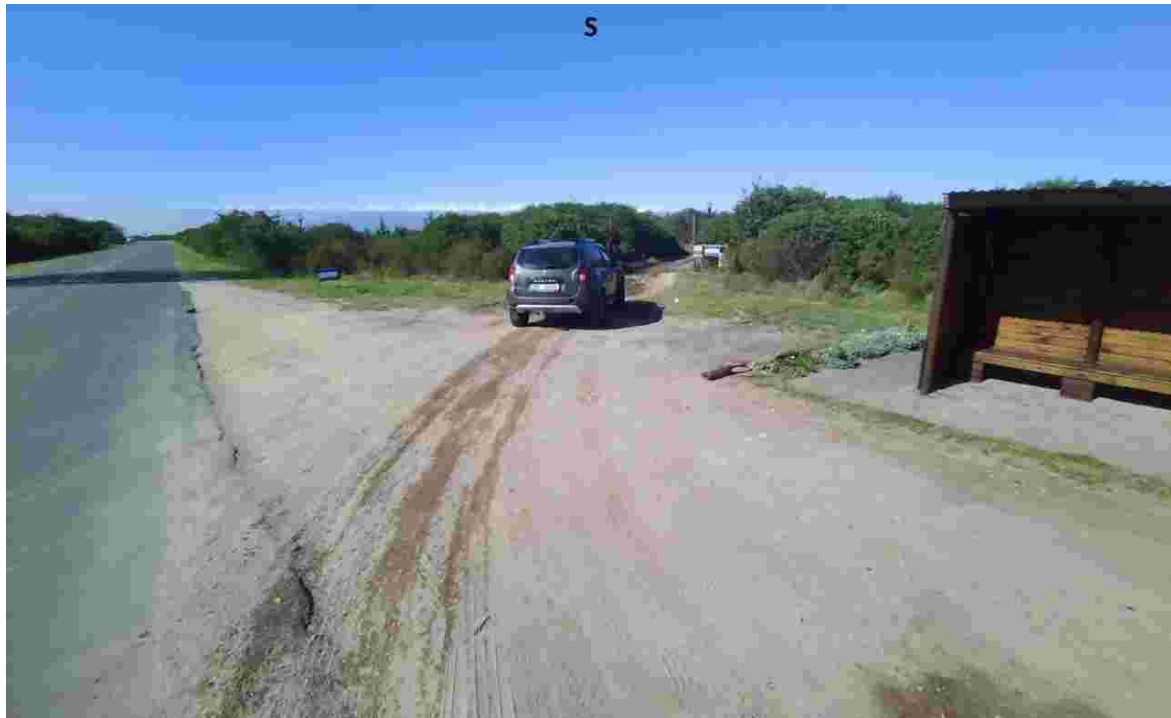


Figure 6. Access point to Kerk Laan along unnamed road leading from the N2 highway to Brenton-on-Sea (top). View toward Buffelsbaai (background on coast) and study area from Kerk Laan (bottom). Note dense vegetation and high coastal dunes.



Figure 7. View of study area from Kerk Laan showing dense vegetation and ground cover (top), steep sloped dunes and access road over central dune on adjacent property (39/216) to the west (bottom).



Figure 8. Examples of exposed sandy surfaces in the north-western corner of the property at the site of the second dwelling.



Figure 9. View over the north-western part of the property at the site of second dwelling with dense, impenetrable vegetation.

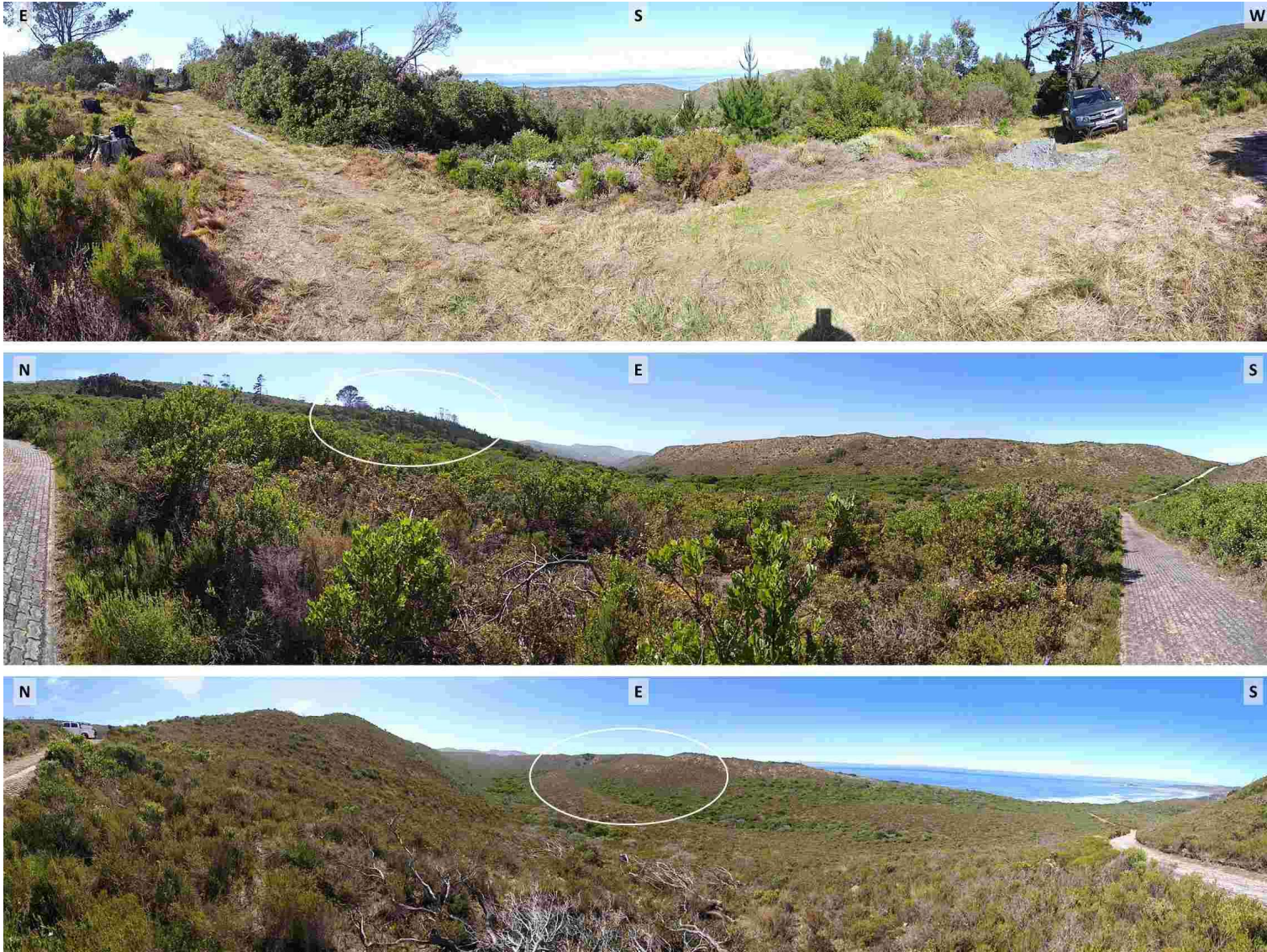


Figure 10. 180° panoramic views from western part of Kerk Laan (top), from existing road on 39/212 between north boundary and central dune (middle) and from west of 76/216 between central and coastal dunes (bottom). Sites for second house (middle) and main house (bottom) in white ellipses.



Figure 11. Views into study area from road on 39/216 in the west showing dense vegetation between the northern boundary and central dune. The site for the second house is in the white ellipse (bottom). Note exposed surfaces near the top of central dune (top).



Figure 12. Low lying area north of central dune (top right) showing dense vegetation, ground cover and sands exposed by mole activity (bottom).

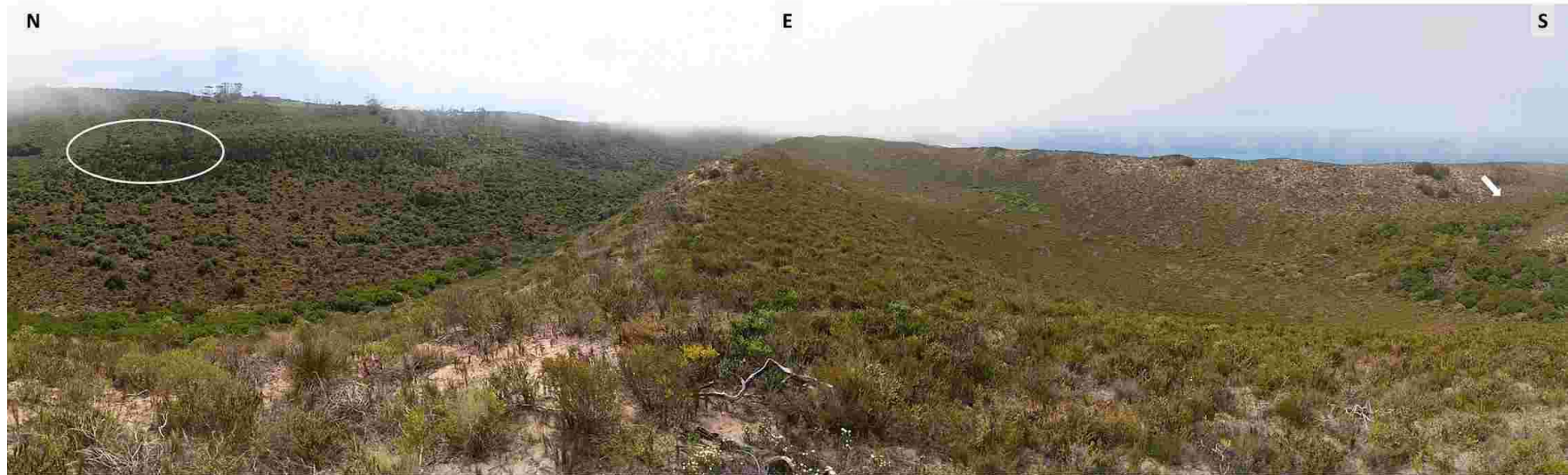
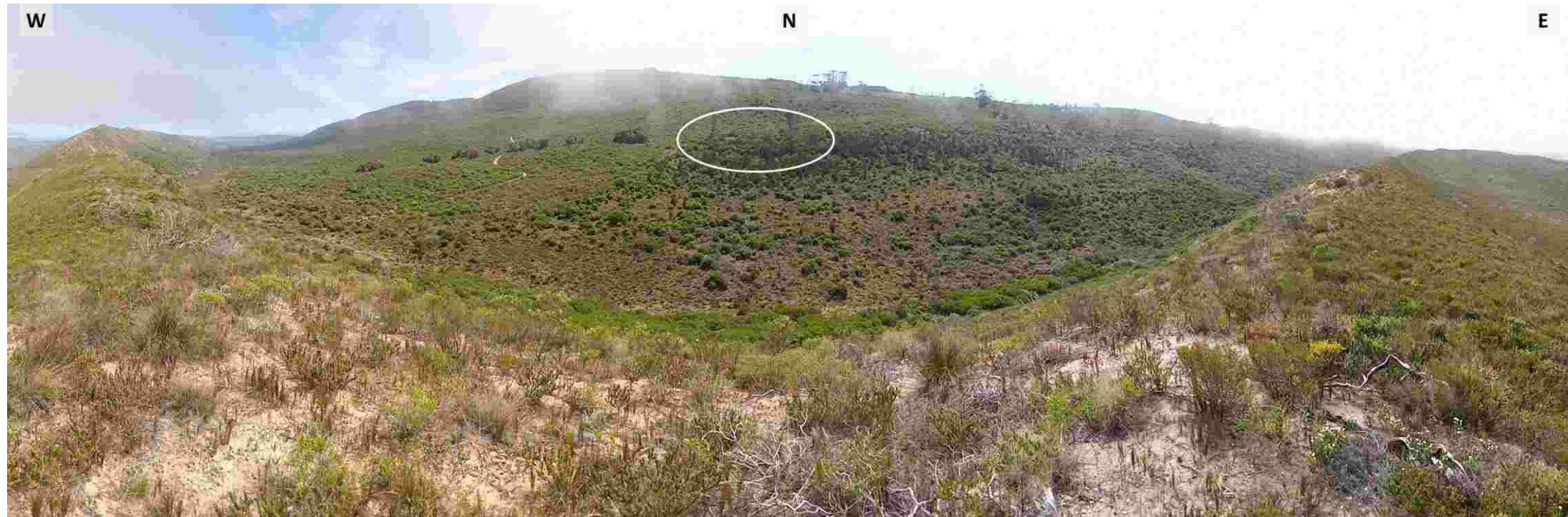


Figure 13. 180° panoramic views from the central dune at roughly the middle of 76/216 with the sites for the second house and main house indicated by the white ellipses and white arrow respectively. Note topography, vegetation and exposed dune sands.

