

DRAFT

**INTEGRATED HERITAGE IMPACT ASSESSMENT IN TERMS OF SECTION 38(8) OF THE NATIONAL
HERITAGE RESOURCES ACT, 1999 (ACT 25 OF 1999)**

**PROPOSED DEVELOPMENT OF PORTION OF RUGTE VALLEY 205/82 & ERF 1638 (SEDGEFIELD),
KNYSNA DISTRICT AND MUNICIPALITY**

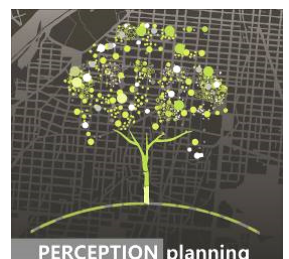


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January 2016

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REFERENCES and ACKNOWLEDGEMENTS:

1. National Geo-Spatial Information, Department of Rural Development and Land Reform
2. Cape Town Archives
3. Cape Town Deeds Office
4. SG Office, Cape Town

ABBREVIATIONS:

1. NGSi – National Geo-Spatial Information, Department of Rural Development and Land Reform, Mowbray
2. DEA – Department of Environmental Affairs (National)
3. DEADP – Department of Environmental Affairs & Development Planning
4. HIA – Heritage Impact Assessment
5. HWC – Heritage Western Cape
6. NHRA - National Heritage Resources Act, 1999 (Act 25 of 1999)
7. NID – Notice of Intent to Develop
8. PHRA – Provincial Heritage Resources Agency
9. PHS – Provincial Heritage Site

DRAFT VERSION

COVER: Extract from aerial survey 6 of 1942, Flight strip 36, Image 11380, NGSi

1. INTRODUCTION

PERCEPTION Planning was appointed by *Liberty Trading 111 (Pty) Ltd* to compile and lodge to Heritage Western Cape (HWC) an Integrated Heritage Impact Assessment (HIA) in terms of Section 38(8) of the National Heritage Resources Act, 1999 (Act 25 of 1999) with relation to the proposed development of portions of the subject as described herein. Sanction for submission of this HIA was provided by *Liberty Trading 111 (Pty) Ltd*, (on behalf of registered property owners) and is attached as **Annexure 1**.

The cadastral land units subject to this application are as follows:

- Farm Ruygte Valley 205/82 (Sedgefield), Knysna District, Western Cape, measuring 58.2440ha, registered to Garden Route Chalets and held under Title Deed 5015/2004;
- Erf 1638 (Sedgefield), Knysna District, Western Cape, measuring 34.9955ha, registered to Garden Route Chalets and held under Title Deed 5015/2004.

The intention of this report is to satisfy the requirements as stipulated in HWC's Interim Comments (Case Nr. 110727JW30) dated 2nd August 2011 (**Annexure 2**), which require the following:

"A Heritage Impact Statement is required including a specialist Visual Impact Study and a specialist Archaeological Study."

Consequently this report serves as a formal input into the public participation process (prior to formal submission to HWC) as a **Draft Integrated Heritage Impact Assessment** and include inputs from the following specialist reports sanctioned as part of the HIA:

- Archaeological Impact Assessment - Dr. Peter Nilssen
- Visual Impact Assessment - Megan Anderson Landscape Architect
- Subsequent to the above Interim Comments dated 2011, additional requirements implemented by Heritage Western Cape, require that the following additional aspects also be dealt with: Basic Historic background research, Cultural landscape analysis and applicability of the urban edge as defined in the current Spatial Development Framework.

2. INDEPENDENCE OF ASSESSOR

The developer appointed *SE de Kock (PERCEPTION Planning)* as an independent professional heritage practitioner to compile the Integrated Heritage Impact Assessment, coordinate the public participation process and submit the report to the relevant provincial heritage resources authority, being Heritage Western Cape, in accordance with relevant statutory requirements and guidelines.

With relation to the author's appointment to compile and submit to Heritage Western Cape an Integrated Heritage Impact Assessment in terms of Section 38(8) of the National Heritage Resources Act, 1999 (Act 25 of 1999), it is hereby declared that:

- This consultancy (including the author) is not a subsidiary, legally or financially, of the proponents;
- Remuneration for professional services by the proponent in relation to this proposal is not linked to approval by any decision-making authority responsible for permitting this proposal;
- Nor this consultancy, nor the author has any interests in secondary or downstream activities as a result of the authorisation of this project.

It is further hereby certified that the author has 19 years professional experience as urban planner (3 years of which were abroad) and 10 years professional experience as heritage practitioner. The author holds the following qualifications:

- Urban and Regional Planning (Hons, CPUT, 1997)
- Environmental Impact Assessment Management – Heritage, Environmental (Dipl/ Masters, Dublin University, 2002)

- Architectural & Urban Conservation (CDP, UCT, 2007)
- Urban Design (CPD, UCT, 2009)

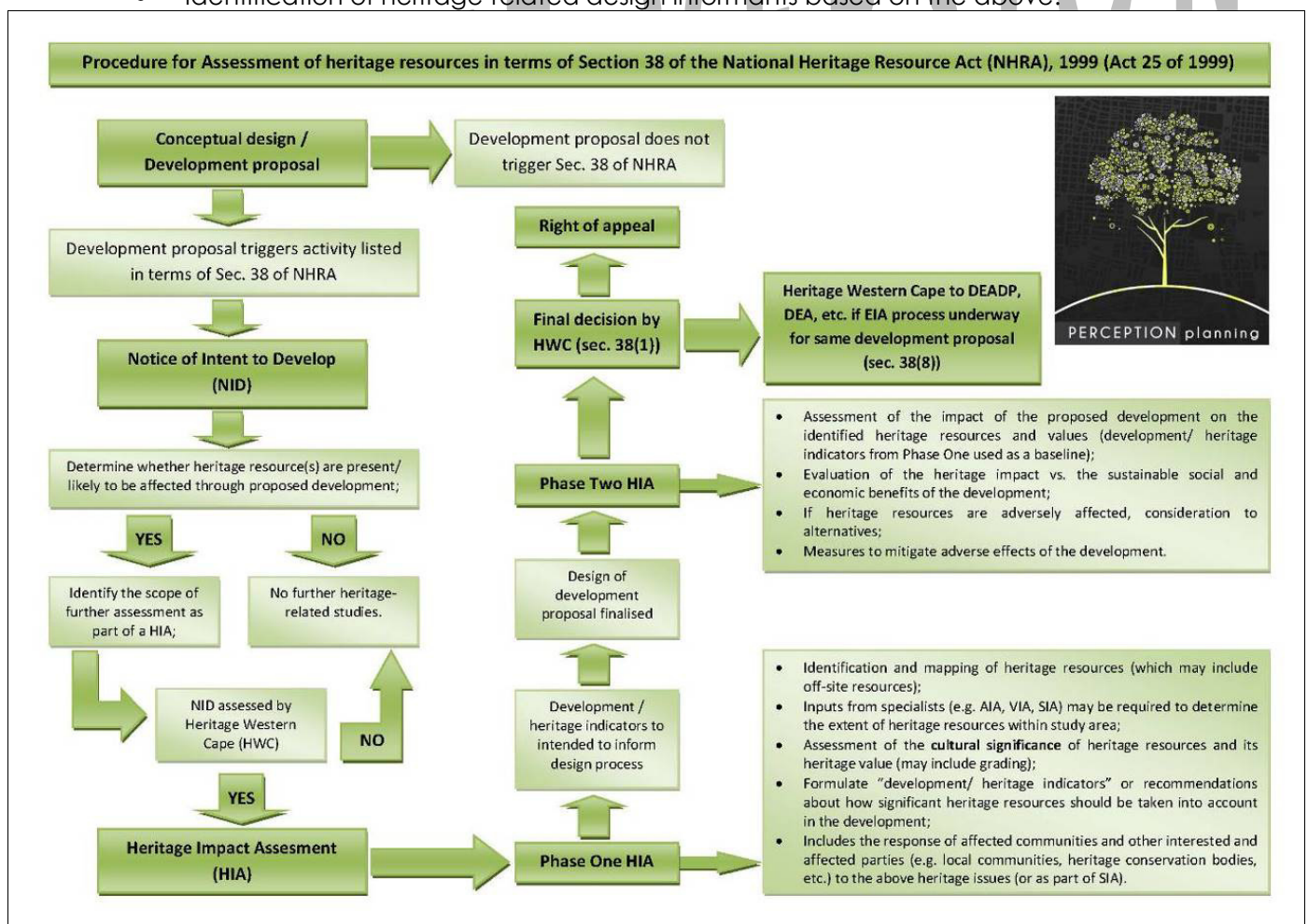
The author is professionally registered as follows:

