# HERITAGE IMPACT ASSESSMENT

In terms of Section 38(8) of the NHRA for the

# Proposed Residential Development in Clanwilliam, Western Cape

***HWC24051407EJV0618***


**Prepared by CTS Heritage**

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**For**

**CK Rumboll**


**November 2024**

**Updated August 2025**

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## EXECUTIVE SUMMARY

***1. Site Name:***

Proposed Residential Development in Clanwilliam, Western Cape

***2. Location:***

In Clanwilliam located on Erf 279

***3. Locality Plan:***

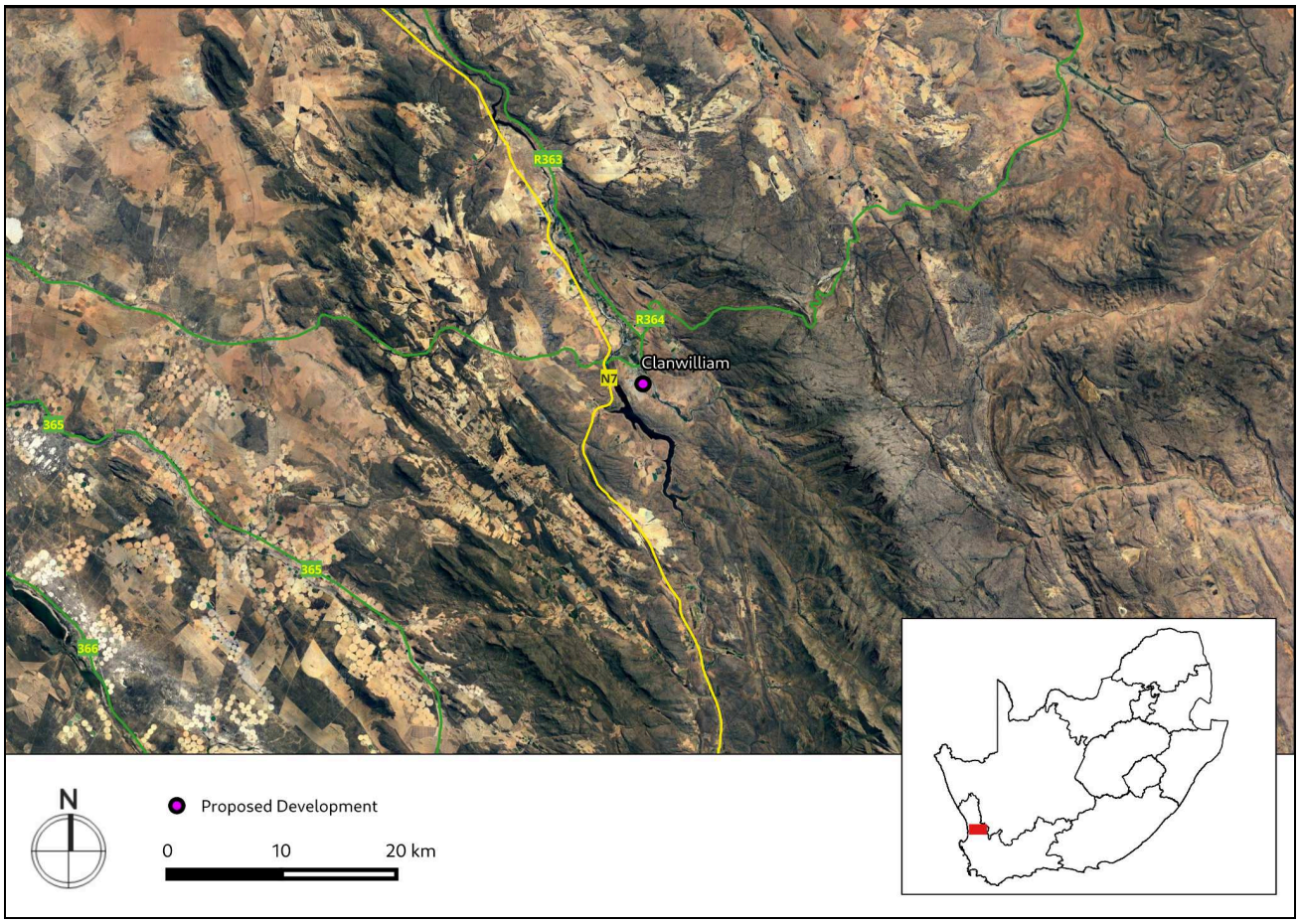


**Figure A: Location of the proposed development area**

***4. Description of Proposed Development:***

The proposed development entails the rezoning of a portion of Erf 279 Clanwilliam to Subdivisional Area which includes the creation of medium to high-density residential erven including supporting land uses such as open spaces, crèches, churches, community centre, commercial as well as a school site. The development footprint covers approximately 49,16 hectares of Erf 279. Furthermore, Erf 279 will be subdivided into two portions namely: the newly created Portion (portion of Erf 279) and Remainder of Erf 279.

***5. Anticipated Impacts on Heritage Resources:***

The broader Cederberg area is renowned for its rock art and significant associated archaeology. Clanwilliam and its access via the Botterkloof Pass road act as a gateway from the N7 into the rest of the Cederberg area. Clanwilliam retains a number of historic farmsteads in the area, as well as excellent examples of vernacular architecture and Provincial Heritage Sites all oriented along the structuring elements of Hoof Street, Park Street and Ou Kaapse Road. As noted above, Clanwilliam suffered when the community of Sederville was moved and their houses demolished and as a result, very little historic fabric remains within the Sederville area.

The proposed development site is predominantly underlain by the Nardouw Subgroup, specifically the Rietvlei Formation. Both the Nardouw Subgroup and the Rietvlei Formation are characterised by low palaeontological sensitivity, as they generally do not contain fossils of significant scientific or heritage value. This conclusion aligns with previous studies, which have consistently indicated that these formations are not typically rich in palaeontological resources.

The potential impact of the proposed development on palaeontological resources is assessed as minimal, with a low likelihood of encountering any significant fossil material during construction. Additionally, the Goudini, Skurweberg, and Rietvlei Formations, which are also present in the broader area, share similarly low palaeontological sensitivity. As a result, no specific mitigation measures are required for the proposed residential development. While no specific mitigation strategies are required, it is recommended that the Chance Fossil Finds Procedure be implemented during the construction phase. This protocol will ensure that any unexpected fossil discoveries are promptly reported and appropriately managed, safeguarding potential heritage resources.

As noted above, the archaeology field assessment did not identify any visible evidence of the supply depot and field hospital located on the Clanwilliam commonage from the South African War mentioned above, although buried evidence of this infrastructure may be present beneath the ground surface.

This development activity comprises infill development within the existing urban edge of Clanwilliam. The area proposed for development is located between two areas that have been identified as having historic value and are proposed as “Heritage Zones” (Park Street precinct - Zone E - and Sederville precinct - Zone G) in the Clanwilliam SDF (2023, Figure 7). In order to ensure that the proposed development fits into this infill space, the following recommendations are proposed:

- Open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space

- If the above is not possible, it recommended that these erven remain in their current form and layout and that the proposed subdivision and re-organisation of these erven is not approved (erven 1422, 359, 148, 147, 144, 143)
- Larger erven are positioned in the space between Zone G and Zone E
- Architectural guidelines are developed for the area between Zone G and Zone E
- Adherence to the historic grid alignment oriented around Park Street, Hoof Street and Ou Kaapse Road
- Sufficient breathing space and appropriate hierarchies in response to the significant heritage resources identified

In order to ensure that no impact to heritage resources occurs during the construction or operational phases of the development, recommendations are made below.

### *6. Recommendations:*

There is no objection to the proposed development from a heritage perspective on condition that:

- Open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order to retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space. This would require the reallocation of approximately 50 GAP housing erven.
- If the above is not possible, it recommended that these erven remain in their current form and layout and that the proposed subdivision and re-organisation of these erven is not approved (erven 1422, 359, 148, 147, 144, 143)
- Due to the position of the proposed development between two areas that have been identified as having heritage value, additional design detail be submitted to HWC for approval as a condition of a positive comment on this HIA. The architecture of the proposed development should adhere to the Guidelines included as Appendix 3.
- The attached Chance Fossil Finds Procedure is implemented for the duration of construction activities
- Should any buried archaeological resources or human remains or burials be uncovered during the course of development activities, work must cease in the vicinity of these finds. Heritage Western Cape (HWC) must be contacted immediately in order to determine an appropriate way forward.

### *7. Acknowledgements*

Sincere thanks must go to Sarah Winter for her assistance and guidance with ensuring that this Heritage Impact Assessment is fully compliant and addresses the requirements of Section 38(3) of the NHRA.

**Details of Specialist who prepared the HIA**

**Jenna Lavin**, an archaeologist with an MSc in Archaeology and Palaeoenvironments, and since 2016 heads up the heritage division of the organisation. She has a wealth of experience in the heritage management sector. Jenna's previous position as the Assistant Director for Policy, Research and Planning at Heritage Western Cape has provided her with an in-depth understanding of national and international heritage legislation. Prior to joining CTS Heritage, her 8 years of experience at various heritage authorities in South Africa means that she has dealt extensively with permitting, policy formulation, compliance and heritage management at national and provincial level and has also been heavily involved in rolling out training on SAHRIS to the Provincial Heritage Resources Authorities and local authorities.

Jenna is a member of the Association of Professional Heritage Practitioners (APHP), and is also an active member of the International Committee on Monuments and Sites (ICOMOS) as well as the International Committee on Archaeological Heritage Management (ICAHM). In addition, Jenna has been a member of the Association of Southern African Professional Archaeologists (ASAPA) since 2009. Since 2016, Jenna has drafted over 250 Screening and Heritage Impact Assessments throughout South Africa.

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1 Archaeological Impact Assessment 2024
2 Palaeontological Impact Assessment 2024
3 Guidelines related to Landscapes of significance (2022)
4 Correspondence from the Cederberg Municipality dated 28 August 2025

# 1. INTRODUCTION

## 1.1 Background Information on Project

### Locality

Erf 279 in Clanwilliam is designated as part of the municipal commonage. The largest portion of the development area stretches from the southern boundary of the existing urban development and is located between the Jan Disselsriver (east), Clanwilliam golf course (south) and the existing residential neighbourhood (west). A portion of the proposed development is located west of the existing neighbourhood and east of the Old Cape Road. Furthermore, it should be noted that this area constitutes an approved layout, however, minor amendments have been made to the layout in this proposal.

### Property Details

**Table 1: The property details are as follows**

| Erf 279 | |
|---|---|
| **Extent** | 926,5469 ha |
| **Owner** | Cederberg Municipality |
| **Servitudes** | Leasehold area L1 (SG no. 8293/1960)<br>Nature Reserve Area (SG no. 8128/1967)<br>Leasehold area (SG no. 6543/1979)<br>Servitude road (SG no. 5311/1990) |
| **Zoning** | Rural Community Zone |
| **Land Use** | The majority of the development area remains undeveloped. However, it does include the existing Wastewater Treatment Works and a portion of the golf course. The portion of the development area along the Old Cape Road is occupied by informal structures. |
| **Title Deed** | CLF3-10/1925 |

### Land use aspects

The Cederberg Municipal Spatial Development Framework provides the planning guidelines that guide forward planning and development in Clanwilliam and the Cederberg Municipal Area as a whole. Broad overarching objectives of the MSDF which include; densification within the urban edge and protecting the place identity and town character are all supported by the development proposal.

Considering that the development areas are located within the urban edge of Clanwilliam, there are proposals at settlement level. With reference to the Spatial Proposal Map for Clanwilliam, the development areas is located within Zone I. In accordance with the MSDF this zone is “earmarked for proposed mixed use development with

supporting institutional and commercial uses such as a correctional services facility (juvenile detention centre) and a cemetery site the zone is also home to the Khayelitsha informal settlement. Infill medium density residential expansion is proposed along the DR 2183/ R539, with cemetery site. Allow for expansion of the cemetery site. This Zone also includes a secondary business node along Park Street and development should be sensitive to furrows within this zone".

The surrounding area is primarily characterised by residential neighbourhoods ranging from low to high densities including some institutional uses (east of proposed development) and the golf course south of the development area. The proposed development consisting of mainly residential erven as well as supporting land uses will thus seamlessly integrate with the existing surrounding residential neighbourhoods hence supporting appropriate infill development.

**Development Proposal**

The proposed development entails the following:

Rezoning of a portion of Erf 279 Clanwilliam to Subdivisional Area which includes the creation of medium to high-density residential erven including supporting land uses such as open spaces, crèches, churches, community centre, commercial as well as a school site. The development footprint covers approximately 49,16 hectares of Erf 279. Furthermore, Erf 279 will be subdivided into two portions namely: the newly created Portion (portion of Erf 279) and Remainder of Erf 279.

Subsequently, the newly created portion will be further subdivided to allow for the creation of individual land units zoned as follows:

I. Single Residential Zone 1
II. Single Residential Zone 2
III. Local Business Zone 2
IV. Community Zone 1 & 2
V. Open Space Zone 1
VI. Transport Zone 1

**General Comments**

The development proposal primarily involves infill development of a residential nature including supporting uses, within the demarcated urban edge. It appears to be unlikely that the development areas is of any heritage significance or that the proposed development will have a significant impact on existing heritage resources within the area.

### 1.2 Description of Property and Affected Environment

The proposed infill urban development is split into two parts in Clanwilliam in the Western Cape. The smaller, southwestern segment is already mostly occupied with informal housing and the rezoning and planning mechanisms will formalise this area. The main and larger segment of the development footprint is currently unoccupied and consists of open public space (previously Clanwilliam commonage) and a golf club bounded by Viooltjie Street, Park Street, Spokie and Bloekom Avenue. The Clanwilliam Golf Club's greens and fairways cover about 50% of study area and the Clanwilliam Waste Water Treatment Works (WWTW) lie to the southeast end.

The Jan Dissels River runs to to the east and northeast of the study site and joins up with the Olifants River further north. The Clanwilliam Cemetery East, BOSASA Clanwilliam Child & Youth Care Centre and Clanwilliam Sports Grounds lie along the east side of Spokie and Park Street overlooking the Jan Dissels River. The western side of the development area rises up to a slight ridge and is completely built over with housing built in the last two decades while the northern and eastern buildings were primarily built in the 20th century.

The area proposed for development is located on the far side of Clanwilliam from the Botterkloof Pass road which acts as a gateway from the N7 into the rest of the Cederberg area.

