

HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENT OF FARM 1202/1, NEAR PNIEL, PAARL MAGISTERIAL DISTRICT, WESTERN CAPE

Required under Section 38 (8) of the National Heritage Resources Act (No. 25 of 1999).

HWC Case No.: 14082003AS0826E

Report for:

Withers Environmental Consultants

P.O. Box 12410, Die Boord, 7613

Tel: 021 887 4000

Email: info@withersenviro.co.za

On behalf of:

Mr Herman du Toit



Dr Jayson Orton

ASHA Consulting (Pty) Ltd

40 Brassie Street, Lakeside, 7945

Tel: (021) 783 0557 | 083 272 3225

Email: jayson@asha-consulting.co.za

1st draft: 18 November 2018

Revised: 08 February 2019

Requirements of Appendix 6 of the 2014 EIA Regulations	Included in the report in:
(1) A specialist report prepared in terms of these Regulations must contain-(a) details of- (i) the specialist who prepared the report; and (ii) the expertise of that specialist to compile a specialist report including a curriculum vitae;	Section 1.5 & Appendix 1
(b) a declaration that the specialist is independent in a form as may be specified by the competent authority;	Appendix 2
(c) an indication of the scope of, and the purpose for which, the report was prepared;	Section 1.4
(cA) an indication of the quality and age of base data used for the specialist report;	Section 3.1
(cB) a description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change;	Sections 7.2, 7.3, 7.4
(d) the duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment;	Section 3.2
(e) a description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used;	Section 3
(f) details of an assessment of the specific identified sensitivity of the site related to the proposed activity or activities and its associated structures and infrastructure, inclusive of a site plan identifying site alternatives;	Section 1.2
(g) an identification of any areas to be avoided, including buffers;	n/a
(h) a map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers;	n/a
(i) a description of any assumptions made and any uncertainties or gaps in knowledge;	Section 3.7
(j) a description of the findings and potential implications of such findings on the impact of the proposed activity or activities;	Section 6
(k) any mitigation measures for inclusion in the EMPr;	Section 7
(l) any conditions for inclusion in the environmental authorisation;	Section 12
(m) any monitoring requirements for inclusion in the EMPr or environmental authorisation;	Section 8
n) a reasoned opinion- (i) whether the proposed activity or portions thereof should be authorised; and (iA) regarding the acceptability of the proposed activity or activities; and (ii) if the opinion is that the proposed activity, activities or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan;	Sections 11 & 12
(o) a description of any consultation process that was undertaken during the course of preparing the specialist report;	Sections 3.6 & 10
(p) a summary and copies of any comments received during any consultation process and where applicable all responses thereto; and	Section 10
(q) any other information requested by the competent authority.	n/a
(2) Where a government notice gazetted by the Minister provides for any proposal or minimum information requirement to be applied to a specialist reports, the requirements as indicated in such notice will apply.	n/a

EXECUTIVE SUMMARY

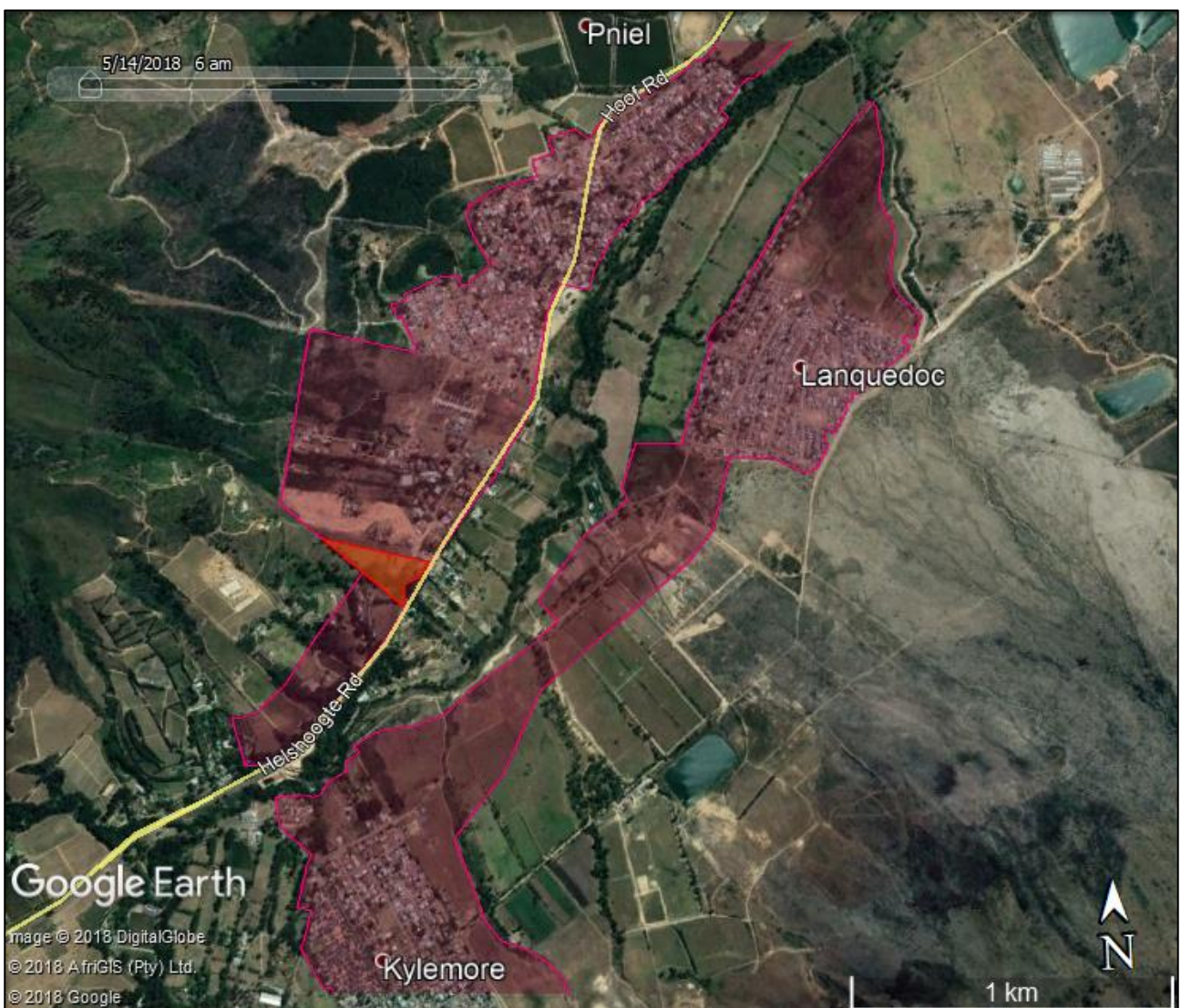
1. Site Name

n/a

2. Location

- Helshoogte Pass
- Farm Johannesburg 1202/1
- S33° 54' 17" E18° 57' 03"

3. Locality Plan



Aerial view of the Dwars River valey showing the location of the site (red shaded polygon) relative to the surrounding settlements and the urban edge (pink shaded polygons).

4. **Description of Proposed Development**

The applicant intends to develop a residential security estate consisting of the following (see layout plan in Figure 3):

- 27 sub-divided residential erven of various sizes;
- Internal access roads and open space;
- A small sewer pump station and sewer line over the stream (to be affixed to the existing culvert) to accommodate the two southernmost erven;
- Connections to the municipal water, sewage and electrical infrastructure;
- Construction of required storm water infrastructure; and
- Gatehouse and perimeter fencing.

The site lies within but at the urban edge.

5. **Heritage Resources Identified**

A house greater than 60 years of age occurs on site but is so modified as to have lost the majority of its cultural significance. The Helshoogte Pass is a locally significant scenic route but is well screened from the development by mature trees and bush that occur between the property boundary and the road. The cultural landscape is the primary heritage resource of concern. Although the vicinity of the site is degrading by virtue of ongoing development immediately to the north, the whole area falls within the south-eastern part of the declared Grade I Cape Winelands Cultural Landscape and it is this aspect that is of primary concern. Of the residential settlements in the area, only the historic core of Lanquedoc retains cultural significance beyond the architectural value of individual structures.

6. **Anticipated Impacts on Heritage Resources**

The existing house will remain unaffected by the proposal, except that it will be on its own subdivided erf. The Helshoogte Pass is not expected to be impacted due to the dense screening that occurs along the road edge. The broader cultural landscape will be impacted by virtue of there being more houses in the area and less agricultural land (although note that the site has been fallow for some time). The core values of the Grade I cultural landscape (outstanding natural and cultural environment, rich history associated with living heritage and its unique architecture (Cape Dutch) that appears nowhere else in the world) are focused in the valleys of the area and will not experience any significant contextual or visual impacts.

7. **Recommendations**

Because of the very limited and easily manageable impacts to heritage resources, the proposed residential development on Portion 1 of Farm 1202 should be allowed to proceed, but subject to the following conditions:

- Visual mitigation measures to limit the visual intrusion should be incorporated into the individual house designs. These include:
 - Preferably have terraced/split-level structures and avoid double-story facades facing downslope;
 - If double-story facades are desired then use pergolas or tree planting to soften the façade;

- Colours and finishes should complement the cultural landscape;
- Minimise cut-and-fill;
- Minimise vegetation clearing;
- Use low, bollard-type lighting;
- Tree planting (especially along the access road) and general greening of the site should be commenced as early as possible so that some visual mitigation will be in place during the construction period;
- Encourage tree planting in rows to compliment the typical Winelands pattern; and
- If any archaeological material or human burials are uncovered during the course of development then work in the immediate area should be halted. The find would need to be reported to the heritage authorities and may require inspection by an archaeologist. Such heritage is the property of the state and may require excavation and curation in an approved institution.

8. **Author/s and Date**

Heritage Impact Assessment: Jayson Orton, ASHA Consulting (Pty) Ltd, 18 November 2018

Archaeological study: incorporated within the HIA

Cultural landscape study: incorporated within the HIA

Visual specialist study: Megan Anderson, January 2019

Glossary

Background scatter: Artefacts whose spatial position is conditioned more by natural forces than by human agency

Early Stone Age: Period of the Stone Age extending approximately between 2 million and 200 000 years ago.

Holocene: The geological period spanning the last approximately 10-12 000 years.

Later Stone Age: Period of the Stone Age extending over the last approximately 20 000 years.

Middle Stone Age: Period of the Stone Age extending approximately between 200 000 and 20 000 years ago.

Pleistocene: The geological period beginning approximately 2.5 million years ago and preceding the Holocene.

Abbreviations

APHP: Association of Professional Heritage Practitioners

ASAPA: Association of Southern African Professional Archaeologists

BAR: Basic Assessment Report

CRM: Cultural Resources Management

DEA&DP: Western Cape Department of Environmental Affairs and Development Planning

ESA: Early Stone Age

GPS: global positioning system

HIA: Heritage Impact Assessment

HWC: Heritage Western Cape

LSA: Later Stone Age

MSA: Middle Stone Age

NEMA: National Environmental Management Act (No. 107 of 1998)

NHRA: National Heritage Resources Act (No. 25) of 1999

NID: Notification of Intent to Develop

SAHRA: South African Heritage Resources Agency

SAHRIS: South African Heritage Resources Information System

SDF: Spatial Development Framework

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1. INTRODUCTION

ASHA Consulting (Pty) Ltd was appointed by Withers Environmental Consultants to conduct an assessment of the potential impacts to heritage resources that might occur through the proposed subdivision and residential development of Portion 1 of Farm Johannesburg 1202, Paarl. The 2.856 ha site is located in the Dwars River Valley off Helshoogte Road, just to the south of Pniel (Figures 1 & 2). It falls within the Grade 1 Cape Winelands Cultural Landscape. Its co-ordinates are as follows: S33° 54' 17" E18° 57' 03".

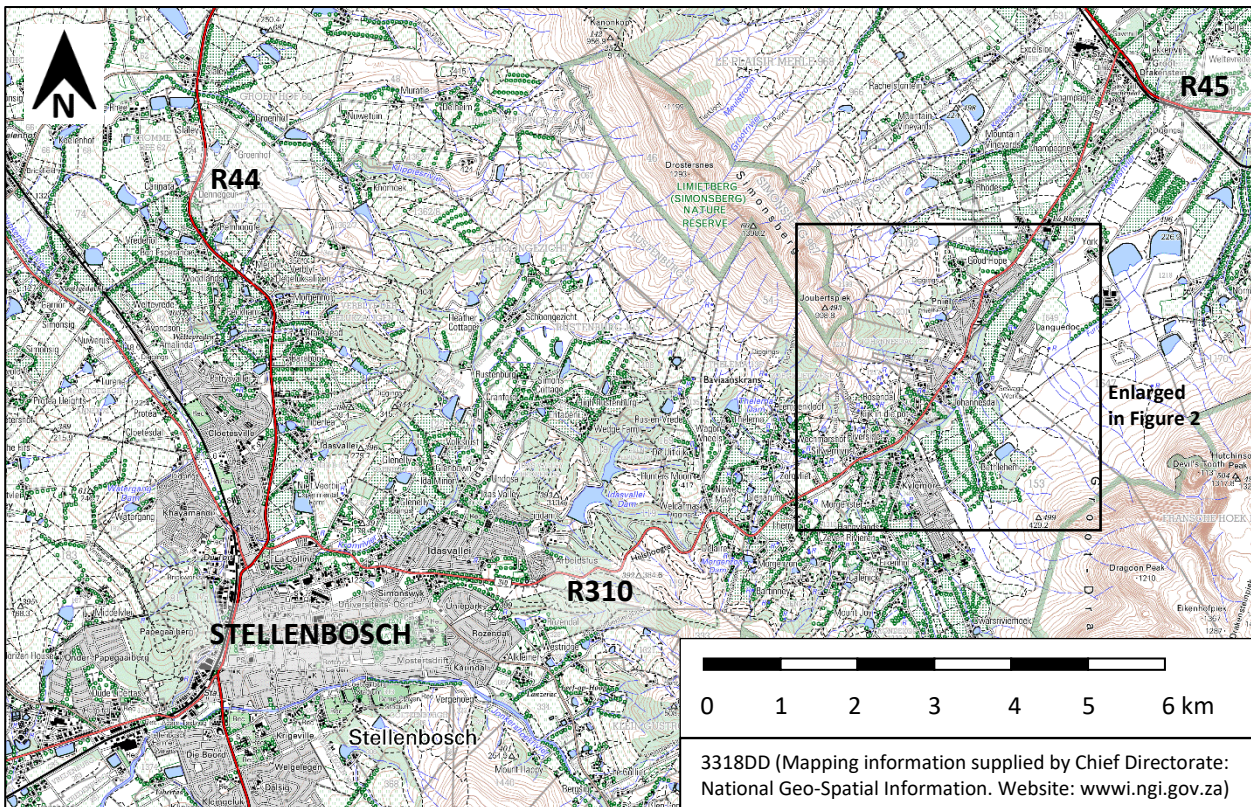


Figure 1: Map showing the general location of the site (boxed area is enlarged in Figure 2). Helshoogte Road (R310) runs through the centre of the map from Stellenbosch and joins the R45 between Paarl and Franschhoek in the northwest corner.