- Accredited Heritage Practitioner – Association for Professional Heritage Practitioners
- Registered as Professional Planner with South African Council for Planners
- Registered as Corporate Planner with South African Planning Institute

3. METHODOLOGY

As part of the compilation of this Integrated HIA report the author has studied, visited, photographed and assessed the subject site and its environs, which more specifically involved the following:

- Field work carried out on 15th September 2015;
- Liaising with client, project manager, consulting town planner and various contributing specialist consultants;
- Negotiations, discussions with consultant team regarding nature and detailed design of proposed development;
- Assimilating findings and recommendations emanating from historical research in Cape Town Archives, SG Office as well as oral history sources as specialist inputs into HIA;
- Identification of heritage-related issues and concerns;
- Analysis of development site and its environs;
- Identification of contextual spatial informants;
- Establishing cultural significance, based on criteria set out in NHRA;
- Identification of heritage-related design informants based on the above.



Flowchart describing the HIA process in terms of Section 38 of the NHRA (Act 25 of 1999). Currently this process is at the level of Draft Integrated HIA

Aspects to be dealt with in the Final Integrated HIA will include (see illustration, Figure 1):

- Focussed public participation process aimed at soliciting heritage-related comments from community members regarding proposed development (comments from local conservation body, interviews with current neighbours);
- Assess conformity of final proposed site layout to design informants identified;
- Submission of Final Integrated HIA to competent authority.

4. DESCRIPTION OF STUDY AREA

The proposed development site (measuring approximately 89.93ha in extent), is situated along the northern periphery of the coastal town of Sedgfield – directly north of the N2 National road as shown with the locality plan below (Figure 1). The site is situated along the southwest-facing slope of a large dune, which is orientated parallel to the coastline and bound by the aptly named Swartvlei (to the west) and Groenvlei (to the east).



Figure 1: Spatial context of study area within its direct environs (Source: GoogleEarth)

The northern site boundary roughly follows the dune ridgeline whilst the southern boundary runs along the foot of the dune. Current access to the site is from the "Cloud Nine" minor provincial road no. OP06914, which extends from the Egret Road/ N2 intersection and traverses through its centre as shown through Figure 2. While the landscape is generally steep below this road, the slope tends to be more variable above said road. Several natural drainage lines traverse the site. Geological conditions are described as consisting of "highly permeable sandy overlay" (Kantey & Templer, 2006). Several natural drainage lines traverse the site, though all have been invaded by alien invasive vegetation (see Figure 2).

Presently zoned for agricultural purposes, the site had formerly been used for forestry (pine plantation) between c. 1960's - 1999. Two devastating forest fires during c. 1998 and 1999 ended its use for this purpose and without a means of deriving an income, has been laying fallow. As a result, the site has become invaded by alien invasive vegetation. An independent vegetation sensitivity analysis (Campbell, Eileen E. (PhD), Department of Botany, Nelson

Mandela Metropolitan University, 28 July 2006) reports that 80% of the site is overgrown by eucalyptus trees with small pockets (10%) of pine trees and fynbos remnants (10%).



Figure 2: Site and direct environs, approximate location of natural drainage lines(*) (Source: GoogleEarth/ (*) Conservation Management Services, June 2006)

Existing land use within the proximity of the site includes undeveloped land with similar characteristics to that of subject site to the east and two smallholdings between the ridgeline and upper reaches of the Swartvlei estuary along the northern boundary. The southern boundary is lined by what appears to be a mostly undeveloped strip of land between the existing town and railway line, but which in fact consists of two rows (mostly-undeveloped) single residential erven. To the west the site is bounds by several smallholdings, some of which are used for rural occupation.

With the exception of a municipal reservoir situated along the eastern site boundary, no structures and/ or ruins were noted. No graves and/or burial grounds were noted. Photographs of the site and its environs are attached as **Annexure 3**.

5. DEVELOPMENT PROPOSAL AND ALTERNATIVES

5.1 Brief planning background

Recent proposals to develop the proposed development site as an urban extension of the town of Sedgefield dates back to August 2006 when an application for Environmental Authorisation was submitted to the Department of Environmental Affairs and Development Planning (DEADP). While a comprehensive scoping process followed, the application was halted Knysna Municipality could not confirm that it would have sufficient water supply to service such development.

Knysna Municipality in 2007 identified the site as one of few that could accommodate future extension of the town, subject to the availability of a sufficient water supply. The site was

earmarked for “future development” in the 2008 Knysna Spatial Development Framework, but excluded from the urban edge until such time as sufficient bulk water supply has been put in place.

A comprehensive land use planning application for establishment of a residential estate on the site was submitted to relevant authorities during 2010. According to *VPM Planning*, factors such as changes to environmental legislation and determination of the unconstitutionality of the former Knysna Plettenberg Bay Wilderness Guide Plan, resulted in the application file being closed and has led to the compilation and submission of a new application as now presented herewith.

According to information provided by *VPM Planning*, three site layout alternatives are under consideration as summarised in further detail in 5.2 - 5.4 below.

5.2 **Alternative layout 4**

This alternative proposes 265 single residential erven, 10 group housing erven, 2 business zone erven, a new water reservoir, private roads, walking trails, viewing points as well as ancillary services and engineering infrastructure as per the site layout plan attached as **Annexure 4.1**.

According to *VPM Planning*, “*This layout alternative was submitted with the previous EIA as well as planning applications. The layout responded well to all specialist studies at the time, but had to be amended to accommodate SANparks and Cape Nature comments requesting larger north south corridors as well as a corridor along the northern boundary.*”

5.3 **Alternative layout 9**

This alternative proposes 50 large residential erven ($\pm 4,000\text{m}^2$ each), each with a maximum residential development footprint of 750m^2 . The proposal would include nature areas, private roads, a new water reservoir as well as ancillary services and engineering infrastructure as per the site layout plan attached as **Annexure 4.2**.

According to *VPM Planning*, “*this low density proposal was not accepted by the client as it is not financially viable. The services are too high and would demand property prices that would not be achievable in Sedgfield*”.

5.4 **Alternative layout 11 (Preferred alternative)**

The development description of this alternative site layout is as follows (see **Annexure 4.3**):

- 130 single residential erven;
- Group-housing (30 large, 40 medium & 40 small) (medium density housing);
- Once commercial site;
- Membrane Bio-Reactor (MBR) sewerage package plant;
- Upgrade of the main access road, from Egret/N2 intersection to the development;
- Two water storage reservoirs (700kl each);
- Dual water supply system (for treated water & potable water);
- Associated service infrastructure (water, electricity, stormwater, road network etc.); and
- Private Open Space, with recreational amenities (hiking/walking trails, lookout points etc.).

6. **LOCAL PLANNING CONTEXT**

6.1 **Knysna Spatial Development Framework November (2008)**

Note that Knysna Municipality found the proposal to be compatible with the Knysna SDF, 2008 (see said ruling dated 28th May 2015 attached as **Annexure 5**).

According to the SDF, the property Ruygte Valley 205/82 is earmarked as “Core Productive Area” and Erf 1638, Sedgfield as “Core Conservation Area” (Figure 3). Section 6.2.2 (a)(i) describes the Core Conservation Area as a “Fossil Dune between the future N2 route and the north-eastern portion of the Swartvlei (there is an identified mammal corridor between Swartvlei and Groenvlei along its northern face)”.