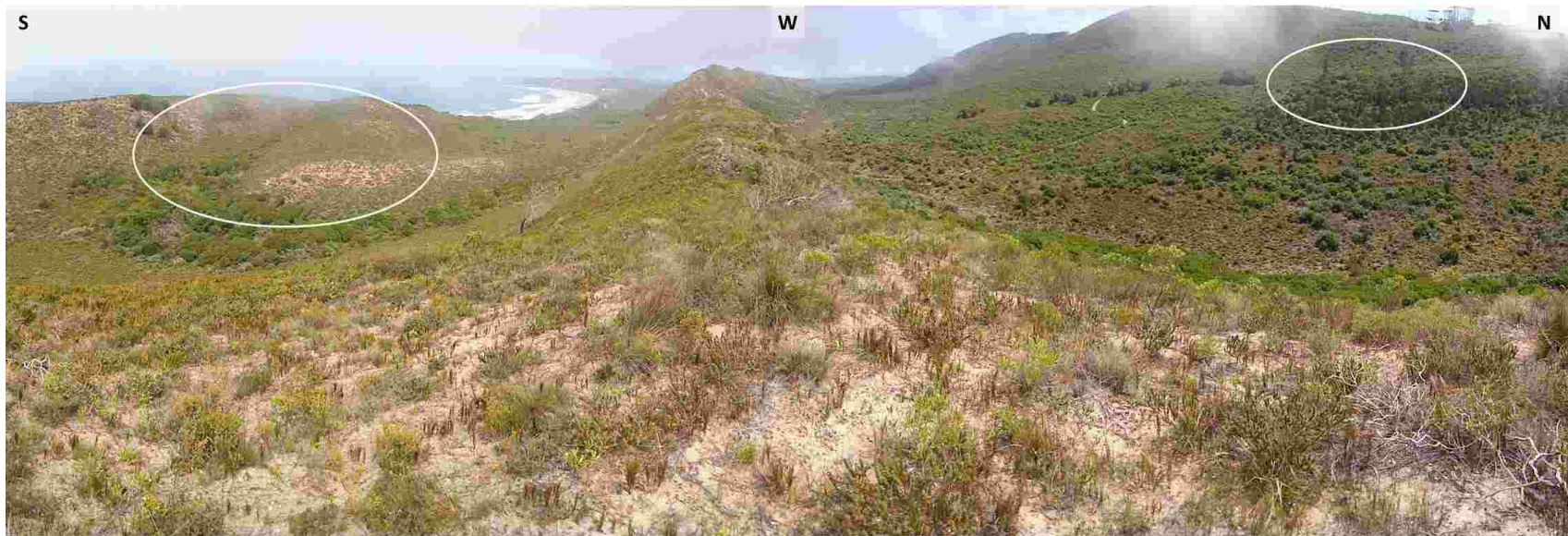
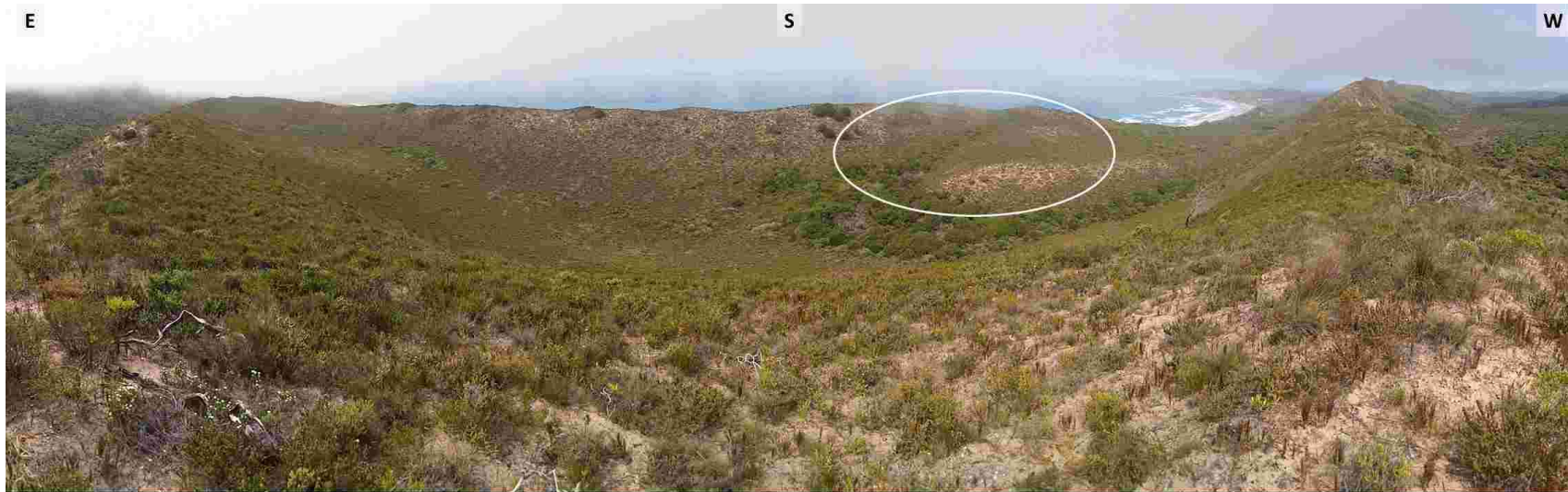


Figure 14. 180° panoramic views from the central dune at roughly the middle of 76/216 with the site for the main house in white ellipse (top and bottom left) and second house in white ellipse (bottom right). Note topography, vegetation and exposed dune sands.

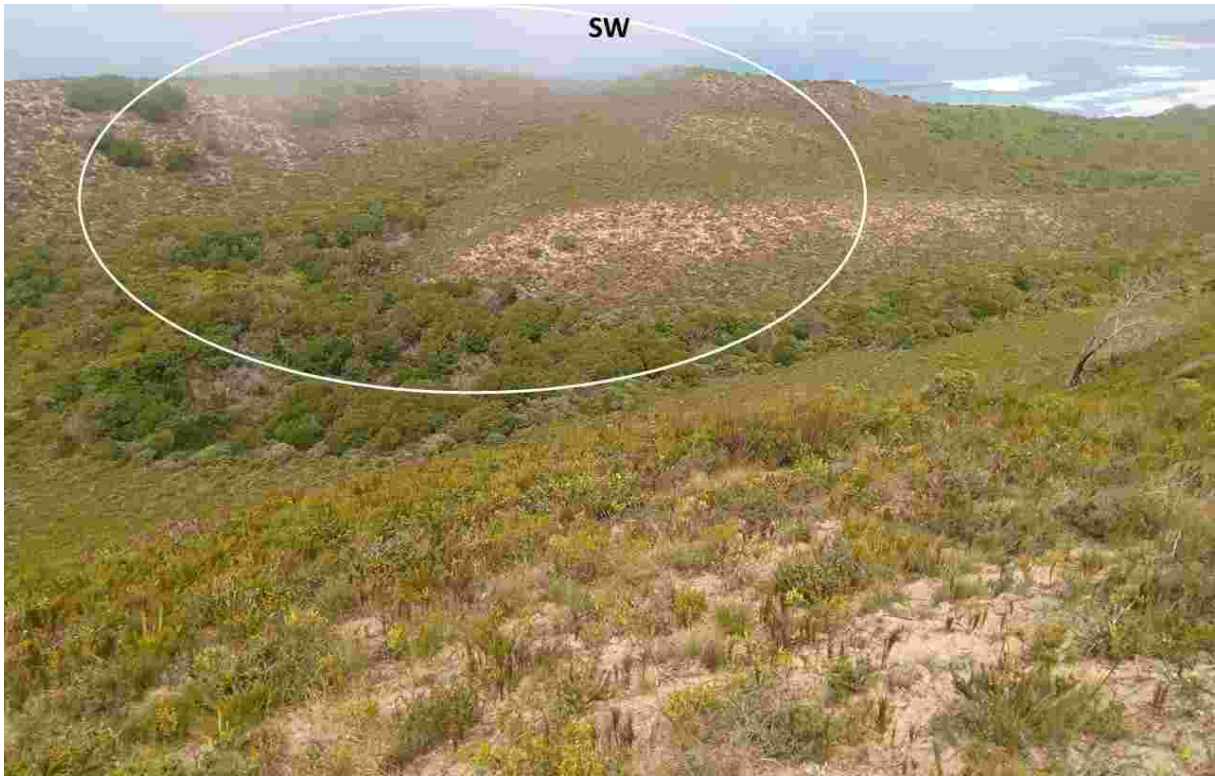


Figure 15. View from central dune toward site for main house (white ellipse) and showing mole activity on dune ridge (bottom). Note topography, vegetation cover and exposed surfaces.



Figure 16. View from lower, secondary dune looking toward site for main house (top, white ellipse) and looking toward Buffelsbaai (bottom). Note topography, vegetation cover, mole activity and exposed surfaces.

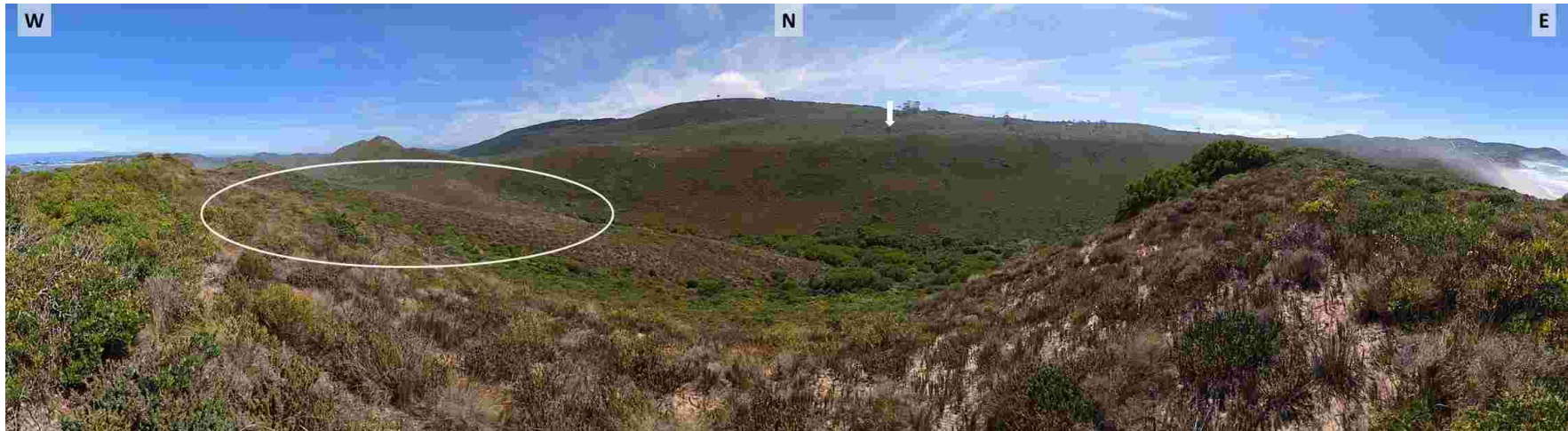


Figure 17. 180° panoramic views from the coastal dune at roughly the middle of 76/216 with the site for the main house in white ellipse and second house indicated with the white arrow at the north-western corner of the property (top). Brenton-on-Sea and Buffelsbaai are on the coast to the East and West respectively (bottom). Note sandy shoreline with nearest rocky intertidal 1,5 km East and 3 km West (bottom).



Figure 18. Views from the unnamed road between the N2 highway and Brenton-on-Sea looking toward the study area that is not readily visible from the road (top) unless you stop at a lookout point from where 76/216 is barely visible in the distance (bottom).

5. Background Information, Previous Heritage Studies & Heritage Resources

Palaeontology

A DFFE screening tool report was obtained by Eco Route as part of the initial stages of the environmental application process (Teeluckdhari 2022). The screening tool map and tables shown in Figure 19 indicate that 76/216 is attributed with a MEDIUM palaeontological sensitivity.

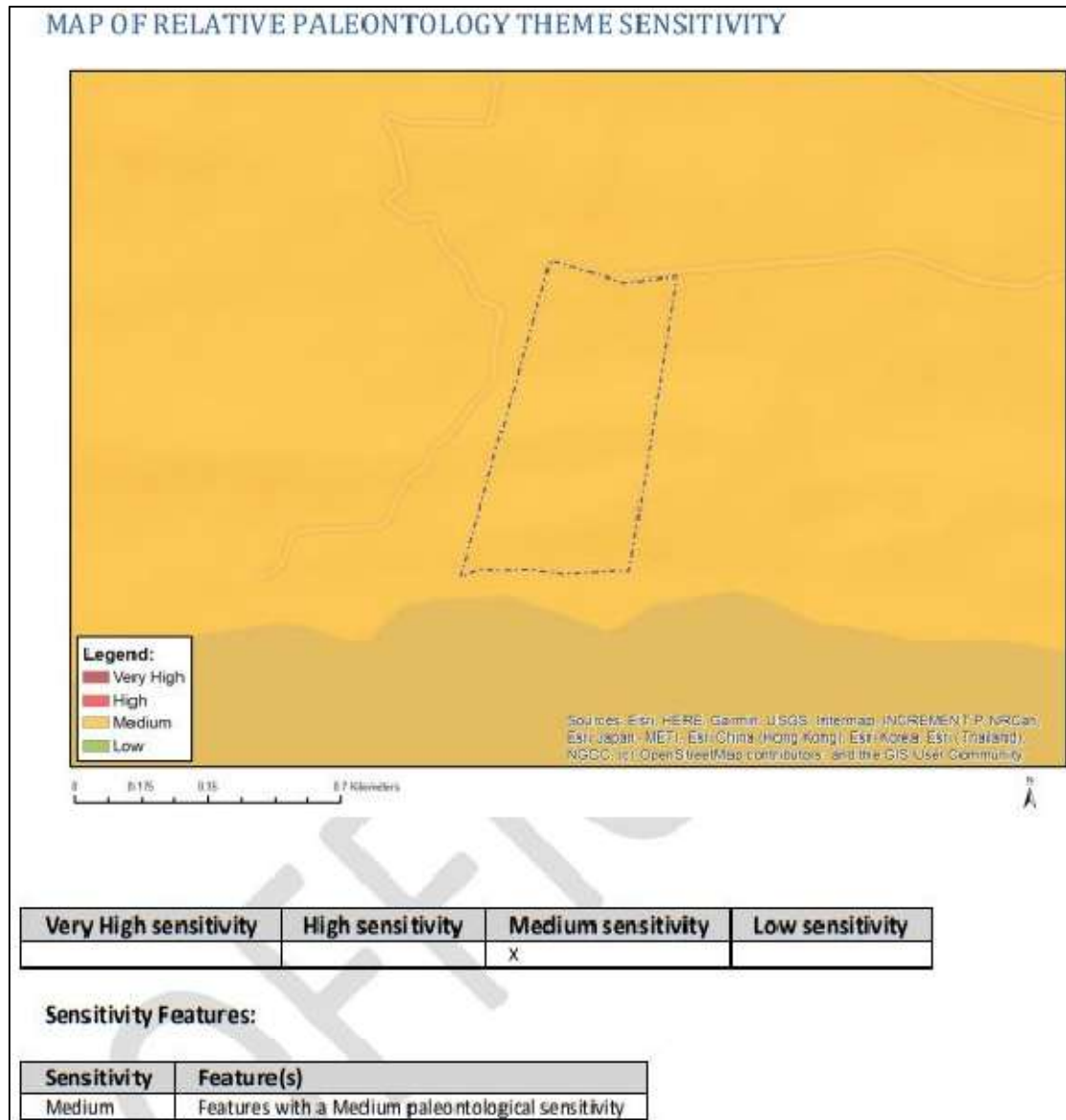


Figure 19. Map of relative palaeontology theme sensitivity from the DFFE screening tool report (Teeluckdhari 2023). 76/216 is represented by the dashed blue line.