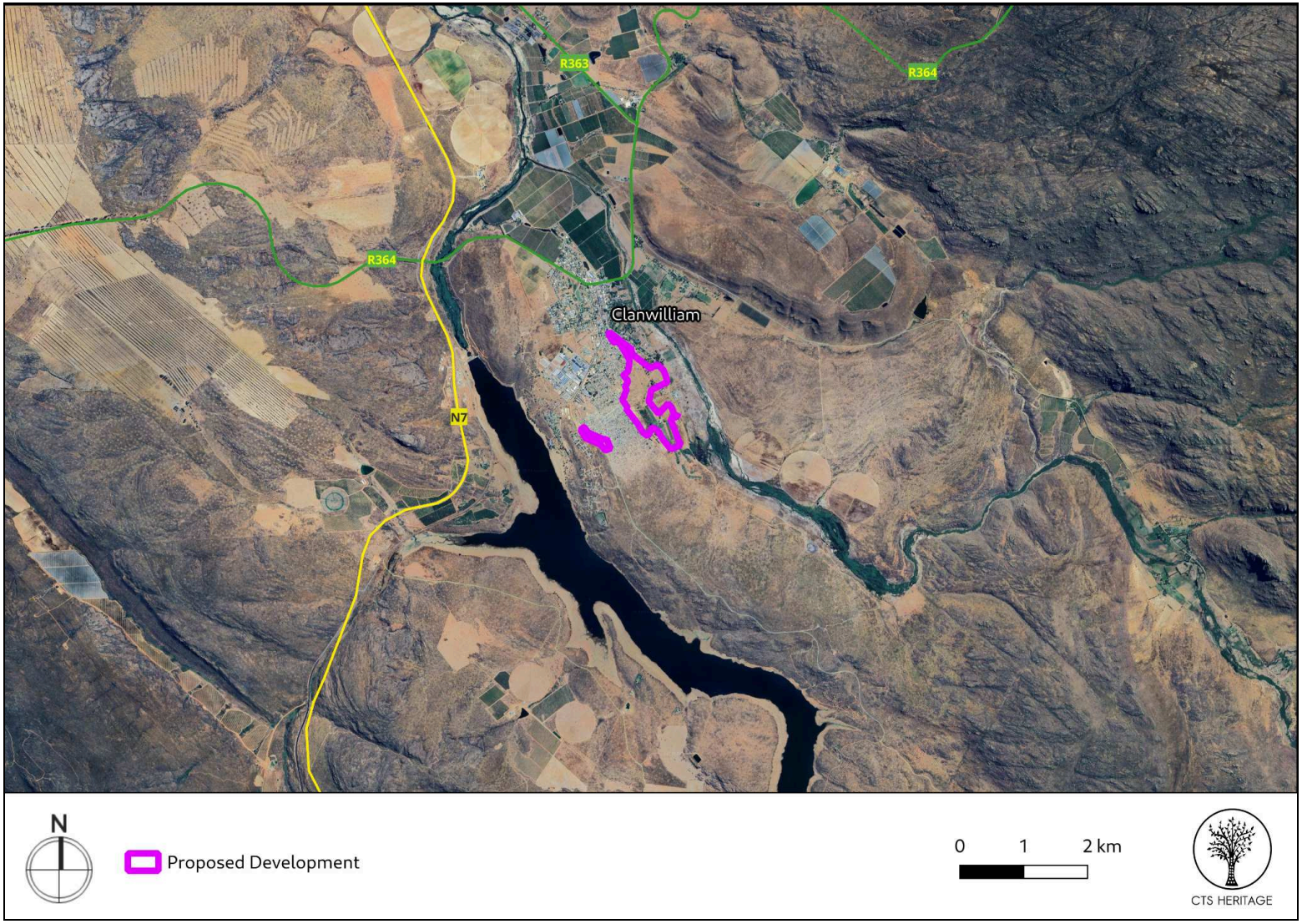


**Figure 1.1 Overview Map**. Satellite image (2024) indicating the proposed development area at closer range.

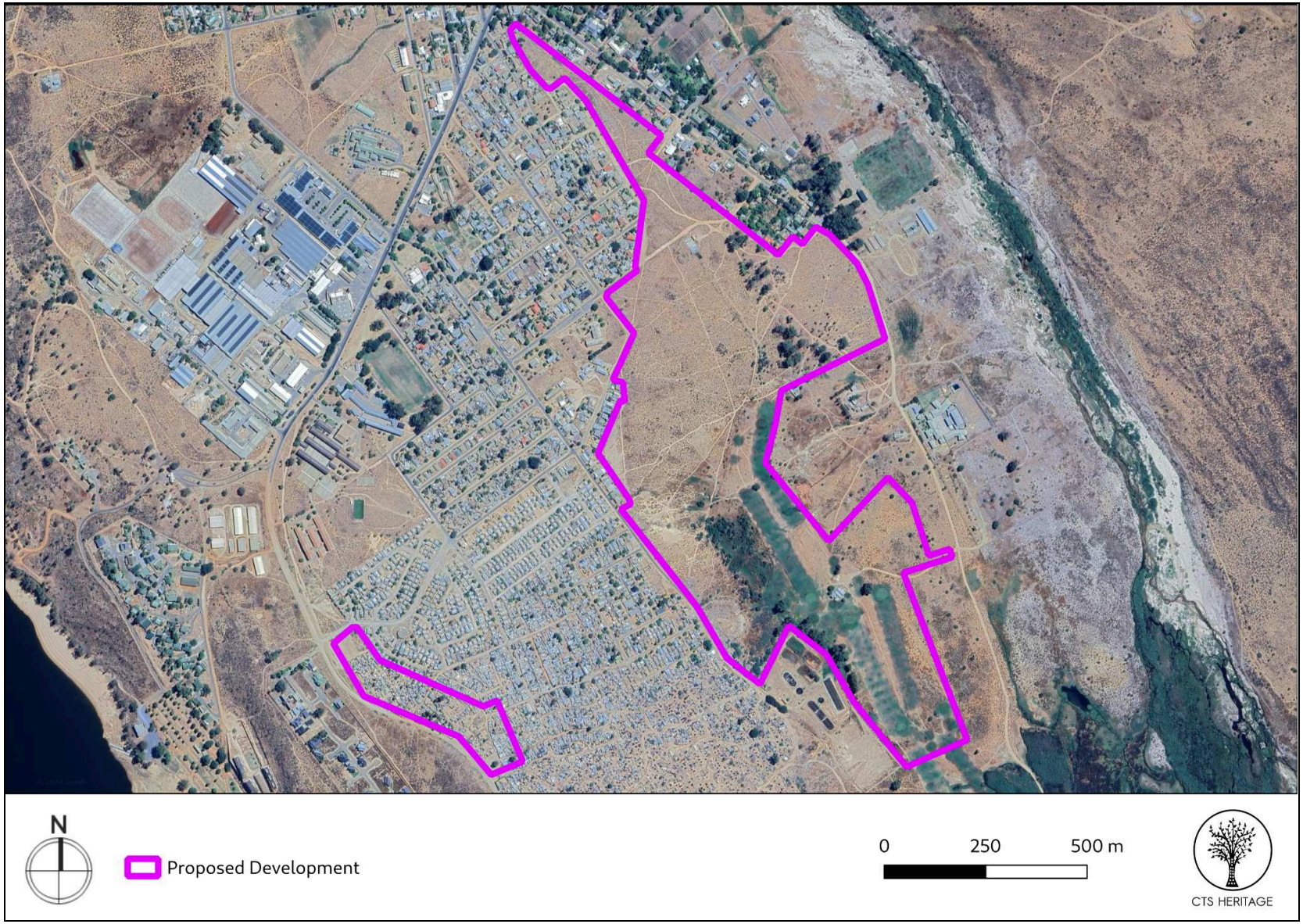


**Figure 1.2 Overview Map**. Satellite image (2024) indicating the proposed development at closer range.

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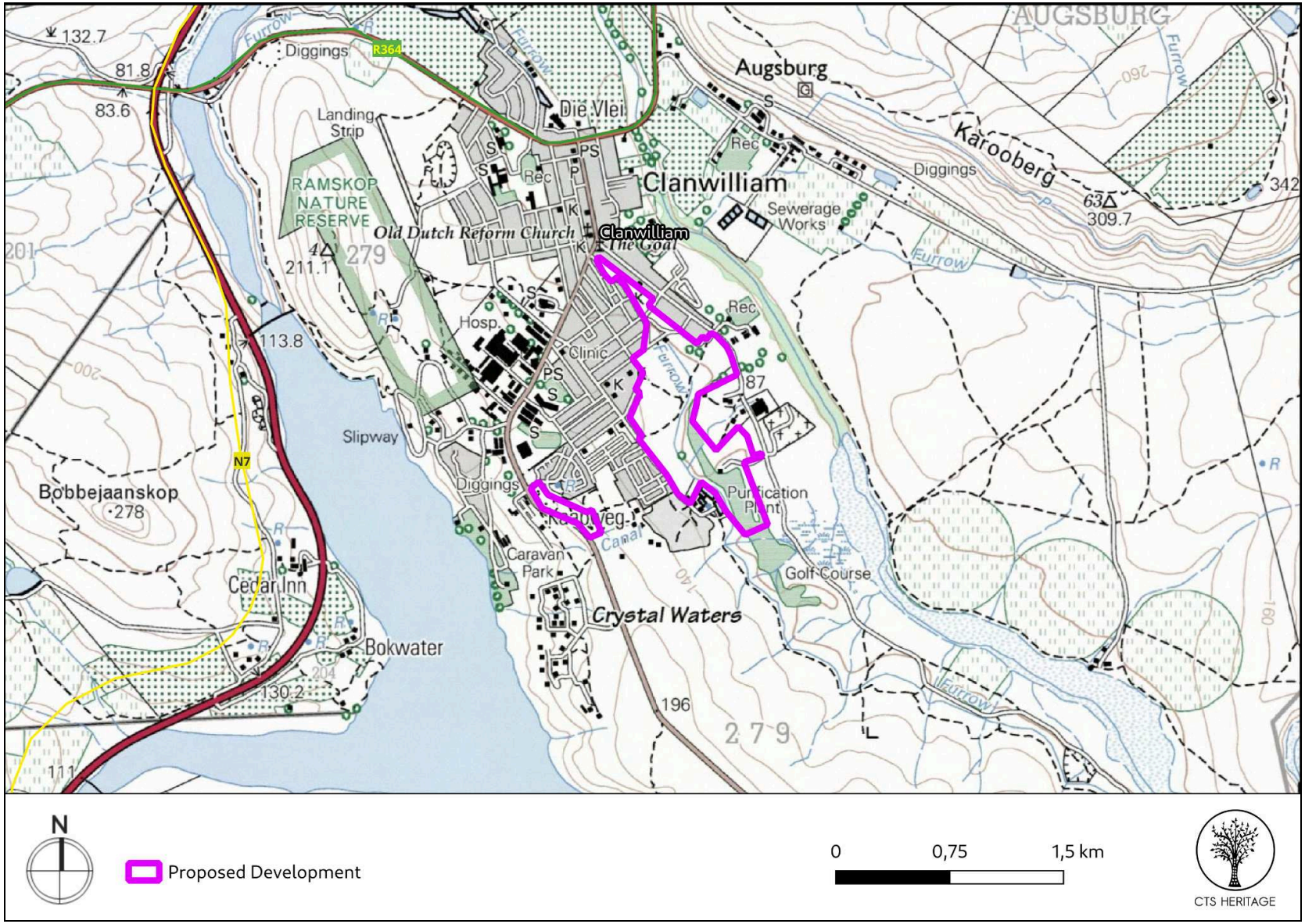



**Figure 1.3 Overview Map**. 1:50 000 Topo Map for the development area

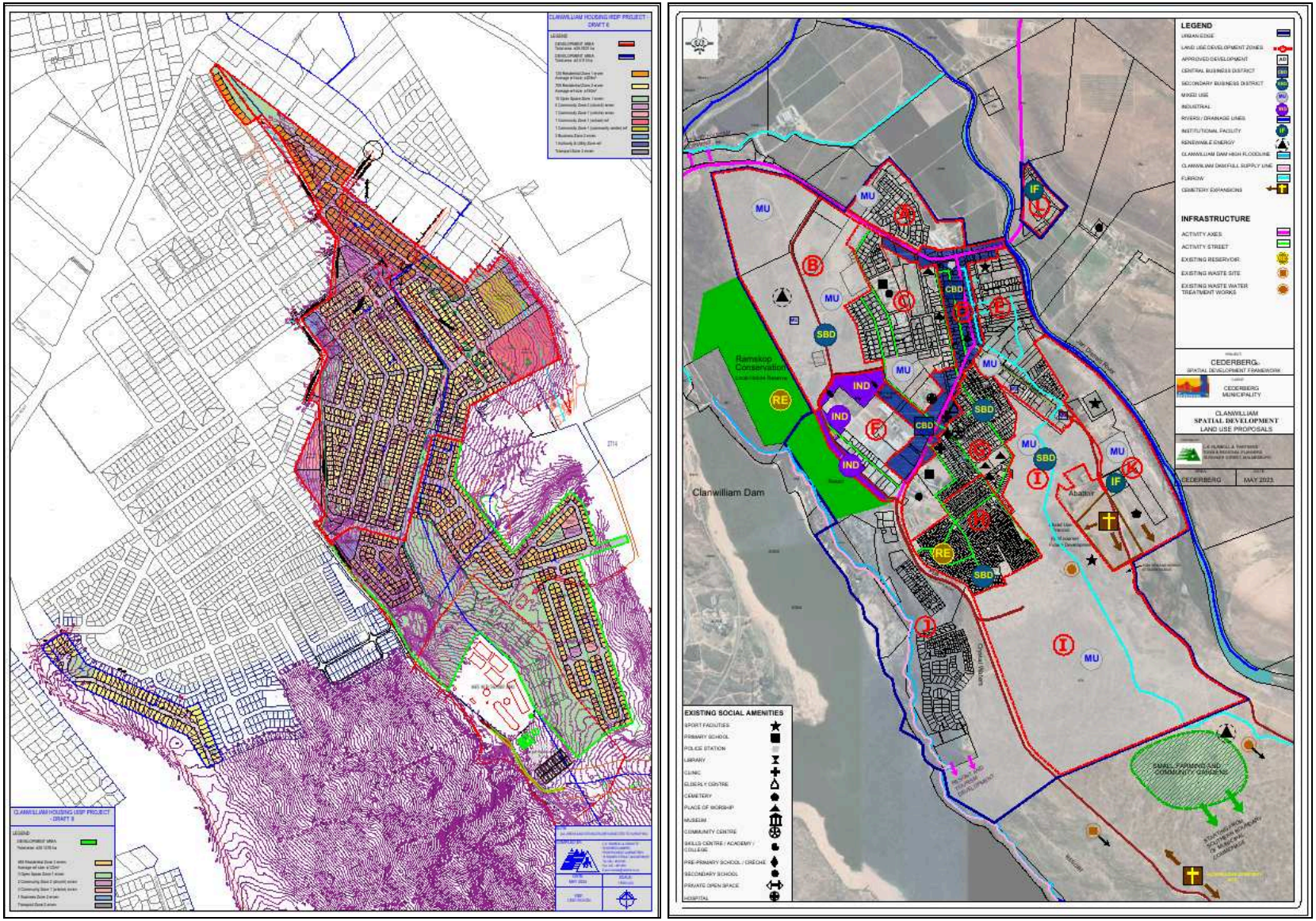



**Figure 1.4-1.5 SDP and SDF Map**. SDP and SDF provided by client

## 2. METHODOLOGY

### 2.1 Purpose of HIA

CK Rumboll submitted a NID application to HWC for this proposed development. HWC responded to this submission in correspondence dated 16 July 2024. HWC noted that "*Since there is reason to believe that the proposed subdivision and rezoning to allow for mixed-use development on Erf 279, Clanwilliam will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of Section 38(3) of the NHRA be submitted.*

*This HIA must in addition have specific reference to the following:*

- *Archaeological Impact Assessment*
- *Palaeontological Impact Assessment*"

The purpose of this Heritage Impact Assessment (HIA) is therefore to satisfy the requirements of section 38(8), and therefore Section 38(3) of the National Heritage Resources Act (Act 25 of 1999) in line with HWC's requirements.

In response to the initial HIA submission, in their meeting held on 11 June 2025, the HWC IACom resolved that:

- *An assessment of cultural landscape significance has not been adequately addressed*
- *There is no assessment of the status and significance of the remaining built fabric within the Bo Dorp.*
- *The relationship of the site to the Bo Dorp and its history, morphology, and built form has not been addressed.*
- *The formulation of heritage indicators based on the above has not been addressed.*
- *The above information must be compiled in a revised integrated HIA that complies with s38(3) and is subject to a further 30-day consultation period with all identified I&APs.*

The HIA has been updated to address these concerns.

### 2.2 Summary of Steps Followed

- A Desktop Study was conducted of relevant reports previously written (please see the reference list for the age and nature of the reports used)
- An archaeologist conducted an assessment of archaeological resources likely to be disturbed by the proposed development. The archaeologists conducted their site visit on 7 October 2024
- A palaeontologist conducted a desktop assessment of palaeontological resources likely to be disturbed by the proposed development.
- The identified resources were assessed to evaluate their heritage significance and impacts to these resources were assessed.

- Alternatives and mitigation options were discussed with the Environmental Assessment Practitioner
- The HIA was updated to address the comments from IACom, particularly section 3.1.2, Section 4.1 (Regional Overview, Local Overview, Topography, Movement Routes, Rivers and Water, Urban Development, Settlement Character, Architectural Typology, Clanwilliam SDF, Composite Analysis), Section 4.3 and section 5.1.2.

## 2.3 Assumptions and Uncertainties

- The *significance* of the sites and artefacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

- It should be noted that archaeological and palaeontological deposits often occur below ground level. Should artefacts or skeletal material be revealed at the site during construction, such activities should be halted, and it would be required that the heritage consultants are notified for an investigation and evaluation of the find(s) to take place.

However, despite this, sufficient time and expertise was allocated to provide an accurate assessment of the heritage sensitivity of the area.

## 2.4 Constraints & Limitations

The southwestern segment is completely occupied by housing structures but the main and larger section of the study site remains largely open as the golf course occupies the lower half of the site. The northern half is currently open space and this area was also easily surveyed. The vegetation is relatively sparse and the visibility of archaeological material on the surface is good. The study therefore achieved a high level of coverage of the area.

# 3. HISTORY AND EVOLUTION OF THE SITE AND CONTEXT

## 3.1 Desktop Assessment

### 3.1.1 Background

This application is for a proposed residential development in Clanwilliam, in the Western Cape province. The town of Clanwilliam is located where the Olifants and Jan Dissels rivers meet. Originally it was known as Jan Disselsvlei as it was laid out on the farm of Jan Disselsvlei. It was renamed Clanwilliam by Sir John Cradock, Governor of the Cape, on 1 January 1814, and attained municipal status in 1901 (Raper et. al., 2018). The original farm was named after botanist Jan Dissel. It was renamed Clanwilliam, after the Earl of Clanwilliam. The first mayor was Charles Fryer, an Irish descendant of the 1820 Settlers, who settled along the Jan Dissels River (CK Rumboll and Partners, 2023).

### 3.1.2 Built Environment and Streetscape

***Early Exploration and Colonial Expansion (1660–1790s)***

Clanwilliam, one of South Africa's oldest towns, traces its origins to 1660 when Dutch explorers, led by Jan Danckaert, crossed the mountains into the Olifants River Valley. Upon spotting large herds of elephants near the riverbanks, they named the river Olifantsrivier (Mossop, 1927 in Orton & Hart, 2005, SAHRIS NID 6420). Subsequent expeditions followed similar routes, but permanent European settlement only began around the 1720s. Jan Dissel, a pioneer and botanist, was the first known settler in the area. He established a farm named Seekoeivlei at the confluence of the Olifants and the smaller Jan Dissels River (hence this smaller river sharing his name)—this site eventually became the modern town of Clanwilliam (Orton & Hart 2005). According to Raper et al. (1998), Clanwilliam was laid out on the farm Jan Disselsvlei. At first, it was also known as Jan Disselsvlei, but on the 1st of January 1814, it was renamed Clanwilliam by Sir John Cradock, Governor of the Cape, after his father-in-law, the Earl of Clanwilliam. In 1901, it attained municipal status. The first mayor was Charles Fryer, an Irish descendant of the 1820 Settlers, who settled along the Jan Dissels River (CK Rumboll and Partners, 2023).

By the late 18th century, loan and freehold farms had been formally allocated throughout the valley, with farms like Rondegat (1761), Andriesgrond (1792), and Holfontein (1794) forming part of this early agricultural landscape (Nell, 1997 in Orton & Hart, 2005, SAHRIS NID 6420). Despite early tensions with Khoi and San communities resisting settler encroachment, the settler footprint expanded steadily.

***Founding of the Town and Administrative Role (1808–1837)***

In response to escalating conflict and cattle raiding in the region, the colonial government bought Seekoeivlei from Sebastian van Reenen in 1808 and converted it into a sub-drostdy to restore law and order (Dickason, 1973 in Orton & Hart, 2005, SAHRIS NID 6420; SAHO, 2011). Daniel van Ryneveld was appointed as Deputy Landdrost. The village was first known as *Jan Disselvlei*, named after Jan Dissel, but was renamed *Clanwilliam* in 1814 by Sir John

Cradock, then Governor of the Cape, in honour of his father-in-law, the first Earl of Clanwilliam (SAHO 2011; CK Rumboll & Partners 2023). The district was initially part of Tulbagh but was proclaimed a separate district in 1837.

***1820 Irish Settlers and Their Legacy***

As part of a broader British immigration scheme, four Irish settler groups led by William Parker, Captain Walter Synnot, Captain Thomas Butler, and John Ingram arrived in Clanwilliam in 1820 (Clanwilliam Tourism Bureau, n.d.; Dickason, 1973 in Orton & Hart, 2005, SAHRIS NID 6420). Most settlers struggled with the region's arid conditions and lack of suitable farming knowledge, leading many to leave. However, some families—such as the Ingrams, Synnots, and Fryers—remained and contributed significantly to the town's development. Synnot was appointed assistant magistrate in 1821, and Charles Fryer, a Fryer descendant, later became Clanwilliam's first mayor when the town gained municipal status in 1901 (CK Rumboll & Partners 2023).

***Missionary, Religious, and Social Developments (1815–1900)***

Religious life developed slowly. Missionary J.H. Marquard arrived in 1815 to serve the local coloured community but broke ties with the London Missionary Society and continued independently under the Dutch Reformed Church (Clanwilliam Tourism Bureau, n.d.). For much of the 19th century, residents attended churches in Tulbagh or Malmesbury until local religious structures were gradually established. The settlement evolved into a modest but distinct village, shaped by European customs and Christian institutions.

***20th Century Infrastructure and Economic Growth***

Clanwilliam experienced major infrastructural development in the 20th century. The Bulshoek Dam (1914) and Clanwilliam Dam (1935) improved irrigation and agriculture in the Olifants River Valley (SAHO, 2011). The completion of the hydroelectric plant in 1938 and its expansion in 1958 provided electricity to the town and surrounding farms. Road infrastructure followed, with the N7 routes connecting Clanwilliam to Citrusdal and Klawer by 1963.

Population growth was steady: from 264 white and 840 coloured residents in 1907 to over 2,200 people by 1960 (Clanwilliam Tourism Bureau, n.d.). Municipal development included a new water supply scheme, town coat of arms, and the Memorial Library (1958) named after Dr. C. Louis Leipoldt and Dr. P. le Fras Nortier. Leipoldt, a renowned poet and physician, spent his childhood in the town and is buried in a cave in the nearby Pakhuis Pass (SAHO, 2011).

***Cultural Landscape and Archaeological Heritage***

The heritage landscape around Clanwilliam includes historical farmsteads, stone ruins, roads, and agricultural infrastructure reflecting settler life from the 18th to early 20th centuries. Many farmhouses were abandoned during the early 20th century, likely due to the 1918 Spanish Flu pandemic and the Great Depression, which drove rural populations to cities (Orton & Hart, 2005).

Archaeological work, such as the UCT excavations at Warmhoek, have begun to explore the material history of the region, though much remains unstudied. Oral histories, like those collected from Holfontein residents, provide critical insights into under-documented aspects of local heritage.

The Clanwilliam Living Landscapes Project is a project with the Archaeology Department of the University of Cape Town. The early stages of this long-term project have involved the development of a local project organisation, the production of an education curriculum utilising the surrounding landscape, and an annual series of heritage events including exhibitions. Architectural projects include the renovation of an old school into a field station for UCT in Clanwilliam. The centre's workshop and shop at 18 Park Street, Clanwilliam, has crafts produced on the San theme of history and archaeology, traditional methods of production, use of authentic materials and natural objects.

Parkington (1999) describes the CLLP as "*a community-based museum and schools curriculum project located in the small rural Western Cape town of Clanwilliam. Founded in 1812, and originally known as Jan Dissels Vallei, Clanwilliam was for much of the 19th century a frontier settlement, in which the politics of colonialism were played out against the magnificent backdrop of the Cederberg mountains. Now, in another era of political reorganisation, the current citizens are attempting to construct a democratic future and put aside a divided past. As in most rural Cape towns the divisions take the form of white town, coloured township and black informal settlement. Our project seeks to support these attempts at reconciliation by revealing and celebrating the history of those who were previously denied a contribution*."