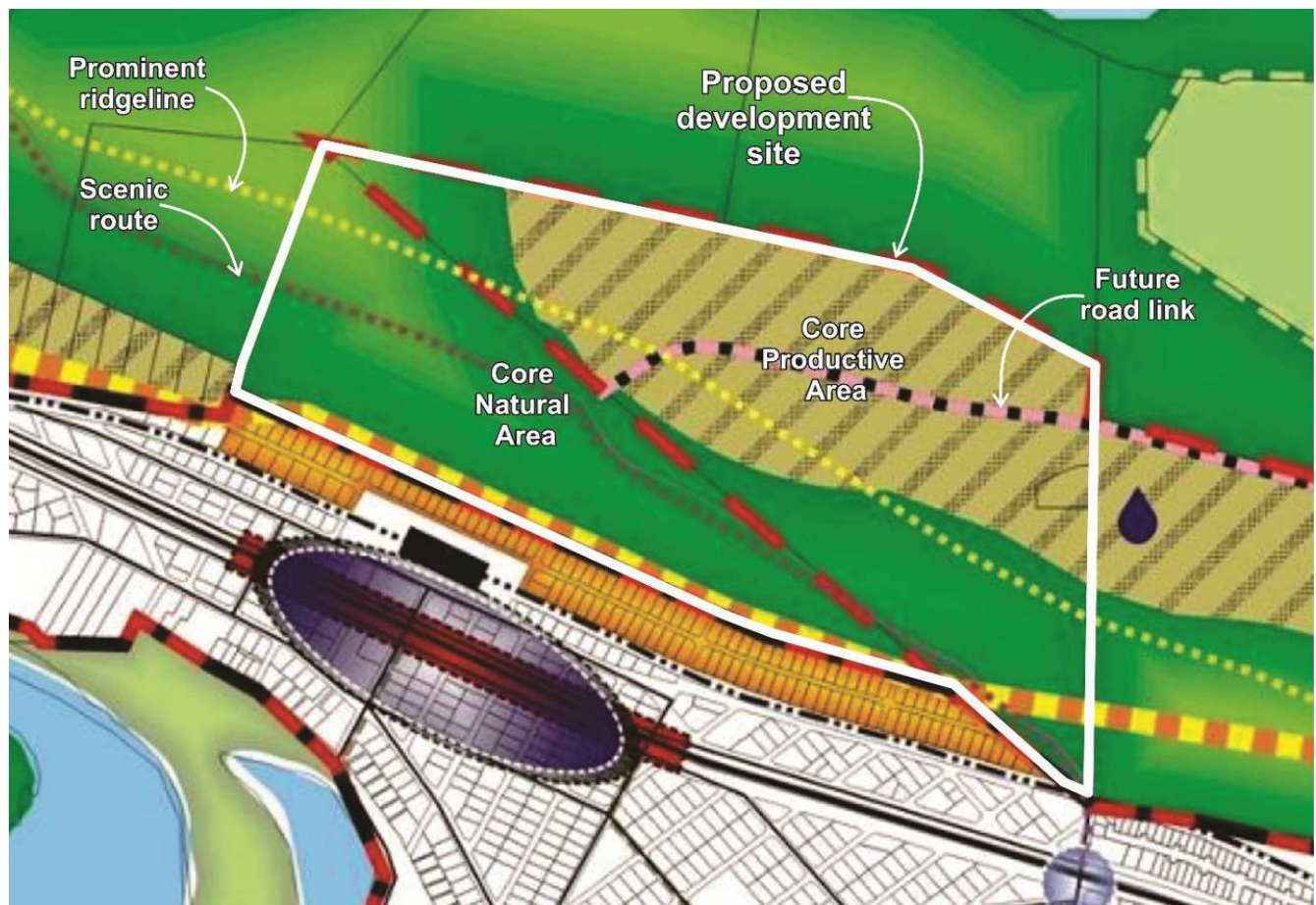


Figure 3: Proposed development site boundaries transposed onto extract from Sedgfield SDF, 2008

Section 6.2.2(a)(iii) the Core Productive Area as “These are high yield forestry plantations that contribute significantly to the economy, and as such, should be maintained as forestry land. The possibility of establishing a sustainable mixed income, mixed use village at Ruigtevlei, which may displace an isolated portion of plantation is, however, not excluded”.

Section 6.2.2(b)(iv) identifies the “Cloud 9” road as a Scenic Route and states that, “These routes represent scenic drives used by both vehicles and cyclists and which should be kept in good condition by the relevant authorities (Provincial Transport Branch) and promoted by the local tourism bureau”.

Section 7.7.1(d) states the following policies regarding Development on Ridgelines and Viewlines along Scenic Routes:

- Development along such lines should be avoided;
- Where development is inevitable, the Municipality reserves the right to limit buildings within 5 contour metres of such a line to a single storey building not exceeding 6,0m above natural ground level at any point below the building;
- The design of the building must comply with accepted principles for reducing visual impact;
- There is a provincial policy on ridgeline development that needs to be consulted.

No inventory of heritage resources, as required in terms of Section 30(5) of the National Heritage Resources Act, 1999 (Act 25 of 1999), has yet been compiled for the village of Sedgfield or its environs.

6.2 Western Cape Provincial Spatial Development Framework (2014)

Given the broad (provincial) focus of this document, the heritage component to the WC PSDF does not relate specifically to the town of Sedgfield or its environs and only refers to it in passing.

7. BRIEF HISTORIC BACKGROUND

While early history regarding lands now forming part of the Sedgefield urban area is limited, we know that the property (then also known as "Sedgefield") was transferred to widow Kate C Maurice (nee Barrington) during 1901 upon the passing of her brother John Barrington. Kate sold the farm in 1911 to Salmon Terblans. Terblans and Thomas Moodie investigated the possibility of proclaiming a town on the farm. The property was transferred to WL Noble during May 1921. New owner SP Terblans during 1925 subdivided the property (then also inscribed as "Erf 1692"¹) substantially - these became the first erven of what is now known as the town of Sedgefield.

The coastal town of Sedgefield was formally proclaimed in 1929 on the farm Sedgefield, which was named in 1894 after the UK home village of then owner, Henry Barrington. The proposed development site straddles the boundary of two early properties, namely Sedgefield and the original loan farm Ruygte Vally 205. After proclamation, the town experienced organic growth by attracting families who wished to visit the so-called 'new winter resort' advertised in the George and Knysna Herald (and other publications) from 1927 onwards. In 1921 a railway connection between George and Knysna was planned and the project was completed in 1928 by routing the line over a new bridge crossing the adjacent Swartvlei ('Black Lake'). In 1940, the town was given a postal service outlet and in 1947 the N2 National Road through Sedgefield was completed.

An extract from early 1880 mapping for the area (Figure 4), produced by the Surveyor General Office shows the boundaries of the two properties flanked by Zwarte Valley (or "Black Lake") to the west and Groenvlei (not annotated) to the east. This mapping confirms use of lands east of modern day Sedgefield for forestry purposes and furthermore shows the early alignment of the historic road between George and Knysna.