The SAHRIS PalaeoSensitivity map shows that the study area is white/clear/unshaded, meaning that palaeontological sensitivity is UNKNOWN and that “these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map” (Figure 20). Due to the UNKNOWN palaeontological sensitivity attributed to the study area a professional palaeontologist, Prof John Pether, was consulted for inputs.

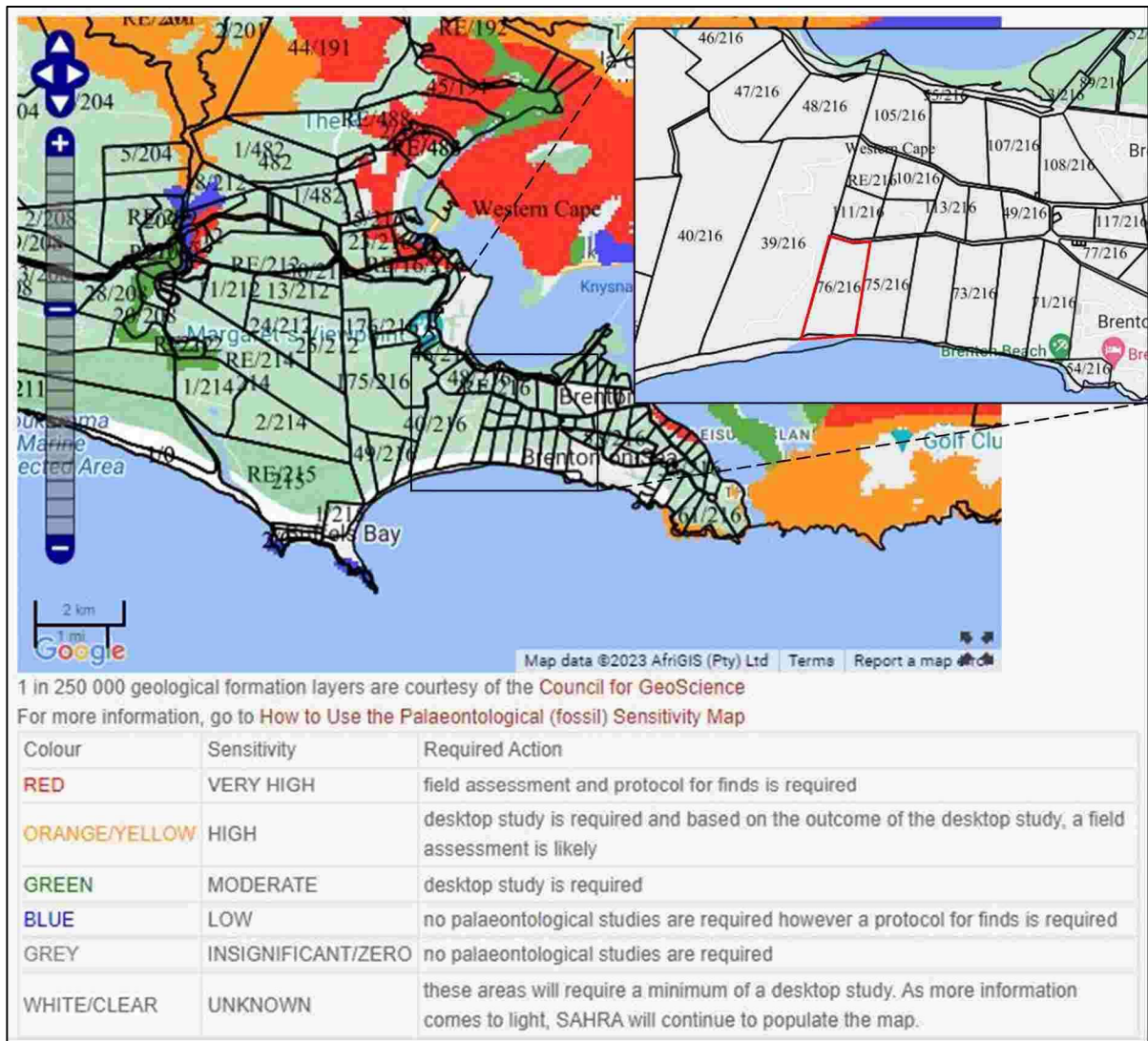


Figure 20. SAHRIS PalaeoSensitivity Map shows that the study area (red polygon in inset) is white/clear/unshaded (<http://www.sahra.org.za/>).

The following includes key sections and full recommendations given in Prof Pether’s report, but figure numbers are changed to follow the sequence in this report (Pether 2023).

“Geological Context

The Knysna property is situated on “Fixed dunes & dune rock” (Figure 21). The aeolianite underlying the area is equivalent to the Waenhuiskrans Formation of the Bredasdorp Group of coastal-plain formations. The Waenhuiskrans Fm. is rated Very High/Red on the Worcester and Riversdale geological maps part of the SAHRIS Palaeontological Sensitivity Map, but is not rated (is unclassified) on the relevant Oudtshoorn map part (Figure 20).

In more detail the property straddles the Seaward Cordon of the Wilderness area dune ridges (Bateman *et al.*, 2011) from which OSL dates from Buffelsbaai seashore cliff exposures indicate the **Waenhuiskrans Fm.** aeolianite accumulated during MIS 5, between 130 to 80 ka (ka=thousand years ago) (Figure 22). The aeolianite beneath the inland, smoothly-sloped portion of Ptn. 76 of Uitzigt 216 is likely of similar or slightly older, later Quaternary age. Further inland is an older ridge of probable mid-

Quaternary age with a well-developed capping soil (Figure 22). The seaward part of the property is overridden by a complex of stacked parabolic (hairpin) dunes of the **Strandveld Fm.** which have accumulated during the last few thousand years of the Holocene Epoch since about 6 ka (Figures 22 & 23). The aeolianite beneath the inland part of the property is overlain by windblown, grey loose coversands generally distributed during the Holocene and bearing Knysna Sand Fynbos, but sometimes a buried palaeosol representing an older generation of coversands may occur.

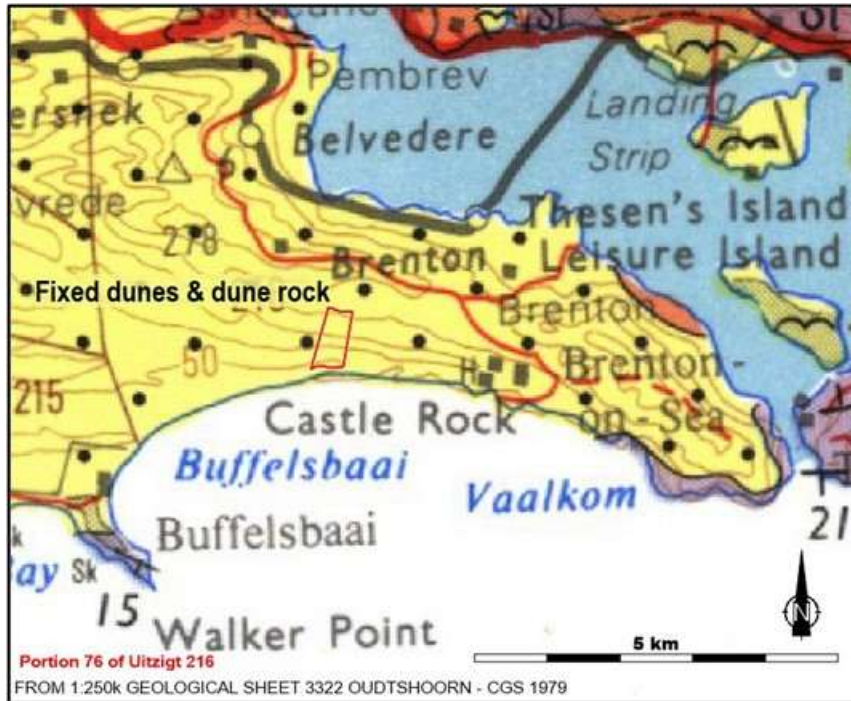


Figure 21. Surface geology of the Brenton area and location of Portion 76 of Uitzigt 216.



Figure 22. Landscape setting of Portion 76 of Uitzigt 216 (A4 version below)

Anticipated Impacts

It is assumed that the excavations for foundations and infrastructure will be typical of those for conventional developments, usually 0.5 to 0.8 m depth. Deeper excavations (~2 m) are entailed for septic tanks and swimming pools. Earthworks for the farm buildings in the NW corner of the property

will mainly affect the coversands, but may intersect the underlying palaeosurface and buried soil capping the underlying Waenhuiskrans Fm. aeolianite.

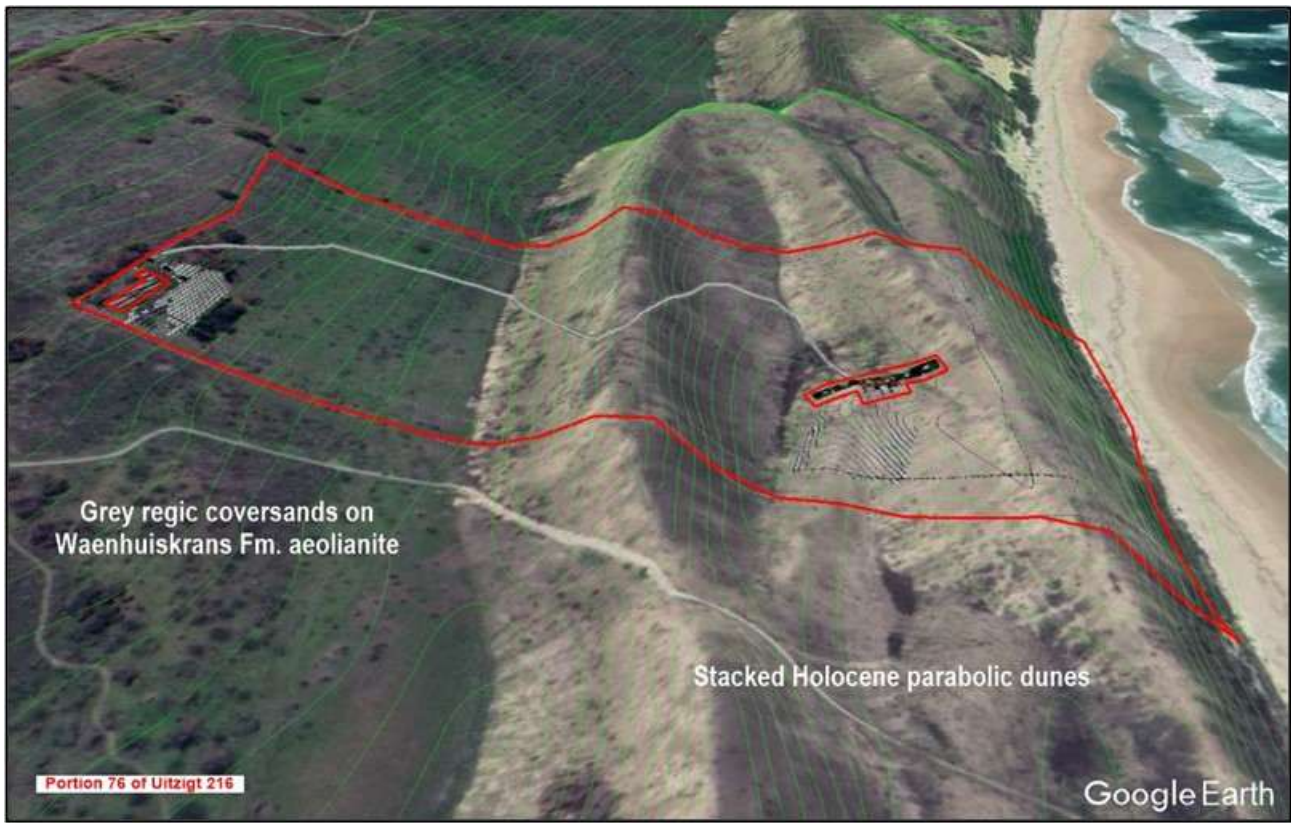


Figure 23. Proposed development areas, looking east. Image date 11/17.

The fossil bones that may occur in the Waenhuiskrans Fm. are expected to be of later Quaternary age, between ~160 to ~80 ka, but fossil bones in and on its top may be considerably younger. The fossil bones are expected to be mainly comprised of representatives of the extant (living) fauna, but unexpected species may occur, as a result of phases of different ecological and palaeoclimatic conditions in the past, as well as the bones of some species which became extinct in the geologically-recent past. The later Quaternary fauna is fairly well known from archaeological sites and hyaena bone accumulations and additional finds are considered to be of moderate scientific importance, *i.e.* formations known to contain palaeontological localities and that have yielded fossils that are common elsewhere, and/or that are stratigraphically long-ranging, would be assigned a MODERATE sensitivity rating. Given the relatively small scale of the farm buildings subsurface impact it is unlikely that fossil bones will be discovered, but it could occur.

The large bones of elephant, rhino, and hippo who died in the Strandveld Fm. dunes have occasionally been uncovered during sand quarrying and developments, but are apparently rare finds. The subfossil bones in the stacked parabolic dunes are expected to be of latest Quaternary age, (less than about 6 thousand years old) and are likely to be mainly members of the extant, modern fauna. Although considered to be subfossil remains, radiocarbon dating and geochemical isotope analyses of teeth and bones yield valuable information of changing ecological conditions during the late Holocene. Excavations on the dune are unlikely to have an impact on palaeontological resources.

Recommendations

The proposed developments are not anticipated to have impacts on fossil heritage resources of the coversands and dune sands in the footprints of subsurface disturbance. However, in case of the unexpected uncovering of fossil bones in the surficial coversands and soil, or buried archaeological

material, or unmarked graves, it is recommended that a protocol for finds of potential fossil material (and buried artefacts), the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the Construction Phase of the project. Adjustments to the development plan are not expected to change this recommendation.

Links to the HWC FFP are below:

https://www.hwc.org.za/sites/default/files/3_11%20Protocol%20Fossil%20Finds%20Final%20June%202016.pdf

https://www.hwc.org.za/sites/default/files/3_12%20Fossil%20Finds%20Poster.pdf

Heritage Western Cape will assess the information and liaise with an archaeological or palaeontological specialist, as appropriate” (Pether 2023, Pg 1 through 4).