1.1. Project description

The applicant intends to develop a residential security estate consisting of the following (see layout plan in Figure 3):

- 27 sub-divided residential erven of various sizes with allowance for double-story houses (to be subject to an architectural guideline);
- Internal access roads and open space;
- A small sewer pump station and sewer line over the stream (to be affixed to the existing culvert) to accommodate the two southernmost erven;
- Connections to the municipal water, sewage and electrical infrastructure;
- Construction of required storm water infrastructure; and
- Gatehouse and perimeter fencing.

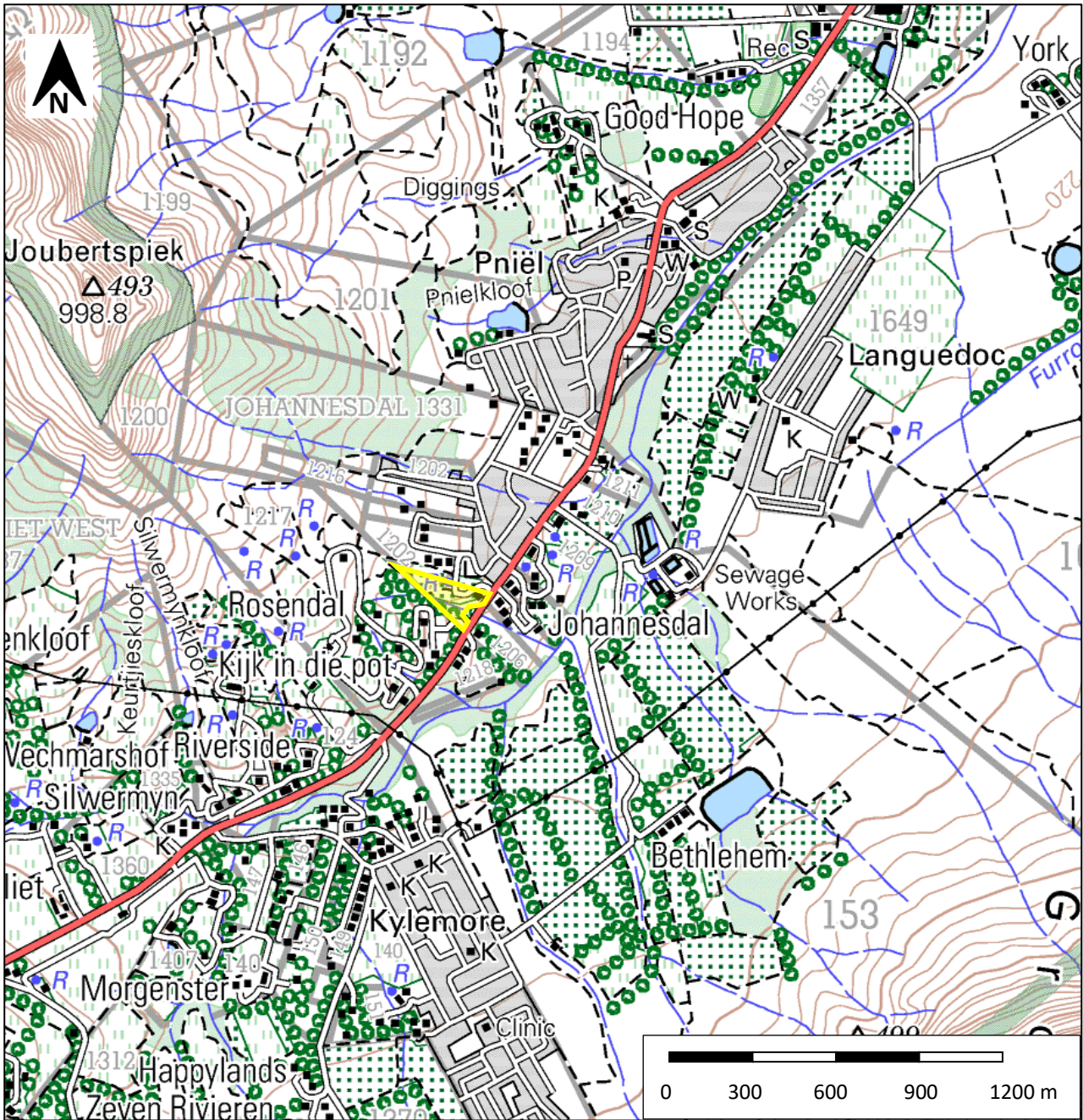
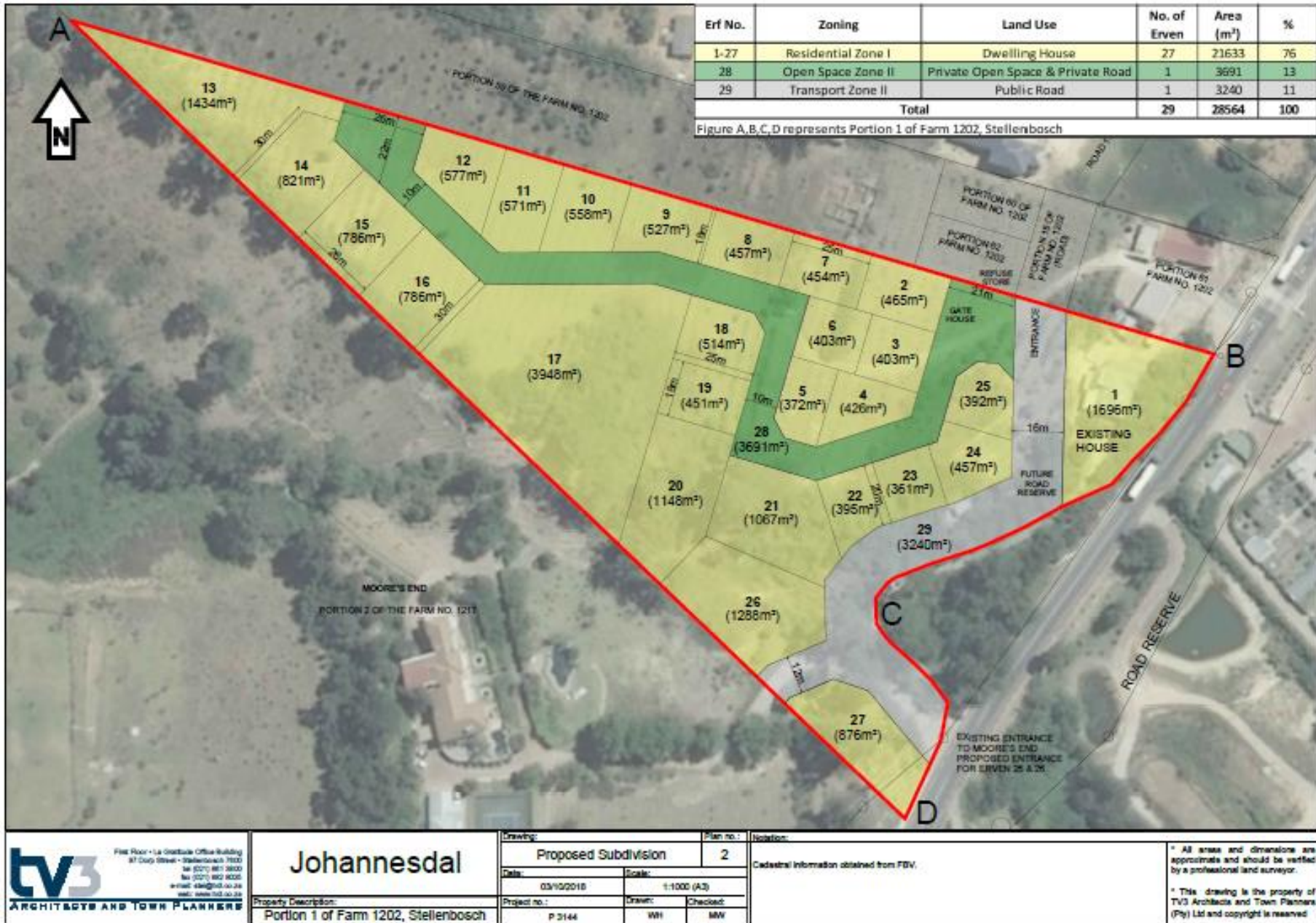


Figure 2: Map 3318DD showing the location of the site (yellow polygon) to the northwest of Helshoogte Road (R310). The settlements of Pniel, Languedoc and Kylemore are all visible.

The property is located within the 2017 Council approved urban edge as contemplated in the Stellenbosch Spatial Development Framework¹ (Sustainability Institute 2012) but, under NEMA, it is considered as being outside of an “urban area” (as defined in the 2014 NEMA regulations) because the municipally adopted urban edge has yet to be adopted by the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP). For the purposes of assessment, therefore, the site will be regarded as outside of the urban edge but within the area earmarked for residential expansion by the Stellenbosch Municipality.

¹ Note that although the urban edge is indicated as ‘proposed’ in the SDF, this was formally approved in May 2017.



tv3
ARCHITECTS AND TOWN PLANNERS

First Floor - La Graciosa Office Building
87 Duyn Street - Stellenbosch, 7852
Tel: (022) 881 3800
Tel: (022) 882 8005
Email: info@tv3.co.za
Web: www.tv3.co.za

Johannesdal

Property Description:
Portion 1 of Farm 1202, Stellenbosch

Drawing: Proposed Subdivision	Plan no.: 2
Date: 03/10/2018	Scale: 1:1000 (A3)
Project no.: P 2144	Drawn: WH
	Checked: MW

Location:
Cadastral information obtained from FDBV.

* All areas and dimensions are approximate and should be verified by a professional land surveyor.
* This drawing is the property of TV3 Architects and Town Planners (Pty) Ltd and copyright is reserved.

Figure 3 (previous page): Plan of the proposed subdivision with 27 residential erven.

An architectural guideline document has been prepared for use within the development. This guideline is included as Appendix 3 to the present report².

1.2. Alternatives

There are no development alternatives (aside from the no-go option) because other layouts have been explored during the process. The present layout is thus the latest alternative that is being carried forward in the BAR process. For comparison, the previous layout is shown in Figure 4.



Figure 4: Earlier spatial development plan with 30 residential erven.

1.2.1. Aspects of the project relevant to the heritage study

All aspects of the proposed development are relevant since excavations for foundations and/or services may impact on archaeological and/or palaeontological remains, while all above-ground aspects of the development, i.e. the houses, boundary treatments, etc, create potential visual (contextual) impacts to the cultural landscape and any significant heritage sites that might be visually sensitive.

1.3. Terms of reference

ASHA Consulting was asked to compile a heritage impact assessment (HIA) that would meet the requirements of Heritage Western Cape (HWC).

² Note that this guideline was recommended by the heritage and visual consultants and that both reports were revised once it had been produced.

A Notification of Intent to Develop (NID) form was compiled by Withers Environmental Consultants and submitted to HWC in August 2014. The HWC response, dated 5 September 2014, requested the following:

1. Since there is reason to believe that heritage resources will be impacted upon, HWC requires an HIA in terms of S. 38(3) of the NHRA (Act 25 of 1999) assessing the impacts on the following heritage resources which it has identified; cultural landscape, visual & possible archaeology.
2. An HIA is required consisting of an archaeological scoping report, cultural landscape study as well as a visual impact assessment.

Although consultation was not requested at that time, this is now a standard requirement for HIAs and this aspect was thus added to the HWC requirements.

It should also be noted, however, that following S.38(3) of the National Heritage Resources Act (No. 25 of 1999), even though certain specialist studies may be specifically requested, all heritage resources should be identified and assessed.

1.4. Scope and purpose of the report

A HIA is a means of identifying any significant heritage resources before development begins so that these can be managed in such a way as to allow the development to proceed (if appropriate) without undue impacts to the fragile heritage of South Africa. This HIA report aims to fulfil the requirements of the heritage authorities such that a comment can be issued for consideration by the DEA&DP who will review the Basic Assessment Report (BAR) and grant or refuse authorisation. The HIA report will outline any mitigation requirements that will need to be complied with from a heritage point of view and that should be included in the conditions of authorisation should this be granted.