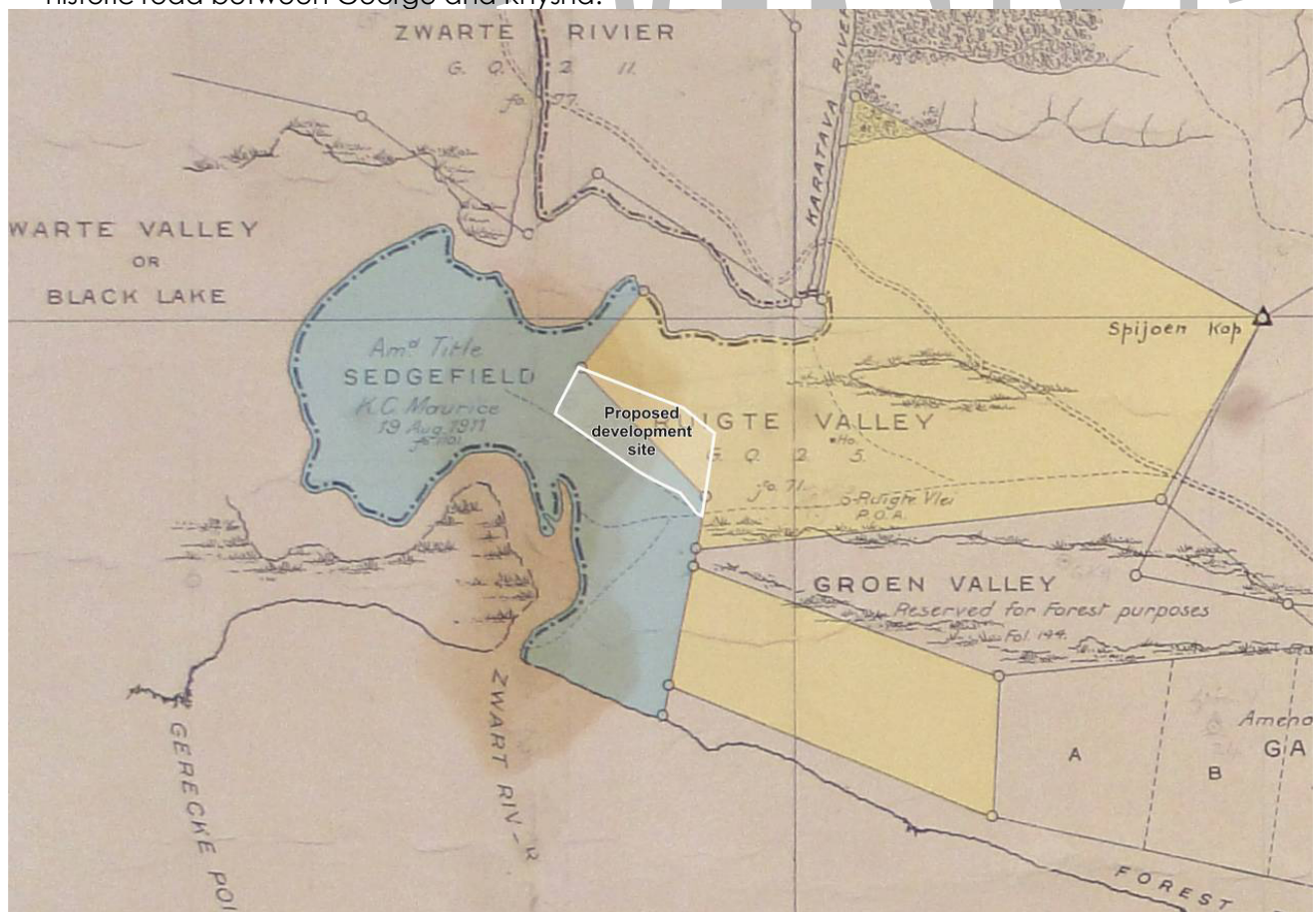


Figure 4: Study area in relation to the early loan Ruygte Valley (yellow) and property named Sedgefield (blue) (Source: 1880 SG Mapping, NGSII)

¹ SG Diagram A4647/1925

The early loan farm Ruygte Vally 205 was first surveyed in 1818² and granted by perpetual Quitrent to Johan Fredrick Meeding on 20th January 1818. At the time this coastal farm measured 2,925 morgen ($\pm 2,505$ ha) and included lands between the coastline as well as Swartvlei and Groenvlei lakes³. At the time of survey, the existing Sedgfield urban area is described as being suitable for "grazing". After the passing of her husband, the farm Ruigtevlei was granted to the widow Meeding by Lord Charles Somerset and upon her death in 1878, the farm was divided into 9 lots. Lots A and B were first bought by individual farmers, before eventually being purchased in 1894 by John Barrington, son of then-famous politician, farmer and industrialist Henry Barrington (referred to as 'Henry Barrington of Portland' in the novel 'Circles in a forest' by Dalene Matthee). John named the town in honour of his father's birthplace Sedgfield in the United Kingdom.

According to the NID submission⁴, "the property concerned took on much of its current form in the mid 1950s and was developed as a Pine Plantation in the early sixties as were most of the plantations on the hills above Sedgfield. The first harvest occurred in 1988 when after a new plantation was cultivated from germinating seeds from the parent trees. This new plantation burned down in 1998 by a fire, started by a train. The scorched trees had to be harvested prematurely at huge loss to the owner. In 1999 another fire raged over the whole area and since then the owners abandoned the idea of forestry. Since the fires, gum, wattle and other invader plants took over to such an extent that manual eradication became impossible. With no capacity or prospect to generate income from the land, the property has been left neglected for many years".

Basic historic background research did not identify or highlight any significant historic or other heritage-related themes, which may be negatively impacted through the proposed development.

8. HERITAGE RESOURCES AND ISSUES

With relation to the integrated mapping of heritage resources and/ or occurrences noted on and within the proximity of the study area please note that heritage-related outcomes emanating from analysis of the Cultural Landscape and Visual Spatial Issues are presented and illustrated through the supportive figures included in the text where appropriate.

8.1 Built environment

While no structures, ruins and/or gravesites were noted during fieldwork by the author, the overgrown state of the site, which results in limited accessibility, means that we are not able to confirm without a doubt that any historic structures may be found. However, given the steep gradient applicable to a significant portion of the property, its long-standing use for forestry-purposes and the fact that two fires reportedly completely destroyed the plantations during 1998 and 1999, it is considered highly unlikely that any historic structures of cultural significance would remain. Furthermore, historical background research and earliest available aerial photography does not allude to the presence of any structures on the site.

8.2 Cultural landscape context

The term "cultural landscape" refers to the imprint created on a natural landscape through human habitation and cultivation over an extended period of time. While the Cape has been inhabited for many hundreds of thousands of years (pre-colonial history) prior to Western settlement (colonial history), the nomadic lifestyles of early inhabitants are rarely as evident within the landscape as the imprints made by humans during the last two – three hundred years and more. Unlike ancient landscapes in parts of the world where intensive cultivation over periods much longer than locally have allowed natural and cultural components of the landscape to become interwoven, landscape components along the Southern Cape have not yet developed in such a manner. The fact that natural and cultural landscape

² Kn Q 11 - 12

³ S.G. Diagram 404/ 1818

⁴ Cindy Postlethwayt, 2011

components in the region is therefore more distinguished means that the cultural landscape tends to be very vulnerable to the cumulative impact of inappropriate large-scale development.

"The concept of landscape gives expression to the products and processes of the spatial and temporal interaction of people with the environment. It may thus be conceived as a particular configuration of topography, vegetation cover, land use and settlement pattern which establishes some coherence of natural and cultural processes and activities." (Green, B.H.1995).