Archaeology

The DFFE screening tool map and table for the archaeological and cultural heritage theme sensitivity shown in Figure 24 indicate that 76/216 falls within an area of LOW sensitivity (Teeluckdhari 2023). The HIGH or VERY HIGH sensitivity area to the NNW of the property most likely relates to Early Stone Age and Middle Stone Age implements reported about 2 km to the NNW (Halkett 2004). These finds were not considered to be significant and required no further investigation, mitigation or management measures (Halkett 2004).

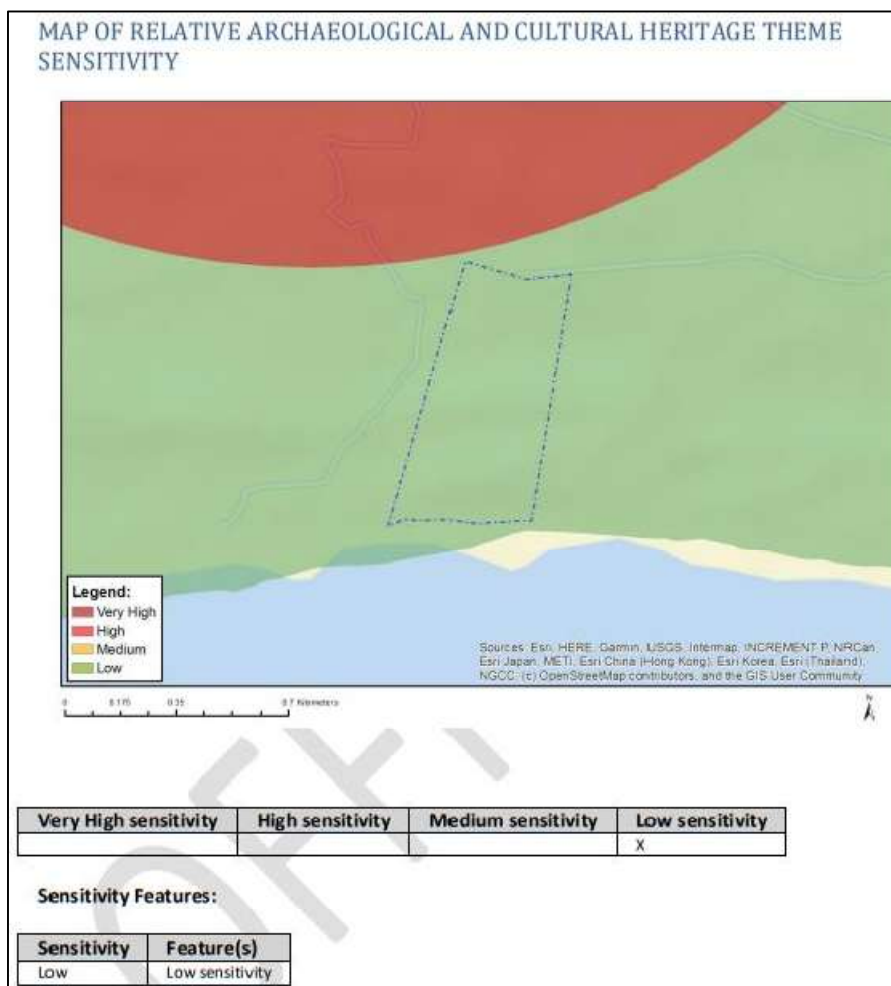


Figure 24. Map of relative archaeological and cultural heritage theme sensitivity from the DFFE screening tool report (Teeluckdhari 2023)). 76/216 is represented by the dashed blue line.

To the best of my knowledge, no previous archaeological or heritage related studies were undertaken on 76/216, though this author did an archaeological study and monitoring or geotechnical excavations for 71/216 & 72/216 about 1 to 1,5 km to the east (Nilssen 2017). There are no National or Provincial Heritage Sites, or graded archaeological resources or sites in the immediate vicinity of the current study area that will be impacted by the proposed development.

Very little scientific archaeological research has been undertaken in the immediate surroundings and is restricted to investigations into Stone Age materials in small coastal caves situated in the cliffs around and at the Knysna Heads some 6 km to the east. Most of the information concerning the colonial and pre-colonial heritage / archaeology of the surroundings was obtained through heritage and archaeological studies associated with chance discoveries during development as well as environmental impact assessments for a variety of development activities. While there are currently 10 reports, an earlier desktop study (Nilssen 2017) revealed only 6 reports of heritage related studies conducted within roughly 10 km from the present study area (De Kock 2017 & 2023, Halkett 2004, Hart & Halkett 1998, Kaplan 2001 & 2002 and Nilssen 2007a, 2007b, 2010, 2016 & 2017).

The historic period in the surroundings of Knysna involved a variety of activities associated among others with the timber industry, agriculture, roads, railways, structures and shipping. A wealth of history is tied to Knysna and is evident from historic buildings and ruins in the town and surroundings (De Kock 2017 & 2023 and Hart & Halkett 1998). There is no built environment older than 60 years in the immediate surroundings of 76/216 as the coastal village of Brenton-on-Sea dates to the late 1950s and early 1960 (De Kock 2017 & 2023 and see historic aerial images below).

About 2 km NNW of the present study area, Halkett recorded Early Stone Age (ESA) and Middle Stone Age (MSA) stone artefacts in quartzite occurring in erosion gullies and previously disturbed areas. The finds were of low significance due to their derived contexts, low densities or isolated nature and the absence of organic and other cultural remains (Halkett 2004). Halkett also notes that "Stone Age material is the most prevalent trace of early human settlement and is likely to be encountered wherever there is surface disturbance" (Halkett 2004 pg. 8).

In addition to a historic farmstead, Middle Stone Age and Early Stone Age stone implements were identified at the site of the Pezula development some 9 km to the west (Kaplan 2001). ESA specimens are most common and were found mainly in disturbed and eroded contexts and included hand axes, cleavers, choppers, flaked cobbles and flakes, mostly in quartzite. MSA implements included cores, flakes, points, blades and chunks mostly in quartzite. Only a few Later Stone Age stone artefacts were identified. Because all these materials were found in disturbed contexts, they are of low significance (Kaplan 2001). Low numbers of Stone Age implements of low significance were recorded at the site of the Fernwood Estate some 7 km to the west (Kaplan 2002). A few Stone Age implements were found during other investigations, but commonly these studies were hampered by poor archaeological visibility (Nilssen 2007a, 2007b and 2010).

Finds at the nearby properties of 71/216 and 72/216 less than 2 km to the west included modern structures and artefacts less than 60 years old, an MSA blade, an ephemeral scatter of marine shell of questionable origin, a few ostrich eggshell fragments, a few fragments of white mussel shell, a quartzite chip and a quartzite bladelet core. Due to temporal mixing, their isolated nature, low densities and absence of associated cultural and organic remains, these finds are of low significance and require no further study, mitigation or management (Nilssen

2017). Furthermore, geotechnical test excavations on 71/216 and 72/216 and dug to a depth of 3 meters revealed unconsolidated aeolian dune sands to depth and no subsurface archaeological or palaeontological remains (Nilssen 2017).

Based on the above, it is anticipated that no colonial period materials will be found and that Stone Age archaeological resources may occur on 76/216, but that these are likely to be of low significance. Due to the young age of the surface sediments (less than 6000 years [Pether 2023]), only Later Stone Age materials may occur in the coversands and given the absence of rock shelters and the fact that predictable food sources in the intertidal zone are more than 1,5 km distant, such finds are unlikely and not expected. While MSA materials might occur on earlier palaeosols below the coversands, such finds are likely to be few and lack associated organic and cultural remains (De Kock 2023, Halkett 2004, Kaplan 2001 & 2002 and Nilssen 2017). Due to a once shifting matrix, low densities, temporal mixing, the complete absence of associated cultural and organic remains, such finds are of low to no archaeological value and hence attributed Grade III C or Not Conservation Worthy status. Consequently, 76/216 is not expected to be sensitive from an archaeological and cultural heritage standpoint and this is in agreement with the DFFE report (Teeluckdhari 2023).

6. SG Diagrams, Historic Aerial Photographs and Results of Site Inspection

In addition to Google Earth “historic” imagery, all available SG Diagrams and high resolution historic aerial photographs – except 1980 - were obtained and carefully examined for indications and traces of potential heritage sites such as rocky outcrops, water and food sources, built structures, roads, features and evidence for ploughing and human-related impacts. A detailed history of ownership and subdivision of the original Farm Uitzicht 216 is beyond the scope of this basic investigation, but previous studies in the immediate surroundings provides some detail (De Kock 2017 & 2023).

The farm Uitzicht 216 was first surveyed by well-known government surveyor Sgt. Petersen in 1818 (De Kock 2017). “The original farm, then measuring 2,836 morgen (\pm 2,429 ha) is recorded as having been granted by quitrent to Hendrik Barnard Snr at the time. The diagram highlights places along the north-facing side of property, along the Knysna River, such as Silver Fountain, Ashford Village, Ashford Grove and Belvidere Village, it does not note any structures on the remainder of the property” (De Kock 2017 Pg. 6, see Figure 25). “The diagram shows a spring, situated just south of Belvidere Village and notes the property as being used for grazing purposes, which is likely to allude to the intent of the quitrent grant” (De Kock 2017, Pg. 6).

The earliest SG Diagram obtained for Uitzicht 216 dates to 1818 and relates to the original survey and granting to H. Barnard Snr as described above (Figure 25, De Kock 2017). Thereafter is the early (1880-1900) SG Mapping (Figure 26, De Kock 2017), followed by SG Diagrams of 1921 (Figure 27) and 1951 when several diagrams were produced including the most recent and current diagram that includes 76/216 (Figures 28, 29 & 30). Further SG Diagrams were examined and include existing servitudes and adjacent properties, but these are not included here and are available from this author on request.

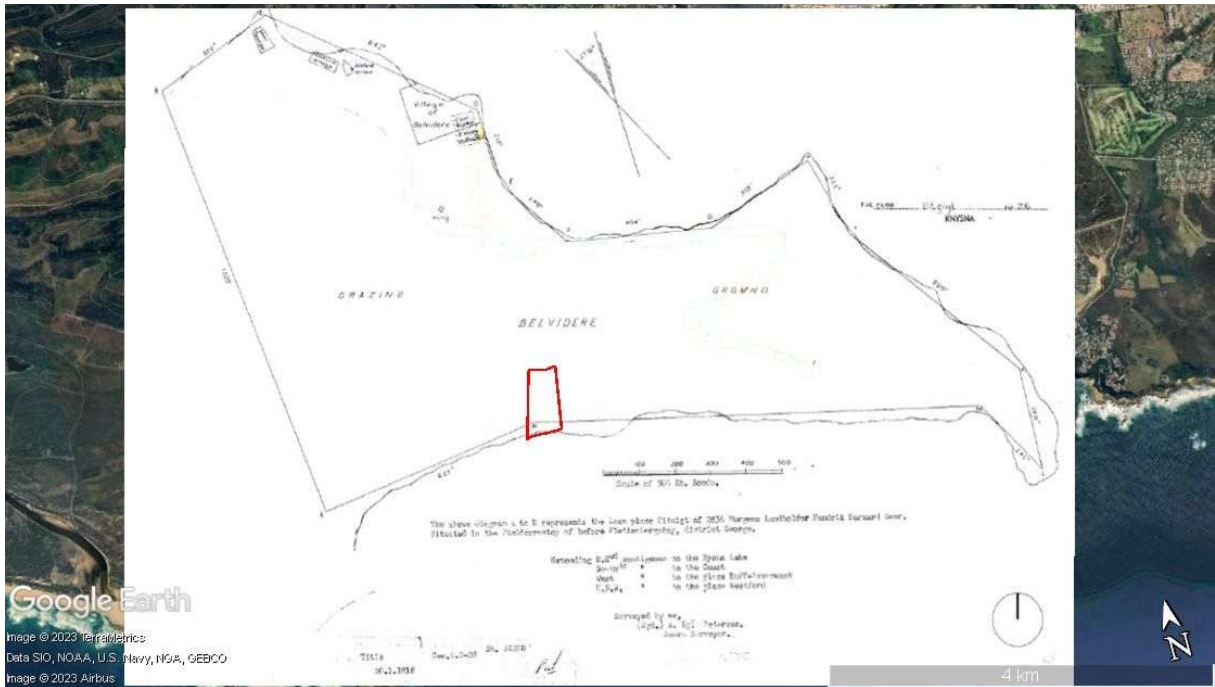


Figure 25. SG Diagram of 1818 showing the original extent of Uitzicht 216 with approximate location of 76/216 (red polygon) (annotated after De Kock 2017, Pg. 6, Figure 5 – source NGSi). Diagram superimposed using Google Earth imagery. (A4 version below)

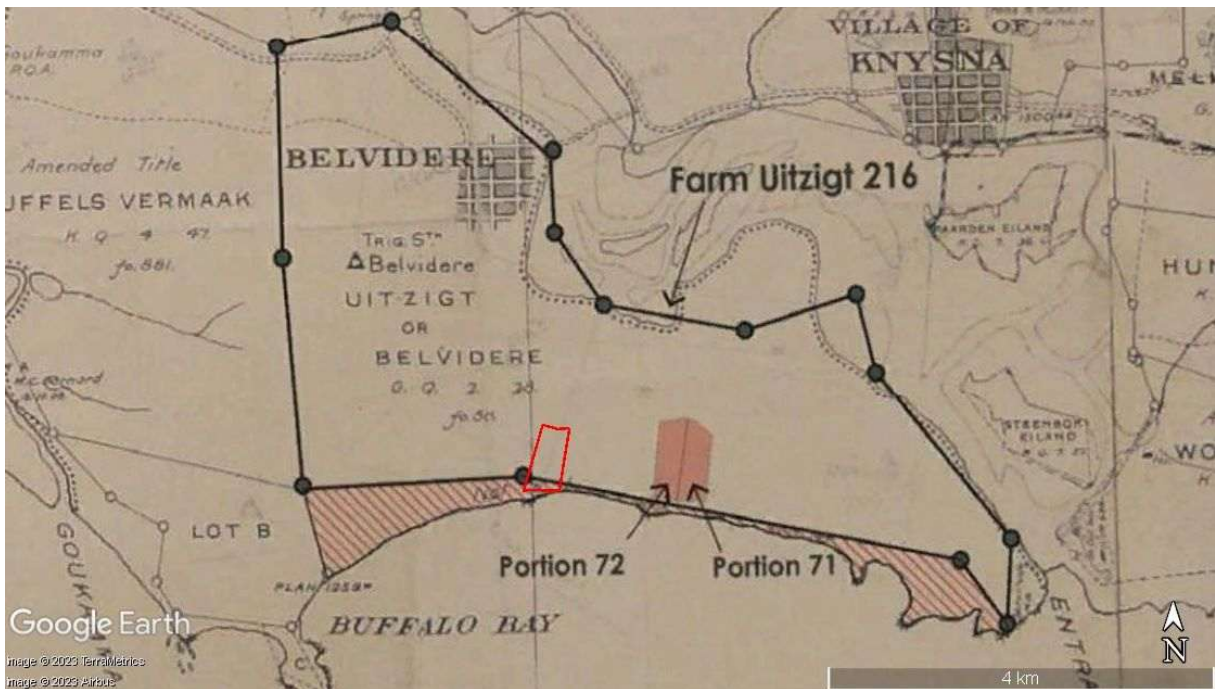


Figure 26. Early (1880-1900) SG Mapping showing the original extent of Uitzicht 216 and approximate location of 76/216 (red polygon) (annotated after De Kock 2017, Pg. 6, Figure 6 – source NGSi). Diagram superimposed using Google Earth imagery.