1.5. The author

Dr Jayson Orton has an MA (UCT, 2004) and a D.Phil (Oxford, UK, 2013), both in archaeology, and has been conducting HIAs and archaeological specialist studies in the Western Cape and Northern Cape provinces of South Africa since 2004 (Please see curriculum vitae included as Appendix 1). He has also conducted research on aspects of the Later Stone Age in these provinces and published widely on the topic. He is an accredited heritage practitioner with the Association of Professional Heritage Practitioners (APHP Member #043) and also holds archaeological accreditation with the Association of Southern African Professional Archaeologists (ASAPA) CRM section (Member #233) as follows:

- Principal Investigator: Stone Age, Shell Middens & Grave Relocation; and
- Field Director: Colonial Period & Rock Art.

1.6. Declaration of independence

ASHA Consulting (Pty) Ltd and its consultants have no financial or other interest in the proposed development and will derive no benefits other than fair remuneration for consulting services provided.

2. HERITAGE LEGISLATION

The National Heritage Resources Act (NHRA) No. 25 of 1999 protects a variety of heritage resources as follows:

- Section 34: structures older than 60 years;
- Section 35: palaeontological, prehistoric and historical material (including ruins) more than 100 years old as well as military remains more than 75 years old;
- Section 36: graves and human remains older than 60 years and located outside of a formal cemetery administered by a local authority; and
- Section 37: public monuments and memorials.

Following Section 2, the definitions applicable to the above protections are as follows:

- Structures: “any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith”;
- Palaeontological material: “any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace”;
- Archaeological material: a) “material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures”; b) “rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation”; c) “wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation”; and d) “features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found”;
- Grave: “means a place of interment and includes the contents, headstone or other marker of such a place and any other structure on or associated with such place”; and
- Public monuments and memorials: “all monuments and memorials a) “erected on land belonging to any branch of central, provincial or local government, or on land belonging to any organisation funded by or established in terms of the legislation of such a branch of government”; or b) “which were paid for by public subscription, government funds, or a public-spirited or military organisation, and are on land belonging to any private individual.”

Section 3(3) describes the types of cultural significance that a place or object might have in order to be considered part of the national estate. These are as follows:

- a) its importance in the community, or pattern of South Africa’s history;
- b) its possession of uncommon, rare or endangered aspects of South Africa’s natural or cultural heritage;
- c) its potential to yield information that will contribute to an understanding of South Africa’s natural or cultural heritage;

- d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- i) sites of significance relating to the history of slavery in South Africa.

While landscapes with cultural significance do not have a dedicated Section in the NHRA, they are protected under the definition of the National Estate (Section 3). Section 3(2)(c) and (d) list "historical settlements and townscapes" and "landscapes and natural features of cultural significance" as part of the National Estate. Furthermore, Section 3(3) describes the reasons a place or object may have cultural heritage value; some of these speak directly to cultural landscapes.

Section 38(8) of the NHRA states that if an impact assessment is required under any legislation other than the NHRA then it must include a heritage component that satisfies the requirements of S.38(3). Furthermore, the comments of the relevant heritage authority must be sought and considered by the consenting authority prior to the issuing of a decision. Under the National Environmental Management Act (No. 107 of 1998; NEMA), as amended, the project is subject to a BAR. HWC is required to provide comment on the proposed project in order to facilitate final decision making by the DEA&DP.

3. METHODS

3.1. Literature survey and information sources

A survey of available literature was carried out to assess the general heritage context into which the development would be set. This literature included published material, unpublished commercial reports and online material, including reports sourced from the South African Heritage Resources Information System (SAHRIS). The 1:50 000 map and historical aerial images were sourced from the Chief Directorate: National Geo-Spatial Information.

3.2. Field survey

The site was subjected to a detailed foot survey on 29th March 2016. This was in Autumn, although on this site seasonality would not have affected the survey because the surface was covered by dense grass that would be present all year round. During the survey the positions of finds were recorded on a hand-held GPS receiver set to the WGS84 datum. Photographs were taken at times in order to capture representative samples of both the affected heritage and the landscape setting of the proposed development.

3.3. Specialist studies

The Cultural landscape study is included within the present report but a separate visual specialist study has been compiled by Megan Anderson and is attached to the present report in full as Appendix 4.

3.4. Impact assessment

For consistency, the impact assessment was conducted through application of a scale supplied by Withers Environmental Consultants.

3.5. Grading

S.7(1) of the NHRA provides for the grading of heritage resources into those of National (Grade I), Provincial (Grade II) and Local (Grade III) significance. Grading is intended to allow for the identification of the appropriate level of management for any given heritage resource. Grade I and II resources are intended to be managed by the national and provincial heritage resources authorities, while Grade III resources would be managed by the relevant local planning authority. These bodies are responsible for grading, but anyone may make recommendations for grading.

It is intended under S.7(2) that the various provincial authorities formulate a system for the further detailed grading of heritage resources of local significance but this is generally yet to happen. Heritage Western Cape (2016), however, uses a system in which resources of local significance are divided into Grade IIIA, IIIB and IIIC. These approximately equate to high, medium and low local significance, while sites of very low or no significance (and generally not requiring mitigation or other interventions) are referred to as Not Conservation Worthy (NCW).

3.6. Consultation

The draft HIA was submitted to relevant interested and affected parties as would have been required by HWC if the NID had been submitted more recently (Section 10). The report was also included in the main public participation process (PPP) required under NEMA as part of the BAR.

3.7. Assumptions and limitations

The field study was carried out at the surface only and hence any completely buried archaeological sites would not be readily located. However, over the vast majority of the site the ground surface was completely obscured by very thick grass. It was only in tracks that the substrate was evident. The ground had also been terraced during the course of previous agricultural activities. Specialist knowledge of the Western Cape's archaeology suggested that in this context on a mountainside archaeological finds were unlikely and this is assumed to hold true in this instance.

4. PHYSICAL ENVIRONMENTAL CONTEXT

4.1. Site context

The site is a broadly triangular portion of land situated alongside the Helshoogte Road. The pass is a popular tourist route linking Stellenbosch and Franschhoek with the Hillcrest Berry Farm (located 1.2 km to the southwest) being a highlight along the route. Several settlements and towns occur in close proximity to the site as follows:

- Kylemore lies 1.0 km to the south;
- Johannesdal lies 0.3 km to the north-northeast;
- Pniel lies 0.8 km to the north-northeast; and
- Languedoc lies 1.2 km to the east-northeast.

As already noted, the site falls within the 2017 approved urban edge (Figure 5). It also lies within the area earmarked for residential development in the far earlier Johannesdal spatial development framework (SDF; Figure 6). It is noted that Portion 59 of Farm 1202, which is a long, narrow strip of land located along the north-eastern boundary of the present site, is also scheduled for development with the impact assessment ongoing. In that instance HWC did not require any assessment of heritage impacts³.

The present site is surrounded by varying land uses. The valley was originally largely agricultural but, over the last century and a half, various settlements have formed, most notable among these are Pniel, Lanquedoc and Kylemore, with the very small settlement of Johannesdal being somewhat less easily spatially definable (Figures 7 & 8). Johannesdal lies a few hundred metres to the north-northeast of the proposed development site but is disconnected from it by an area of low density settlement (Figure 8). Densification of this area is currently underway on one property while a second is under application. A number of other residential buildings lie scattered about, but most are on large properties. The only obvious exception appears to a small security estate directly across Helshoogte Road to the east of the site, although this lies on an undivided farm portion rather than on individual small erven.

³ HWC NID response to case 130205TG05 dated 20 February 2013.

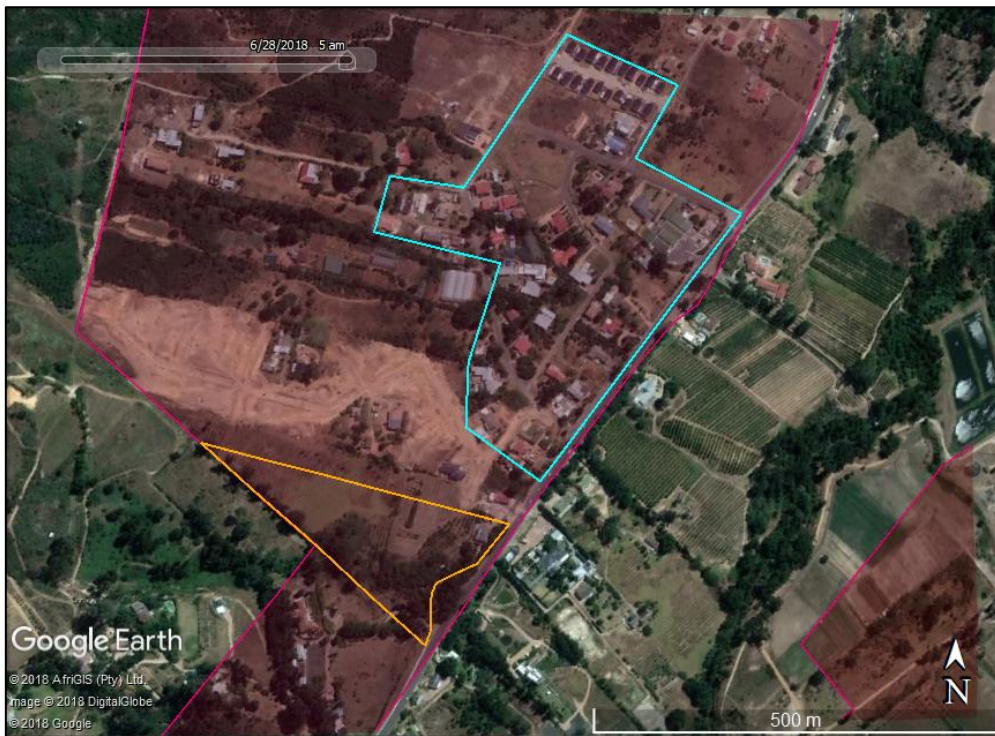


Figure 5: Aerial view of the Johannesburg residential area (turquoise polygon) showing the site (Farm 1202/1; orange polygon) and the urban edge (pink shaded area). Of note is the ongoing residential development to the north of the property.

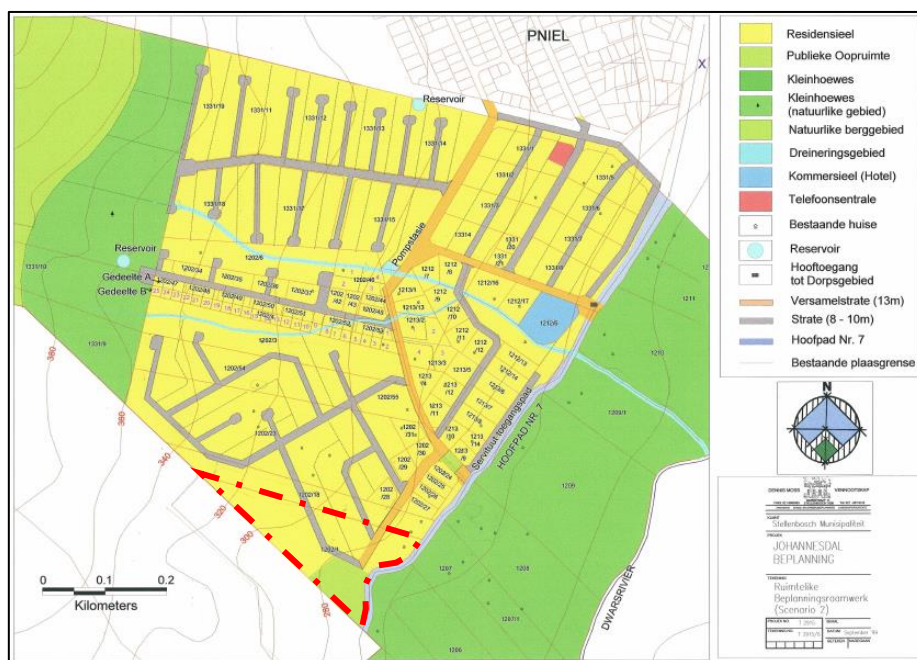


Figure 6: Johannesburg SDF showing the proposed extent and density of residential urban development (yellow shading) in Johannesburg⁴. The position of Farm 1202/1 is indicated in red dashed outline. Source: Dennis Moss Partnership (1999).

⁴ Note that a more recent traffic report has meant that the road layout will not necessarily follow that shown here and that this SDF is, therefore, partially outdated. It is presented only for the purpose of illustrating the proposed extent of development which remains valid.

The site lies within the south-eastern part of the Grade 1 Cape Winelands Cultural Landscape (Figures 8 & 9) and a few kilometres away from land included within the core of the Cape Floral Region Protected Areas World Heritage Site.