The Clanwilliam Living Landscape Project has successfully used the Clanwilliam landscape as a framework for teaching in local schools and developing sustainable business ideas for local people. The programme has created an archive of historical, archaeological and environmental information with links to a job creation initiative, a new schools curriculum and new heritage legislation[1]. Unfortunately, the CLLP is no longer active.

***Economic and Cultural Identity Today***

Clanwilliam is today known for its scenic charm, citrus orchards, and its central role in the rooibos tea industry, being home to the Rooibos Tea Control Board. Cultural heritage, outdoor festivals, a veldskoen factory, and its location at the foot of the Cederberg Mountains make it both a working town and a tourist destination. The legacy of its layered history—from Khoisan roots to colonial expansion and 20th-century transformation—remains visible in its landscape and institutions.

Four Provincial Heritage Sites (PHS) are located within 200m of the proposed development. Three of these, SAHRIS IDs 28961, 28962, and 28966, are on the other side of Park Street, and the proposed development is unlikely to have a significant impact on these three sites. However, SAHRIS ID 28973, known as Clanwilliam

[1] https://www.virtualtours.ctsheritage.com/

Museum (Ou Tronk), Main Street, Clanwilliam touches on the northwestern end of the project area (Figure 3.2). Further southeast, the Clanwilliam Cemetery East is also located within 70m of the proposed development. Burial grounds and graves have high levels of local social and spiritual significance and as such, are graded IIIA. It is important that the sense of place associated with these human remains is retained. The cemetery is separated from the project area by Spokie Road, an informal gravel road, which should mitigate impact.

**Table 2: Grade II Sites within 500 of the study area**

| SAHRIS ID | Site Number and Name | Description | Site Type and Grade | Image |
|---|---|---|---|---|
| 28961 | 9/2/022/0016<br>Die Erf, 5 Park Street, Clanwilliam | The property with the house known as "Die Erf" thereon. being the remaining portion of certain Erf or Lot of land situate in the Municipality and Division of Clanwilliam and marked No.1 (now known as Erf 94 Clanwilliam). measuring as per remaining extent two hundred and fifty-eight (258) square roods. twenty-two (22) square feet. Deed of Transfer 17786/1968. dated 14 August 1968 (paragraph 1). Historical and architectural interest This house in the Cape Dutch style housed one of the drostdy officials shortly after the establishment of a sub-drostdy at Clanwilliam in 1808. 10/2/678. | Building<br>Grade II |  |
| 28962 | 9/2/022/0025<br>Old Residency, 3 Park Street, Clanwilliam | The Property With The Old Residency Of The Deputy Landdrost Thereon, At 3 Park Street, Clanwilliam<br>The property with the Old Residency of the Deputy Landdrost thereon, being the Remainder of Erf 95, situated in the Municipality and Division of Clanwilliam, in extent 5 667 (five thousand six hundred and sixty·seven) square metres.<br>Deed of transfer T9286/1966, dated 18 May 1966. | Building<br>Grade II | |
| 28966 | 9/2/022/0015<br>2 Park Street, Clanwilliam | The property with the Old Landdrost Office thereon, being Erf 920, Clanwilliam, situated in the Municipality and Division of Clanwilliam, in extent 1 063 (one thousand and sixty-three) square metres.<br>Deed of Transfer T38395/1974, dated 13 November 1974. | Building<br>Grade II |  |
| 28973 | 9/2/022/0005<br>Clanwilliam Museum (Ou Tronk), Main Street, Clanwilliam | History: This Georgian building, the core of which was probably erected as early as 1808, is a prominent architectural feature in the historic core of Clanwilliam. Visual Description: Symmetrical stone building with three-bay central pavilion. Plaster decorations at windows and corners. Round-headed openings. Left hand side has addition constructed c1890. Parapets with moulded cornices conceal low-pitched roof. Condition: Fair - The unfortunate alterations, which include the incorrect addition of shutters and vertical application of slasto, require attention. Construction Date: c1860 | Building<br>Grade II |  |

### 3.1.3 Archaeology

The Cederberg Mountains in the Western Cape of South Africa boast more rock art images per square kilometre than any other area in the world. There are a total of over 3 000 recorded sites in the Cederberg area, compared to 280 in France and Spain combined. The Western Cape of South Africa has been inhabited by humans and their ancestors for at least a million years. Earlier Stone Age artefacts date to between about 2 million and 200,000 years ago. These hunter-gatherers apparently did not make rock paintings. Middle Stone Age artefacts have also been found but they are not directly linked to the artists responsible for rock paintings in the region.

From about 40,000 years ago, the Later Stone Age people living in the Western Cape were regularly making artefacts like bows and arrows, digging stick weights, ostrich eggshell beads and other items that were still being made by San hunter-gatherers at the time of European contact in the seventeenth century (1600s). It was during the Later Stone Age that most of the rock paintings were made in the Western Cape.

Rock paintings can be dated if the paint had an organic ingredient like blood or egg or plant juice, but in many cases there is not enough of these ingredients left to get a reliable age.

The eastern Cederberg Rock Art Group (eCRAG) was started by Dr Janette Deacon and Simon Liell-Cock in 2007 and is run by two archaeologists (Nic Wiltshire and Dr. Janette Deacon) with approximately 30 members of the South African Archaeological Society (ArchSoc). eCRAG volunteers have been surveying the Cederberg for the last 18 years to try and locate the rock art sites, document them and provide landowners and other researchers with baseline information about the sites. The recordings are uploaded to SAHRIS which is South Africa's national heritage management system. There are approximately 4000 sites recorded thus far (eCRAG has recorded about 1850 sites) and it is estimated that another 4000 remain between the Cederberg, Niewoudtville, Elands Bay/Lamberts Bay and down to Villiersdorp in the south. This area of the West Coast Cape Fold Belt is obviously larger than the Cederberg in the core area but the bulk of the 4000 sites are in the core area (Nic Wiltshire, pers. comm).

A number of AIA and HIAs have been completed in the vicinity of the study area; and extensive rock art surveys of the surrounding mountains and kloofs have been completed by the Eastern Cederberg Rock Art Group (eCRAG). Tusenhuis (2012, SAHRIS NID 329798) summarised the known archaeological sensitivity of the region and a brief summary is provided here: *The Cederberg, Olifants River Valley, and Doring River area have been inhabited for over 500,000 years, with archaeological evidence from the Early Stone Age, Middle Stone Age, Later Stone Age, and colonial times (Orton & Hart 2005; Halkett et al. 1997). Stone Age artefacts, often scattered due to erosion, are found on the surface, while some Middle and many Later Stone Age sites are preserved in rock shelters. The region is notable for its rock art, particularly in the northern Cederberg, which has been extensively studied academically (e.g., Maggs & Sealy 1983; Manhire 1998; Manhire et al. 1983; Yates et al. 1985; Yates & Manhire 1991) and is featured in popular literature (e.g., Deacon 1994; Parkington 2003). Well-known rock art sites*

*include the Sevilla Trail, Leipoldt's Grave, and Bushmanskloof. Excavations in the Pakhuis Pass region, such as at De Hangen (Parkington & Poggenpoel 1971) and Klein Kliphuis Shelter (Van Rijssen 1992), have revealed significant archaeological layers, including Middle Stone Age layers below Late Holocene Later Stone Age deposits (Orton & Mackay 2008).*

In 2005, Orton and Hart conducted an HIA for the development of the Clanwilliam Dam (SAHRIS NID 6420). They provided a thorough history of place and archaeological background of the area, of which the main points are summarised here. Since the late 1960s, the Department of Archaeology at UCT and Iziko Museum have conducted research in the Olifants River Valley, mainly focusing on rock art and Stone Age heritage in the northern Cederberg Mountains. The Department of Geography also conducted geomorphological and palaeoclimatic studies. Research on the Early and Middle Stone Age (ESA and MSA) has been limited, with most finds being surface artefact scatters due to erosion. Significant sites include Klipfonteinrand, Klein Kliphuis, and Hollow Rock Shelter. However, many ESA and MSA artefacts are found disturbed on the landscape. The LSA of the Olifants River Valley is well-researched, particularly through rock art and excavations in rock shelters. Several deposits at sites like De Hangen and Klipfonteinrand provide insight into subsistence practices. Open artefact scatters have also been found at farms like Malgashoek and Andriesgrond. The Clanwilliam area has a long history of colonial settlement, dating back to the 1720s. Historical research has focused on frontier status and infrastructure development, while oral history is expected to provide more details during future research. The area also contains numerous ruins of farmhouses, likely abandoned during the early 20th century due to events like the Spanish flu and the Great Depression (Orton & Hart, 2005, SAHRIS NID 6420).

During the archaeological survey for the Clanwilliam Dam, Orton and Hart (2005, SAHRIS NID 6420) identified 120 heritage sites. These comprise a large portion of the Heritage Resources on SAHRIS within a 4km radius of the proposed development. Their findings were that the Early and Middle Stone Age artefacts found around and below the Full Supply Level (FSL) are generally in secondary contexts, meaning their disturbance would not significantly impact heritage value, as most artefacts are not in their original positions. Some scattered artefacts might even become more accessible for study during times of low water. The Later Stone Age rock art, however, is highly vulnerable to water damage, including mechanical weathering and salt crystallisation, which can lead to severe deterioration or total loss of the artwork. Several significant painted rock art sites close to the water are already showing signs of damage. While some artefact scatters in the area have limited heritage significance due to their open context, those with rock art or archaeological deposits hold higher significance. Historical structures, such as early road infrastructure, quarries, and the Clanwilliam Dam itself, also face potential flooding, with the significance of their loss ranging from low to medium-high. Sites of importance include rock art panels, prehistoric kraals, and graveyards, all of which are highly valued for their cultural and historical significance. As all of these sites fall outside the project area, impact is unlikely, but Orton and Hart's findings provide insight into which types

of heritage resources can exist within the project area.

In 2008, Kaplan conducted an AIA located less than 2km west of the proposed development (SAHRIS NID 6421). Kaplan identified no significant heritage resources. CTS Heritage also conducted an HIA located less than 5km northwest of the project area. Their findings were "*A total of 9 observations were made during the survey. A modern complex of temporary shelters is located on the western end of erf 478 just below the level of the R364. It was not possible to determine who has been using these areas as they were unoccupied during the survey but blankets, torn clothing items and plastic debris have been left here. The concrete canal, built in the 1920s, is still in a very good condition and looks to be well maintained. An older internal farm track lined with standing stones was also found on erf 478 but most of it disappeared during the construction of the R364 and subsequent dumping activities mentioned previously. The rest of the observations consisted of isolated Later and Middle Stone Age stone artefacts that were found in very low numbers across the site. This was not surprising given that the lower lying, level ground had already been taken up by agricultural activities and that there were no suitable rock shelters and boulders. Only observation #9 contained more than a couple of flakes and this lies just outside of the development area in a heavily disturbed drainage channel next to the R364. The archaeological sensitivity of erf 912 and erf 478 is therefore very low and no further work is recommended.*"

As part of the NID application for this project, CK Rumboll included the following information regarding archaeological resources, "*The Cederberg Mountains surrounding Clanwilliam are renowned for their ancient San (Bushman) rock art. The rock art of the Cederberg area is very diverse, and perhaps the most appealing of heritage resources in the area (Infinity Environmental, 2021). As mentioned previously Erf 279 in Clanwilliam is designated as part of the municipal commonage bordered by the Jan Disselsriver (east) and the Olifants River Valley (west). Previous studies conducted on Erf 279 have identified archaeological resources, such as rock shelters with rock art, artefacts, and rocky outcrops, along the Olifants River Valley (Clanwilliam Dam). The development site is situated approximately 1,2 km north of these known archaeological resources. Additionally, the property is relatively flat with very few rocky outcrops"* (CK Rumboll, 2024).

### 3.1.4 Palaeontology

According to the SAHRIS Palaeosensitivity Map, the development sites are underlain by sediments of High fossil sensitivity (Figures 4). According to the extract from the CGS 3218 Clanwilliam Geology Map, the development area is underlain by the Nardouw Subgroup, Table Mountain Group. The **Nardouw Subgroup** sediments are made up of quartzitic sandstone, and minor shale and have **High Palaeontological Sensitivity**. The Nardouw Subgroup consists of the Goudini, Skurweberg, and Rietvlei formations (west of 21°E). East of 21°E, the equivalent to the Rietvlei Formation is the Baviaanskloof Formation. "*The bulk of all the sediment that makes up these rocks are generally sandy in nature (MacRay, 1999, p.106) and apart from occasional trace fossils are generally devoid of invertebrate body fossils. The Baviaanskloof Formation (Db) however has, in the past, yielded a marine shelly*

*fauna like brachiopods, molluscs (bivalves & gastropods) and rare trilobites, bryozoans etc. This particular unit is regarded as having a reasonably high palaeontological significance."* (De Klerk, 2011, SAHRIS NID 140547).

As part of the HIA completed for the upgrade of the intersection between the N7 and the R364 (ACO, 2012, SAHRIS NID 503706), Avery (2012) completed a Palaeontological Assessment located in the same geological formations as this development. Avery (2012) concluded that "*Topography is rocky and hilly, comprising primarily elements of the Cape SuperGroup Table Mountain Series sandstones with some shale lenses, neither of which is likely to yield fossils. Sandy patches occur on the surrounding slopes and Quaternary-aged alluvial sediments are along the river. The latter could contain fossils and sub-fossils. Any alluvial deposits (should river crossings be intersected) should be carefully assessed. The existence of fossils in the very ancient underlying hard rocks in the area concerned is extremely unlikely but younger sediments may contain ancient wetland deposits, which preserve pollens and/or more-recent fossils.*"

Avery (2012) goes on to note that "*While the occurrence of fossils in underlying hard rock sediments in the area concerned is unlikely, any excavation that penetrates into Pleistocene or Recent sediments may have potential." In the palaeontological assessment conducted for the proposed upgrade of the N7 between Clanwilliam and Trawal, Avery (2012) concludes "The likelihood that palaeontological remains will be encountered during the proposed (development) is minimal but, if encountered, such material is important and must be recorded by an appropriately-qualified person.*" It is therefore not anticipated that significant palaeontological resources will be impacted by the proposed cultivation and as such, no further palaeontological studies are recommended. However, it is recommended that the HWC Chance Fossil Finds Procedure be implemented for the duration of all excavation activities.

As part of the NID submission, CK Rumboll included the following information regarding the palaeontological sensitivity of the development area, "*The development site is underlain by quartzitic sandstone with thin shale and conglomerate lenses of the Nardouw Subgroup comprising three subunits Goudini, Skurweberg and Rietvlei Formations (Almond, 2010). According to Almond (2010:8) "few fossils of any sort have been found within the Rietvlei Formation in the Clanwilliam sheet area where the succession is dominated by clean-washed, pebbly sandstones of braided fluvial to coastal facies. Bioturbation occurs intermittently, especially in finer- grained interbeds [and] vertical burrows with funnel-shaped entrances and annulated walls (Monocraterion) are reported from Kerskop Pass near Wuppertal, while Skolithos "pipe rock" occurs just north of the map area near Doringbos". With reference to the SAHRIS palaeo-sensitivity map (attached herewith), the proposed development site is in an area of high palaeontological sensitivity. However, according to Almond (2010), the sedimentary formations beneath the site are of low paleontological sensitivity."*