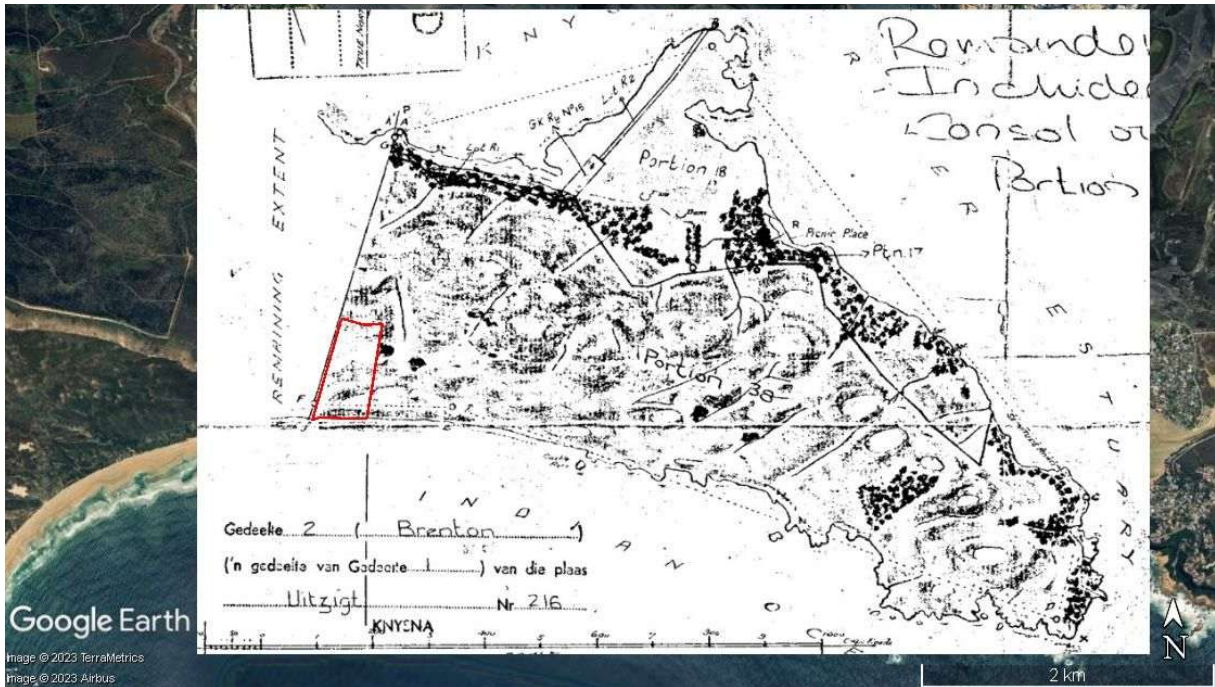


Figure 27. Annotated portion of SG Diagram 2171/1921 showing location of 76/216 (red polygon). No structures or features of the built environment are indicated on or in the immediate surroundings. (A4 version below)



Figure 28. Annotated portion of SG Diagram 6782/1951 Sheet 1 showing location of 76/216 (red polygon). No structures or features of the built environment are indicated on or in the immediate surroundings.

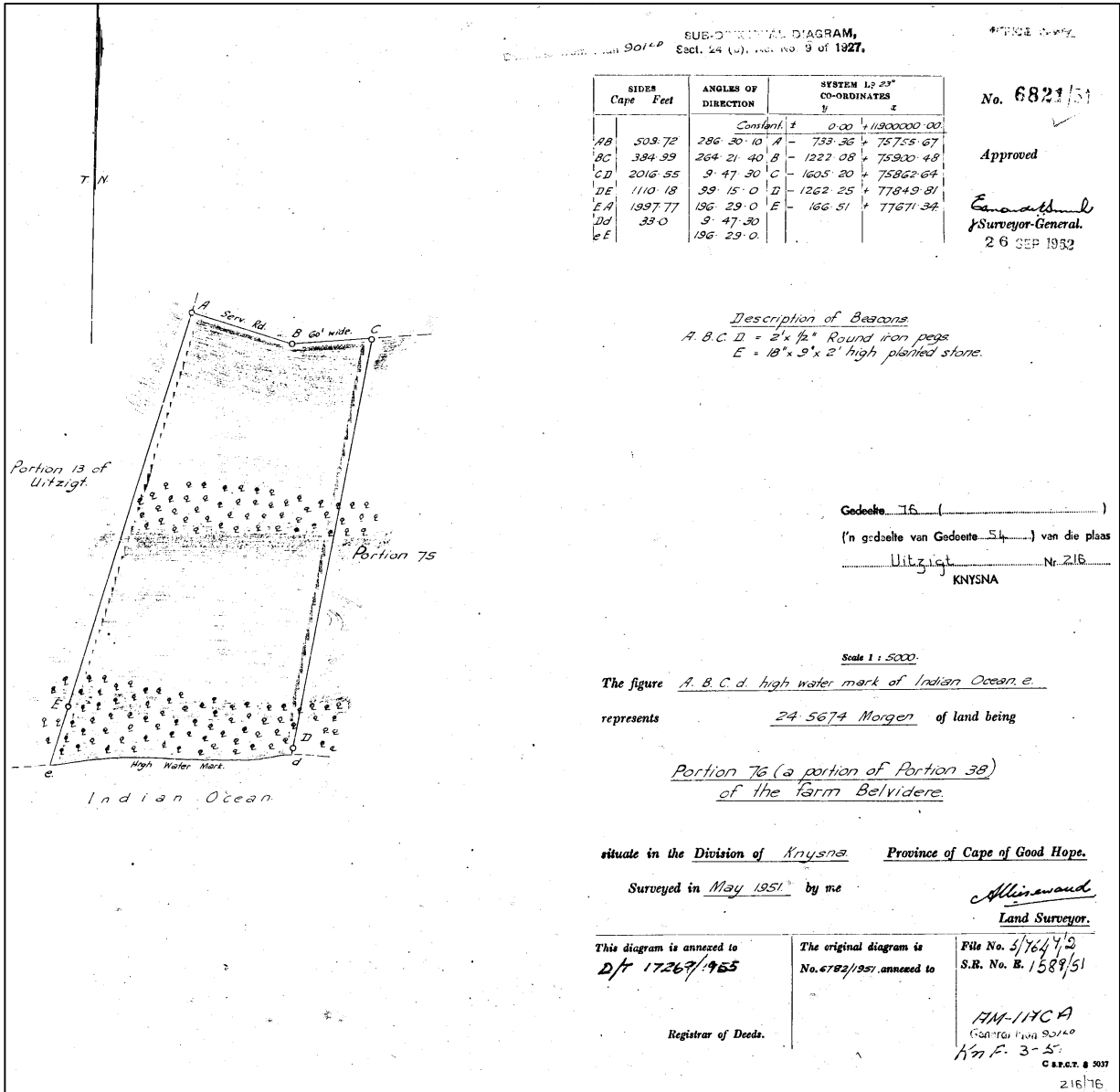


Figure 29. SG Diagram 6821/51 Sheet 1 of 76/216. No structures or features of the built environment are indicated on or in the immediate surroundings.

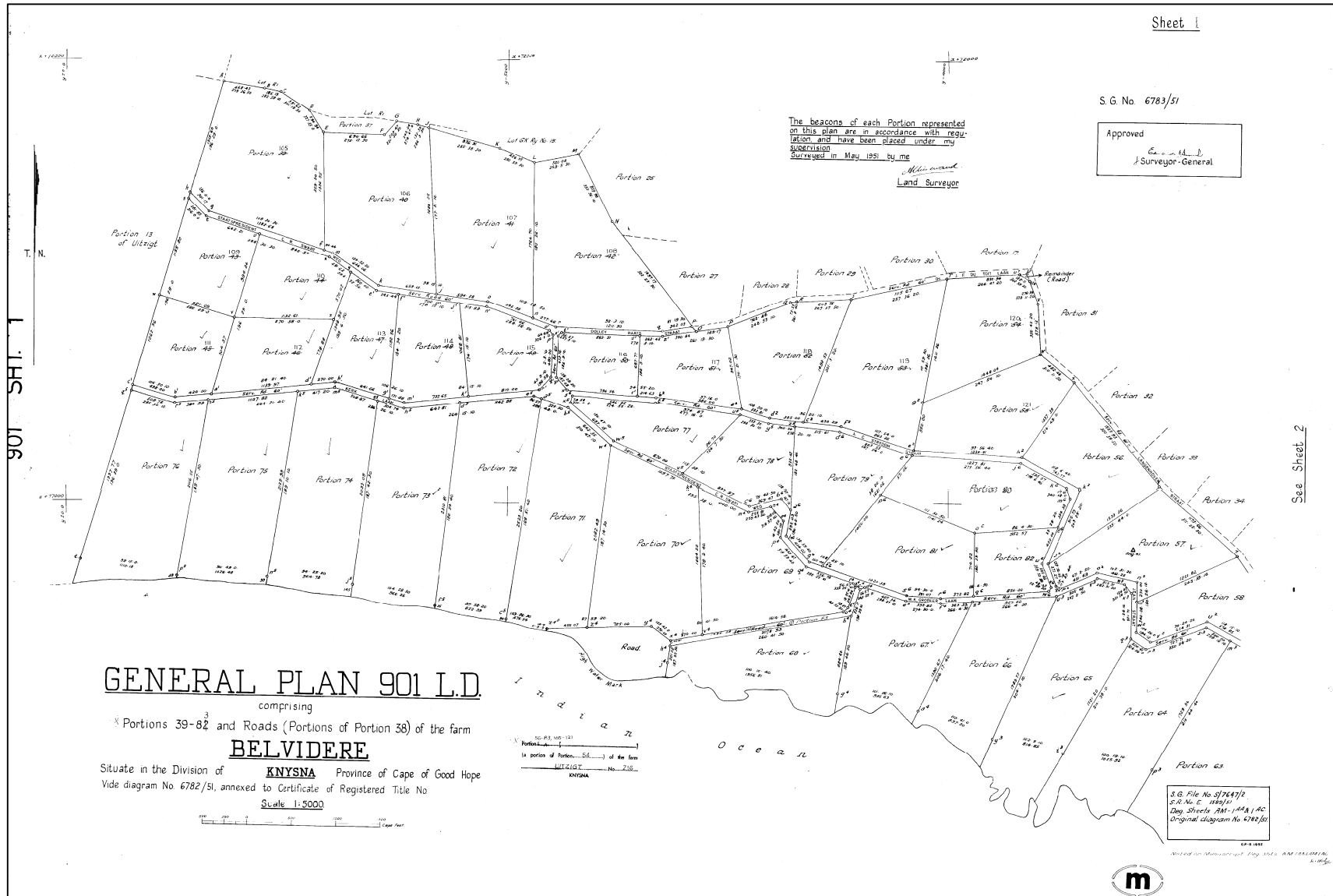


Figure 30. SG Diagram 6783/51 Sheet 1 shows 76/217 at bottom left with the Kerk Laan servitude immediate north of the property.

After careful examination of all SG Diagrams, no early colonial period structures or features of the built environment were identified on 76/216 or within its immediate surroundings.

All available high resolution aerial photographs from 1936 to 2006 were obtained and inspected in detail and at high magnification. A selection of "historic" aerial photographs dating from 1936 to 2006 are shown below and reveal that there are no colonial period features or structures on the site and in the immediate surroundings that are older than 60 years.