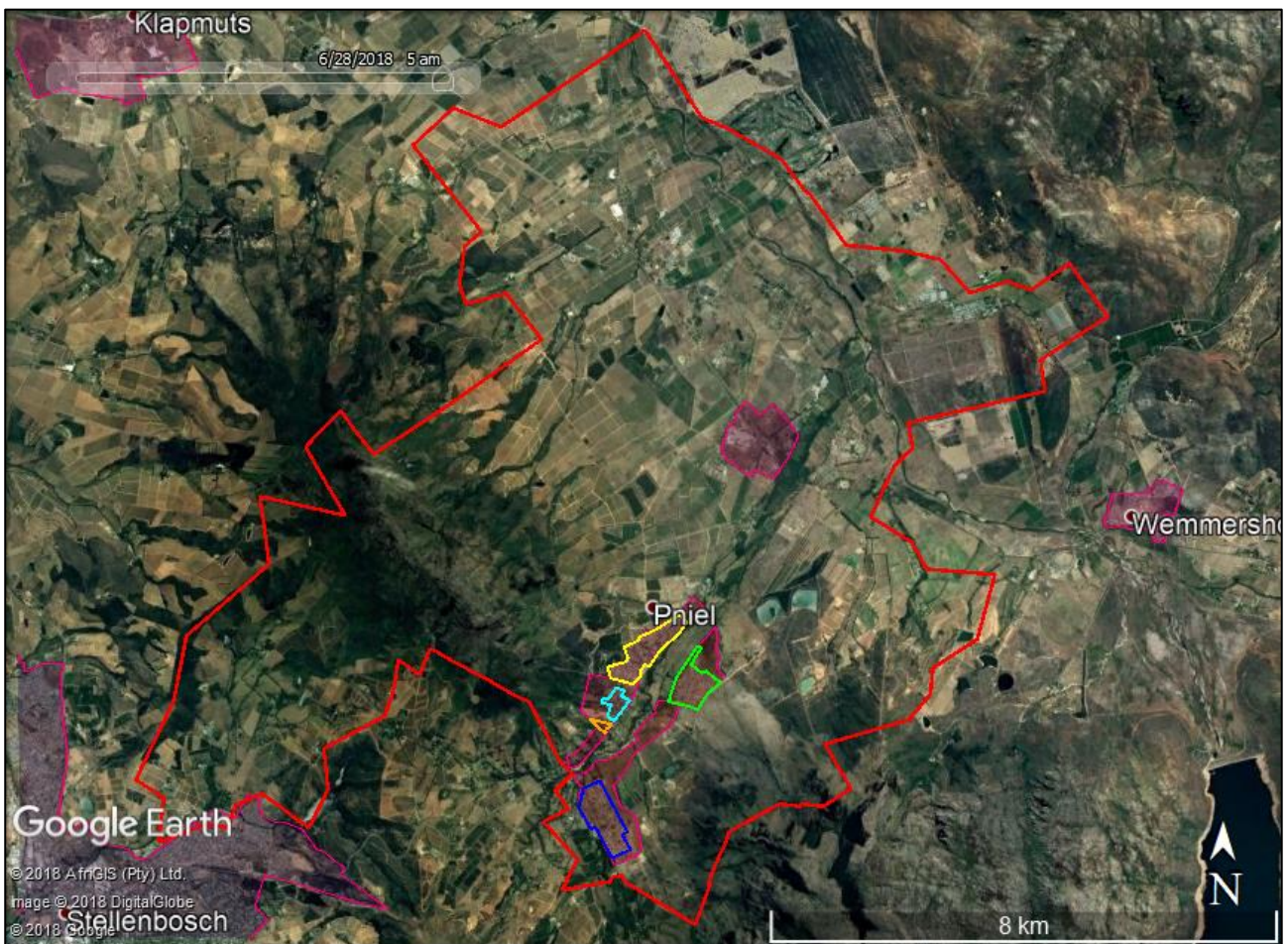


Figure 7: Aerial view of the broader region showing the study area in orange, Pniel in yellow, Lanquedoc in green, Kylemore in dark blue and Johannesdal in turquoise. The large red polygon encloses the Grade 1 Cape Winelands Cultural Landscape. The site is in Orange.

4.2. Site description

The site itself is a disused agricultural landscape⁵. Many unmaintained fruit trees occur and the vast majority of the land has become heavily overgrown by invasive kikuyu grass (Figures 9 & 10). The uppermost part of the site also has fruit trees on it but the grass cover is a mix of grasses largely lacking kikuyu (Figure 11). Pine and gum trees are present along the edges of the property with a broken line of gum trees forming the south-western margin (Figure 9) and a stand of young pine trees lying just outside the boundary to the north (Figures 10 & 11). A cement reservoir lies in the central part of the site (Figure 12) and a gravel track passes through the northern part of the site (Figure 13), originating and ending outside of 1202/1.

⁵ Note that this description is based on the 2016 fieldwork and that a repeat site visit has not been undertaken. No changes are expected to have occurred in the intervening time.



Figure 8: Close-up view of the broader study area as shown in Figure 6 – note the ongoing development to the north of the site. See Figure 7 for caption.



Figure 9: View up the hill towards the northwest and the apex of the triangular site. Joubert Peak lies in the background.

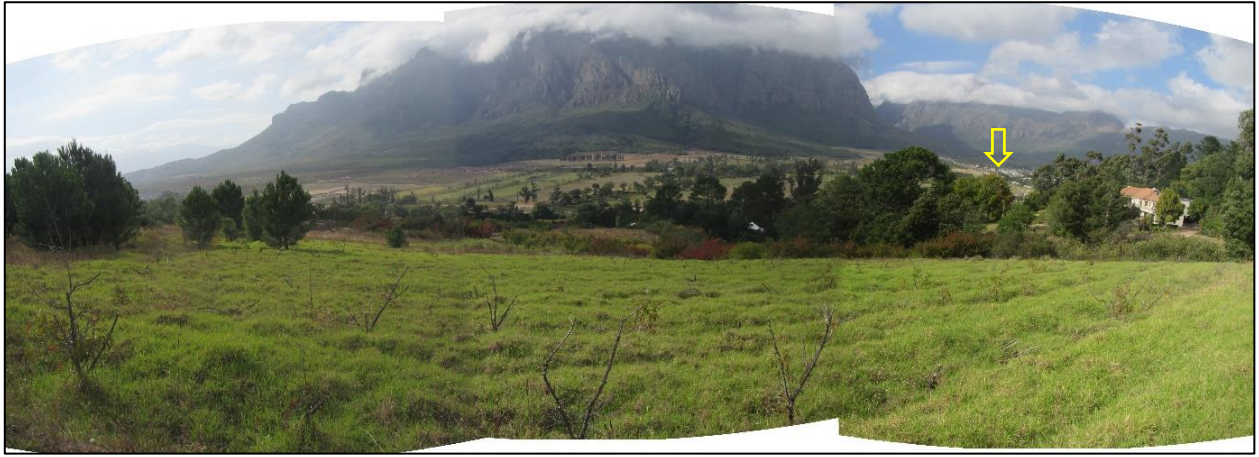


Figure 10: View downhill towards the southeast and the Helshoogte Road. Dragoon and Drakenstein Peaks lie in the central background beneath the clouds. Lanquedoc is out of view to the left and the southernmost end of Kylemore (arrowed) is just visible to the right.



Figure 11: View towards the east-northeast from near the highest part of the site. The town of Lanquedoc (arrowed) is just visible in the distance above the pine trees.



Figure 12: Cement reservoir on the site.



Figure 13: Gravel track and recent vineyard.

The site is well screened from the Helshoogte Road by dense vegetation which grows both inside and outside of the property boundary (Figure 13). Much of this is in the road reserve which is broader at this point because, as shown on old maps, the road used to run further to the west through the river valley prior to being straightened. A single house is present (Victorian) at the eastern corner of the property.



Figure 14: View towards the northwest from Helshoogte Road. The top of the roof of the house present on the property is just visible below Joubert Peak.

5. CULTURAL HERITAGE CONTEXT

This section of the report contains the desktop study and establishes what is already known about heritage resources in the vicinity of the study area. What was found during the field survey and desktop research may then be compared with what is already known in order to gain an improved understanding of the significance of the newly reported resources.

5.1. Archaeological aspects

Early (ESA), Middle (MSA) and Later Stone Age (LSA) occupation is known from the general area. The Pleistocene-aged ESA is particularly well represented in the Stellenbosch area and surrounds (Goodwin & Van Riet Lowe 1929; Kaplan 2003) as well as in the Dwars River Valley itself just downslope of the present site (Vos 2011). The important ESA site of Bosman's Crossing was discovered by Louis Peringuey in 1899 (Peringuey 1911; Seddon 1966) and is memorialised in an archaeological reserve, which was declared a Provincial Heritage Site (PHS) in 1962 (SAHRA, n.d.a), in the western part of Stellenbosch town. More recent archaeological material is relatively infrequently encountered in this area but a significant Holocene Later Stone Age site was discovered on the farm Solms Delta lower down the Dwars River Valley. This site yielded large numbers of mid-Holocene aged artefacts and a handful of younger items, including pottery, that date to within the last 2000 years (own data, 2005). ESA and MSA artefacts were also found but were rare. Rock art is another trace of LSA occupation in the Franschoek area (Manhire and Yates 1994).

5.2. Historical aspects and the built environment

The broader area has a very deep history extending back to within a few centuries of the beginning of colonial occupation of the Cape. The first land grants to Dutch farmers in the area date back to 1687, while the first French Huguenots arrived soon afterwards. Slavery was quite prominent in the

area with those having artisanal skills being most highly valued. Slavery began soon after the start of the Dutch occupation at the Cape and continued until emancipation in 1834 (DVT 2016).

Fransen (2004) describes the four most significant built heritage sites in the area. The homestead of Bethlehem (see also Vos 2011) lies 1.07 km southeast of the study area, De Goede Hoop is 1.7 km to the north, while Rhone and Boschendal are 2.6 and 4.1 km to the northeast respectively. These farms were first settled between 1688 and 1694, while they were officially granted in 1691 (Rhone), 1696 (Bethlehem), 1708 (De Goede Hoop), and 1713 (Boschendal, although another farm now forming part of Boschendal was granted in 1690⁶). These farm werfs all possess important historic buildings with some now incorporated into the Boschendal Founders Estate in the lower part of the Dwars River Valley and which has been declared a Grade 1 site for, among other things, its concentration of heritage sites, their landscape setting, the architectural history preserved in the estate and the range of built forms and settlement types (SAHRA n.d.b). Of the Boschendal werf specifically the following notes appear on SAHRIS (n.d.b):

The layout of the werf is unique with outbuildings forming two long parallel rows behind the homestead. It is highly representative of the Cape Winelands Cultural Landscape in terms of the visual dominance of a productive agricultural landscape, dramatic mountain-valley setting, its collection of historical farm werfs, cottages and villages, and pattern of historical tree alignments.

During the late 19th century a disease called Phyloxera swept through the winelands destroying vineyards. This was the time at which Cecil John Rhodes began his strong association with the valley through buying up many struggling farms and converting them to fruit farms. He commissioned a village for farm workers (Lanquedoc) in an effort to retain labour in the face of the diamond rush (DVT 2016).

5.2.1. Pniel

In 1842, two local farmers, Pieter Isaac de Villiers and Paul Retief, donated land to the community of recently freed slave so that they could build themselves a mission. Part of the land was from the farm de Goede Hoop while the remainder was the farm Papiermolen which the farmers bought for the purpose. Erven were laid out for houses and vegetable gardens and the local farming community created the Apostolic Trust to fund a school and church. The mission became known as Pniel (DVT 2016). Raper (n.d.) notes that the name is of Biblical origin referring to the place where Jacob wrestled with God and means “face of God”.

5.2.2. Lanquedoc

Lanquedoc is an architecturally interesting village because the original settlement and its buildings were designed by Herbert Baker. It was established by Cecil John Rhodes in order to accommodate farm labourers. The houses were unusually large for labourers’ houses and were designed in “a toned-down Cape Dutch Revival style” (Fransen 2006:147). DVT (2016) notes that they reflected Bakers interest in both the local Cape Dutch architectural tradition and the Arts and Crafts movement.

⁶ SAHRIS (n.d.b) records the earliest land grant at Boschendal as being in 1685 to Jean le Long.

5.2.3. Kylemore and Johannesdal

Kylemore and Johannesdal were originally settlements formed by groups of Pniel residents who bought land in those areas during the 20th century (DVT 2016). The development of these areas was explored further as part of this study and is presented below.

6. FINDINGS OF THE HERITAGE STUDY

This section describes the heritage resources recorded in the study area during the course of the project. It reports on the fieldwork and also a study of survey diagrams, maps and aerial photography.

6.1. Archaeology

The ground survey failed to reveal any stone artefacts. This may be because the site is located quite high on the mountain slope and would not have been particularly attractive for Stone Age settlement. A small number of historical artefacts were seen (Figures 15-17). None of them look older than the turn of the twentieth century and all are very likely 20th century in age, and very likely too young to be considered archaeological. One item was marked “MADE IN OCCUPIED JAPAN” (Figure 15) which allows it to be dated to between the end of World War II (1945) and the 25th April 1952 (Nilsson 2017).



Figure 15: The underside of a porcelain vessel marked “MADE IN OCCUPIED JAPAN”.



Figure 16: White glass jar fragment.



Figure 17: Refined white earthenwares and a glass jar fragment.

6.2. Built environment

A single dwelling lies in the north-eastern corner of the property. It is a house of Victorian age, although it has been much altered and added to over the years (Figures 18 & 19). The nearest houses to the subject property are not heritage structures (Figures 20 & 21) with one – in Figure 20 (see also Anderson 2018: figure 10) – detracting from the scenic/heritage value of the immediate landscape.



Figure 18: View of the dwelling on Farm 1202/1 as seen from behind (facing east).



Figure 19: View of the dwelling on Farm 1202/1 from the side (facing north).



Figure 20: The house immediately adjacent to the site on Helshoogte Road.



Figure 21: The house just north of the site.

6.3. Graves

No evidence of any graves was seen on the site. It is highly unlikely that unmarked human burials would be present so high on a mountain slope due to it being a relatively unattractive settlement location.

6.4. Cultural landscapes

Survey diagrams and aerial photography provide some background into the subdivisions and land use of the site and its surrounds which in turn informs the understanding of the cultural landscape.