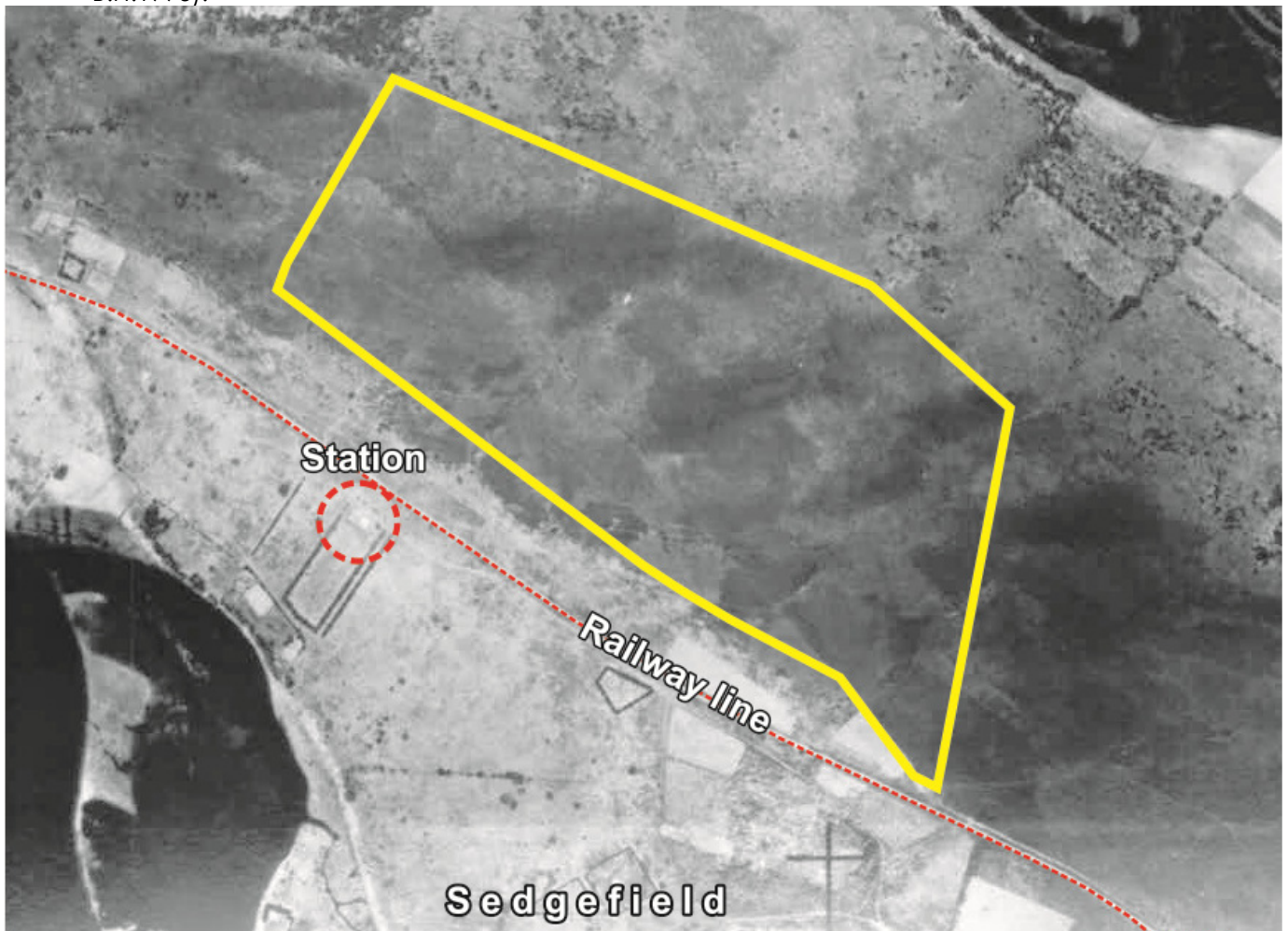


Figure 5: Study area transposed onto 1942 aerial imagery of the study area (Source: Compilation taken from Aerial survey 6 of 1942, NGSI)

Analysis of early aerial photography (Aerial survey 6 of 1942) provides the following insights into traditional (i.e. Pre-Modern) cultural landscape patterns applicable to the study area and its direct environs (read in conjunction with Figure 5):

- Image reveals beginnings of village of Sedgefield;
- Note landscape framing/ tree planting along early property boundaries of the station and several others south of the proposed development site;
- Alignment of the railway line (red) and station site (red circle) noted;
- Though vague, the alignment of the "Cloud Nine" Road is visible (not highlighted);
- Date of image precedes construction of the N2 National Road;
- Agricultural activity/ cultivation limited to Ruigtevlei Valley, northeast of the site;
- While not evident on this image, archival sources confirm forestry to have been a strong landscape pattern on and within the proximity of the proposed development site;
- Broader cultural landscape patterns are illustrated through Figure 5.

Analysis of broader cultural landscape patterns within proximity of proposed development site are illustrated through Figure 6 and the corresponding text below.

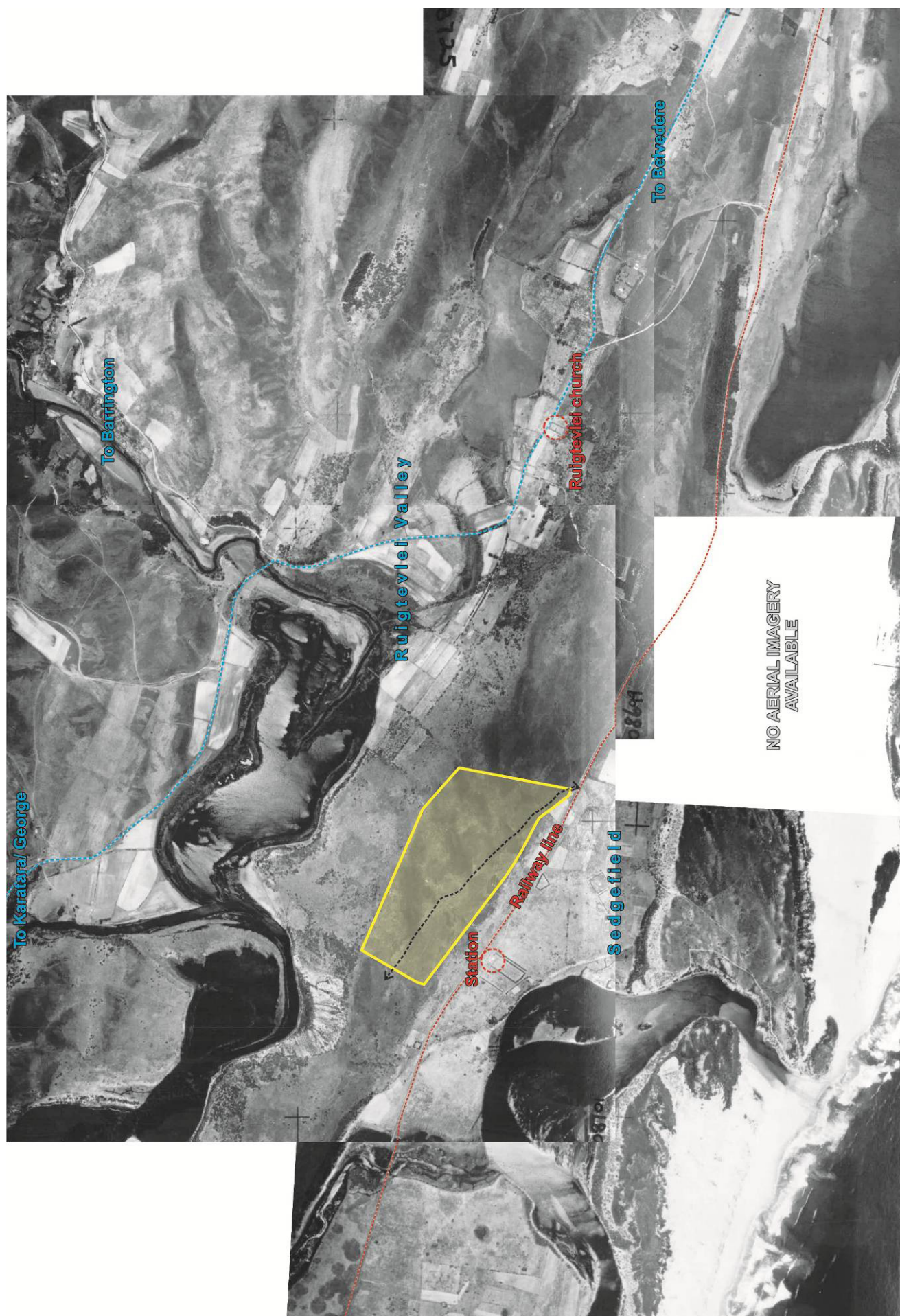


Figure 6: Proposed development site shown within broader cultural landscape context, highlighting some historic features within its direct proximity
 (Source: Compilation of early images taken from Aerial survey 6 of 1942, NGS)

Analysis of traditional cultural landscape patterns for the broader areas from a compilation of 1942 aerial photography reveals the following (read in conjunction with Figure 5):

- The alignment of the railway line (shown in red, Figure 5/ completed 1928) is significant as this “opened up” the coastline well before 1947, when the construction of the N2 through Sedgfield was completed;
- The alignment of the historic “coastal road” between Belvedere and George (shown in blue, Figure 5) did not extend through Sedgfield but traversed the Ruigtevlei Vallei situated north of the proposed development site;
- The location of the historic Ruigtevlei church is indicated with red circle (Figure 5)
- The imagery confirms agriculture/ cultivation along the Ruigtevlei Valley at the time.