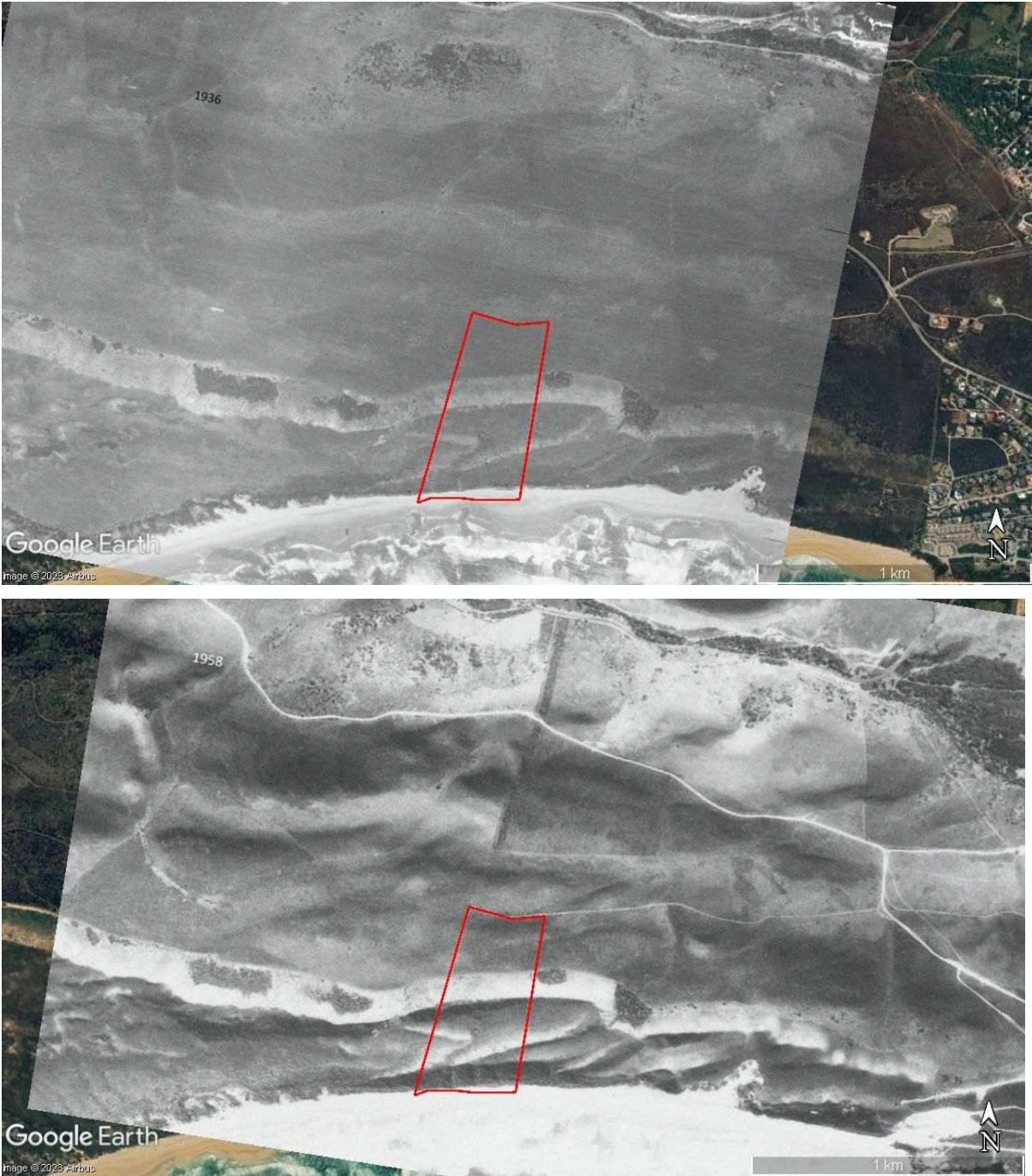


Figure 31. Historic aerial photographs of 1936 (top) and 1958 (bottom) superimposed on 76/216 (red polygon) using Google Earth imagery. The only developments are north on the Knysna Lagoon (road along shoreline). By 1958 the road to Brenton-on-Sea and Staat St and other roads are in place as is the single vehicle track in Kerk Laan servitude. Vegetation introduced. No structures are visible.

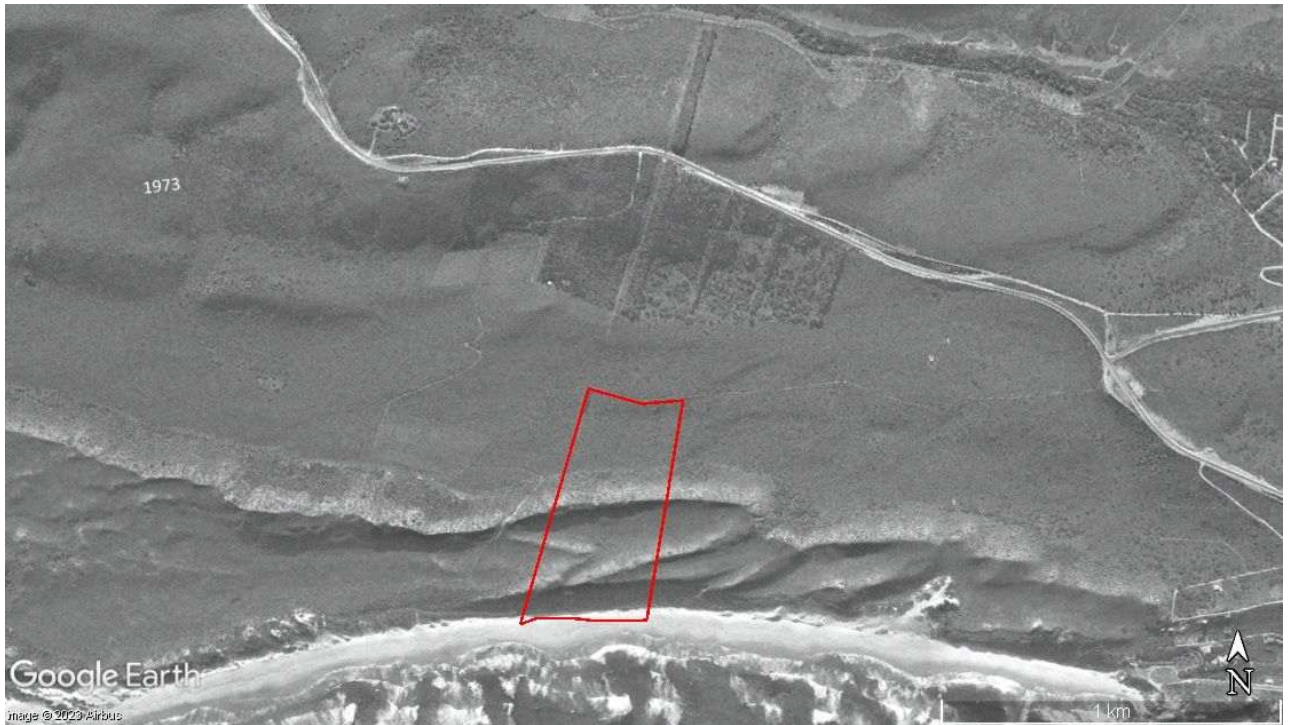


Figure 32. Historical aerial photograph of 1973 superimposed on 76/216 (red polygon) using Google Earth imagery. In addition to roads mentioned in Figure 32, the road on 39/216 (west) as well as several structures are now present in the surroundings and in Brenton-on-Sea. More vegetation introduced.



Figure 33. Historical aerial photograph of 1989 superimposed on 76/216 (red polygon) using Google Earth imagery. More roads and structures are present in the surroundings and in Brenton-on-Sea. More vegetation introduced. No structures are visible on 76/216.



Figure 34. Historical aerial photograph of 2006 superimposed on 76/216 (red polygon) using Google Earth imagery. New developments are evident in the area and in Brenton-on-Sea, but 76/216 remains vacant. Road on 39/216 appears paved. More exotic vegetation introduced including NW corner of site.

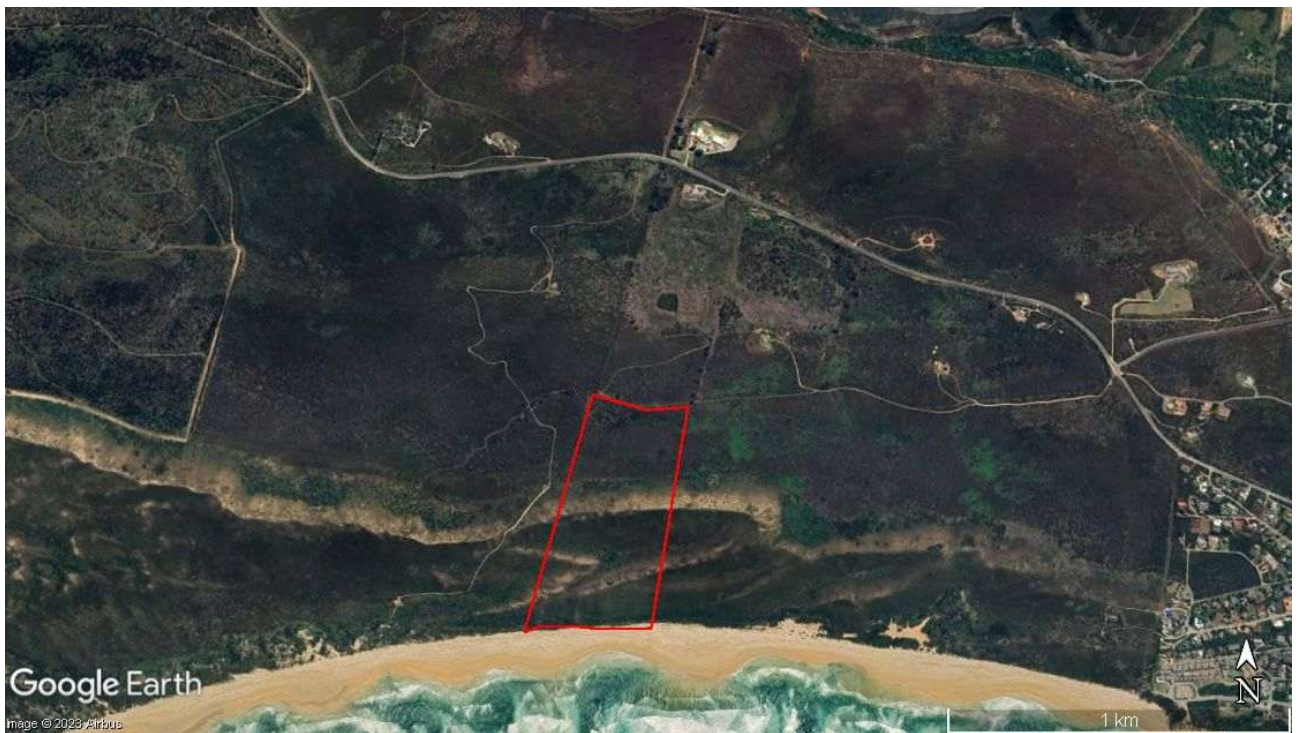


Figure 36. Google Earth aerial imagery of 2023 with 76/216 (red polygon) using Google Earth imagery. Character of area is similar to 2006, but some new developments are evident in the area and in Brenton-on-Sea, but 76/216 remains vacant. Some exotic vegetation cleared but present on site.

After clearing potential access issues and requirements with Eco Route, an independent site inspection of the affected properties was conducted on 11 November 2023 by means of a foot survey (archaeological walk-through) that covered representative parts of the proposed development footprints. Due to dense vegetation cover, much of the property was either inaccessible or archaeological visibility - ground surfaces - was obscured by vegetation cover. Nevertheless, a representative sample of the affected environment was covered, and archaeological visibility was adequate for the purpose of this baseline assessment. Examples of the studied area, exposed surfaces and mole heaps are shown above in Figures 6 through 17.

Survey tracks and observations were fixed with a handheld Garmin Etrex 30x GPS to record the investigated area and finds (Figure 37). A high quality, comprehensive digital photographic record was made with a DooGee S86 mobile phone, including location data for photographs. All GPS and photographic data are available on request.

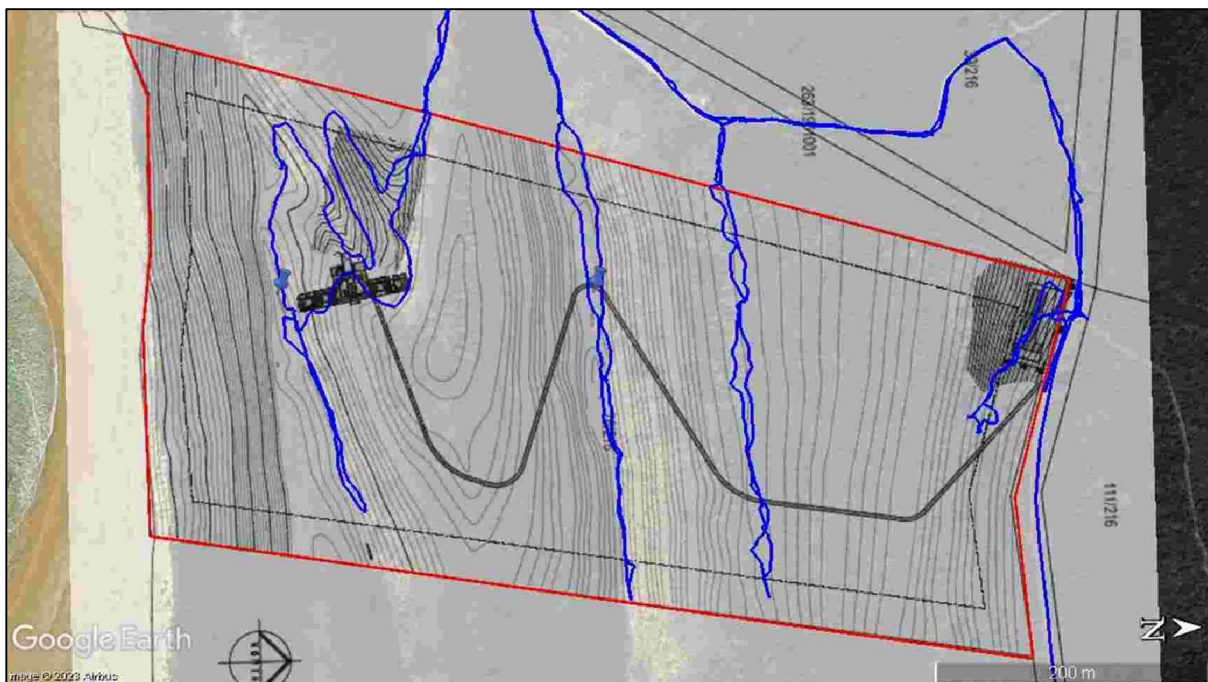


Figure 37: Study area (red polygon) and Site Development Plan with GPS-fixed survey tracks (blue lines). Left blue marker represents a few fragments of white mussel shell and the right blue marker represents glass fragments.

The property was examined with a focus on the potential impact of the proposed development on heritage related resources of both colonial and pre-colonial origin. Heritage resources listed in Section E of the NID application form were considered but are not listed here unless they are present on or in the immediate vicinity of the property, or if they are anticipated to occur on or in the immediate vicinity of the property.

Due to previous heritage studies and monitoring of geotechnical test excavations in the immediate surroundings and inspection of the development footprints, exposed surfaces and mole heaps, adequate observations and information is available for input to the HWC NID application process.

The approach to the field work was:

- to walk and inspect the development footprint to gain an understanding of its archaeological content and context by accessing a representative portion of the affected area,
- and the site inspection was completed with an evaluation of the visual / aesthetic sensitivity of 76/216 from the unnamed road leading to and from Brenton-on-Sea.

A few fragments of white mussel shell were seen among numerous modern land snail shells atop the apex of the southernmost coastal dune (Figure 37 & 38). The shells appear modern and are not associated with any anthropogenic materials. They are likely recent bird or fisherman droppings and are not archaeological in origin. The observation is of no heritage value.



Figure 38: Four fragments of white mussel (*Donax serra*) shell on the apex of the southern coastal dune (Figure 37). The GPS unit is 10 cm long.