6.4.1. Cadastral history

Farm Johannesburg 1202 appears to have been created in 1882, having been referred to as Lot 2 before that (Figure 22). The farm had various subdivisions of which Lot Q was granted to D.J. Louw on 24th October 1882. It was resurveyed in 1905 and became known as Portion 1 of Farm 1202

(Figure 23). In 1940 a strip of land was subdivided off the northern edge of the property as Portion 18 (it was only registered in 1944 though), leaving a remainder which is the subject of this assessment (S.G. Diagram No. 3397/1940)⁷. No structures are indicated on the survey diagrams but this does not mean that none were present since they are only sometimes marked.

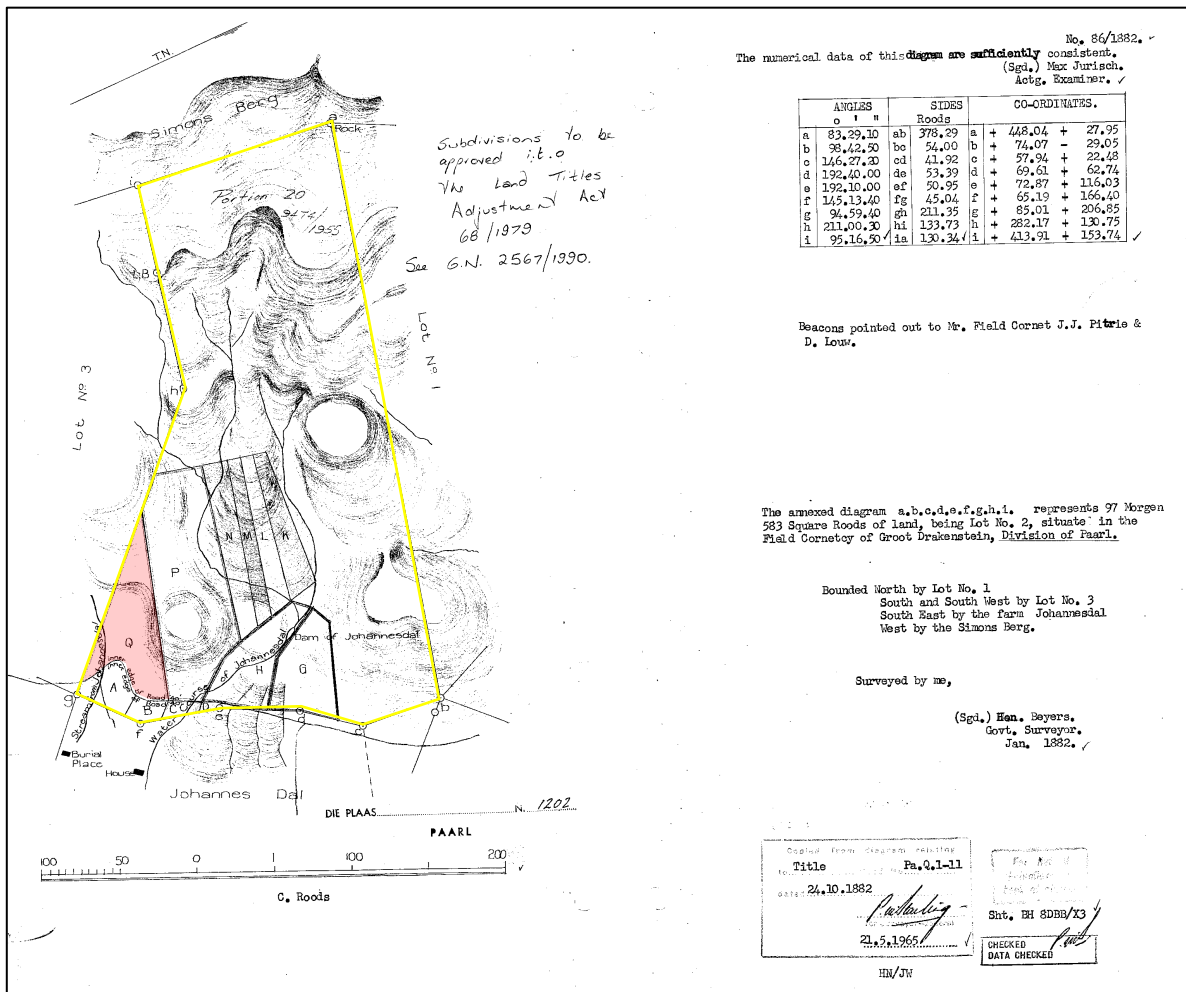


Figure 22: S.G. Diagram No. 86/1882 showing the full extent of Farm 1202 (yellow outline) and Portion 1 (red shading).

⁷ For reasons unknown, the property is currently referred to as Portion 1 rather than Portion 1/rem.

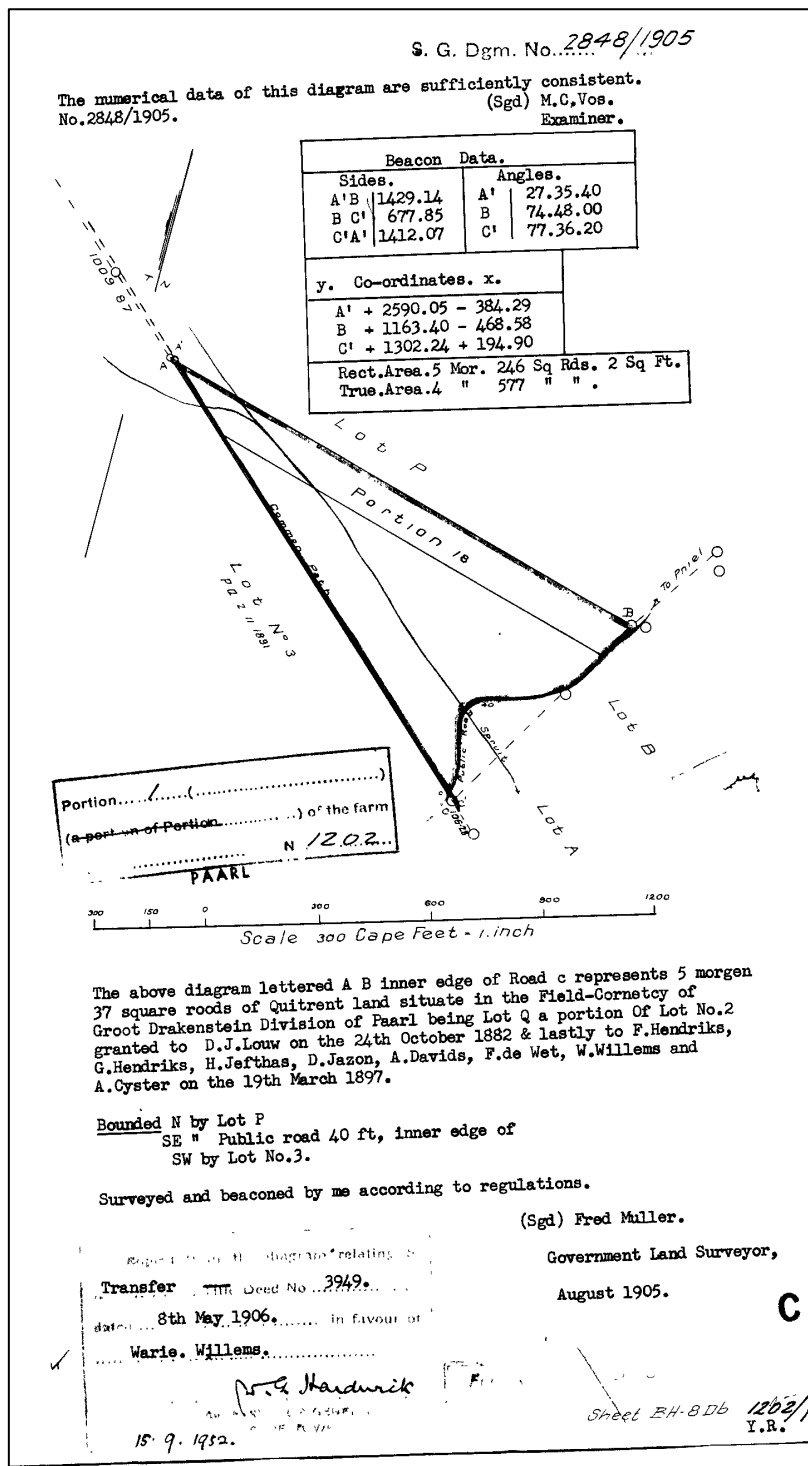


Figure 23: S.G. Diagram 2848/1905 showing the full extent of Farm 1202/1 with the subdivided Portion 18 indicated.

6.4.2. Development of the cultural landscape from maps and aerial photography

A map dating to the turn of the 20th century shows that Lanquedoc was developed but that elsewhere in the surrounding area there were only scattered houses and farm lands. A church is also marked some way to the north of the site (Figure 34). By 1935 we see that Pniel and Kylemore are developing but that Johannesdal is still a farm (Figure 25).



Figure 24: Map dated 1901 showing the upper Dwars River Valley. The approximate position of the site is marked by the red star. The historic Lanquedoc Village and the earliest houses in the north-eastern end of the Pniel Mission Station are evident. The farms of Bethlehem, Good Hope and Rhone are visible. Source: KR CPA 1901 in Winter & Baumann (2013).

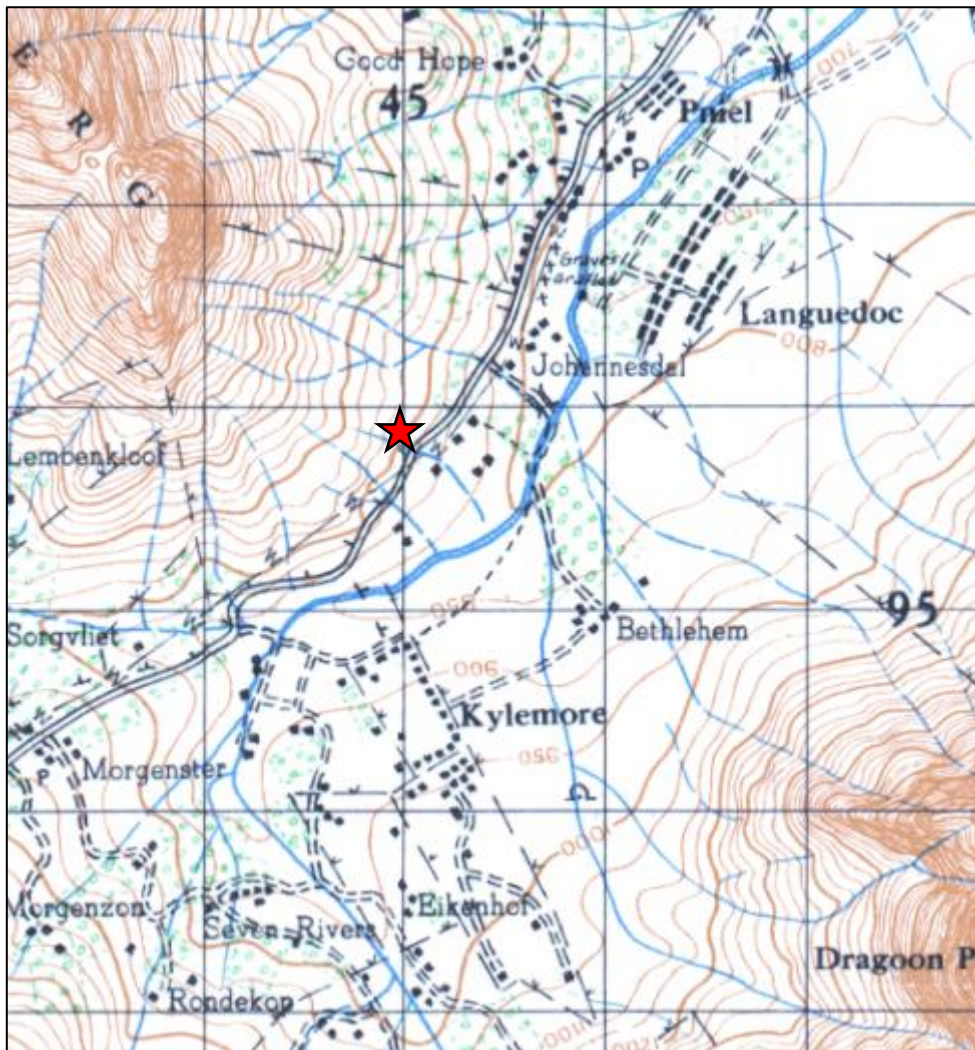


Figure 25: Map 3318DD from 1935 showing the location of the site (red star). Pniel and Kylemore are both substantially smaller villages than they are today. Johannesdal is still a farm and there are no buildings marked above the Helshoogte Road (although the house on the study site is expected to have been present already).

The earliest available aerial photographs show that the area to the northwest of the Helshoogte Road is generally lacking in development, although the house on Farm 1202/1 is clearly present (Figure 26). The row of large gum trees along the south-western edge of the property had already been planted by this time and serves as an indication of the developing agricultural/rural cultural landscape. Some areas above the Helshoogte Road have been cultivated as evidenced by their higher reflectivity in the aerial photograph.



Figure 26: Aerial photo from 1938 (Job 126, strip 82, photo no. 12270). Kylemore is visible as a rectangular area with houses around the edge and agriculture in the centre. The house on the study site is visible, as are the gum trees along the south-western boundary, and the Helshoogte Road follows its earlier alignment past the site. The Johannesdal area is generally undeveloped to the northwest of Helshoogte Road.