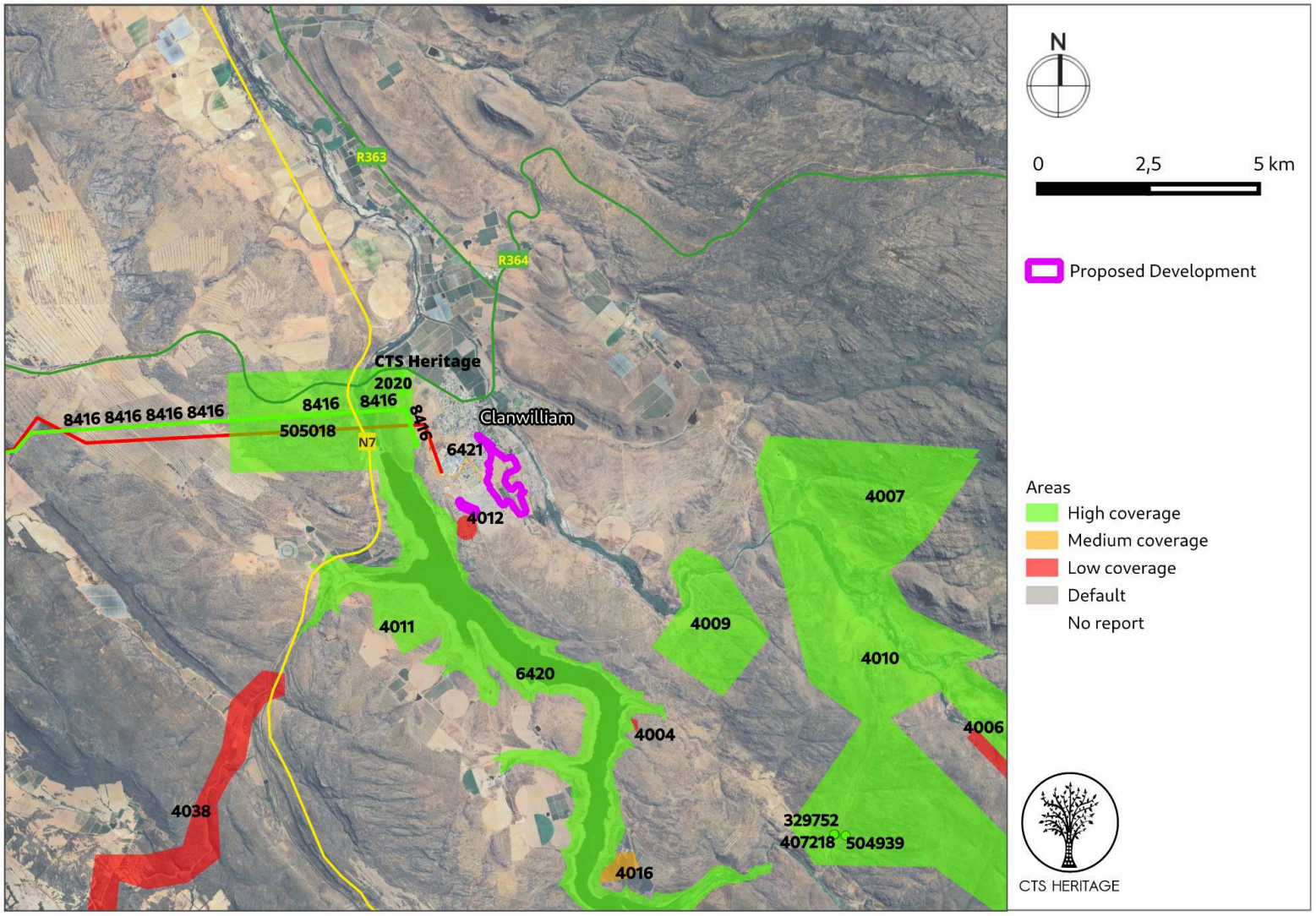



**Figure 2: Spatialisation of heritage assessments conducted in proximity to the proposed development**

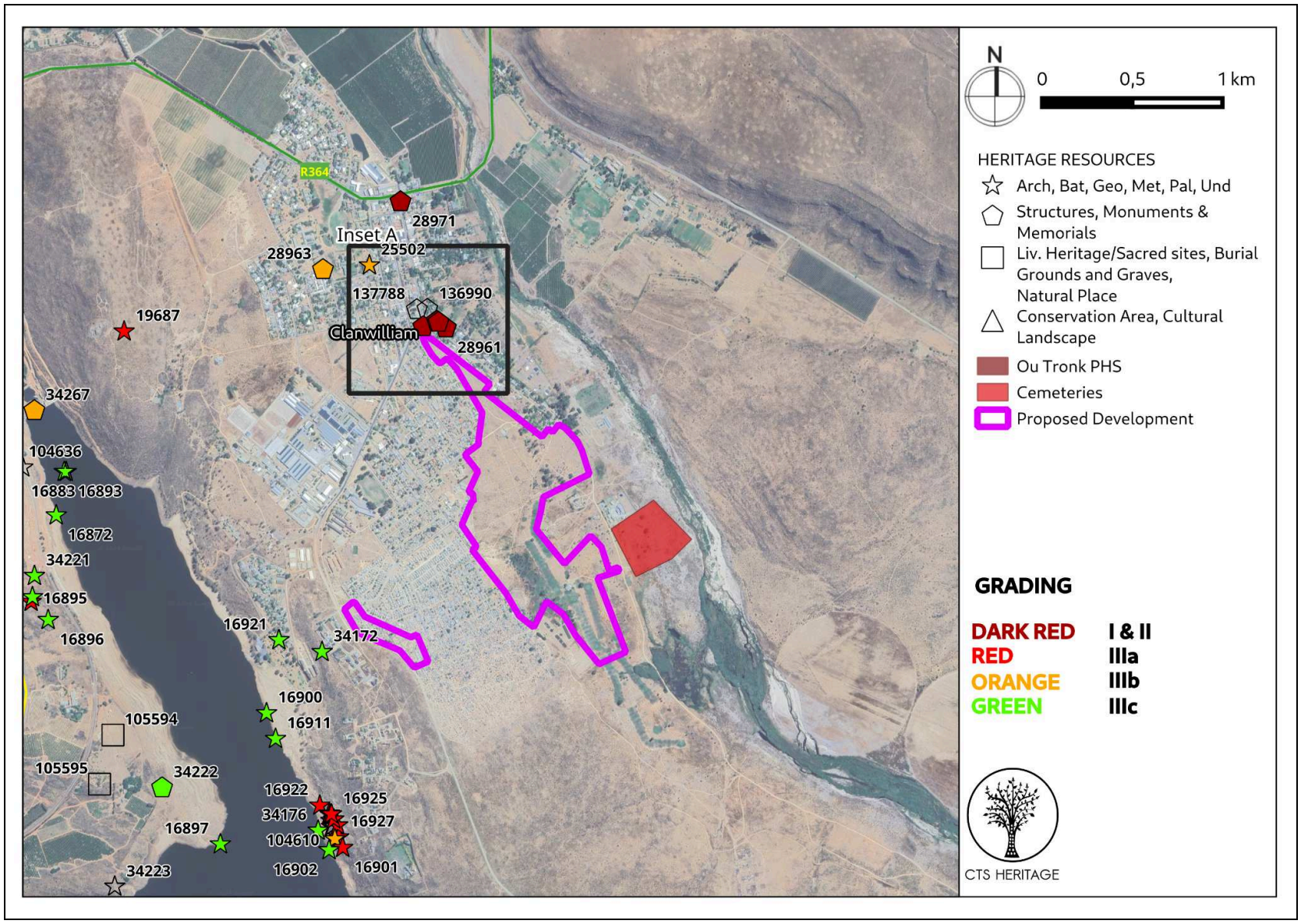



**Figure 3.1 Heritage Resources Map.** Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs indicated.

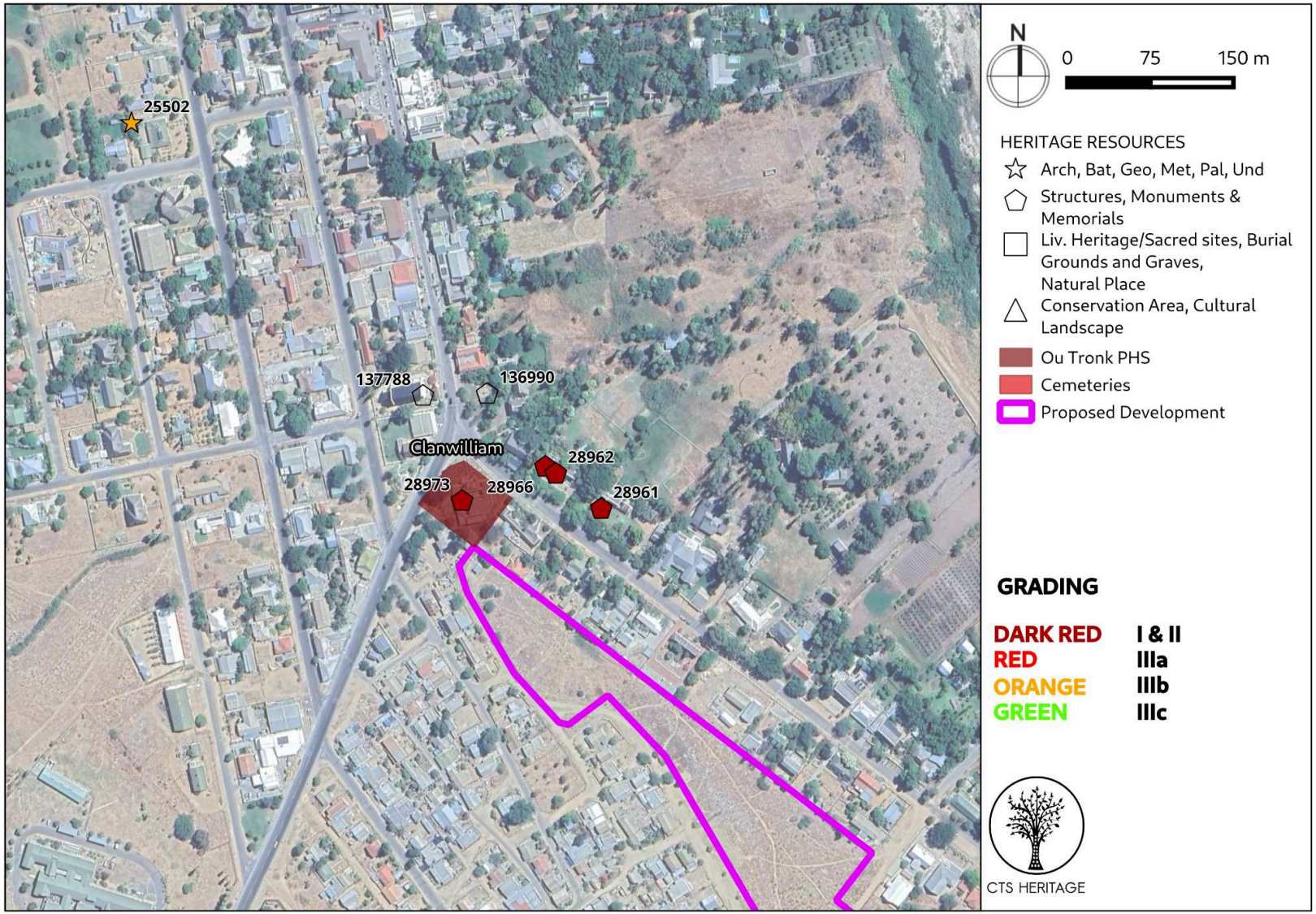



**Figure 3.2 Heritage Resources Inset Map A.** Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs indicated.

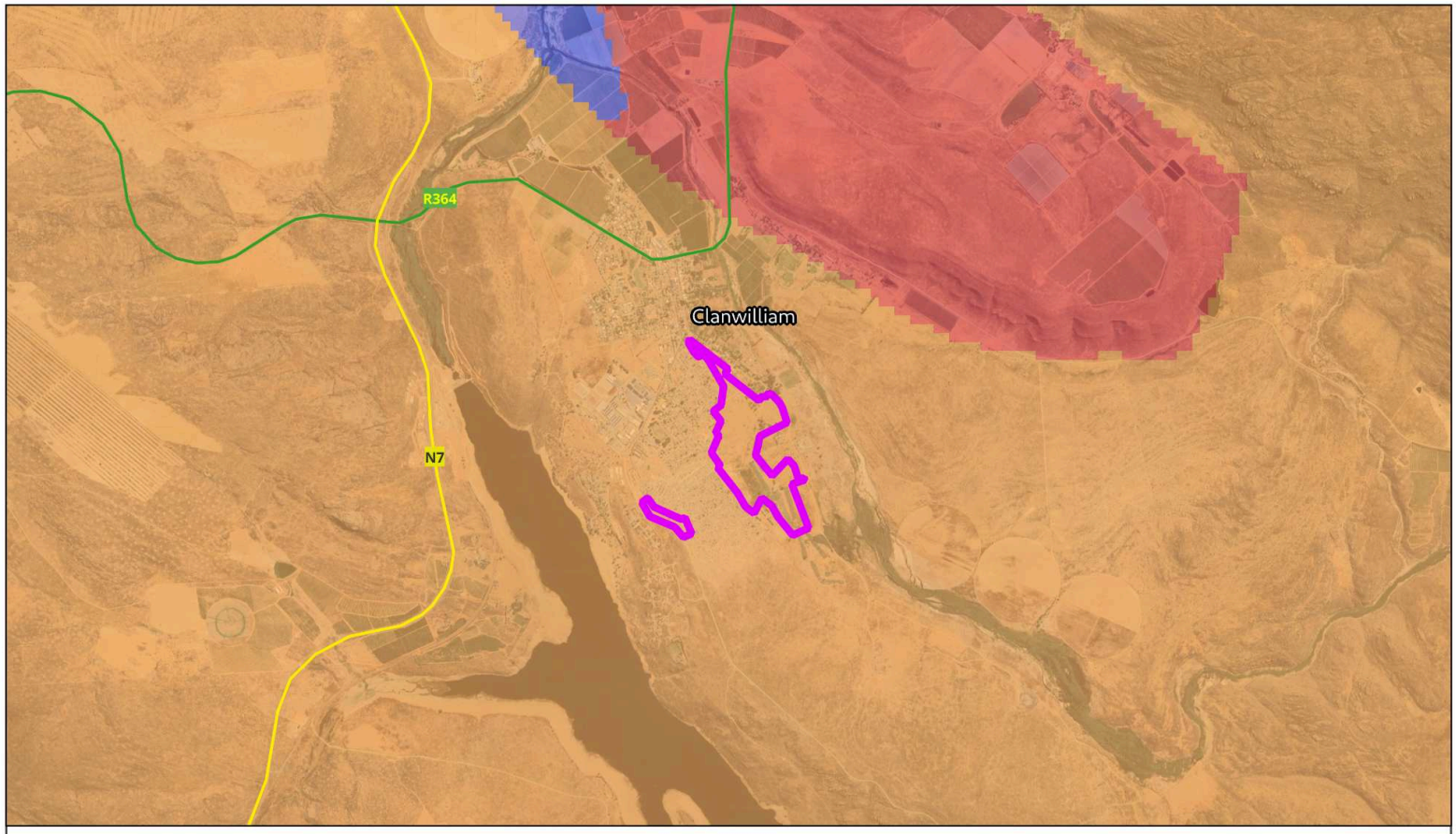



**Figure 4.1: Palaeontological sensitivity of the proposed development area**

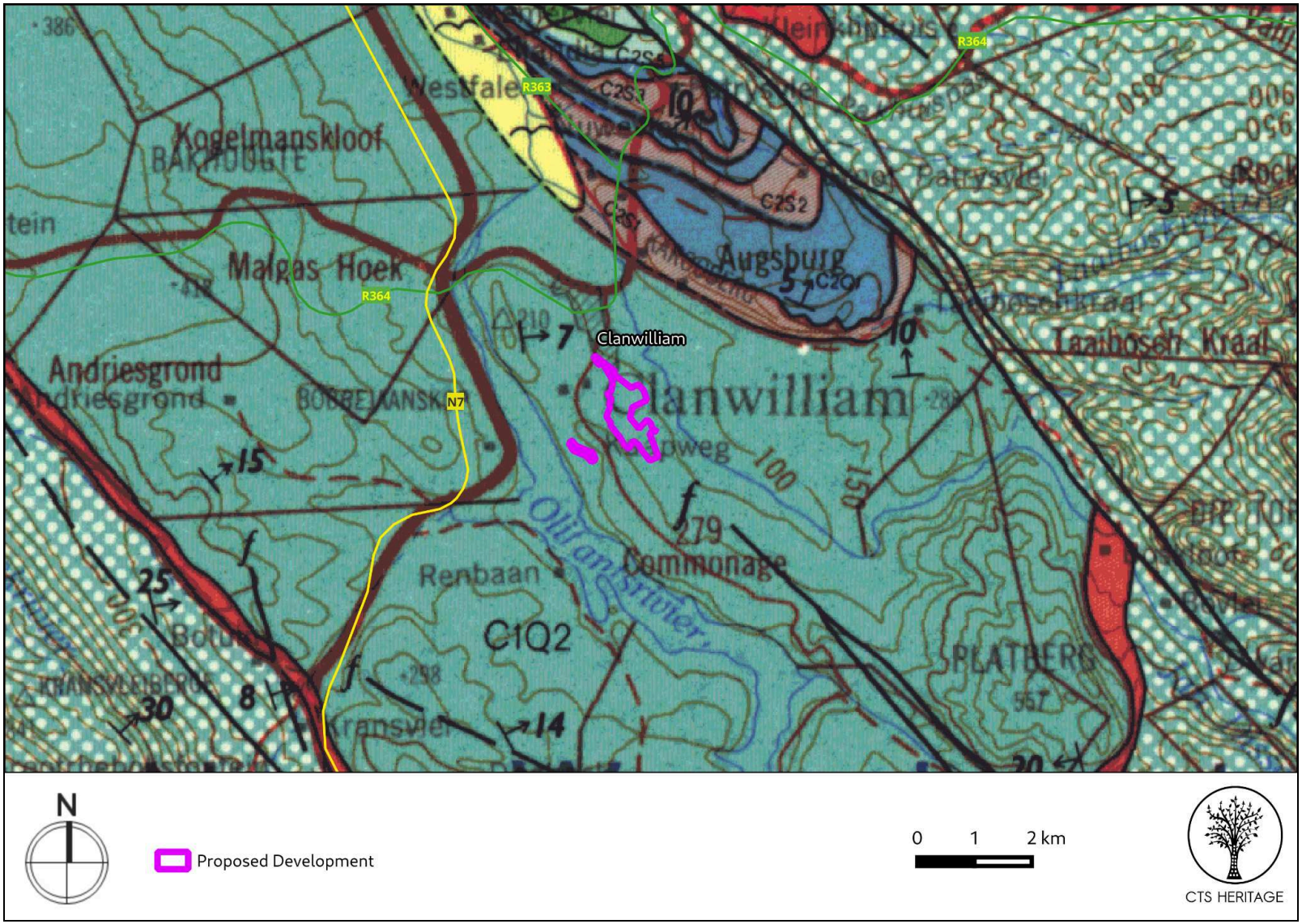



**Figure 4.2: Extract from the CGS 3218 Clanwilliam Geology Map indicating that the development area is underlain by C1Q2 Quartzitic sandstone with thin shale and conglomerate lenses in the Tafelberg Series.**

# 4. IDENTIFICATION OF HERITAGE RESOURCES

## 4.1 Built Environment and Settlement Character

***Regional Overview***

The town has expanded slowly, and the original pattern of settlement, with the bisecting main roads, and the encircling Olifants and Jan Dissels Rivers, still in evidence. Importantly, the area proposed for development is located on the far side of Clanwilliam from the Botterkloof Pass road which acts as a gateway from the N7 into the rest of the Cederberg area.

The environmental context and character of the Clanwilliam area is made up of the following primary and significant features and elements, which together constitute the cultural landscape of the area:

- The magnificent natural setting, compromising mountain backdrops and the green and fertile river valley;
- The rolling hills, which are intensively farmed, creating a pastoral landscape dominated by rooibos and citrus farms as well as open pastureland and tree belts/windbreaks;
- Watercourses, including valley streams – in the case of Clanwilliam the Olifants and Jan Dissels Rivers and their tributaries - as well as man-made dams and historic water channels;
- Evidence of human landscape modifications and patterns of land use over millennia, including seasonal grazing, pastoral uses and crop production;
- Remnants of pioneer transport and communication networks, including historic wagon routes;
- Significant Cape farmsteads and farm nuclei, primarily set hard-up against the mountain ranges in order to take advantage of their rain shadows;
- Towns, villages and smaller settlements with specific cadastral patterns that respond to the dominant natural features, and include dwellings, civic buildings and streetscapes (for instance Clanwilliam, Greyton, Riviersonderend, Napier, Hawston and Bredasdorp);
- Social history of the area, from the early Khoi pastoralists to the trekboers, colonists and post-apartheid societies.

The towns and villages of the Clanwilliam area have several structuring elements in common which seem to persist throughout the region:

- They are sited along water courses, where water flows for most of the year;
- They are sited along major roads, often laid over old wagon routes that were established during the 1700s;
- They are sited against the enveloping Mountain ranges, where the westerly winds create a rain shadow that makes these regions among the highest rainfall areas in South Africa. Because of the abundance of water and the fertility of the soils within the broad alluvial plain, this area is particularly suited to

agriculture, namely citrus and rooibos, and its overall landscape character is therefore a cultivated, pastoral one, sparsely dotted with settlements.

***Local Overview of the Clanwilliam Area***

In 1732, Pieter van Zyl was awarded the first farm in the Olifants River Valley. The original farm name was Jan Dissels Valley, named after a local pioneer and botanist based near Piketberg. The original farmers in the area planted crops on the banks of the Olifants River, which would irrigate the crops whenever it overflowed. This, however, led to the deepening and widening of the river, until it no longer overflowed, which in turn led to other water distribution techniques being researched.[2]

In 1808, there was a proclamation from the Cape Town Government to appoint a Deputy Landdrost who was to be based on Jan Dissels Valley (the first farm in the area). The deputy landdrost would be in charge of the "*Districts of the Oliphants River, the onder Roggeveld, Hantam, onder or Great Bokkeveld, and the Namacqua Land.*"[3] This went hand-in-hand with the declaration of this area as a sub-district by the Earl of Caledon. Most of the first families with farms in the area were either rich farmers looking for larger farms, descendants of well-known Cape families or Dutch East India Company officials from Sweden and northwest Europe. By 1814, sixteen of these families lived in the area.[4] The buildings indicated on the Settlers Map of 1820 (Figure 5.1) are located along what is now known as Park Road. The "Garrison" building most likely became the "Goal" indicated on the SG Diagram of 1925 (Figure 5.2), with most of the vernacular buildings along Park road belonging to this period.

The next significant growth spurt in terms of population occurred in 1820, with four parties of the 1820-Settlers arriving from Ireland.[5] 125 families on board the *East Indian* and the *Fanny* arrived in Simonstown on 30 April and 1 May 1820, respectively. These families mainly originated from Cork as well as other areas in Ireland. They were under the impression that they would be heading to the Zuurveld on the Eastern Border but due to internal politics at the Cape Colony at the time, they had been reallocated to the Clanwilliam area The four parties were granted four different surveyed areas, namely The Groot Seekoei, the Klein Valley, the Groot and Klein Patrys Valleys, and the Taaiboschkraal Valley (Figure 5.1).

After their arrival in Simonstown (then known as SImon's Bay), one of the party leaders, Parker set off across land with two companions to Clanwilliam to assess the situation, whilst the ships and remaining parties set off to Saldanha Bay from where they would be transported to Clanwilliam by cart. During the next few years, several of

[2] L. Van Vuuren (2010) Olifants River – Home to one of South Africa's oldest irrigation schemes, https://journals.co.za/doi/pdf/10.10520/EJC115900
[3]Besoeken, A. & Cairns, M. (1989) The Secluded Valley: Tulbagh: 't Land van Waveren, 1700-1804, https://www.vassa.org.za/wp-content/uploads/2024/11/Boeseken-Cairns-1989-Secluded-Valley-Facsimile-2024.pdf
[4] Kannemeyer, J.C. (1999) Leipoldt. 'n Lewensverhaal https://www.dbnl.org/tekst/kann003leip01_01/kann003leip01_01_0003.php
[5] McCleland, D. (2016) Rev Francis McCleland: An Interlude in Clanwilliam 1820 – 1825, http://thecasualobserver.co.za/rev-francis-mccleland-interlude-clanwilliam-1820-1825/

the 1820 Settlers were given the option to relocate to Albany near the Eastern Frontier. Most left, but several stayed behind. Most of the 1820-Settlers were not farmers but tradesmen, and Kannemeyer (1999) postulates that this is why several of the houses on Park Street have specific Georgian traits.