Fragments of modern glass were noted on the apex of the dune running through the middle of the property (Figure 37 & 39). These are of no heritage value.

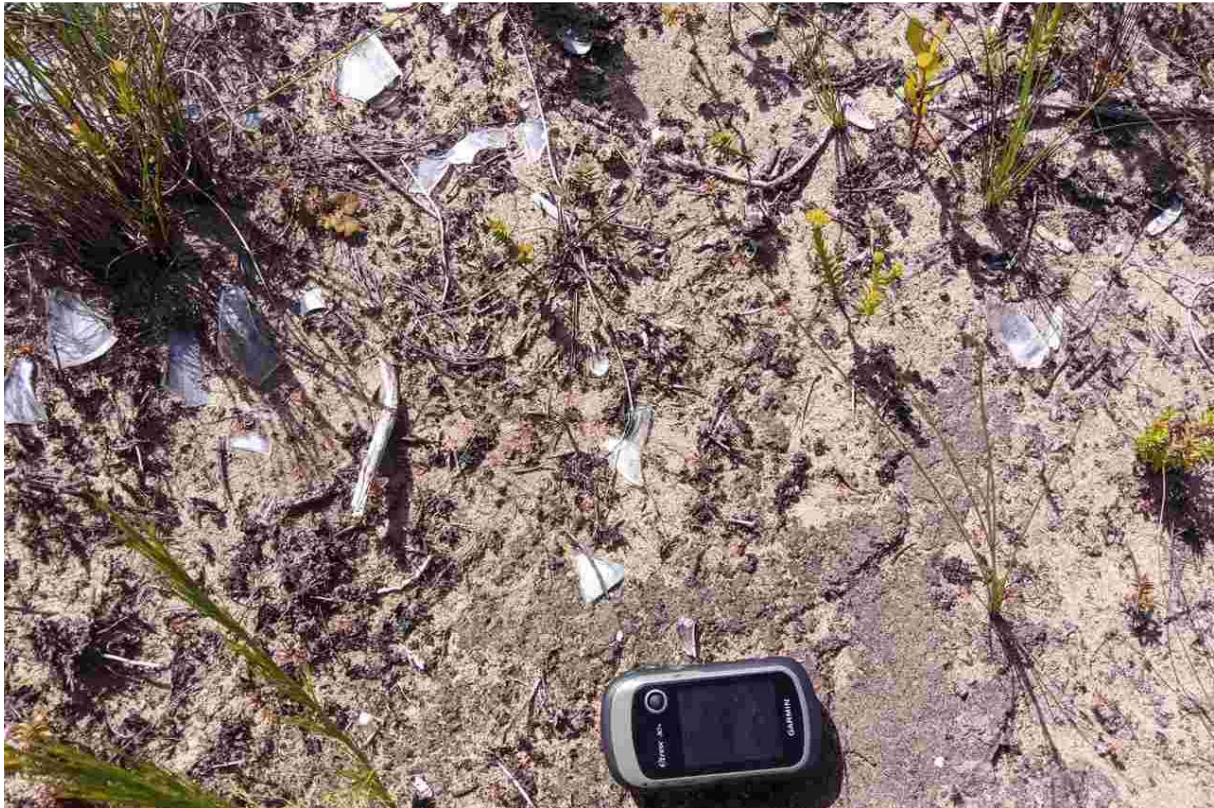


Figure 39: Fragments of modern glass were noted on the apex of the dune running through the middle of the site (Figure 37). The GPS unit is 10 cm long.

No archaeological or heritage resources of colonial or pre-colonial origin were identified on 76/216 or in its immediate vicinity.

A palaeontological study, previous heritage studies, geotechnical test excavations and field observations show that significant archaeological or palaeontological resources are not expected to be intercepted by the proposed development, which is in keeping with the land-use rights and character of the surroundings. It follows that the proposed development will have a negligible visual impact to the area. On heritage grounds, due to the entire absence of heritage resources or themes in and around 76/216, the proposed two houses and road will have negligible to no impact on the visual or aesthetic heritage value of the area. The former coastal landscape is already transformed into a holiday / recreational and residential cultural landscape with associated infrastructure.

Given the partially transformed context of the area and the absence of heritage and archaeological resources, the impact of the proposed activity will have negligible to no impact on the heritage value of the area.

Furthermore, since there are no significant heritage resources or features associated with the development footprints, the proposed activity will have no impact on the existing and already altered cultural landscape of the area. For the same reason there will be negligible to no cumulative impact on the heritage value of the area.

7. Conclusions and Recommendations

The following conclusions and recommendations are arrived at after reviewing information obtained through:

- previous heritage studies and HWC applications in the vicinity of the 76/216,
- SAHRIS PalaeoSensitivity map,
- Palaeontological Impact Statements (Pether 2023)
- previous archaeological and heritage related studies in the surrounding area,
- SG Diagrams,
- historic and Google Earth aerial photographs, and
- a site inspection (archaeological walk-through).

The SAHRIS PalaeoSensitivity map shows that the study area is white/clear meaning that palaeontological sensitivity is UNKNOWN and that “these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map” (Figure 20). Due to the UNKNOWN palaeontological sensitivity attributed to the study area a professional palaeontologist, Prof John Pether, was consulted for inputs.

Prof Pether concluded as follows: “The proposed developments are not anticipated to have impacts on fossil heritage resources of the coversands and dune sands in the footprints of subsurface disturbance. However, in case of the unexpected uncovering of fossil bones in the surficial coversands and soil, or buried archaeological material, or unmarked graves, it is recommended that a protocol for finds of potential fossil material (and buried artefacts), the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the Construction Phase of the project. Adjustments to the development plan are not expected to change this recommendation” (Pether 2023, Pg. 3).

Links to the HWC FFP are as follows:

https://www.hwc.org.za/sites/default/files/3_11%20Protocol%20Fossil%20Finds%20Final%20June%202016.pdf

https://www.hwc.org.za/sites/default/files/3_12%20Fossil%20Finds%20Poster.pdf

No colonial or pre-colonial heritage resources of significance were identified in the study area. If present on or in aeolian dune sands, then Stone Age implements are expected to be of low significance and Not Conservation Worthy. No caves or rock shelters occur on 76/216 and there are no known or declared Heritage Sites nor other significant heritage resources in the surroundings that will be impacted by the proposed activity.

Because there are no significant heritage resources associated with the property, it does not meaningfully contribute to the already altered cultural landscape of the area. For the same reason there will be negligible to no cumulative impact on the heritage value of the area.

As is evident from Figure 18, 76/216 is only barely visible in the distance from the road leading to and from Brenton-on-Sea. Consequently, the proposed development will have no visual impact on the aesthetic value of the affected area. On heritage grounds, due to the entire absence of heritage resources or themes in and around 76/216, the proposed development will have negligible to no impact on the visual or aesthetic heritage value of the area.

The positive socio-economic impact, including a few short-, medium- and long-term jobs outweigh the negligible to zero negative impacts this project may have on heritage resources.

Because of the above, and because there is no reason to believe that significant heritage resources will be impacted by the proposed activity, it is recommended that the proposed activity be approved in full, and that a Heritage Impact Assessment is not warranted for the project.

Nevertheless, it is recommended that Heritage Western Cape consider and/or require that the following be included in the Environmental Authorisation / Environmental Management Program, if the project is approved:

- although not requiring further Palaeontological investigation, Prof Pether recommends that the Fossil Finds Procedure (FFP – see links above), should be included in the Environmental Authorisation / Environmental Management Program (EMPr) for the construction phase of the project,
- due to the findings of this, geotechnical test excavations, and previous archaeological studies, archaeological monitoring is NOT recommended, but,
- if any human remains or significant archaeological materials are exposed during mining activities, then the find should be protected from further disturbance and work in the immediate area should be halted and Heritage Western Cape must be notified immediately. These heritage resources are protected by Section 36(3)(a) and Section 35(4) of the NHRA (Act 25 of 1999) respectively and may not be damaged or disturbed in any way without a permit from the heritage authorities. Any work in mitigation, if deemed appropriate, should be commissioned and completed before construction continues in the affected area and will be at the expense of the developer.

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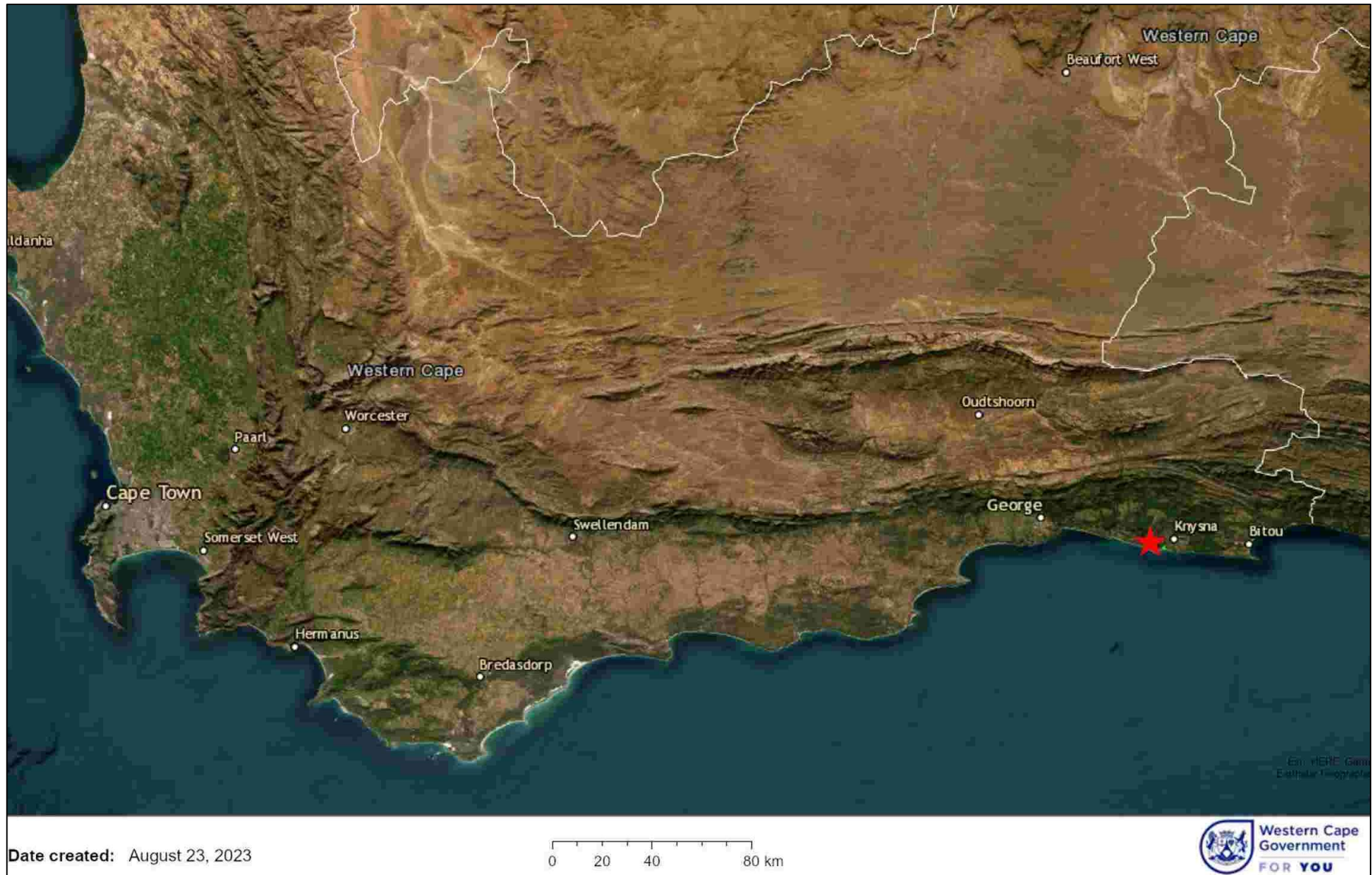
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Vreken, M. 2020. Specialist Planning Report for NEMA Purposes. Portion 76 (a Portion of Portion 54) of the Farm Uitzicht No 216.



Locality Map. General location of the study area (red star) SW of Knysna, Western Cape Province. Courtesy of Cape Farm Mapper.

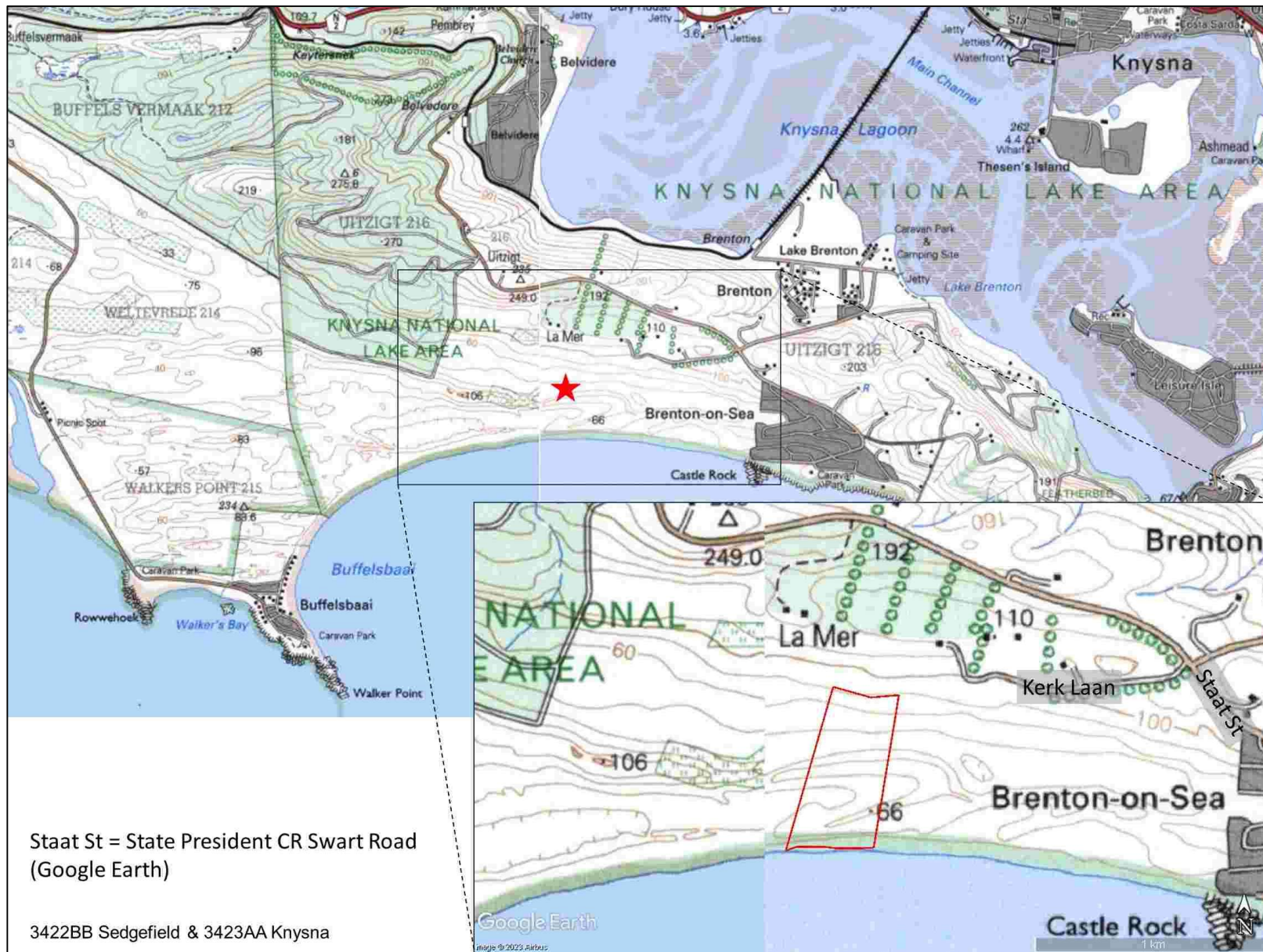


Figure 1. Enlarged portions of 1:50 000 topographic maps 3422 BB 1998 Sedgefield and 3423AA 1998 Knysna showing the location of 76/216 (red star and red polygon). Courtesy of the Chief Directorate Surveys and Mapping, Mowbray and Google Earth 2023.