By 1953 it is evident that agricultural activities have progressed considerably in the area above the Helshoogte Road (Figure 27). The subject property is dark in colour suggesting much vegetation to be present. Whether this is an orchard or bush is hard to say but, given the clearing visible in later photography it may in fact just be bush. Through the addition of another road on its south-western side, Klyemore has now formalised its rectangular shape.



Figure 27: Aerial photo from 1953 (Job 335, strip 5, photo no. 06145). The rectangular layout of Klyemore is more prominent now and it appears as though subdivisions and agriculture are gaining momentum in that part of Johannesburg to the northwest of the Helshoogte Road.

The next topographic map dates to 1959 and shows farmland at and around the study area (Figure 28). Kylemore and Lanquedoc look much the same as they did in the earlier map but Pniel has clearly grown enough to be regarded as the main settlement in the Dwars River valley. Johannesdal was still a farm.

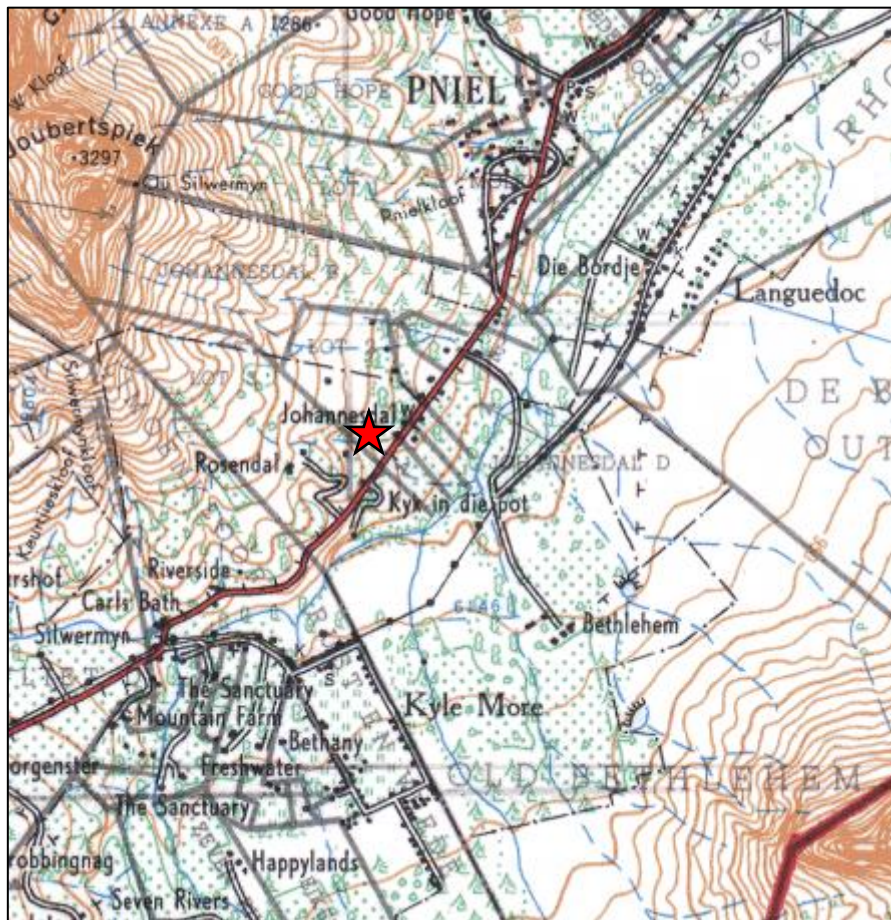


Figure 28: Map 3318DD from 1959 showing the location of the site (red star). Pniel and Kylemore are both substantially smaller than they are today. Johannesdal still appears to be a farm. From the larger font of PNIEL, it appears as though that village was now seen as the main urban centre in the valley.

In 1966 we see that Kylemore has densified but is still based on agricultural lots with houses around the periphery of a centralised but subdivided agricultural area (Figure 29). Pniel seems to have also densified significantly and is clearly far more of a residential suburb than Kylemore. Lanquedoc was still its original strip of houses with no or minimal additional structures having been added. The photograph suggests that Portions 1 and 18 were farmed together despite their separation in 1944. The access road snakes across the two properties and a dark shape, very likely a farm dam, is evident on the boundary line. A cement reservoir stands in that location today although it is contained wholly within Portion 1. Large numbers of windrows can be seen amongst the agricultural lands in the valley below Johannesdal. The windrow along the south-western edge of the study area is strongly evident.



Figure 29: Aerial photograph from 1966 (Job 534, Strip 18, photo 00353). The villages of Kylemore and Pniel have developed somewhat, although the former is far more of a residential suburb than the latter. The study site has now been cleared for agriculture for the first time with the steeper slopes around the river in the south remaining under bush.

The 1977 aerial photograph shows much the same situation as that from 1966 except that it is evident that the expansion of Lanquedoc has commenced (Figure 30). Kylemore is still strongly rural in nature and Johannesdal remains a farm. The present agricultural pattern seems to have been established by this time. The original gum tree windrow on the south-western periphery of the site has now expanded to become a small forest. Although there are more houses present in the Johannesdal area (presumably indicating ongoing subdivision of the farm), it is still not a conventional residential suburb.



Figure 30: Aerial photograph from 1977 (Job 794, Strip 07, photo 00319). While Pniel has continued to densify, Kylemore remains a low density village of allotments. The study site is in more or less the same cultivated state as it is today (although currently disused) and Johannesdal remains quite rural.

This review shows that the area has always had a rural character but with patches of increasing residential density appearing over the years. The approved urban edge seeks to consolidate these patches into a larger residential village in two strips stretching along the north-western side of the

Helshoogte Pass and the south-eastern side of the Dwars River with a green/agricultural belt in between the pass and the river.

The modern pattern of residential development outside of the existing settlements tends to feature quite scattered houses in the vicinity of the proposed development. Examination of recent aerial photography shows that a number of these houses, especially to the south of the site, have been constructed within the last decade. Within the settlements, however, development is fairly dense. The adjoining developments to the northwest (one underway, the other proposed) will, together with the proposed development, serve to increase the footprint of the Johannesdal settlement.

At present the broader Grade I cultural landscape can be considered a rural and agricultural landscape with farmsteads scattered between numerous vineyards and windrows and with the rugged mountains as a backdrop. In the area surrounding the site (i.e. the immediate vicinity of Johannesdal) we find a rural cultural landscape comprised of small holdings and large residential properties but with a modern urban component at the settlement.

6.4.3. Winelands Cultural Landscape

An important aspect of the Cultural Landscape relates to the agricultural history of the area. The site lies within the Grade 1 landscape known as the Cape Winelands Cultural Landscape (Figure 31) which was declared for its outstanding natural and cultural environment, rich history associated with living heritage and its unique architecture (Cape Dutch) that appears nowhere else in the world (SAHRA 2009). The boundary of the Grade I site includes Ida's Valley on the Stellenbosch side and the Dwars and Berg River valleys on the Pniel side. Ida's Valley has been protected for far longer than the rest of the area (Pistorius & Todeschini n.d.).

The site (Farm 1202/1) has an agricultural history and, although lying fallow, it makes its own small contribution to the overall Cape Winelands cultural landscape. Although it is a low density site in terms of structures, it should be noted that the larger site to the north is currently under development, while the small strip (Farm 1202/59) in between that and the present site is currently under application for environmental authorisation with HWC having not requested an HIA for it (see section 4.1 above). The area inside the urban edge is thus destined for higher density development in the very near future and the precedent has been firmly set.

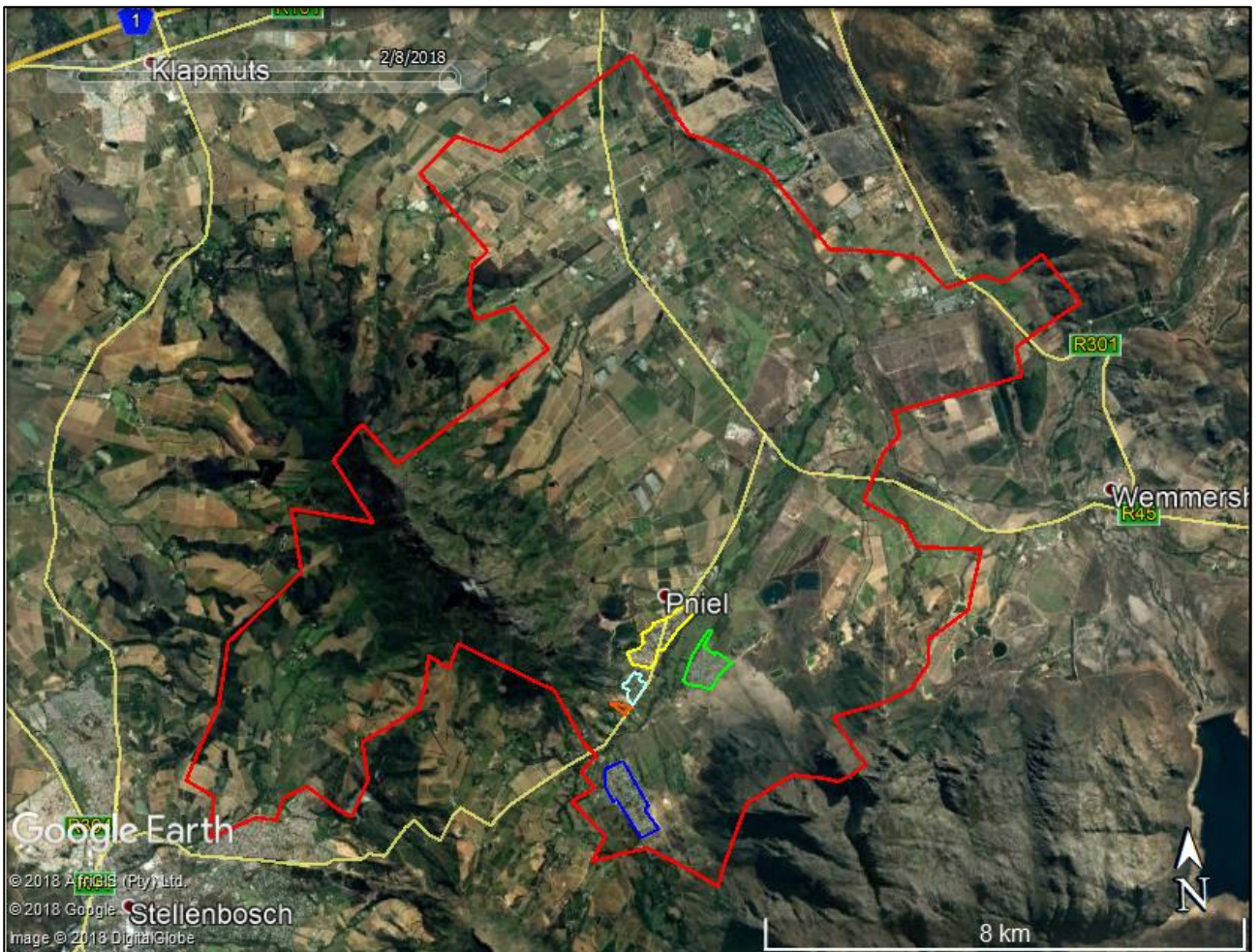


Figure 31: The main area in which the features characterising the Grade 1 cultural landscape occur is the valley bottom. The site is somewhat disconnected from the valley floor by the Helshoogte Road and the (mostly recent) plantings in the immediate vicinity of the site, especially along the Helshoogte Road.

6.5. Scenic routes

The Helshoogte Pass has been identified by Winter and Oberholzer (2013) as a scenic route of local significance for its historical and scenic values. Anderson (2018) also regards the road as scenic and a tourist route. The wine farms in the area are the primary destinations for tourism and Helshoogte links two wine-producing areas, namely Stellenbosch and Franschhoek. The site is largely screened from this road by the mature trees growing along the roadside (Figures 32 & 33) and the pass is thus not expected to experience significant impacts. The development would be partially and momentarily visible when approaching from the Pniel side but only just before reaching the site (Figure 34).



Figure 32: View of the site when approaching from the southwest (Stellenbosch side) on the Helshoogte Pass.



Figure 33: View of the site from Helshoogte Pass. The top of the existing house is just visible (arrowed).



Figure 34: View of the site when approaching from the northeast (Pniel side) on the Helshoogte Pass. The existing house is just visible (grey roof arrowed). The proposed development would be visible behind the white shed in the centre of the photograph.

6.6. Visual impact assessment

Anderson (2018) notes that the site is theoretically visible from about 10 km away to the southeast and more than 15 km away to the east. Views in other directions are constrained by topography (Anderson 2018: figure 10). Pniel, Lanquedoc and Kylemore are all between 1 and 2 km from the site. It is notable that the large windrow to the south of the site provides significant screening from the south, while from the north the visibility is reduced by the presence of a minor ridgeline and the adjoining urban development. The most open views of the site are from the undeveloped mountain and agricultural land to the east of the site and located between 2.5 and 5.5 km away.

Anderson (2018) notes that because of the Grade I status of the area, the visual environment should be regarded as visually sensitive to development. From a topography point of view, the northern part of the site itself is regarded as being of moderate visual sensitivity, while the southern part, with its steeper slopes as a result of the river valley, is of high sensitivity. A few small areas are rated low because of their flatter topography. Landform also results in areas of low to high sensitivity. Vegetation cover results in low-medium sensitivity along the southern and eastern edges of the site but the open central and northern parts are more highly sensitive due to their lack of existing screening vegetation. In terms of existing land uses, the northern part of the site abutting the ongoing and proposed residential developments is of lower sensitivity than the southern edge which abuts a rural area. Taking all these factors into account, Anderson (2018) considers the site to be of medium to high visual sensitivity (see Anderson 2018: figure 27).