Several historic structures were noted within the Ruigtevlei Valley north of the proposed development site noted during fieldwork - these included historic farmsteads, agricultural outbuildings, historic church, former trading post, etc.

8.2.1 *Synthesis*

Taken in conjunction with the above, the study area therefore forms part of a cultural landscape, which by itself, as well as within a broader context, provides a more lasting framework for the understanding and management of heritage resources. While it itself a heritage resource, cultural landscape could in a sense be regarded as a “patchwork” within which all other heritage resources are embedded and which adds to their meaning and sense of place.

While the NHRA does not clearly define the term “cultural landscape”, it is briefly referred to in the schedule of definitions. Based on local and international best-practice and within the context of definitions assigned to the terms heritage resource, place and cultural significance, cultural landscape can be defined as “A place of cultural significance, which engenders qualities relating to its aesthetic, architectural, historical, scientific, social, spiritual, linguistic, technological, archaeological or palaeontological value⁵”.

Primary archival sources indicate that some properties within and around the Ruigtevlei Valley were registered as loan farms from at least the 18th century onwards. While no comprehensive heritage survey has yet been undertaken in this area, various archival sources and fieldwork undertaken by the author confirm that this area has been inhabited since at least the 18th century. The cultural landscape defined as the Ruigtevlei Valley is therefore considered of **moderate to high local historic and aesthetic cultural significance (Grade 3B)**.

8.3 *Visual Impact Assessment*

The Visual Impact Assessment (VIA), compiled by Megan Anderson Landscape Architect (November 2015), is attached as **Annexure 6**. Essentially, the report assesses and compares the potential visual impacts likely to be associated with three alternative layouts as may be viewed from the identified Zone of Visual Influence (ZVI). The report further rates the significance of visual impacts likely to be incurred during the pre-construction, construction and operational phases and puts forward a range of mitigation measures mostly pertinent to landscaping.

Figure 7: Zone of Visual Influenced as defined in VIA
(Source: MALA, 2015)



⁵ Winter, S (October 2004)

Summaries of visual impact ratings, as extracted from the VIA, are set out in the tables below:

8.3.1 Summary of impacts during the pre-construction phase (Vegetation clearing)

	Preferred Proposal Layout 11	Alternative 1 Layout 4	Alternative 2 Layout 9
Nature of impact:	Removal of some vegetation will be required for earthworks. Some tall trees (mostly exotic Gums and Pines) would also be cleared for building thereby increasing the visibility of the site and loosing the 'wooded' visual resource.		
Extent and duration of impact:	Local, permanent	Local, permanent	Local, permanent
Intensity:	Low-medium	Medium	Low
Probability of occurrence:	Definite	Definite	Definite
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible
Degree to which the impact may cause irreplaceable loss of resources:	Marginal - significant	Marginal-significant	Marginal - significant
Cumulative impact prior to mitigation:	Medium - High	Medium - High	Medium - High
Significance rating of impact prior to mitigation:	MEDIUM - HIGH	MEDIUM - HIGH	MEDIUM - HIGH
Degree to which the impact can be mitigated:	Moderate	Moderate	Moderate
Proposed mitigation:	<ul style="list-style-type: none"> Restrict extent of disturbance to only those areas to be developed, i.e. retain large exotic trees below the access road as well as those in the developable areas that will not be in the way of proposed roads/services and houses. Demarcate no-go areas to prevent damage to vegetation (e.g. establish Pines and Gums) beyond works areas 		
Cumulative impact post mitigation:	Low-medium	Medium	Low
Significance rating of impact after mitigation:	LOW-MEDIUM	LOW-MEDIUM	LOW - MEDIUM

8.3.2 Summary of impacts during the construction phase (Visual scarring of the landscape resulting from earthworks (cut and fill))

	Preferred Proposal Layout 11	Alternative 1 Layout 4	Alternative 2 Layout 9
Nature of impact:	During construction, earthworks would create cut and fill of slopes would constitute visual scarring of the landscape.		
Extent and duration of impact:	Local, short term	Local, short term	Local, short term
Intensity:	Low-Medium	Medium	Low - Medium
Probability of occurrence:	Definite	Definite	Definite
Degree to which the impact can be reversed:	Barely reversible	Barely reversible	Barely reversible
Degree to which the impact may cause irreplaceable loss of resources:	Marginal	Marginal	Marginal
Cumulative impact prior to mitigation:	Medium	Medium	Low - Medium
Significance rating of impact prior to mitigation:	MEDIUM - HIGH	HIGH	MEDIUM
Degree to which the impact can be mitigated:	Medium	Medium	Medium
Proposed mitigation:	<ul style="list-style-type: none"> Site buildings on less visually sensitive slopes Limit extent of damage, keeping cut and fill to a minimum Note: additional mitigation should be implemented during the operational phase: landscape cut/fill slopes/terraces/retaining walls and use natural finishes and/or colours on retaining walls 		
Cumulative impact post mitigation:	Low	Low - Medium	Low
Significance rating of impact after mitigation:	LOW - MEDIUM	MEDIUM	LOW

8.3.3 Summary of impacts during the operational phase

8.3.3.1 Change in visual character from a natural landscape to a built landscape:

	Preferred Proposal Layout 11	Alternative 1 Layout 4	Alternative 2 Layout 9
Nature of impact:	The site is currently undeveloped and covered in wooded vegetation. Development would result in a change in visual character from a natural unbuild landscape to a built landscape.		
Extent and duration of impact:	Local, long term	Local, long term	Local, long term
Intensity:	Medium - high	Medium-high	Medium
Probability of occurrence:	Definite	Definite	Definite
Degree to which the impact can be reversed:	Barely reversible	Barely reversible	Barely reversible
Degree to which the impact may cause irreplaceable loss of resources:	Significant	Significant	Significant
Cumulative impact prior to mitigation:	Medium - High	Medium-high	Medium
Significance rating of impact prior to	MEDIUM - HIGH	MEDIUM-HIGH	MEDIUM

mitigation:			
Degree to which the impact can be mitigated:	High	High	High
Proposed mitigation:	<ul style="list-style-type: none"> Retain Woodland of Gum and Pine trees between erven and southern boundary and northern boundary Limit height of buildings Terrace/step housing units and limit upper story to 50% of house print Draw up and enforce development and architectural guidelines Establish landscaping including large indigenous trees that will screen development, phase Gums and Pines out Implement architectural design guidelines aimed to reduce visual impact of dwellings Roof colour to be dark grey, walls and structures to be muted earth colours 		
Cumulative impact post mitigation:	Medium	Medium	Low
Significance rating of impact after mitigation:	LOW-MEDIUM	LOW -MEDIUM	LOW

8.3.3.2 Visibility from scenic N2 route:

	Preferred Proposal Layout 11	Alternative 1 Layout 4	Alternative 2 Layout 9
Nature of impact:	The proposed development would be visible from the N2 scenic tourist route approaching Sedgfield.		
Extent and duration of impact:	Local, medium term	Local, long term	Local, medium term
Intensity:	Medium	Medium - High	Low - Medium
Probability of occurrence:	Highly probable	Highly probable	Highly probable
Degree to which the impact can be reversed:	Partly – Completely reversible	Partly reversible	Partly – Completely reversible
Degree to which the impact may cause irreplaceable loss of resources:	Significant	Significant	Marginal
Cumulative impact prior to mitigation:	Medium	Medium	Low
Significance rating of impact prior to mitigation:	MEDIUM - HIGH	MEDIUM - HIGH	MEDIUM
Degree to which the impact can be mitigated:	High	High	High
Proposed mitigation:	<ul style="list-style-type: none"> Retain Woodland of gum and pine trees between erven and southern boundary and northern boundary Limit height of buildings to 6,5m Terrace/step housing units and limit upper story to 50% of house print Draw up and enforce development and architectural guidelines Establish landscaping including large indigenous trees that will screen development, phase Gums and Pines out Implement architectural design guidelines aimed to reduce visual impact of dwellings Roof colour to be dark grey, walls and structures to be muted earth colours 		
Cumulative impact post mitigation:	Low-medium	Medium	Low
Significance rating of impact after mitigation:	LOW	LOW-MEDIUM	LOW