Murray (2012) quotes a section by R R Langham-Carter, "*British folk first settled in the Olifants River Valley in 1820.*" Furthermore, Murray (2012) notes that "*Jan Disselsrivier as it was called then was proclaimed on 1 February 1808 and renamed Clanwilliam in 1814 but a great tragedy was the razing of its official buildings in a fire during the South African War in 1901. Unfortunately, this resulted in a large amount of historical material being lost to posterity. The abovementioned two texts as well as a limited number of others are therefore exceptionally useful for establishing details of the history of Clanwilliam.*"

As noted in Fransen (2006), "*Clanwilliam long remained a tiny town without a church, and even after the arrival of the Irish, the missionary Johann G Leipoldt of Wupperthal counted only some fourteen houses, several of which were those of drostdy officials. Not unlike Tulbagh it consists basically of one street, about 600m long; at its east end forking into what used to be the road to the Cape and, left, Park Street. Main and Park streets roughly follow the course of the Jan Dissels River at a distance of some 400m.*" Fransen (2006) goes on to describe the position of the houses as limited to one side of the street only - "*here they were placed on the river side of the street, with their backs turned to the street, a unique and charming feature.*" He goes on to note that "*Right in front of their steps ran a vrypad, a free passageway almost like the level contour path of many mission towns, and below it the still-extant irrigation furrow to water the narrow lands down to the river, cutting through the properties.*"

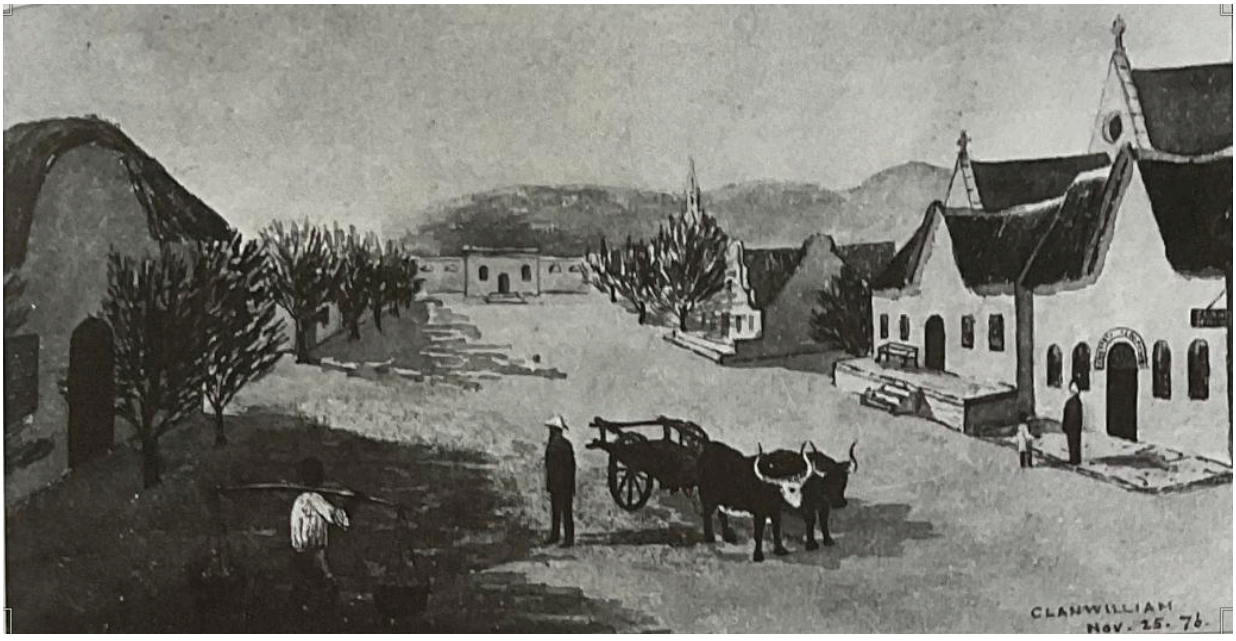



**Figure 5.1.1: Main Street in watercolour (1876) by CH Joberns - Chaplain to the Bishop of Cape Town (from Fransen, 2006)**



**Figure 5.1.2: Main Street by Ravenscroft (1905) - almost the same view as by Joberns (from Fransen, 2006)**

***Sederville (or Cedarville)***

Fransen (2006) describes the growth of Clanwilliam beyond its original one-street confines. "*An onderdorp - the 'Coloured' area that became an omni-present part of any Cape dorp - developed in the fork between Park Street and the Old Cape Road, behind the goal. It was laid out informally, but in roughly parallel rows of thatched houses, and until not too long ago counted as one of the best preserved of such districts. As in so many mission villages, nearly all these vernacular structures have since been "moderninsed*". The only one still surviving, elongated and multi-unit, should be preserved at all costs." As noted in tour notes drafted for a VASSA outing to the Sandveld in 2003, Cedarville is the name of this township in Clanwilliam. The last remaining structure noted by Fransen (2006) is noted as Site 11 in Figure 6.1.1 and 6.1.2.

Cedarville has four distinct sections running from the "old town", that is closest to Clanwilliam, next the "Kerriekamp", so called because of the colour of all the houses, further up the hill is the "RDP housing" followed by a "squatter area". The old town is located immediately adjacent to the area proposed for development. Although many of the original houses have been demolished or altered so much that any old structure is unrecognisable there are a few truly vernacular dwellings still in existence. Some of these are kept in excellent condition, others not so. One house built only fifty years ago has a thatched roof supported by a traditional timber structure and constructed in this way because of its practical nature, cool in summer and warm in the winter[6]. Site 11 listed below is one of these remnant vernacular dwellings still evident in Sederville.

[6] https://www.vassa.org.za/wp-content/uploads/2010/09/SANDVELD-TOUR-NOTES.pdf

Clanwilliam – like many other towns – suffered when the community of Sederville was moved and their houses demolished. It is also the home to the Clanwilliam Living Landscape Project, which presents an interesting case study in how to involve local communities in the preservation of both tangible and intangible heritage resources[7].



**Figure 5.1.3: Street in "Onderdorp" or Cedarville from Fransen (2006) of the remaining row and extant longhouse (Site 11)**

***Clanwilliam Commonage***

Based on the available information, the area proposed for development was likely the historic Clanwilliam commonage as mapped in Figure 5.2 According to Viljoen (2011) "*The Rev. Smit moved to Clanwilliam town and established the new Mission Station, now St. Stephan's, in the part of town now known as Cederville, located at the east end of the village, north of the old Cape road and adjacent to the Commonage. At this time, the only large areas of open Crown land at Clanwilliam were the village Commonage and a piece of outspan land, used by residents of the town (Nell 1997:23-24). Lot 1320 also abutted the Clanwilliam Commonage.*"

In 1894, the property abutting the commonage's lease had expired and Rev. Smit's replacement, *"Rev. Leipoldt appealed to the authorities on behalf of the villagers to add Lot 1320 to the Commonage. He argued that there*

[7] https://www.theheritageportal.co.za/notice/all-systems-go-heritage-symposium-2015

*was not sufficient winter grazing on the existing Commonage to meet the villagers' needs and that "this mountain" (i.e. Platberg) was the only place where villagers could collect firewood which was difficult to obtain from farmers. These arguments carry significant sub-texts: firstly that the villagers who objected to the sale of Lot 1320 were landless people, i.e. they did not own farmland, and secondly that the villagers had become dependent on collecting firewood on this land, implying that they had free access. It is my impression that the villagers referred to are in fact members of the coloured community and that the sub-tenants of Lot 1320, September and Titus, as members of this community, had been tolerant of these practices and possibly profited from them."* (Viljoen,2011). The appeal was successful, and the commonage was extended from behind Park Street to Platberg.

The next description of the Clanwilliam Commonage also comes from Viljoen's MPhil, "*These intervening years were historically turbulent: the outbreak of the South African ("Boer War") threw the country into turmoil in 1899. Clanwilliam town became a British camp: the Clanwilliam School was used as hospital and administrative centre and also accommodated the officers (Feeskomitee (b):30). There was a supply depot and field hospital on the commonage beyond Park Street (Langham-Carter 1993:29). Just before Christmas in 1901 there were skirmishes on the Pakhuis Pass. The war forced Dutch and British inhabitants to take sides despite the fact that they had always got on well and that, according to Langham-Carter "relations between the troops and the townsfolk were cordial" even through the postwar years when martial law prevailed (Langham-Carter 1993:31). The local coloured population acted as mule drivers and messengers for the British forces (LanghamCarter 1993:31) and served in the Native Convoy and Town Guard. After the war they found that both farmers and townspeople appeared to be opposed to them due to their involvement in the conflict (Nell 1997:87)."*

The archaeology field assessment did not identify any visible evidence of the supply depot and field hospital mentioned above, although buried evidence of this infrastructure may be present beneath the ground surface.

It is important to understand the broader cultural landscape setting of Clanwilliam itself, as the subject site is located very close to the town. This will enable a better understanding of the role of the site within the broader cultural landscape of the town. Several maps and documents have formed the basis for this analysis, and all show the interplay of the urban and the landscape: an 1820 map of Clanwilliam (Figure 5.1), the 1840 Surveyor General Map of the town and surrounds (Figure 5.2.1), the 1925 SG Diagram of the town (Figure 5.3) and the late 20th century topographical map for the area (Figure 5.4). The overlay and analysis of these documents allows for a picture of the evolution and development of the town during the course of the 19th and 20th centuries.

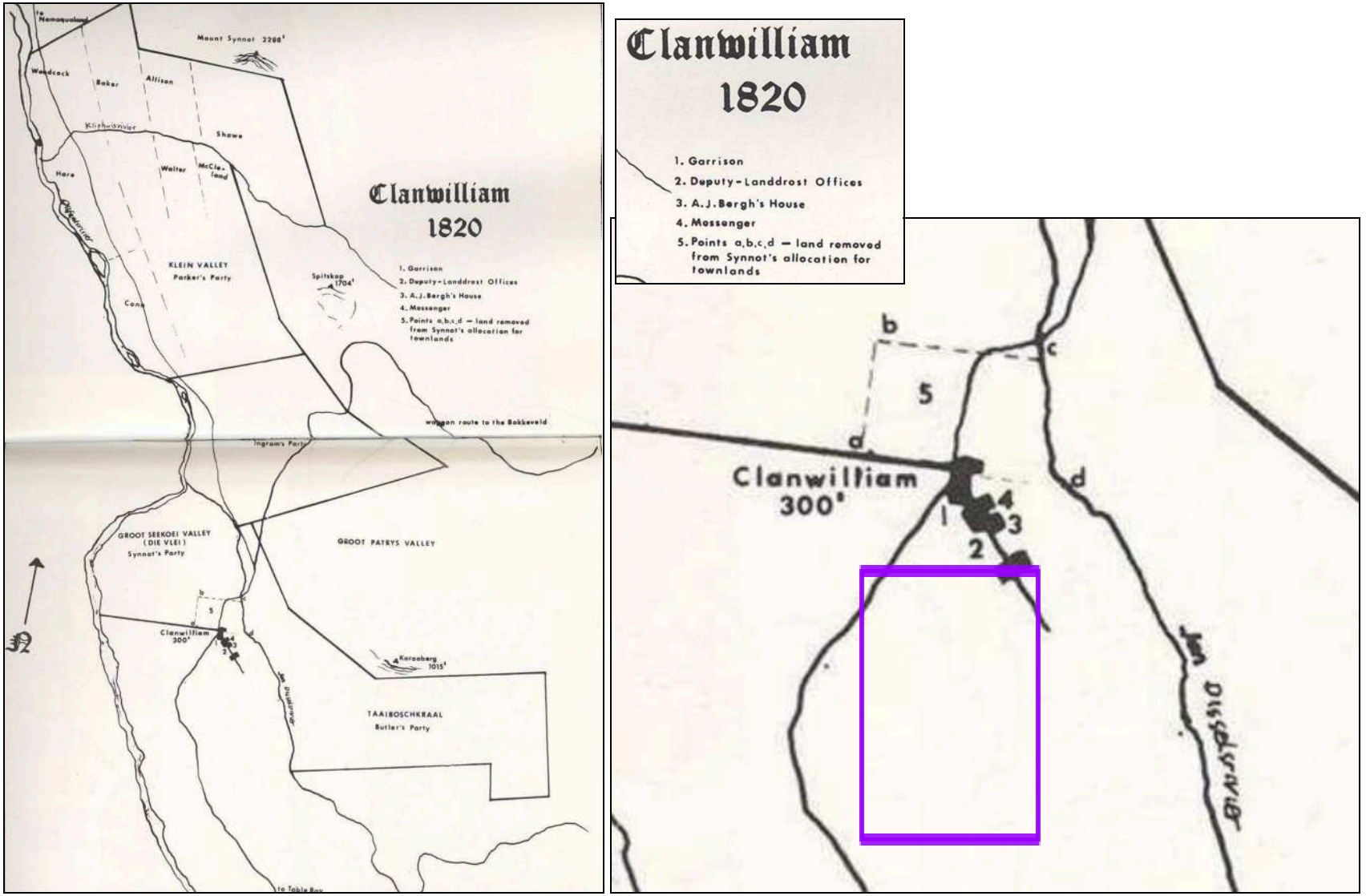



**Figure 5.2.1: map of the Clanwilliam area showing the allocations of land to the Irish settlers and the beginnings of the town of Clanwilliam (Dickason 1973: between pp. 20 & 21) (Taken From ACO, 2005, SAHRIS NID 6420) - notional position of proposed development area indicated in purple**

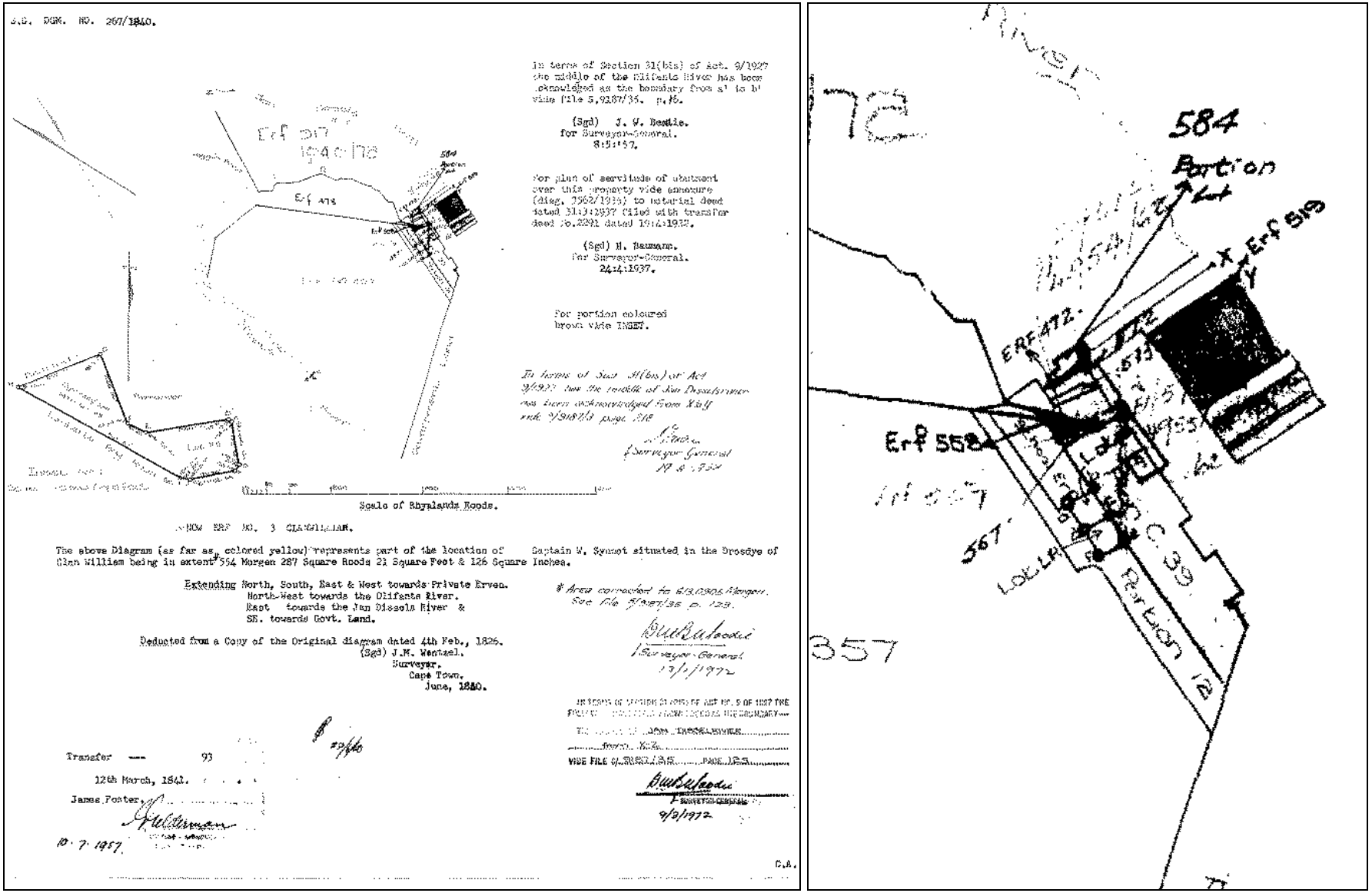



**Figure 5.2.2: SG Diagram (1840) and close up of the original town layout**

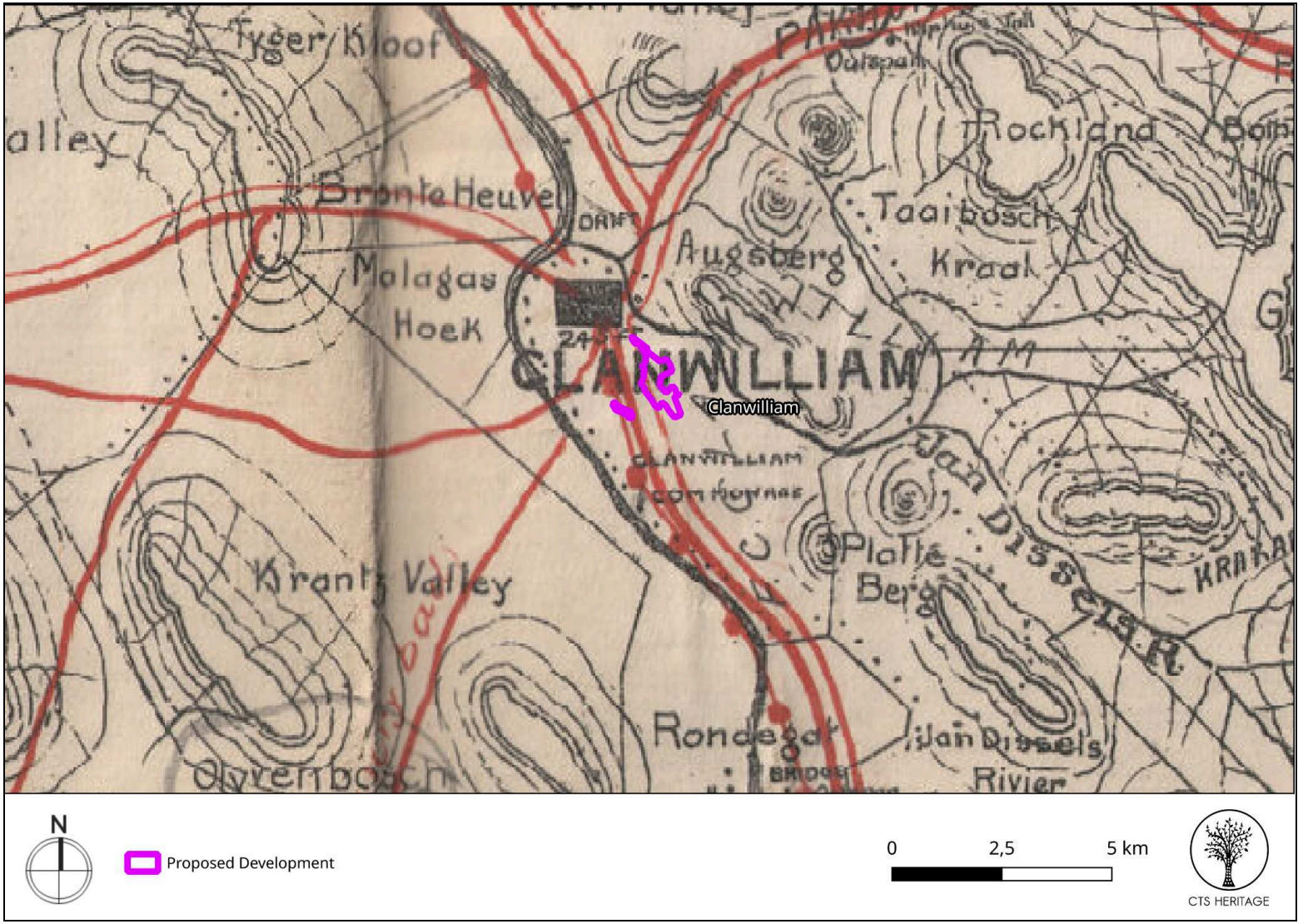



**Figure 5.2.3: Clanwilliam Map (1901) with approximate location of the proposed development[8] relative to the Clanwilliam commonage**