Because of partial screening of the site by vegetation and topography, the visual absorption capacity of the site is deemed to be moderate. Visual intrusion is rated as being moderate because although the development would be openly visible from some areas, it will also partially fit in with its surroundings because of the ongoing development of Johannesdal to the northeast. The proposed land use on the site is thus consistent with its surroundings.

In sum, Anderson (2018) sees the visual receptors within the zone of visual influence as being variably of low to high significance. Included in among these, from a heritage point of view, is the grade I Cape Winelands Cultural landscape. The site itself is seen as being of moderate to high visual sensitivity and the visual absorption capacity as moderate. The degree of visual intrusion in the landscape is rated as moderate because, although the development will be clearly noticeable, it will also partially fit in with its surroundings. Anderson (2018) provides three photomontages to illustrate the potential impacts before and after mitigation. These are reproduced in Figures 35 to 37. They show that avoiding bright colours and adding trees can significantly reduce the visual contrast and result in a far more recessive development which a substantially lower visual impact.



Figure 35: Photomontage showing the development as seen from Kylemore, some 2.2 km from the site. Source: Anderson (2018: fig. 28).



Figure 36: Photomontage showing the development as seen from Lanquedoc, some 1.2 km from the site. Source: Anderson (2018: fig. 29).



Figure 37: Photomontage showing the development as seen from Moores End, the property immediately to the southwest of the site. Source: Anderson (2018: fig. 30).

6.7. Summary of heritage indicators

No archaeological materials, fossils, or graves were seen and none are expected to occur.

The structure on site, although more than 100 years old, is heavily modified. It would not be impacted because it will remain as is. It is too heavily modified for contextual impacts to be of concern.

The Helshoogte Pass is a locally significant scenic route but visibility of the proposed development would be fleeting and significant impacts are thus not expected because the current belt of trees separating the site from the road will be retained.

The cultural landscape is the main heritage resource identified and it is this aspect of heritage that needs to be considered further. The Sustainability Institute (2012:16) notes that instead of focusing development on the urban periphery (like a doughnut shape), efforts should be made to ensure that the settlement centre is the most dense, with densities diminishing toward the urban edge. To this end lower density development is more desirable on the periphery of the urban edge. Although this design indicator is most relevant at a larger scale, it can be noted that it has been achieved to some degree within the context of the site because larger properties have been proposed alongside the urban edge (southwest boundary of the site; Figure 3) with smaller ones towards the north and east where they abut neighbouring developments.

The mature vegetation along the Helshoogte Road is partly a component of the riverine landscape and should be retained as far as possible. It is noted that a future road reserve has been included in the design and this should be left vegetated to provide screening while the new development 'settles in' to the landscape.

The use of split-level/terraced houses and natural colours and finishes will help the development to sit more comfortably on the site. Tall facades should be avoided so as to reduce the visual impacts when the development is viewed from the Dwars River Valley to the south and east.

6.8. Statement of significance and provisional grading

Section 38(3)(b) of the NHRA requires an assessment of the significance of all heritage resources. In terms of Section 2(vi), “cultural significance” means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

The only heritage resource of concerns are the scenic route and the cultural landscape. The Helshoogete scenic route is likely worthy of a Grade of IIIA because of its location within a Grade I cultural landscape. It has aesthetic and historical cultural significance. Because of the Grade I Cape Winelands Cultural Landscape within which the site lies, the whole area has to be seen as of national significance. It has high significance in virtually all of the categories listed above. However, there are no intrinsic qualities on the site itself that suggest a high grading for it. The agricultural component extends back at least as far as the 1930s but at the regional scale the agricultural history in the valley below is substantially longer. The site itself makes a minor contextual contribution to the Grade I cultural landscape. The structure on the site (which will be retained) has no intrinsic or wider significance (IIIC or NCW) because of its highly modified nature. It makes no contribution to the streetscape due to being so heavily screened by vegetation. The site itself is thus considered to have no more than IIIC grading. Within the wider area, the historic core of Lanquedoc retains its integrity. It has high cultural significance for its aesthetic, architectural, historical and social values and is regarded as being worthy of grade IIIA. The village has seen significant expansion during the 21st century. The allotments of Kylemore have all be filled in with modern residential development which means that the heritage significance of the village pertains more to the individual heritage structures within it (architectural value). Pniel, although also containing a number of heritage structures (some of which have cultural significance for their architectural value), has seen considerable urban development during the latter half of the 20th century and is also no longer a culturally significant urban landscape. Figure 39 shows the locations of the important heritage resources (Grade IIIA and up) but excludes individual structures.

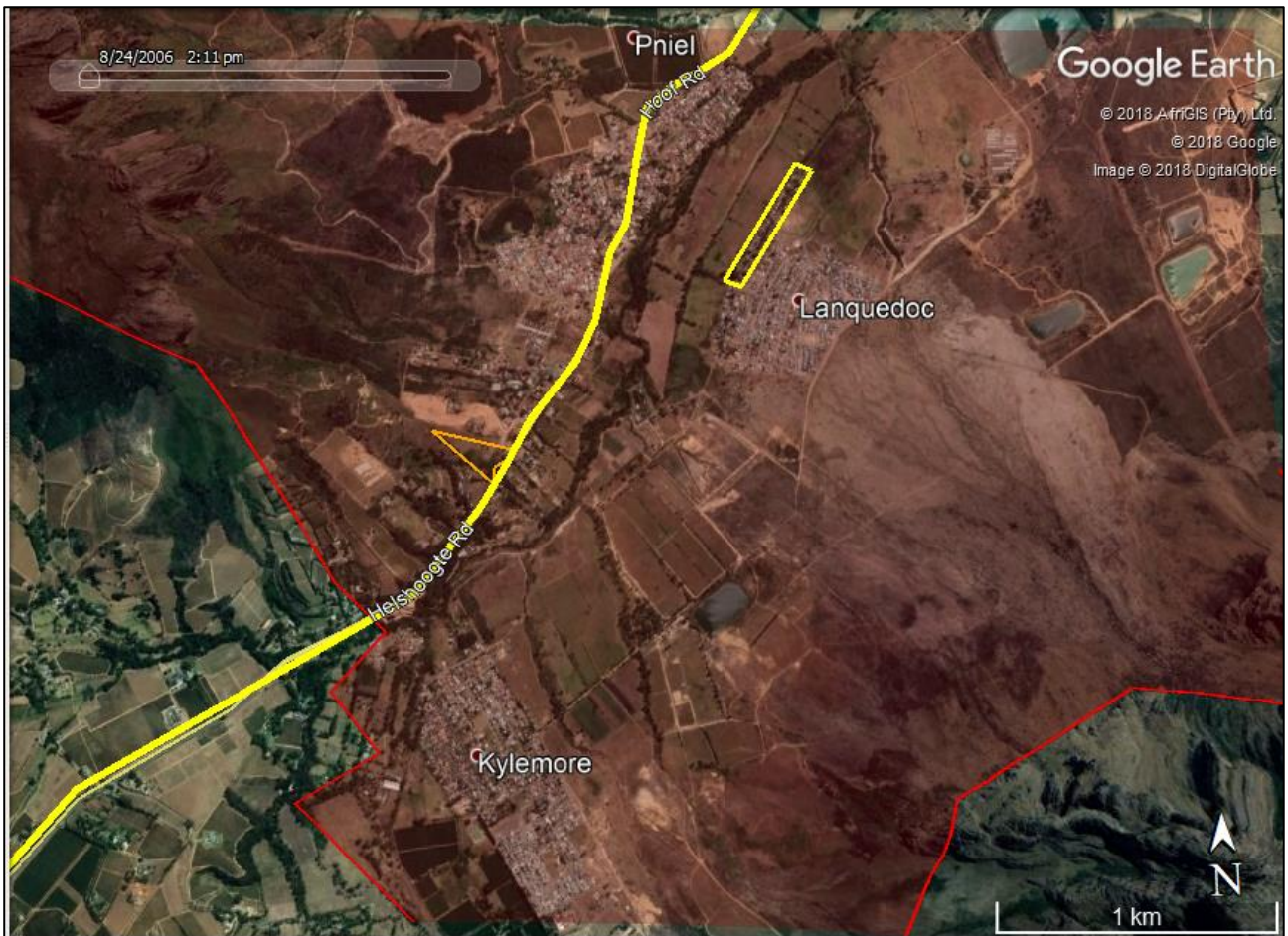


Figure 38: Aerial view of the broader study area showing the site (orange polygon) relative to the Grade I cultural landscape (red shaded polygon), the suggested Grade IIIA scenic route (yellow line) and the suggested Grade IIIA historic core of Lanquedoc (yellow polygon).

7. ASSESSMENT OF IMPACTS

Only one aspect of heritage is of any concern here and that is the cultural landscape. All other aspects of heritage are either of too little concern or have been shown to be absent from the site; none require further consideration.

7.1. Impacts to the cultural landscape

Table 1 provides an assessment of the significance of impacts to the cultural landscape.

Impacts to the cultural landscape relate to the change in land use from agricultural to residential, the densification of the built environment and the general expansion of urban development. Impacts would occur during all phases of the project with construction phase impacts possibly having a greater magnitude if several houses were built at once. It is not really possible to separate the phases because of the likelihood that houses would be built over a period of time. Some parts of the site may thus be experiencing construction while other parts are already in the operational phase. No decommissioning is envisaged. Construction work is largely expected to be screened by the existing roadside vegetation, as are already completed and occupied houses. Duration is not

rated permanent because, in theory, the impacts could be reversed if the site reverted to agricultural use. This is highly unlikely though.

The extent of the impact requires unpacking. Following Anderson (2018), it is rated as local (defined as within 5 km of the site in the impact assessment methodology) because it has been established in the VIA that the development would be visible from a number of vantage points around the Dwars River Valley. The Cape Winelands Cultural Landscape is obviously far larger with maximum dimensions of about 15.5 km by 13.5 km. The proposed development will not impact the cultural significance of the greater Grade I cultural landscape in any meaningful way because the vast majority of features providing cultural significance to this landscape occur in the base of the valleys. Especially significant in this regard are vineyards, Cape Dutch buildings and their associated farm complexes. The site has none of these features and borders an existing residential suburb. Although the dramatic mountain scenery also plays its part in adding to the cultural significance of the landscape, the proposed development only occupies a tiny area on the mid-slope of the mountain in the context of the greater landscape.

The heritage resource cannot be replaced. Although the impacts could theoretically be reversed, it is highly unlikely that this would ever happen so it is regarded as irreversible. If the development goes ahead then the impacts would definitely happen. Combining the ratings provides a calculated impact significance of **high negative** before mitigation. Mitigation measures are as suggested by Anderson (2018) and would aim to reduce the overall visibility of the houses in the landscape and help the development to 'fit in' to the surroundings. Successful mitigation would reduce the magnitude and extent of the impacts, while the duration can be reduced to medium term because the development would 'settle in' to the landscape with time and become an accepted part of it. This would result in a calculated significance of **medium negative** after mitigation.

It should be noted that the impact assessment methodology calculates the potential impact significance and because of the definite probability that impacts will occur if the development proceeds, the calculated significance is higher than what it likely should be. In heritage terms (i.e. considering impacts to cultural significance) the impacts are likely to be of **low** significance after mitigation even though they would definitely occur. Anderson (2018:36) has calculated a **low** significance visual impact after mitigation for the change from a vegetated, rural site to a developed site during the operation phase.

Table 1: Assessment of impacts to the cultural landscape.

PROJECT ALTERNATIVE	POTENTIAL ENVIRONMENTAL IMPACT / NATURE OF IMPACT	ENVIRONMENTAL SIGNIFICANCE															MITIGATION			
		BEFORE MITIGATION									AFTER MITIGATION									
		M	D	E	I	R	P	TOTAL (SP)	S	CUMULATIVE	M	D	E	I	R	P		TOTAL (SP)	S	CUMULATIVE
Potential impacts on the cultural landscape.																				
Project activity:	All phases.																			
Preferred Alternative	Impacts will relate to the loss of agricultural land, clearing of vegetation, cutting of terraces, densification of structures, and expansion of the urban environment within a Grade 1 cultural landscape.	6	4	2	5	4	5	105	H (-)	Gradual loss of agricultural land within the Grade I cultural landscape area. In this area the cumulative impact does not significantly affect the core significance of the Grade I landscape.	2	3	1	5	4	3	45	M (-)	None	<ul style="list-style-type: none"> Minimise cut and fill; Minimise vegetation clearing; Implement appropriate landscaping including tree rows and hedges; Use natural colours/finishes on walls; Minimise building height through split levels and flat roofs; Visually permeable fencing to be used as far as possible; and Architectural designs to ensure recessive style and form including natural finishes and/or colours.
"No - Go" alternative	The site will remain as fallow agricultural land with a single dwelling house on it. The potential for the reintroduction of agriculture would remain a possibility.	0	1	1	0	0	5	10	L (-)	None.	6	4	2	0	0	3	36	L (+)	None	<ul style="list-style-type: none"> Keep site clear of invasive aliens; and Reintroduce agriculture and make the site productive.

Cumulative impacts will occur through the continued expansion of urban development in the area. The approved urban edge has been set in such a way as to provide for two ribbons of urban development on either side of the valley. Development to the full extent of the urban edge would swallow up the historical settlements and destroy their spatial integrity (Figure 35). The present proposal would make only a very small contribution to this

The impact after mitigation is not regarded as a fatal flaw.