8.3.3.3 Visibility from sensitive receptors – residential areas of Sedgfield and section of the Wilderness National Park:

	Preferred Proposal Layout 11	Alternative 1 Layout 4	Alternative 2 Layout 9
Nature of impact:	The proposed development would be visible from the surrounding residential areas and a section of the Wilderness National Park to the south west		
Extent and duration of impact:	Local, medium term	Local, long term	Local, medium term
Intensity:	Medium	Medium-high	Low-medium
Probability of occurrence:	Probable	Highly probable	Probable
Degree to which the impact can be reversed:	Partly reversible	Partly reversible	Partly – Completely reversible
Degree to which the impact may cause irreplaceable loss of resources:	Significant	Significant	Marginal
Cumulative impact prior to mitigation:	Medium	Medium	Low
Significance rating of impact prior to mitigation:	MEDIUM- HIGH	MEDIUM-HIGH	MEDIUM
Degree to which the impact can be mitigated:	High	High	High
Proposed mitigation:	<ul style="list-style-type: none"> Retain Woodland of Gum and Pine trees between erven and 		

	southern boundary and northern boundary <ul style="list-style-type: none"> • Limit height of buildings to 6,5m • Terrace/step housing units, limit upper storey to 50%. • Draw up and enforce guidelines. • Building colours to be muted earth colours, roof to be dark grey 		
Cumulative impact post mitigation:	Low - medium	Medium	Low
Significance rating of impact after mitigation:	LOW-MEDIUM	MEDIUM	LOW

8.3.3.4 Night Lighting:

	Preferred Proposal Layout 11	Alternative 1 Layout 4	Alternative 2 Layout 9
Nature of impact:	The proposed development will require lighting which will have a visual impact at night. This will be visible to the surrounding areas and sensitive receptors in these areas.		
Extent and duration of impact:	Local, medium term	Local, long term	Local, medium term
Intensity:	Medium	Medium-high	Low-medium
Probability of occurrence:	Highly Probable	Highly probable	Highly probable
Degree to which the impact can be reversed:	Partly reversible	Partly reversible	Partly reversible
Degree to which the impact may cause irreplaceable loss of resources:	Significant	Significant	Significant
Cumulative impact prior to mitigation:	Medium	Medium-high	Low-medium
Significance rating of impact prior to mitigation:	MEDIUM	MEDIUM-HIGH	LOW-MEDIUM
Degree to which the impact can be mitigated:	Medium - High	Medium - High	Medium - High
Proposed mitigation:	<ul style="list-style-type: none"> • Limit external lighting on buildings, use low spill lighting • Street lighting to be low spill bollard lighting • Retain woodland and landscape new development, and • Draw up and enforce development and architectural guidelines 		
Cumulative impact post mitigation:	Low-medium	Medium	Low-medium
Significance rating of impact after mitigation:	LOW-MEDIUM	MEDIUM	LOW

Kindly refer to specialist's full report and proposed mitigation measures, the latter of which is set out in Section 5 of VIA, Annexure 6.

8.3.4 Conclusions

The VIA concludes as follows:

- "The potential visual impacts are visual scarring as a result of clearing vegetation and earthworks during construction, change from a wooded site to a built site, visibility from scenic routes (N2), sensitive receptors including the residents on Sedgfield and parts of the Wilderness National Park and lighting at night.
- The proposed Preferred Alternative (Layout 11) development will have a medium-high visual impact before mitigation, particularly to the Sedgfield residential area to the south, the N2 to the west of the Sedgfield and from parts of the Wilderness National Park. After mitigation, these visual impacts can be reduced to low to low-medium. The extent of this visual impact will be limited to the area south of the site which is local.
- The Proposed Alternative 1 (Layout 4) development will have a medium-high to high visual impact before mitigation. After mitigation these impacts will be reduced to low-medium to medium.
- The Proposed Alternative 2 (Layout 9) development results in mainly medium visual impacts with vegetation clearing being potentially medium-high before mitigation. With mitigation, the visual impacts can be reduced to mainly low, with vegetation clearing being low – medium.
- The visual impact has been mitigated in The Preferred Alternative Layout 11 and Alternative 2 Layout 9 through siting of most of the components of the development in the less visually sensitive areas, however development on the moderately sensitive visual areas of the site will need to be managed to prevent visual impacts, e.g. earthworks, building heights and footprints.
- Further mitigation measures will include retaining existing large trees which will initially screen the development, detailed, sensitive and limited earthworks, extensive landscaping which will ultimately screen the development, and development and architectural guidelines which should strive to guide development such that it enhances the visual environment and not detract from it.

- *These mitigation measures will need to be implemented and monitored throughout the planning, design development, construction, maintenance and operation of the development if the mitigation of the visual impact of this development is to be significantly and successfully achieved."*

8.4 Archaeology

According to the Phase 1 Archaeological Impact Assessment, compiled by Dr. Peter Nilssen (attached as **Annexure 7**), it was not possible to accomplish the aim of an AIA, namely to assess the potential negative impacts of development on archaeological resources and to make recommendations in mitigation. Due to inaccessibility and very poor archaeological visibility it is therefore recommended as follows:

"Because archaeological materials occur in the nearby landscape, it is anticipated that similar materials are present in the study area. Based on the fieldwork reported above, it is recommended that a full AIA is not feasible at the moment. It is further recommended that, from an archaeological standpoint, the proposed residential development of The Hill should be approved, provided that archaeological monitoring is conducted by a suitably qualified professional archaeologist during vegetation clearing and earthmoving activities associated with the construction phase of development."

9. HERITAGE INFORMANTS AND ASSESSMENT OF IMPACT

According to the requirements of Section 38(3) of the NHRA, land use planning and EIA processes must be informed by and incorporate heritage informants and indicators as summarised in this report. As this section aims to summarise heritage informants and indicators and the manner in which heritage resources should be incorporated into the overall design of the proposed development, it should therefore be read in conjunction with the findings reflected in Section 8 above.

9.1 Historic context

While the site is thematically linked to the role that forestry played in the early development of the Southern Cape (i.e. having been used for this purpose during certain periods in the past), it is considered that better examples representing this historic theme (i.e. the role that forestry played in early development of the region) may be found elsewhere in the Eden region. The overall cultural significance of this heritage informant is therefore considered of **low to no local historical cultural significance**.

Basic historic background research did not identify or highlight any other significant historic or heritage-related themes, which may be negatively impacted through the proposed development.

9.2 Built environment issues

No comprehensive heritage inventory as required in terms of Section 30(5) of the NHRA has yet been undertaken for this area. Although no structures, ruins and/or gravesites were identified during fieldwork, site accessibility was limited due to topography and dense vegetation. Given long-standing use of the site for forestry-purposes, the occurrence of two fires that reportedly completely destroyed former timber plantations, the site topography and lack of historic evidence suggesting the possible presence of historic dwellings on the site, it is considered highly unlikely that any historic structures of cultural significance remains.

9.3 Cultural landscape aspects

Traditional (Pre-Modern) cultural landscape elements alluding to early settlement patterns along the Ruigtevlei Valley north of the site are still evident within the present landscape through several historic buildings, cultivation patterns along low-lying areas bordering Swartvlei and Ruigtevlei as well as the two primary river corridors (Hoëkraal- and Karatara Rivers). Historic buildings include the Ruigtevlei church building (Image 1), several farmsteads and associated outbuildings (e.g. Images 2, 3, 4). Unfortunately many of these historic buildings were not accessible and could therefore not be recorded accurately as part of this assessment.