Figure 2. Enlarged from Locality Map showing 76/216 (green polygon) relative to Brenton-on-Sea, Belvedere and Knysna. Courtesy of Cape Farm Mapper.



Figure 3. Enlarged from Figure 2 showing 76/216 (green polygon) relative to Brenton-on-Sea, Kerk Laan and surrounding properties. Courtesy of Cape Farm Mapper.

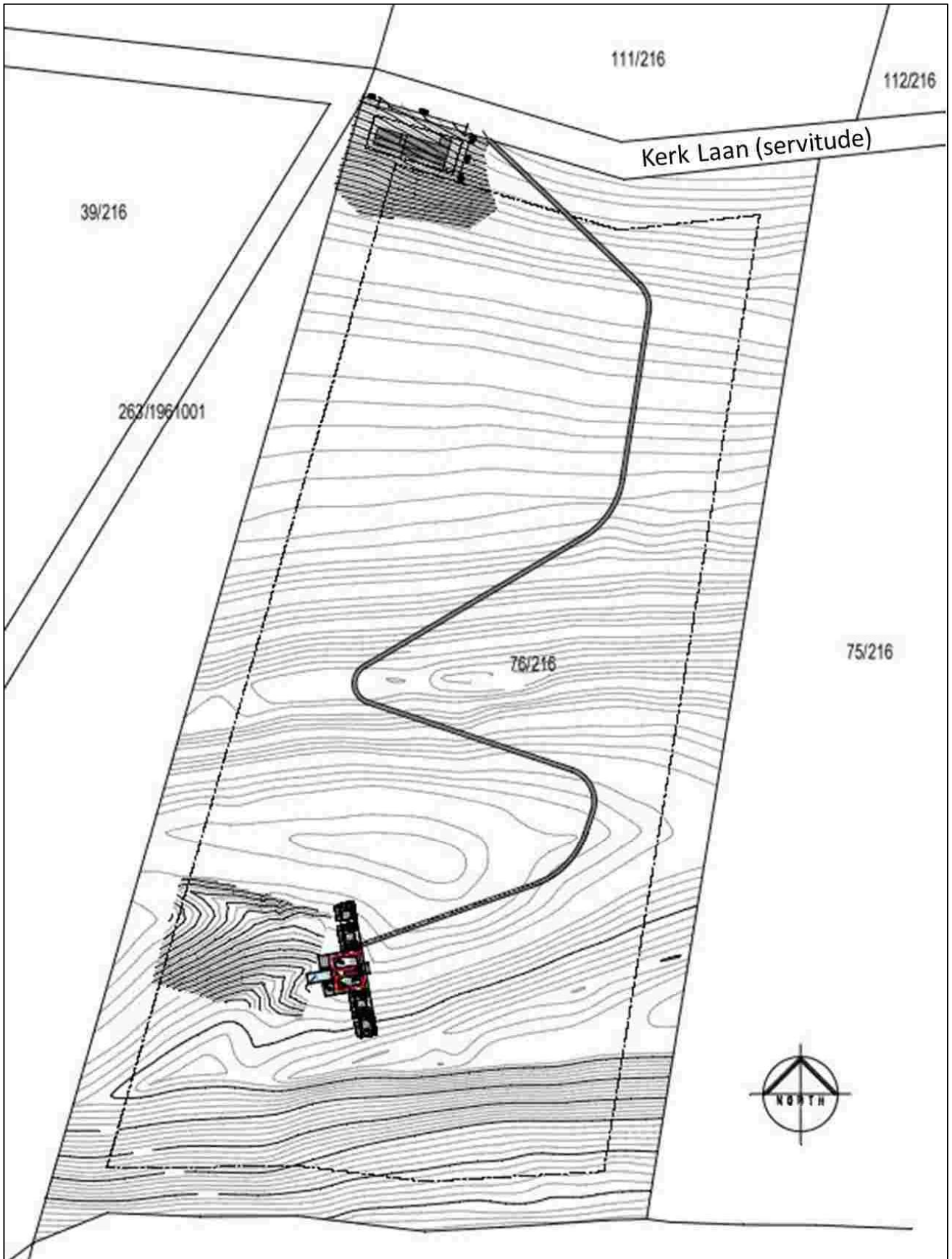


Figure 4. Proposed Site Development Plan. Courtesy of the applicant (annotated after Vreken 2020, Plan 7).



Figure 22. Landscape setting of Portion 76 of Uitzigt 216.

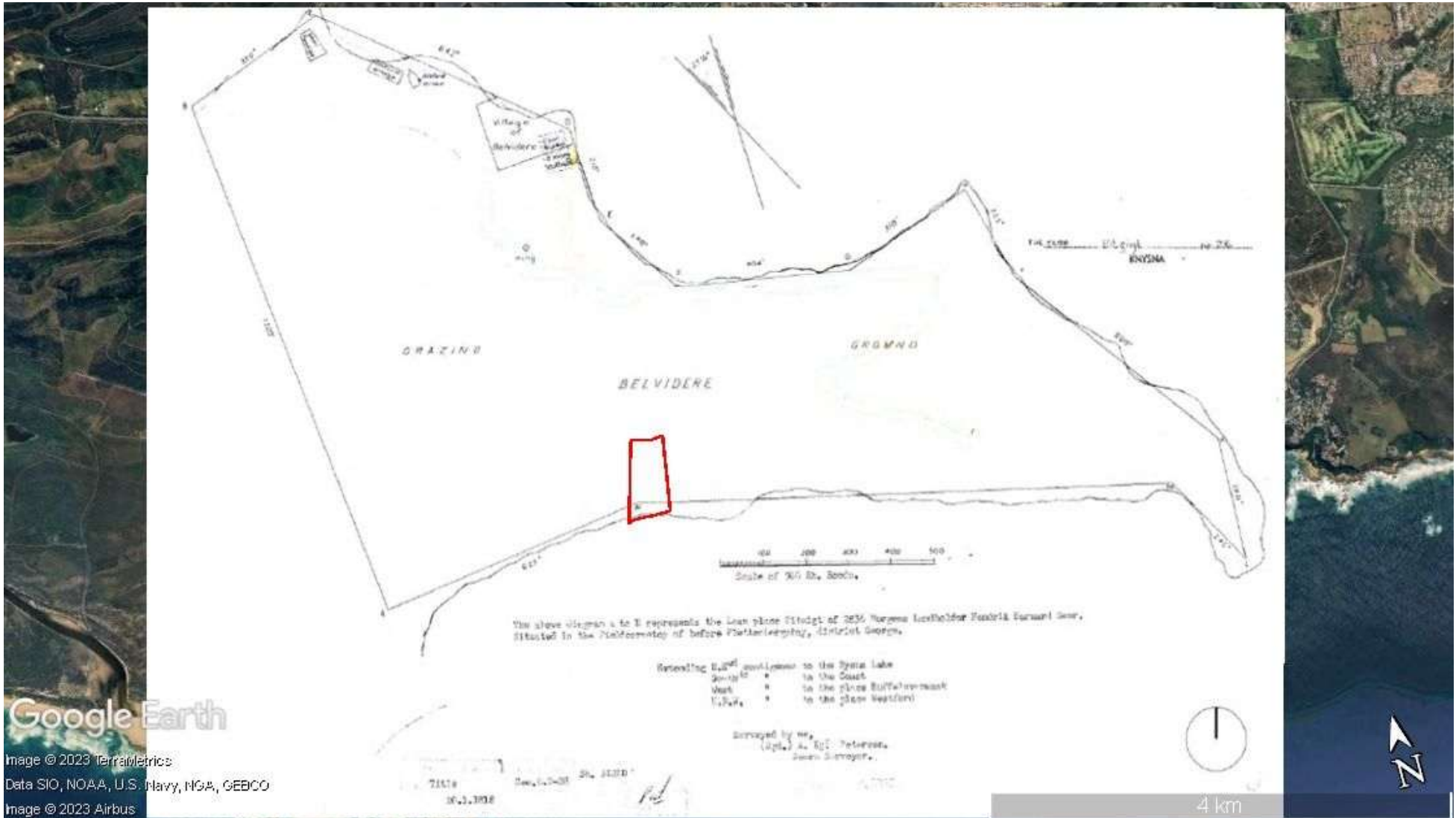


Figure 25. SG Diagram of 1818 showing the original extent of Uitzicht 216 with approximate location of 76/216 (red polygon) (annotated after De Kock 2017, Pg. 6, Figure 5 – source NGS). Diagram superimposed using Google Earth imagery.

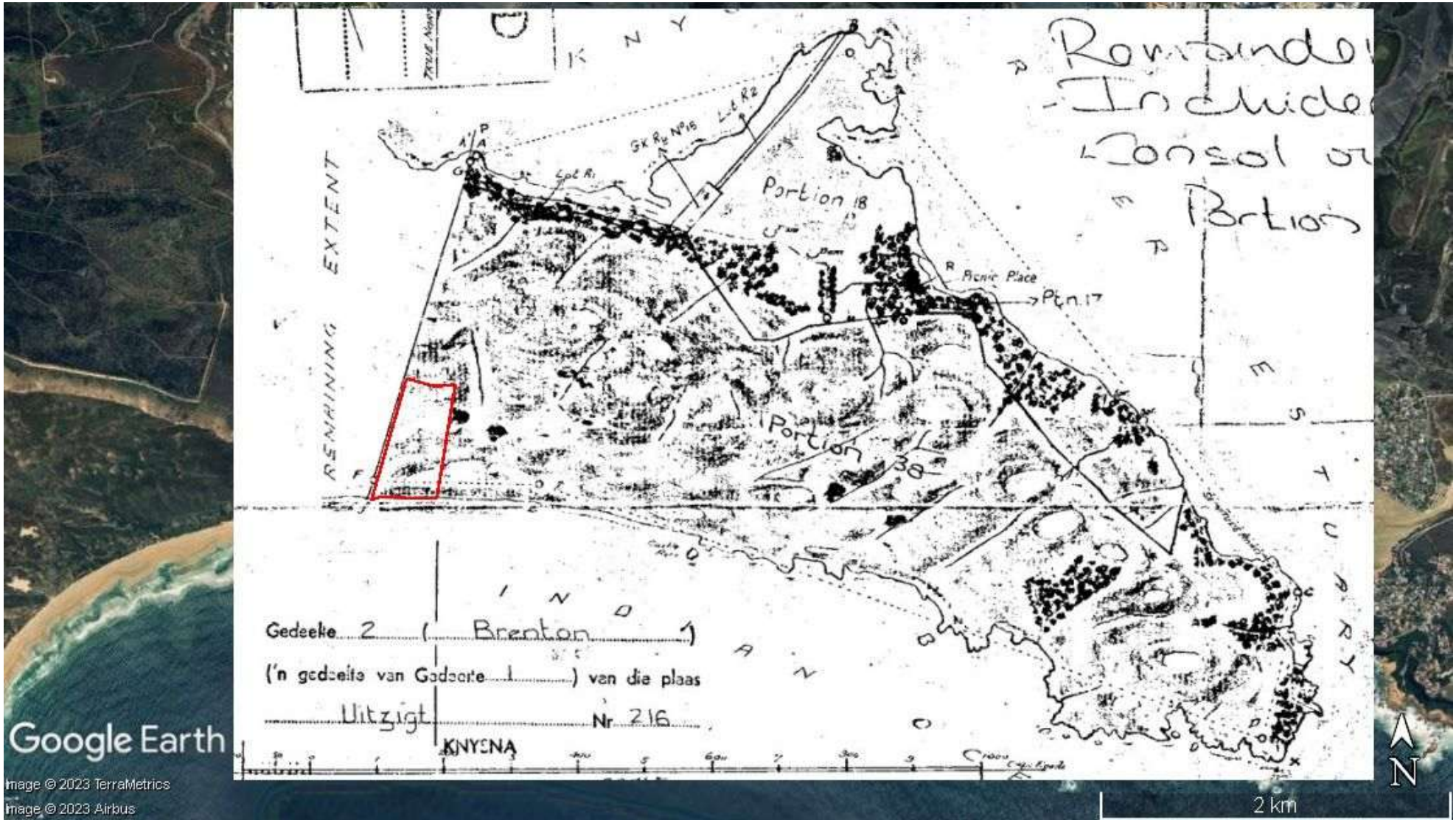


Figure 27. Annotated portion of SG Diagram 2171/1921 showing location of 76/216 (red polygon). No structures or features of the built environment are indicated on or in the immediate surroundings.