[8] William and Yvonne Jacobson Digital Africana Program at UCT: Clanwilliam (1901), https://ibali.uct.ac.za/s/jacobson-africana/item/96997#lg=1&slide=0

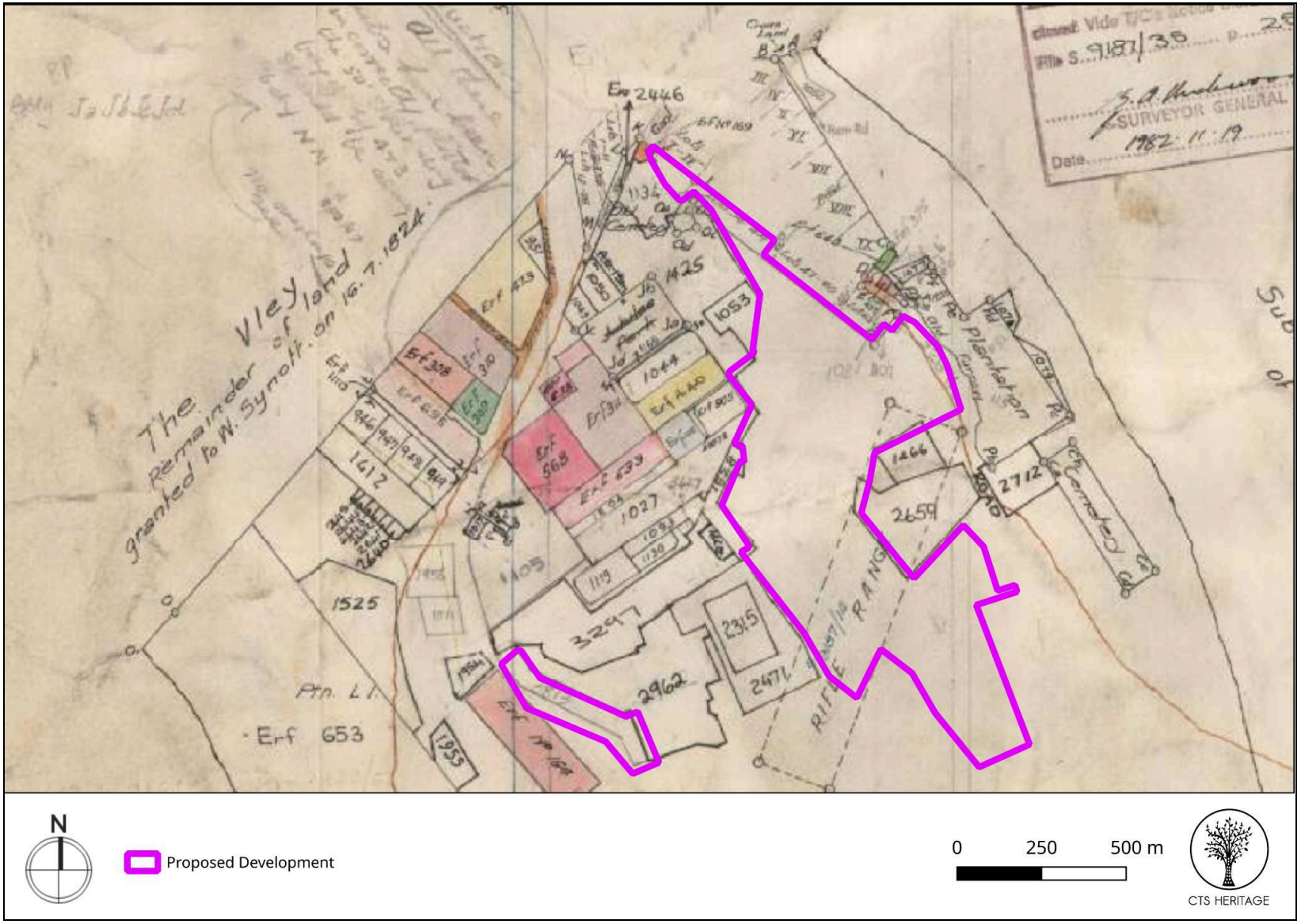



**Figure 5.3 SG Diagram Outline Plan of Clanwilliam Allotment Area (Surveyed 1923, Granted to the council of the municipality of Clanwilliam in 1925)**

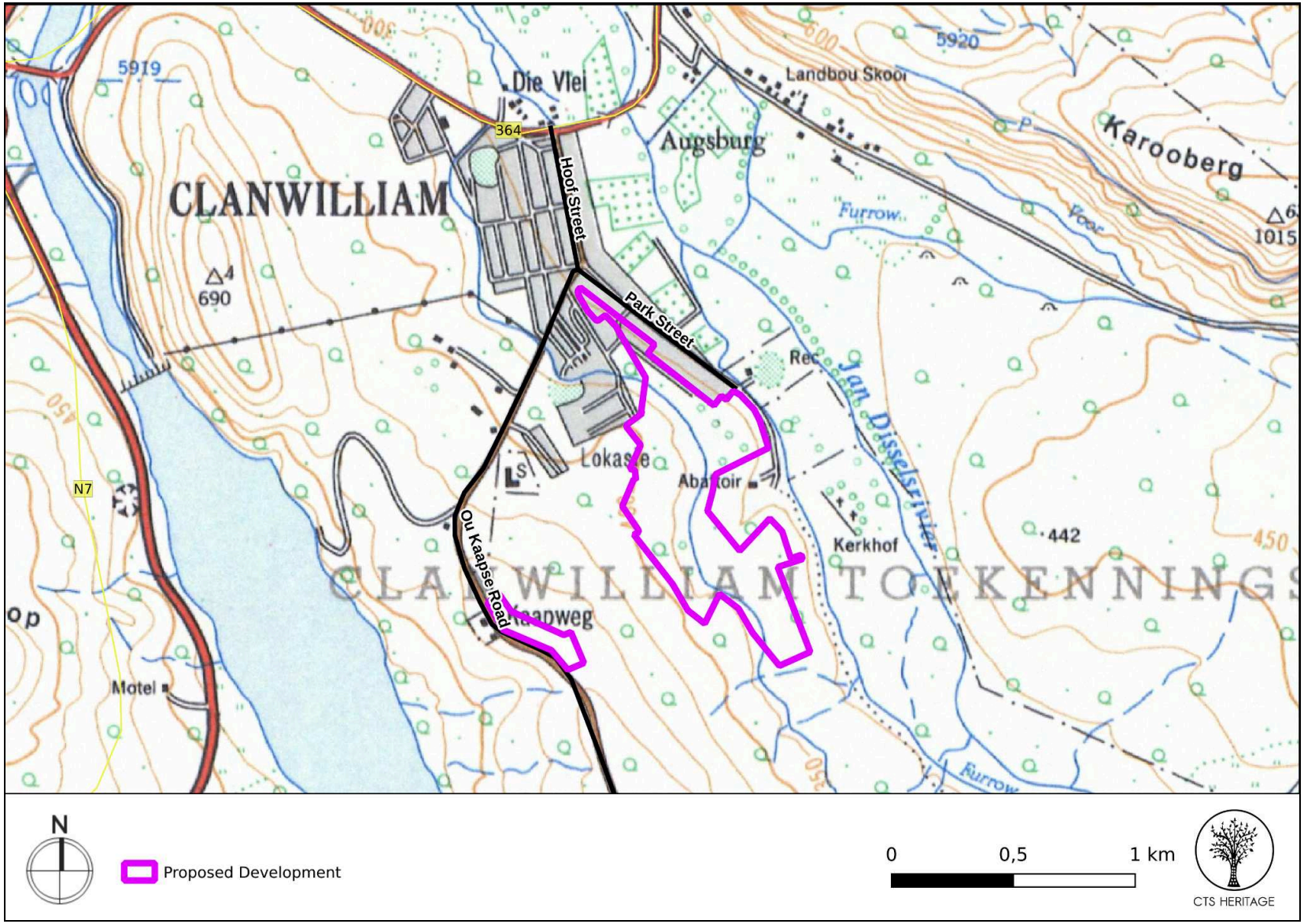



**Figure 5.4 First Edition Topo Map**

***Topography***

The meeting of the Olifants River and the Jan Dissels River in the Clanwilliam Valley is geographically distinct, being defined to the east by the Cederberg, from which the tributaries that feed the river emerge, and with steep hills defining the course of the rivers to the south and east. At this site, the valley floor slopes eastwards, down towards the Jan Dissels River. The subject site, in purple, is located within a geographically well-defined section of the valley, defined by the 100m and 120m contours.

The area proposed for development is located mid-slope. The thick black line in Figure 5.5.2 below indicates the position of the proposed development assessed herein. Existing historic structures are located downslope of the area proposed for development. Based on the information available, the proposed development is unlikely to be visible from the historic Park Street.

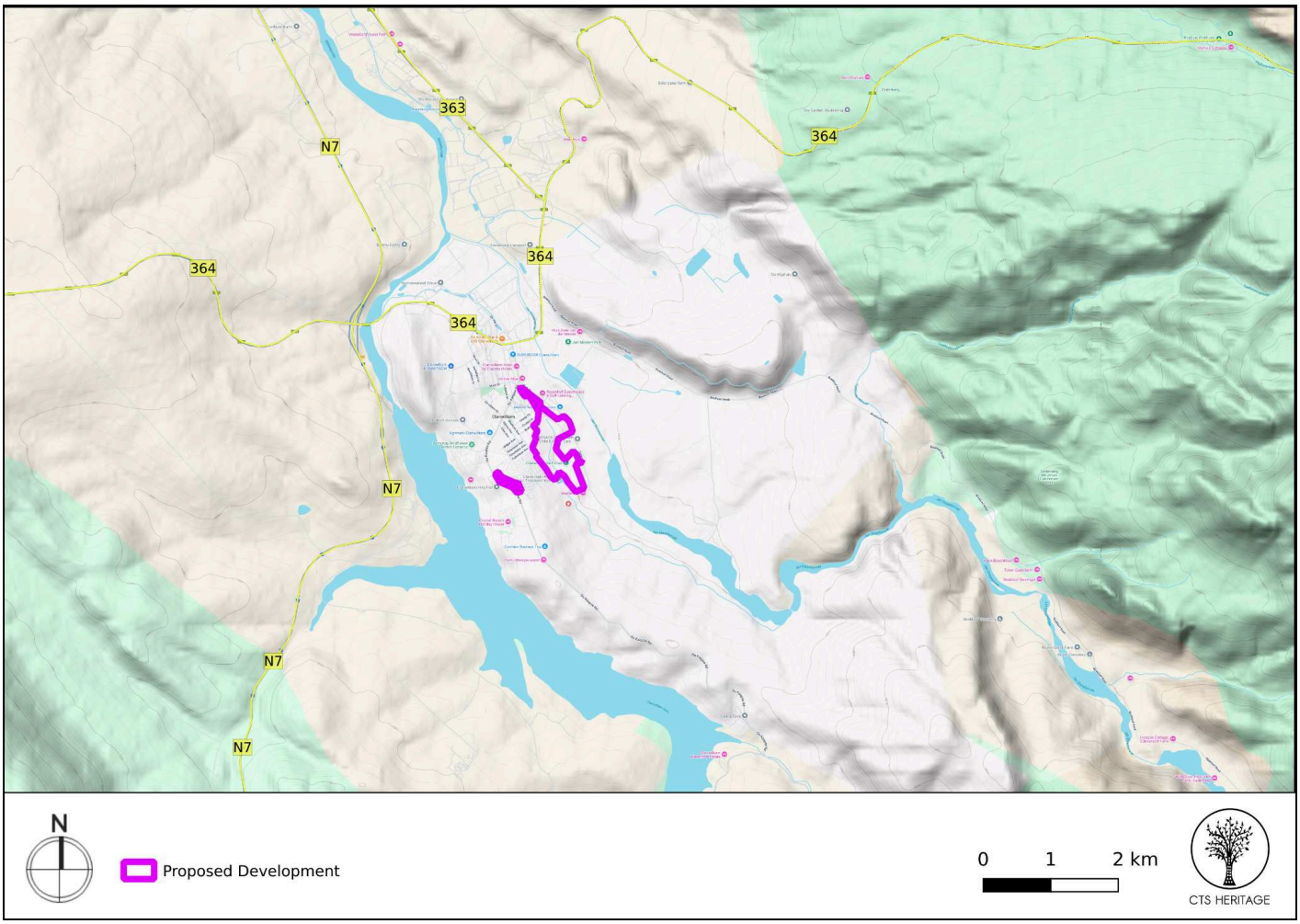
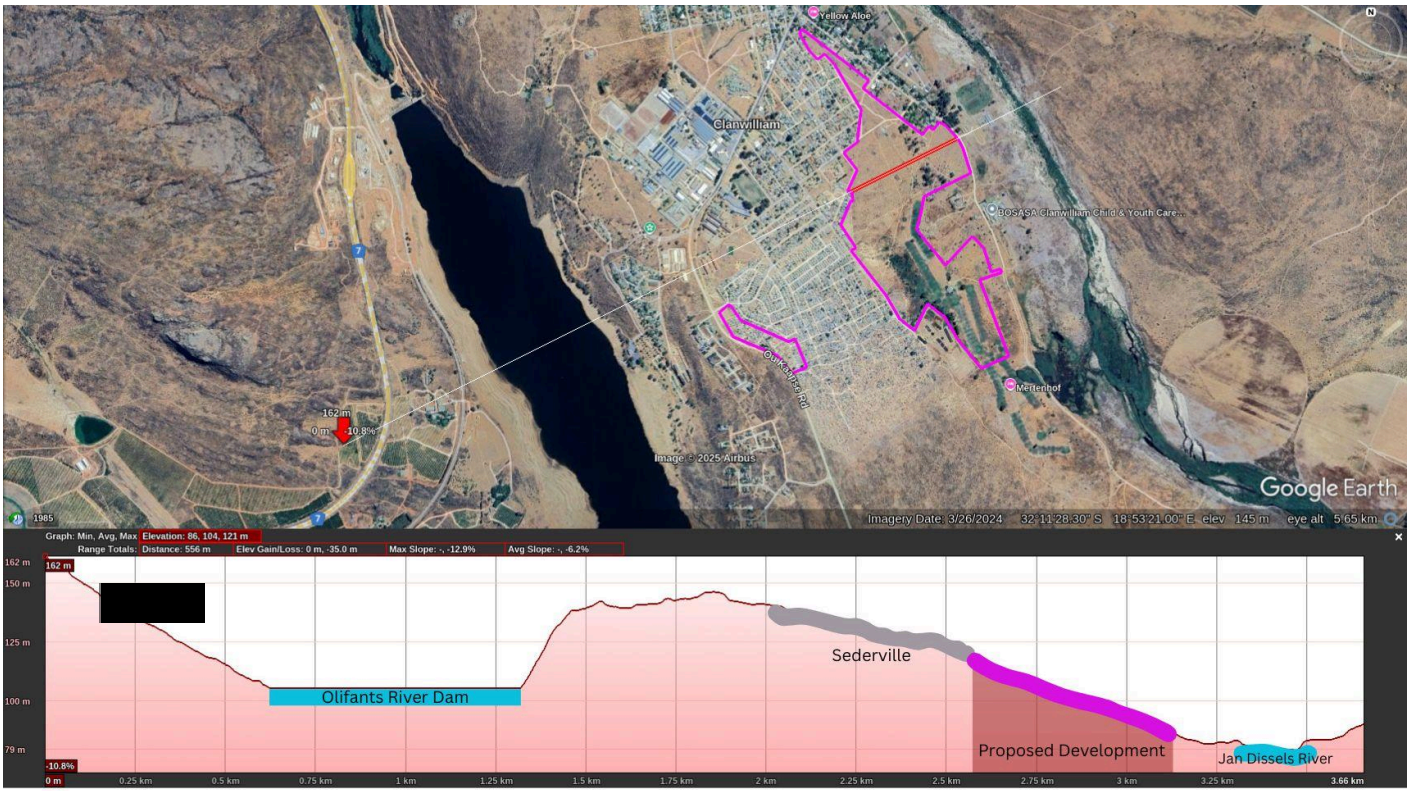



**Figure 5.5.1 Terrain Map indicating topography and river systems**




West Side **Figure 5.5.2: Slope of the assessment area** East Side

### *Movement Routes*

The valleys provided a flatter area through which to move. In addition, when travelling by ox wagon or horse, the availability of water was critical. It is no coincidence, then, that the historic road approach to Clanwilliam was along the valley floor along Ou Kaapse Road which follows along the historic alignment of the Olifants River. It was only in the later 20th century, when the N7 was built, that the town's approach was from the north. The area proposed for development is located on the far side of Clanwilliam from the Botterkloof Pass road which acts as a gateway from the N7 into the rest of the Cederberg area.

### *Rivers and Water*

According to Dalberg (2019), "*Clanwilliam is situated between two rivers, the Olifants—with its catchment area starting in the Cederberg mountains, near Ceres—and the Jan Dissels river to the north of the town. The rivers start and end in totally separate catchment areas. This might explain why the Jan Dissels kept flowing through the height of the 2015-2017 drought, while the Clanwilliam dam (which sits on the Olifants river) sat at only 39.3% capacity in August 2017. Currently the Jan Dissels canal is piped, flowing hidden directly below the town's peripheral (RDP) community.*" (Figure 5.6.2).