Figure 8: Some of the cultural landscape patterns still evident within the environs of the site as well as the Ruigtevlei Valley to the north (Source: GoogleEarthPro)



Image 1: Ruigtevlei Valley church



Image 2: Historic dairy building



Images 3,4: Examples of farmstead and labourer's cottages within Ruigtevlei Valley north of the site

Commercial forestry remains a prominent form of land use within the Ruigtevlei Valley north of the site (Figure 8). While many properties within the valley appear to be used mostly for rural occupation purposes, limited agriculture/ cultivation also remain as evident. The coastal landscape south of the site has mostly been transformed through formalised urban development (Sedgefield town), which in contrast hold little, if any, cultural significance.

Based on the information provided it appears that the three proposed layout alternatives would not necessarily be highly visible from the Rondevlei Valley cultural landscape during daytime hours, should the recommended mitigation measures put forward in the VIA be implemented. However uncertainty remains as the VIA does not specifically indicate whether the proposed development alternatives would negatively impact on the Rondevlei Valley cultural landscape (Image 5).

The nocturnal footprint of the proposal as viewed from the Rondevlei Valley cultural landscape (i.e. overall lighting overspill likely to be associated with the concentration of residential dwellings across the proposed development site) cannot be accurately assessed with the information available.



Image 5: Southwest-facing view of "The Hill" and proposed development site across cultivated lands from the old Karatara road (see insert for point/ direction of view)

It is noted that the roughly triangular portion of cultivated land west of the site, at the western entrance to the town (mapped as "Cultivation", Figure 8) is considered of local aesthetic cultural significance but would not be affected by the proposed development alternatives.

9.4 Visual-spatial issues

9.4.1 Introduction

The urban morphology of Sedgefield has clearly developed in response to nearby physical landscape features such as river corridors, edge of the Swartvlei water body and the location and orientation of the landscape feature known as "The Hill". In fact, "The Hill" serves as an important visual backdrop to much of the urban area forming part of Sedgefield. As the subject site forms part of the plateau and south-facing slopes of "The Hill", all proposed development alternatives would therefore tend to be visible from at least some areas within Sedgefield, whether or not the recommended mitigation measures put forward in the VIA are implemented.

9.4.2 Anticipated visual impact from N2

While much of the south-facing slope of the site is visible from the N2 (a tourism and scenic route), the distance of exposure would tend to be limited to that of the Sedgefield urban area (see illustration, Figure 9). This is due to natural topographical features along the N2, which tend to limit views of the site for both east- and westbound traffic along the N2.

Much of development proposed as part of the three layout alternatives assessed would appear to be concentrated on the plateau of the site, in which case those structures and infrastructure would not have a high level of exposure from the N2. In addition, it is our view that the severity of the above zone of exposure from the N2 would tend to be moderate to low

as vehicles travelling through the urban area of Sedgefield would primarily be visually exposed to their direct (urban) environment.



Figure 9: Anticipated area of visual exposure of site as viewed from N2 National Road (east- and westbound)

9.4.3 General comments

Inter-visibility between the site and Sedgefield urban area increases further southward as the plateau tends to come into view from further away - south, southwest and southeast of the site. This would apply during day time hours but importantly also during night time when urban development is likely to introduce a significant nocturnal footprint, which will permanently alter the character of "The Hill" as a natural landscape feature.

We would argue that (a) the Visual Absorption Capacity (VAC) of the site, as viewed from Sedgefield, would vary depending upon the distance of the viewpoint taken, south of the site and; (b) that the VAC would depend on the overall density of development proposed.

We agree with the findings and conclusions (Section 8.3.4 of this report) as well as summary of visual impacts as transposed reflected in the VIA (reiterated in table below):

SUMMARY IMPACTS	The Preferred Alternative Layout 11		Alternative 1: Layout 4		Alternative 2 Layout 9	
	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation
Vegetation clearing	Medium-High	Low-Medium	Medium-High	Low-Medium	Medium-High	Low-Medium
Visual scarring of the landscape resulting from earthworks (cut and fill)	Medium-High	Low-Medium	High	Medium	Medium	Low
Change in visual character from a natural landscape to a built landscape	Medium-High	Low-Medium	Medium-High	Low-Medium	Medium	Low
Visibility from scenic routes, view sites and the surrounding residential areas	Medium-High	Low	Medium-High	Low-Medium	Medium	Low

Visibility from sensitive receptors – residential areas of Sedgfield and a section of the Wilderness National Park	Medium-High	Low-Medium	Medium-High	Medium	Medium	Low
Night Lighting	Medium	Low-Medium	Medium-High	Medium	Low-Medium	Low

9.5 Archaeology

The Phase 1 Archaeological Impact Assessment recommends that, should the development be approved, archaeological monitoring must be conducted by a suitably qualified professional archaeologist during vegetation clearing and earthmoving activities associated with the construction phase of development. This requirement will therefore have to be implemented as part of the Environmental Management Plan.

9.6 Conclusions

Based on the above assessment it is our view that the proposed development site is not linked to a significant historical theme and that it is unlikely to contain structures of cultural significance, though the latter can only be confirmed with certainty once site accessibility becomes possible. Due to dense vegetation which currently limits visibility, archaeological monitoring would therefore have to be conducted by a suitably qualified professional archaeologist during vegetation clearing and earthmoving activities associated with the construction phase of any development approved.

An assessment of the potential visual impact of the proposed alternatives on the Ruigtevlei Valley rural cultural landscape north of the site would be required. This assessment should also consider the potential nocturnal footprint of development on the site.

While views of the site from the N2 will mostly be limited to a ± 2.2 km stretch of road within the Sedgfield urban area, the severity of such visual impact will depend on the overall density of development approved.

The site forms part of "The Hill", which is a mostly undeveloped natural landscape feature generally perceived as being a "natural backdrop" to the town of Sedgfield. From the findings of this assessment as well as the VIA it is therefore evident that a low density layout such as proposed layout alternative 9 would tend to have a less significant overall visual impact - particularly when viewed from Sedgfield/ further south of the site. Mitigation measures proposed as part of the VIA should be reviewed and expanded if necessary, once the alternative site layout has been selected/ finalised.

10. ASSUMPTIONS AND LIMITATIONS

The assessment reflected in Section 9 of this report is based on the assumption that the local planning authority supports the development of the site, which by implication would result in revision of the urban edge as presently reflected in the Knysna Spatial Development Framework November 2008 (refer Section 6.1 of this report).

As detailed information such as architectural design, landscape planning and engineering design and infrastructure is not yet available, it is not possible to fully gauge the potential visual impact of the three development alternatives.

Due to the overgrown state of the site, this assessment also precludes final statements regarding potential built environment and archaeological heritage resources, though monitoring during construction should sufficiently address these.

11. PUBLIC PARTICIPATION

In accordance with Heritage Western Cape's requirements pertaining to public participation, the Draft Integrated Heritage Impact Assessment will be made to local conservation bodies formally registered with HWC in terms of Section 25 of the NHRA, for a period of 30 calendar days. Any written comments received within this period will be included in the Final Integrated Heritage Impact Assessment to be submitted to HWC for adjudication.

A notice regarding the intention to initiate this application in terms of Section 38(8) of the NHRA has been advertised as part of formal public participation process as part of the Basic Assessment Process in terms of the National Environmental Management Act, 1998 (Act 107 of 1998), which is managed by *Cape Environmental Assessment Practitioners (Pty) Ltd* (advert attached as part of **Annexure 8**).

12. RECOMMENDATION

Having regard to the above assessment, it is recommended:

- 12.1 That the report be subject to focussed public participation to solicit heritage-related comments for a statutory period of 30 days;
- 12.2 That the recommendations of this Draft Integrated HIA and outcomes of focussed public participation be incorporated into a Final Integrated HIA, to be submitted to Heritage Western Cape for adjudication.

PERCEPTION Planning
27th January 2016

SE DE KOCK
Hons (TRP) EIA Mgmt (IRL) Pr Pln PHP