The no-go alternative would result in **negative** impacts of **low** significance without mitigation. This relates to the proliferation of invasive alien vegetation and the general continued state of disuse of land that used to be agricultural and make a contribution to the broader rural/agricultural landscape. With mitigation in the form of re-establishing agriculture, and even allowing for further development within the rights of the present zoning, a **positive** impact of **low** significance could be achieved.

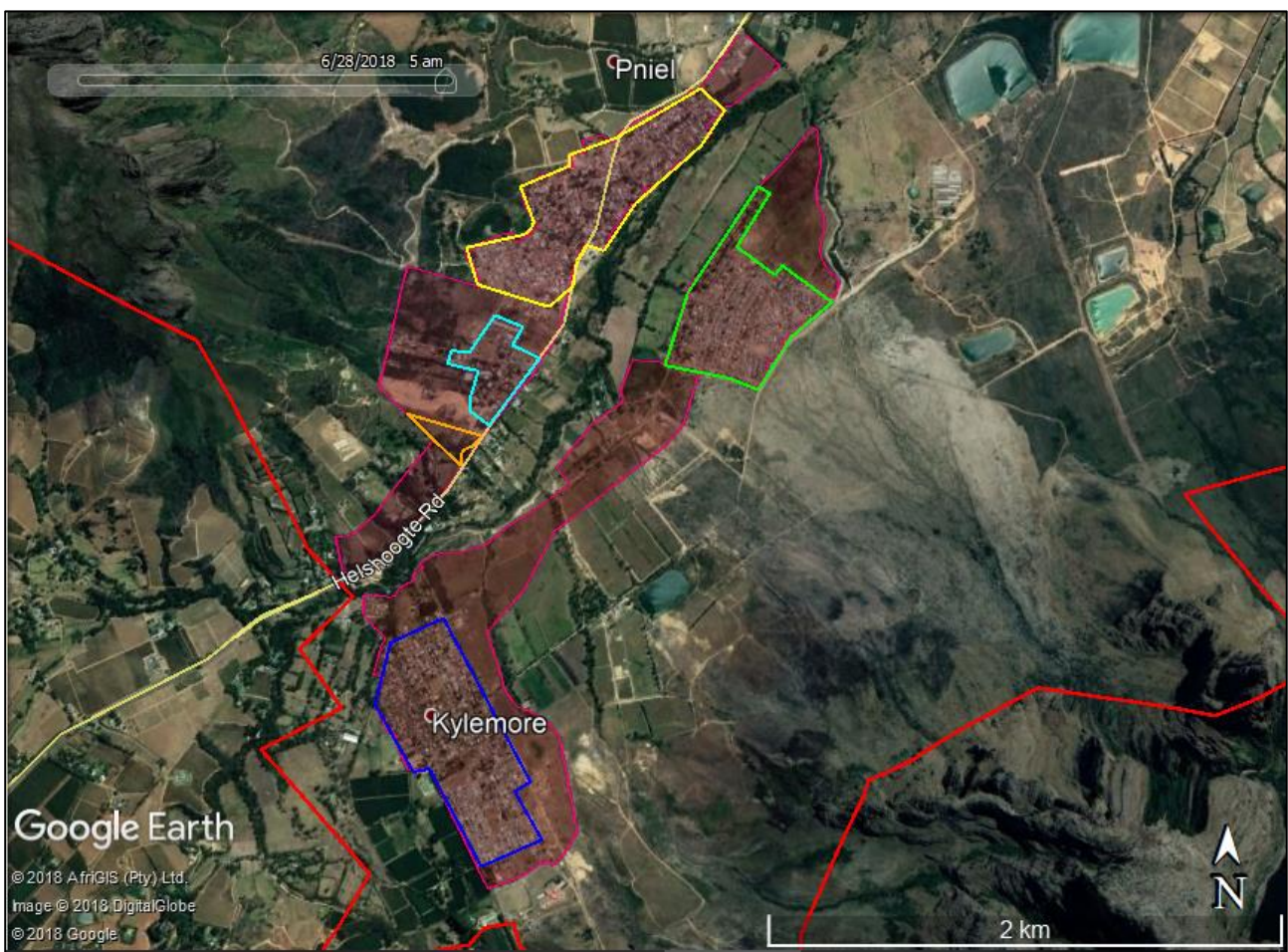


Figure 35: Aerial view of the Dwars River valley showing the various settlements in relation to the site (orange triangular polygon) and urban edge. See Figure 7 for full caption.

7.2. Existing impacts

Existing impacts on the site are minimal and relate only to the state of disuse of the site's agricultural land.

7.3. Cumulative impacts

The site is one of several in the area that are being developed. A large area to the northeast is currently under development, while the site in between that are and the present project site is currently under application (note that HWC did not require an HIA for that development). All developments are residential and fall within the urban edge. These developments all result in an incremental hardening of the environment which in turns slowly degrades the overall character of the cultural landscape. This does, however, need to be seen against the general requirement for housing for the people of South Africa as contemplated in Section 9 below.

7.4. Levels of acceptable change

The expansion of urban development would be seen as acceptable if the development does not visually dominate the landscape when seen from afar. Although the new development would, perhaps, be somewhat visually prominent, with time and the growth of vegetation among the houses, it would become an accepted part of the landscape.

8. INPUT TO THE ENVIRONMENTAL MANAGEMENT PROGRAM

Monitoring of ground clearing should occur periodically in order to ensure that areas not needed for development are left vegetated so as to reduce visual landscape scarring.

9. EVALUATION OF IMPACTS RELATIVE TO SUSTAINABLE SOCIAL AND ECONOMIC BENEFITS

Section 38(3)(d) of the NHRA requires an evaluation of the impacts on heritage resources relative to the sustainable social and economic benefits to be derived from the development.

The main socio-economic benefit of this project will be the provision of housing. This might be accompanied by short term employment opportunities during the construction phase. A secondary benefit may be the provision of longer term employment because it is likely that some of the new occupants would require domestic workers and/or gardeners. The overall impact to heritage resources is relatively small given the placement of the site within the approved urban edge and insufficient to outweigh the socio-economic benefits.

10. CONSULTATION WITH HERITAGE CONSERVATION BODIES

As would have been required by HWC had the NID been submitted more recently, the draft HIA was submitted to the Stellenbosch municipality and registered heritage conservation bodies (Pniel Heritage and Cultural Trust, Stellenbosch Interest Group and Stellenbosch Heritage Foundation) for comment. Because the site falls within the bounds of the Grade 1 Cape Winelands Cultural Landscape, the report was also submitted to SAHRA for comment.

11. CONCLUSIONS

Although the Helshoogte Pass is a significant scenic route, it will experience negligible impacts due to the screening provided by existing vegetation. The existing house on the property is older than 60 years but has very low cultural significance. The cultural landscape, including the Grade 1 Cape Winelands Cultural Landscape, is the only heritage resource of greater concern. Most of the heritage resources that give significance to the winelands landscape are to be found in the valley bottoms and because of neighbouring urban development and limited visibility of the site, impacts will be relatively minor. Mitigation measures aimed at helping the development fit into the visual surroundings will further limit the impacts and it is expected that, with time, the development will settle into the landscape and become an accepted part of it.

There are thus no fatal flaws in terms of impacts to heritage and the proposed development is deemed to be acceptable.

12. RECOMMENDATIONS

Because of the very limited and easily manageable impacts to heritage resources, the proposed residential development on Portion 1 of Farm 1202 should be allowed to proceed, but subject to the following conditions:

- Visual mitigation measures to limit the visual intrusion should be incorporated into the individual house designs. These include:
 - Preferably have terraced/split-level structures and avoid double-story facades facing downslope;
 - If double-story facades are desired then use pergolas or tree planting to soften the façade;
 - Colours and finishes should complement the cultural landscape;
 - Minimise cut-and-fill;
 - Minimise vegetation clearing;
 - Use low, bollard-type lighting;
 - Boundary treatment should be largely permeable;
- Tree planting (especially along the access road) and general greening of the site should be commenced as early as possible so that some visual mitigation will be in place during the construction period;
- Encourage tree planting in rows to compliment the typical Winelands pattern; and
- If any archaeological material or human burials are uncovered during the course of development then work in the immediate area should be halted. The find would need to be reported to the heritage authorities and may require inspection by an archaeologist. Such heritage is the property of the state and may require excavation and curation in an approved institution.

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APPENDIX 1 – CURRICULUM VITAE



Curriculum Vitae

Jayson David John Orton

ARCHAEOLOGIST AND HERITAGE CONSULTANT

Contact Details and personal information:

Address: 40 Brassie Street, Lakeside, 7945
Telephone: (021) 789 0327
Cell Phone: 083 272 3225
Email: jayson@asha-consulting.co.za

Birth date and place: 22 June 1976, Cape Town, South Africa
Citizenship: South African
ID no: 760622 522 4085
Driver's License: Code 08
Marital Status: Married to Carol Orton
Languages spoken: English and Afrikaans

Education:

SA College High School	Matric	1994
University of Cape Town	B.A. (Archaeology, Environmental & Geographical Science) 1997	
University of Cape Town	B.A. (Honours) (Archaeology)*	1998
University of Cape Town	M.A. (Archaeology)	2004
University of Oxford	D.Phil. (Archaeology)	2013

*Frank Schweitzer memorial book prize for an outstanding student and the degree in the First Class.

Employment History:

Spatial Archaeology Research Unit, UCT	Research assistant	Jan 1996 – Dec 1998
Department of Archaeology, UCT	Field archaeologist	Jan 1998 – Dec 1998
UCT Archaeology Contracts Office	Field archaeologist	Jan 1999 – May 2004
UCT Archaeology Contracts Office	Heritage & archaeological consultant	Jun 2004 – May 2012
School of Archaeology, University of Oxford	Undergraduate Tutor	Oct 2008 – Dec 2008
ACO Associates cc	Associate, Heritage & archaeological consultant	Jan 2011 – Dec 2013
ASHA Consulting (Pty) Ltd	Director, Heritage & archaeological consultant	Jan 2014 –

Professional Accreditation:

Association of Southern African Professional Archaeologists (ASAPA) membership number: 233

CRM Section member with the following accreditation:

- Principal Investigator: Coastal shell middens (awarded 2007)
Stone Age archaeology (awarded 2007)
Grave relocation (awarded 2014)
- Field Director: Rock art (awarded 2007)
Colonial period archaeology (awarded 2007)

Association of Professional Heritage Practitioners (APHP) membership number: 43

- Accredited Professional Heritage Practitioner

➤ **Memberships and affiliations:**

South African Archaeological Society Council member	2004 – 2016
Assoc. Southern African Professional Archaeologists (ASAPA) member	2006 –
UCT Department of Archaeology Research Associate	2013 –
Heritage Western Cape APM Committee member	2013 –
UNISA Department of Archaeology and Anthropology Research Fellow	2014 –
Fish Hoek Valley Historical Association	2014 –
Kalk Bay Historical Association	2016 –
Association of Professional Heritage Practitioners member	2016 –

Fieldwork and project experience:

Extensive fieldwork and experience as both Field Director and Principle Investigator throughout the Western and Northern Cape, and also in the western parts of the Free State and Eastern Cape as follows:

Feasibility studies:

- Heritage feasibility studies examining all aspects of heritage from the desktop

Phase 1 surveys and impact assessments:

- Project types
 - Notification of Intent to Develop applications (for Heritage Western Cape)
 - Desktop-based Letter of Exemption (for the South African Heritage Resources Agency)
 - Heritage Impact Assessments (largely in the Environmental Impact Assessment or Basic Assessment context under NEMA and Section 38(8) of the NHRA, but also self-standing assessments under Section 38(1) of the NHRA)
 - Archaeological specialist studies
 - Phase 1 archaeological test excavations in historical and prehistoric sites
 - Archaeological research projects
- Development types
 - Mining and borrow pits
 - Roads (new and upgrades)
 - Residential, commercial and industrial development
 - Dams and pipe lines
 - Power lines and substations
 - Renewable energy facilities (wind energy, solar energy and hydro-electric facilities)

Phase 2 mitigation and research excavations:

- ESA open sites
 - Duinefontein, Gouda, Namaqualand
- MSA rock shelters
 - Fish Hoek, Yzerfontein, Cederberg, Namaqualand
- MSA open sites
 - Swartland, Bushmanland, Namaqualand
- LSA rock shelters
 - Cederberg, Namaqualand, Bushmanland
- LSA open sites (inland)
 - Swartland, Franschhoek, Namaqualand, Bushmanland
- LSA coastal shell middens
 - Melkbosstrand, Yzerfontein, Saldanha Bay, Paternoster, Dwarskersbos, Infanta, Knysna, Namaqualand
- LSA burials
 - Melkbosstrand, Saldanha Bay, Namaqualand, Knysna
- Historical sites
 - Franschhoek (farmstead and well), Waterfront (fort, dump and well), Noordhoek (cottage), variety of small excavations in central Cape Town and surrounding suburbs
- Historic burial grounds
 - Green Point (Prestwich Street), V&A Waterfront (Marina Residential), Paarl

Awards:

Western Cape Government Cultural Affairs Awards 2015/2016: Best Heritage Project.

APPENDIX 2 – SPECIALIST DECLARATION


THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I, JAYSON ORTON, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- in terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations, 2014 (as amended).

Signature of the Specialist:



ASHA CONSULTING (PTY) LTD

Name of Company:

Date:

12 NOVEMBER 2018

APPENDIX 3 – ARCHITECTURAL GUIDELINE

APPENDIX 4 – VISUAL IMPACT ASSESSMENT