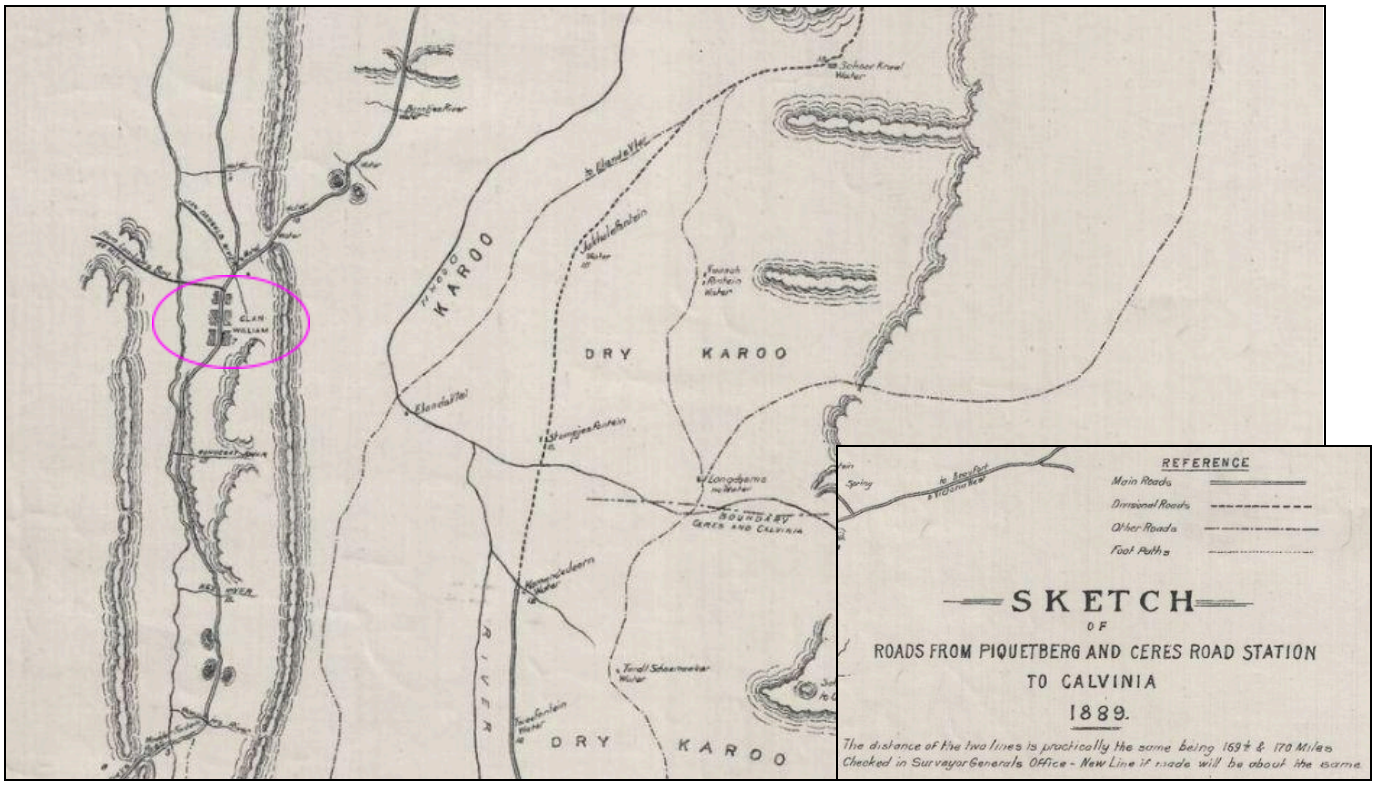



**Figure 5.6.1 Roads and Transport Map (1889) from William and Yvonne Jacobson Digital Africana Program at UCT[9]**

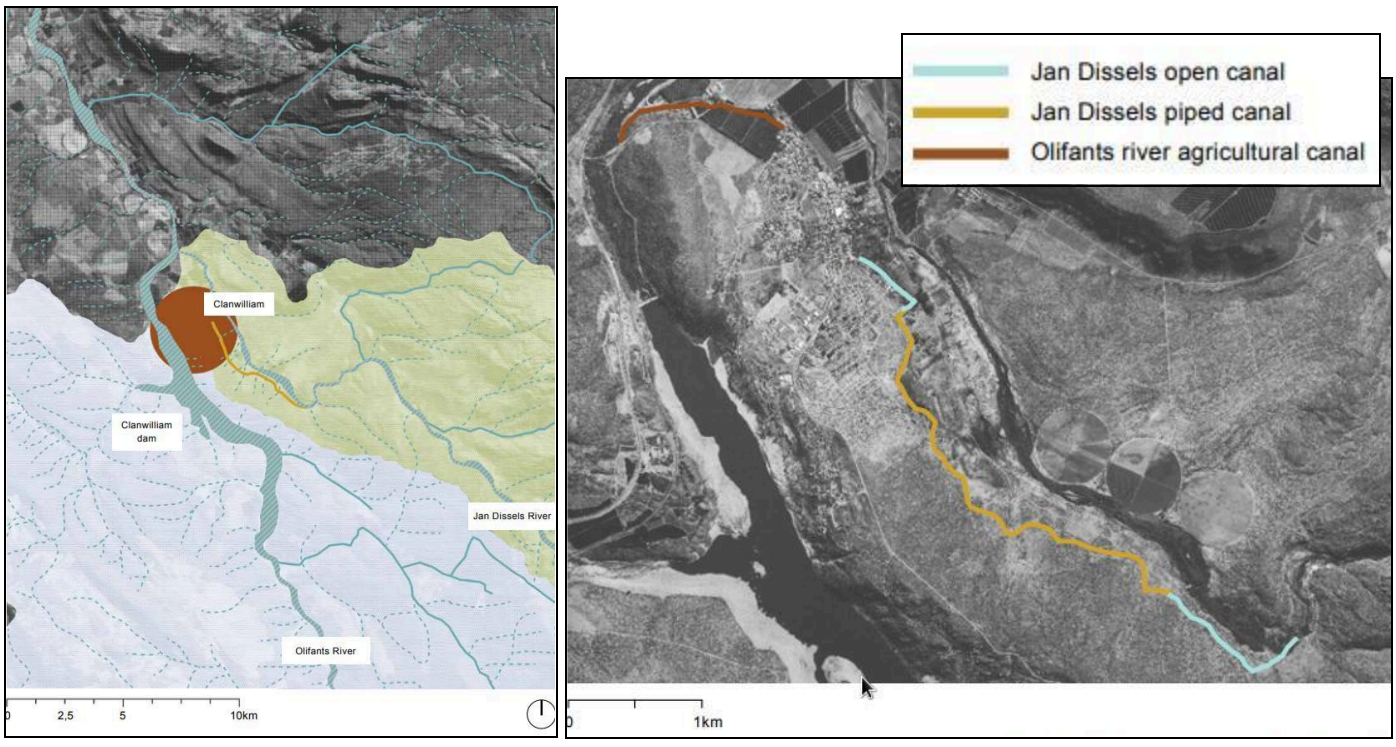



**Figure 5.6.2 River map from Dalberg (2019) page 20 and 21**

[9] Sketch of roads from Piquetberg and Ceres Road station to Calvinia, 1889, https://ibali.uct.ac.za/s/jacobson-africana/item/96220#lg=1&slide=0

The Clanwilliam leiwater is fed from the Jan Dissels River in the north, an existing reservoir within the town as well as a piped canal from the Jan Dissels River which runs along the edge of this area proposed for development. No impact to the historic leiwater or its access to water is anticipated as a result of this proposed development (Figure 5.6.2 and Figure 5.9). A man-made furrow is visible on the Aerial Image of Clanwilliam from 1948 and 1960, and is evident on the First Edition Topography map (Figure 5.4) however the furrow is no longer visible on the 1971 Aerial Image. It is likely that this furrow was piped or destroyed with the expansion of Clanwilliam ton in the 1960's.

***Clanwilliam Dam***

As noted in an article written for The Water Wheel September/October 2010, the Olifants River is home to one of the country's oldest irrigation schemes. "*Known today for its rooibos and wine, the hamlet of Clanwilliam lies at the foot of the Cederberg Mountains in the Western Cape. Regarded as one of the ten oldest towns in the country, Clanwilliam's beginnings go as far back as 1660 when a team of Dutch explorers sent out by Jan van Riebeeck first reached the Olifants River. The river was named by Jan Danckaert, the Dutch cadet in charge of the party, who, upon entering the valley, saw 300 elephants frolicking on the riverbank. The first farm in the Olifants River valley was awarded to Pieter van Zyl in 1732, and by the late eighteenth century small-scale irrigation was well established. Originally known as Jan Disselsvlei (after Jan Dissel, a local pioneer), the area first formed part of the district of Stellenbosch, but was declared a sub-district of its own in 1808 by the Earl of Caledon, then Governor of the Cape. In 1814, Caledon's successor, Sir John Cradock, renamed the area after his father-in-law, the Earl of Clanwilliam. Originally, farmers planted crops in the fine alluvial deposits on the banks of the Olifants River. These crops would be irrigated every time the river overflowed (the first flood ever recorded occurred in the Olifants River in 1822). However, vast destruction of riparian vegetation caused the river's banks to widen and deepen, until after a while it rarely overflowed. Between 1822 and 1870 the river had widened from an average 29 m to about 38 m.*"

"*On 16 October, 1858, Patrick Fletcher left Cape Town for Clanwilliam on orders from the Colonial Secretary to undertake one of the first surveys for a potential large irrigation scheme in the Cape. He travelled to the Olifants River mouth and surveyed the latter upstream for about 37 km. His report, which included estimates for two possible dams, was submitted in 1860. Around 120 people were living around the irrigable portion of the Olifants River at that time. According to Fletcher, however, the farmers were not very successful.*

*Meanwhile, local farmers started their own irrigation initiatives, including the use of steam pumps, windmills and bucket pumps (bakkiespompe) to boost their production. During the following decades the farmers would appeal to the government time and time again for assistance in various forms without success. Finally, in 1907, the Cape government asked the Director of Irrigation, Francis Edgar Kanthack, to determine the possibility of an irrigation scheme on the Olifants River.*"

Following the construction of the Bulshoek Dam in 1924, water demand soon again outstripped supply, especially during the hot summer months. "*A suitable site was found just outside Clanwilliam. Work started with the construction of staff housing and the erection of machinery in September 1932. As with many water infrastructure schemes at the time, only white workers were employed on the construction of the dam. However, as the new dam would inundate part of the ClanwilliamPiketberg Road, a new bypass had to be created, and here use was made of 'coloured' labour. At the height of construction (1934) an average of 428 whites and 366 coloured workers were employed. White workers earned 4 shillings and eight pennies a day, while their coloured counterparts earned two shillings and 6 pennies a day. In his 1934 report, Director of Irrigation Alfred Lewis complains about the productivity of the white workers. Recruited by the Department of Labour, many of these workers probably had no construction skills (in subsequent reports the aversion of many of these workers to hard, physical labour is also noted). Staff housing comprised wood houses with tin roofs, along with a combined mess hall and entertainment area. Meals were supplied to workers daily at a cost of one shilling, and the mess hall was managed by the farmer on whose farm the dam was being built. By December 1933, the foundations had been completed and placing of concrete started in January 1934. Clanwilliam Dam was completed in March, 1935.*"

***Urban Development***

As noted by Dalberg (2019), "*Clanwilliam is the Cederberg's oldest town, and is the seventh oldest in South Africa. Formed between 1804 and 1808 (exact dates are unknown) it became its own sub-district in 1808, having been classified under the Stellenbosch district until then. In 1854, other towns slowly started establishing in the Cederberg area, with Ceres being founded in 1854 and Citrusdal in 1916. Both these towns, as was the case for most others in the area, were established to service the local farms.*"

Clanwilliam exhibits the classic features of a 'river ribbon' or 'linear settlement' pattern development. Most of the original houses were centred around the Jan Dissels River (Figure 5.8.3), with long narrow strips of land stretching down the slight incline towards the river, with the houses being located at the top of properties away from flooding risk.

Its main streets (Hoof and Park) typically follow the river course with a strip of narrow garden erven running down to the Jan Dissels River along a distance of just over 1km. Its houses are concentrated on the upper side similar to Church Street, Tulbagh and Long Street, Montagu. The ubiquitous NG Kerk is positioned at the meeting point of Hoof Street, Park Street and Ou Kaapse Road with its characteristic wide gables and steeple being a major landmark within the town. The 1820 plan of the town below shows Park Street with four structures established along its alignment, including the Garrison which is likely to have evolved into the old Goal. Of these original buildings, the old Goal and the landdrost offices appear to remain.

Park street comprises a mixed collection of mid to late 19th early 20th century houses and other structures being architecturally dominated by its upper side with buildings rising above the street with raised stoeps in response to sloping terrain. With the development of houses on the lower side, these are generally set below the street level.

While each town established during this period has its particular history, they all showed broad commonalities in the way that they were laid out. Todeschini highlights a "*relatively clear and simple model for settlement formation that comprised a few major elements that gave it spatial, developmental and experiential order*":

- Astute site selection relative to fundamental needs such as potable water and the purpose of the settlement (military, agricultural, religious etc.);
- The application of a grid layout for the subdivision of land into private and public domains;
- The definition of road networks for access between and within settlements;
- The disposition of important public spaces, such as market squares and outspans;;
- The disposition of notable social, cultural, judicial government and administrative institutions such as churches, landmark pivots within the townscape, graveyards and so on;
- The application of this abstract model to specific contexts and unique site constraints and features, such as riverbeds and rocky outcrops.

The interplay and imposition of these elements can be clearly seen in the layout of Clanwilliam, as discussed above. Clanwilliam shares some key commonalities with other small historic towns in the Western Cape in terms of settlement pattern and urban structuring:

- The town was established at an intersection of streets, with the church occupying the focal point at the intersection.
- The first properties were allotments or "water erven", with long gardens located between the houses, position along the street edge, and the Jan Dissels River below. This pattern occurred along the north-south axes of the historic settlement;
- The growth of a gridded townscape to the north-west, arising from the layout of the initial water erven allotments;
- The position of the town strung out along the contour, allowing for a gentle gradient down towards the river;
- The location of the town along the western slope of the river valley. This pattern has been eroded during the 20th century;
- The position of the settlement nestled below the tall mountain range, a slightly defensive position within the landscape. This pattern has also been somewhat eroded during the 20th century due to the location of the N7 and the Clanwilliam Dam.

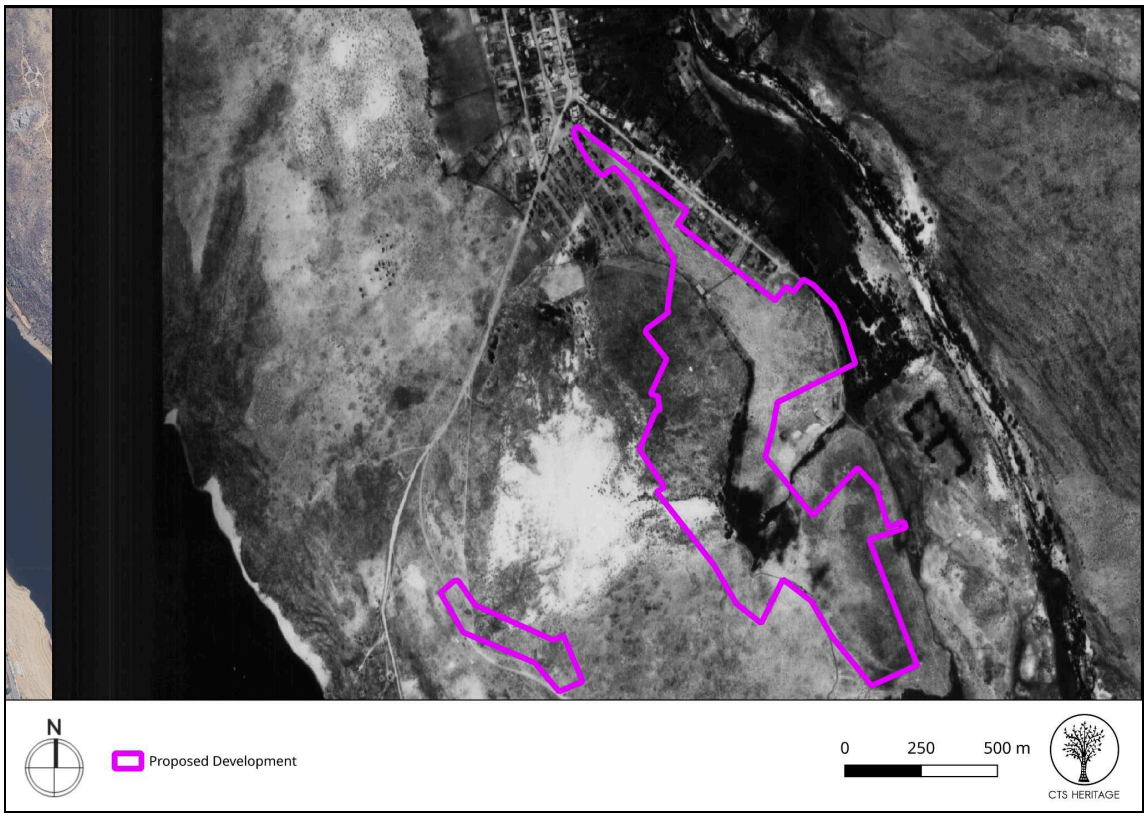



**Figure 5.7.1 Historic Aerial photograph of Clanwilliam (1948)**

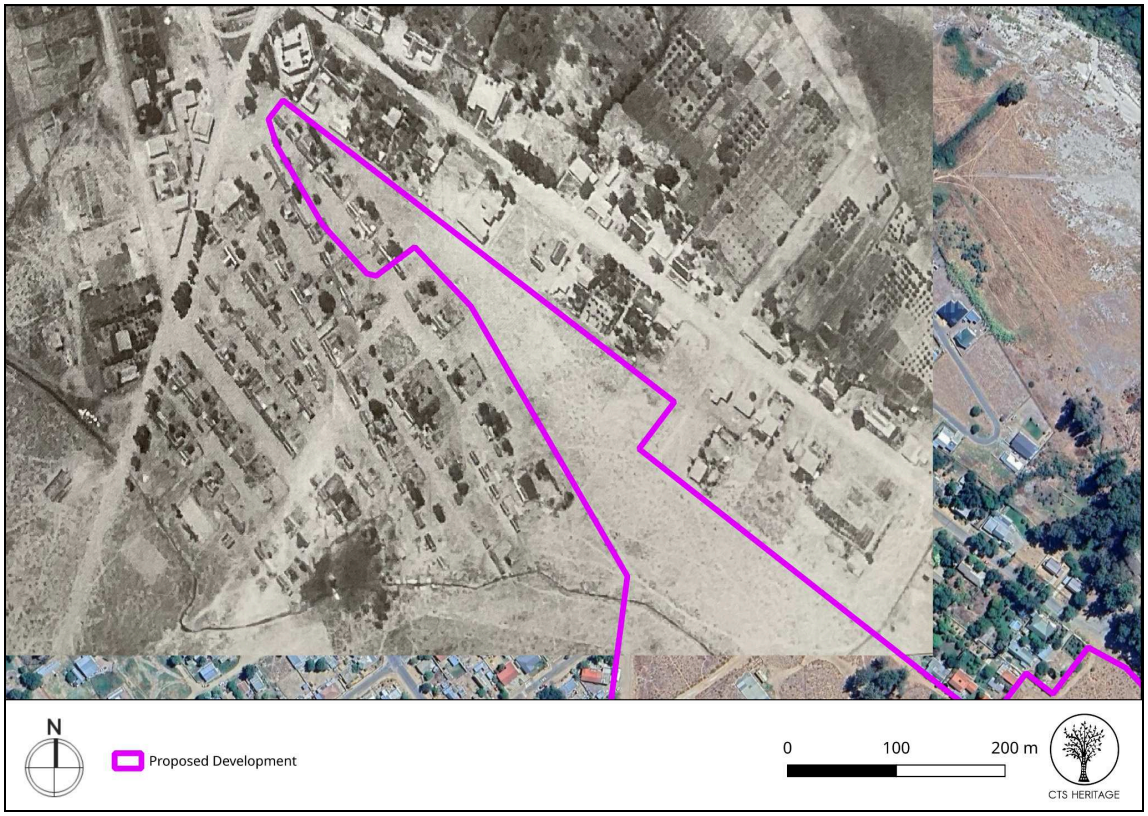



**Figure 5.7.2 Historic Aerial photograph of Clanwilliam (1948, From Fransen, 2006)**

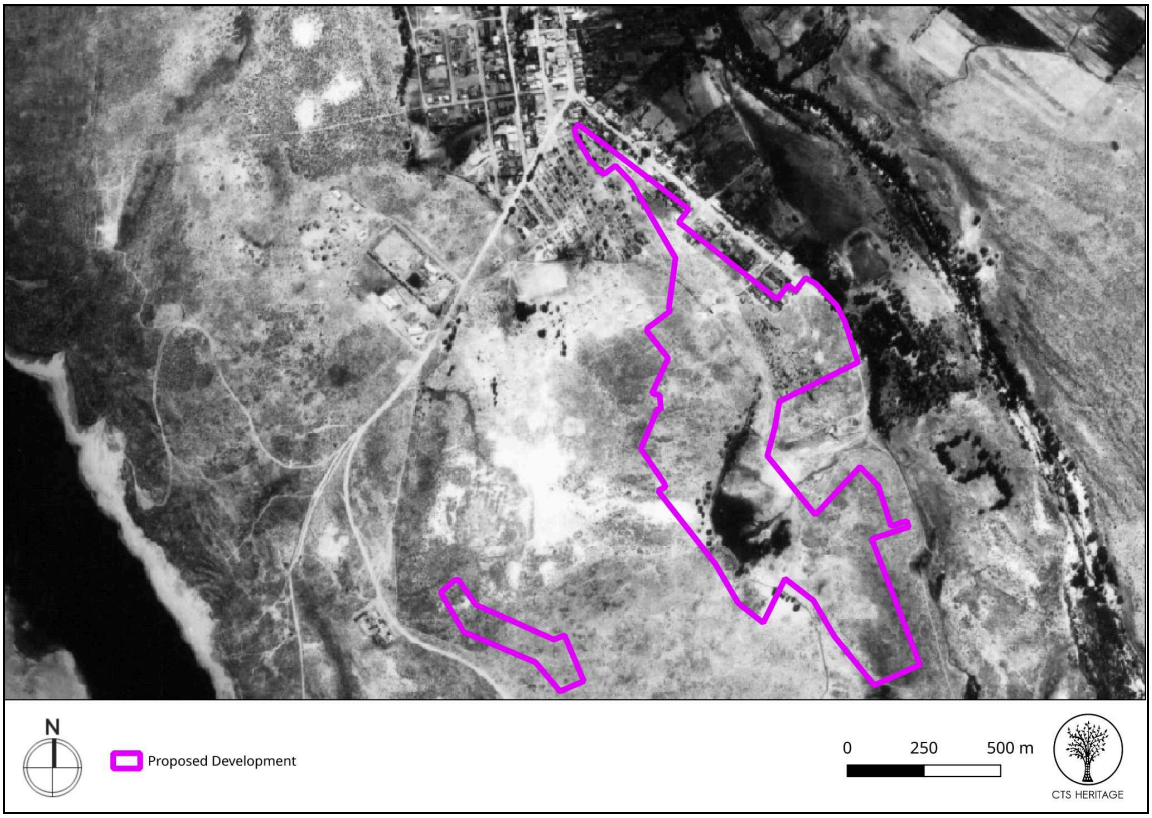



**Figure 5.7.3 Historic Aerial photograph of Clanwilliam (1960)**




**Figure 5.7.3 Historic Aerial photograph of Clanwilliam (1971)**

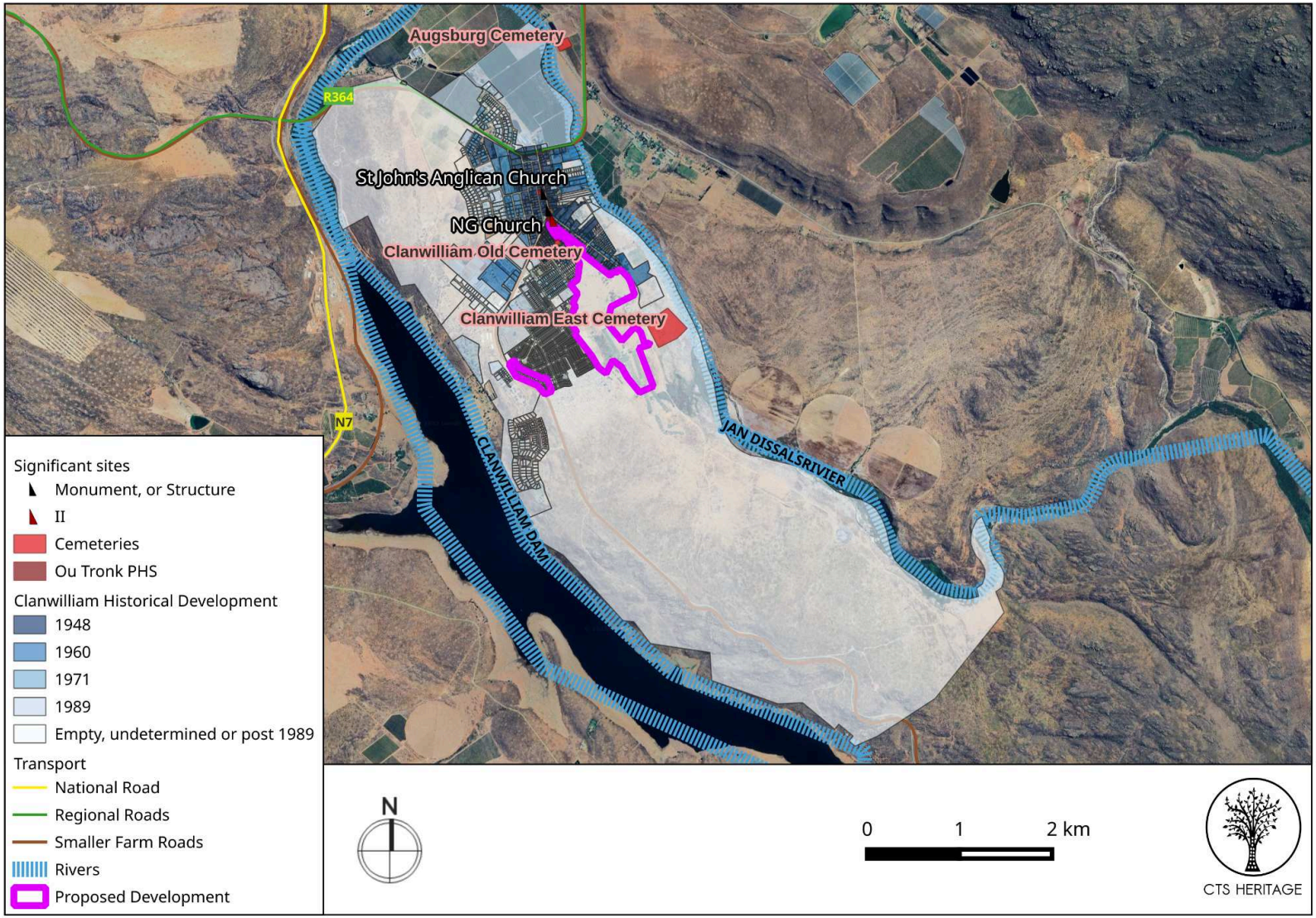



**Figure 5.8.1: Town Development Map indicating how the town developed over time based on aerial photographs**

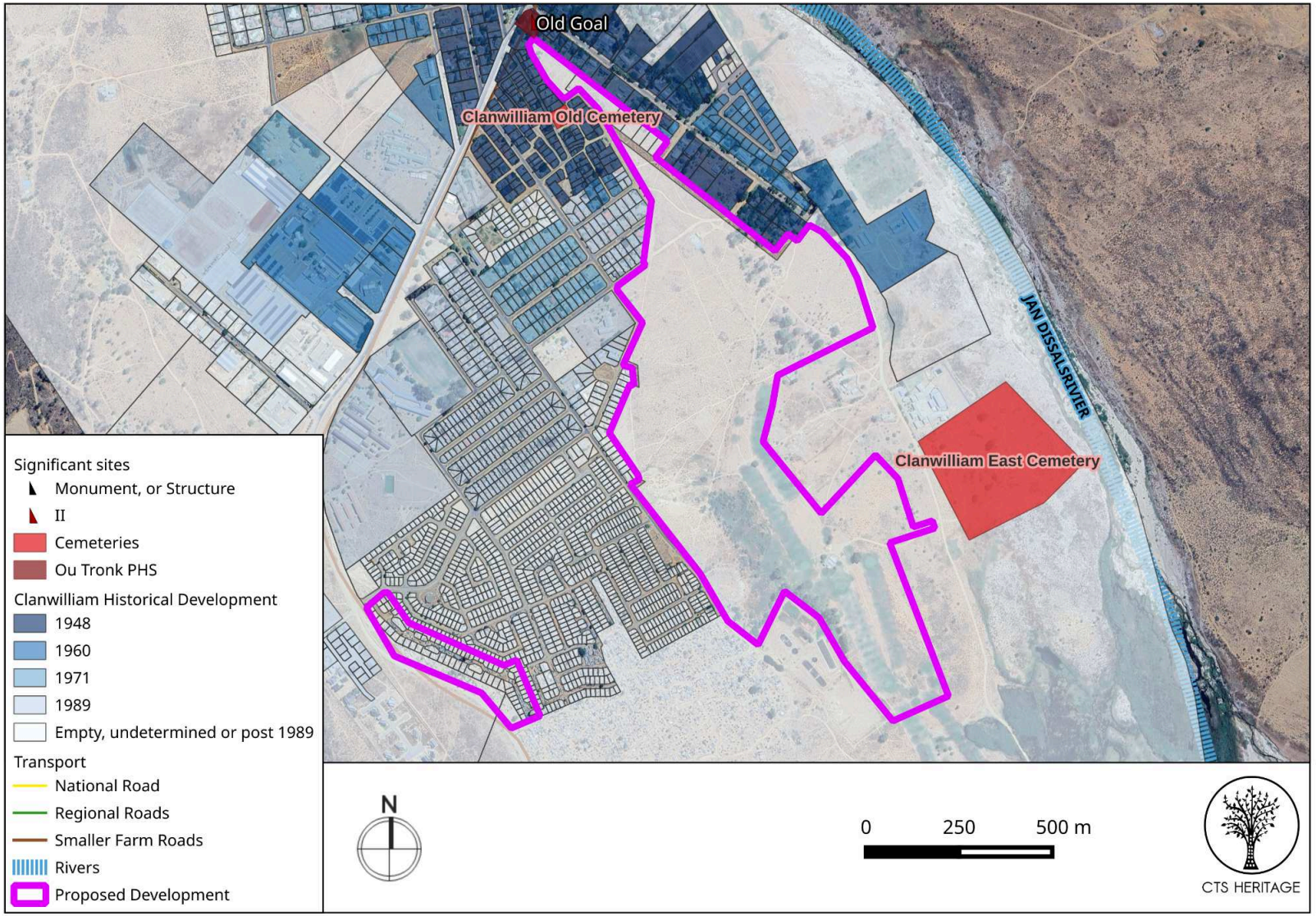



**Figure 5.8.2: Town Development Map indicating how the town developed over time based on aerial photographs**



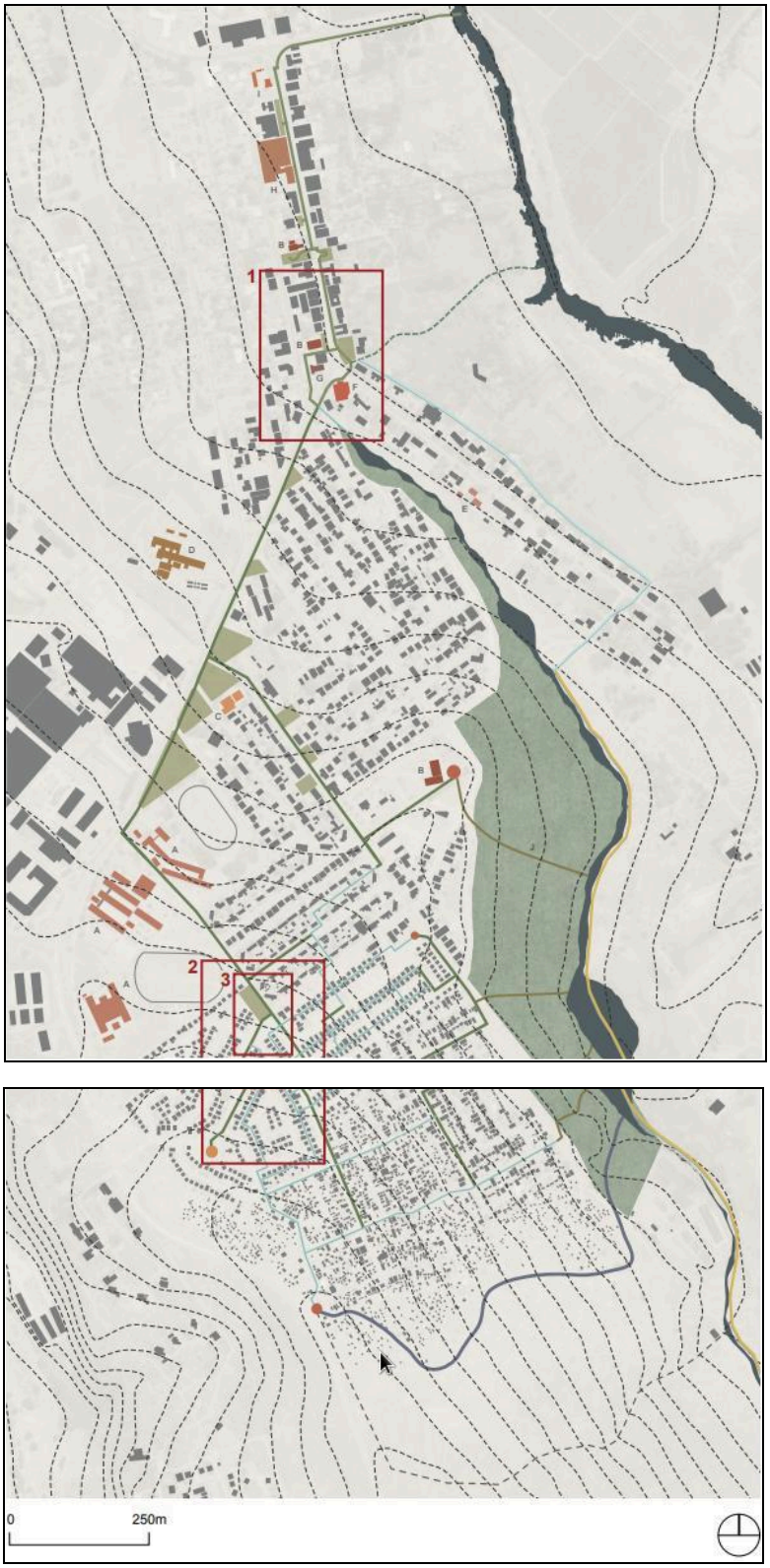

**Figure 5.8.3: Garden Erven  Map indicating how the town developed over time impacted the original Garden Erven on the Jan Dissels River**

***Character of Settlement and Built Form Typology***

The broader Cederberg area is renowned for its rock art and significant associated archaeology. Clanwilliam and its access via the Botterkloof Pass road act as a gateway from the N7 into the rest of the Cederberg area. Clanwilliam retains a number of historic farmsteads in the area, as well as excellent examples of vernacular architecture and Provincial Heritage Sites all oriented along the structuring elements of Hoof Street, Park Street and Ou Kaapse Road. As noted above, Clanwilliam suffered  when the community of Sederville was moved and their houses demolished and as a result, very little historic fabric remains within the Sederville area.

Distinctive architectural typologies and elements with the history of the town include the following:

- Thatched houses with rounded dormer gables and gable ends dating to the mid to late 19$^{th}$ century. Few of these original dwellings survive with most being either demolished or substantially 'Victorianised' and replaced with corrugated iron in the late 19$^{th}$ and early 20$^{th}$ century as located along Park Road
- The typical 3 bay cottage with central door and flanking windows probably being of mid to late 19th century date, originally thatched now mostly under corrugated iron.
- The simple mono-pitched parapeted dwellings with distinctive pediments.
- Remnant vernacular cottages dating to the early 19th Century origins of the town are somewhat still evident in Cedarville.
- Religious buildings including a number of churches
- Industrial/commercial building typologies associated with the economic development of the town in the 19$^{th}$ and early 20$^{th}$ century including jail, warehouses, shops and offices located along Hoof Street.



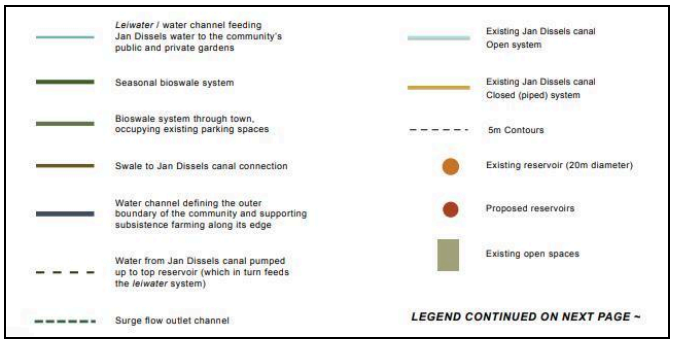







**Figure 5.9: Extract from Dalberg (2019) illustrating a Figure-ground of the existing structures in the town and her proposed "daylighting" of the Jan Dissels River pipeline route - page 28 to 31. Development area indicated in Green as "Existing Open Space"**



**Figure 5.10.1 View north along Hoof Street with NG Kerk in the foreground**



**Figure 5.10.2 Capt Walter Synnot's House in Clanwilliam[10]**

[10] http://thecasualobserver.co.za/rev-francis-mccleland-interlude-clanwilliam-1820-1825/




**Figure 5.10.3. 37 Hoof Street, indicating a similar typology (GoogleStreet View)**




**Figure 5.10.4. 12 Park Street, indicating a similar typology (GoogleStreet View)**




**Figure 5.10.5. View of Criterion building along Hoof Street, date unknown[11]**




**Figure 5.10.6. View of Criterion building along Hoof Street from Google Street View**

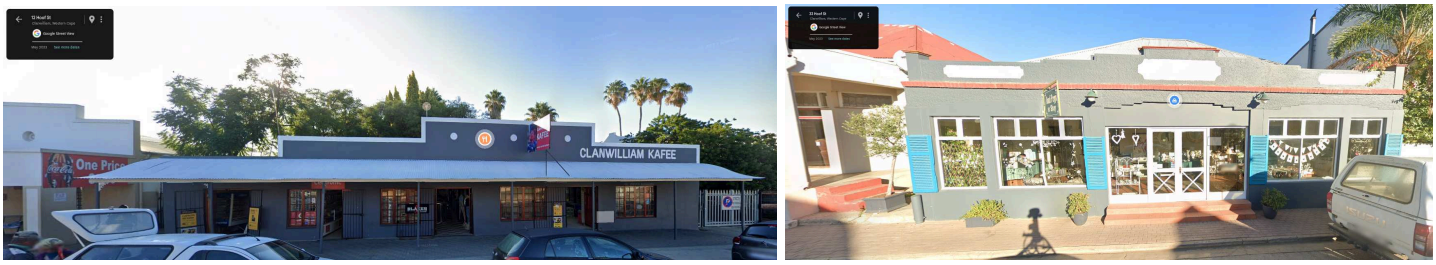



**Figure 5.10.7. View of commercial structures along Hoof Street (GoogleStreet View)**

[11] https://www.ancestors.co.za/clanwilliam-history/



**Figure 5.10.8. 3 Park Street (2010) (GoogleStreet View)**




**Figure 5.10.9. 18 Park Street (2010) (GoogleStreet View)**




**Figure 5.10.10. 41 Hoof Street (GoogleStreet View)**




**Figure 5.10.11. 22 Park Street (GoogleStreet View)**




**Figure 5.10.12. 48 Park Street (GoogleStreet View)**




**Figure 5.10.13. 24 Park Street (GoogleStreet View)**



**Figure 5.10.14. 24 Clanwilliam, date unknown, along Hoof Street facing north from the goal**



**Figure 5.10.15 11 Botterkloof Pass**

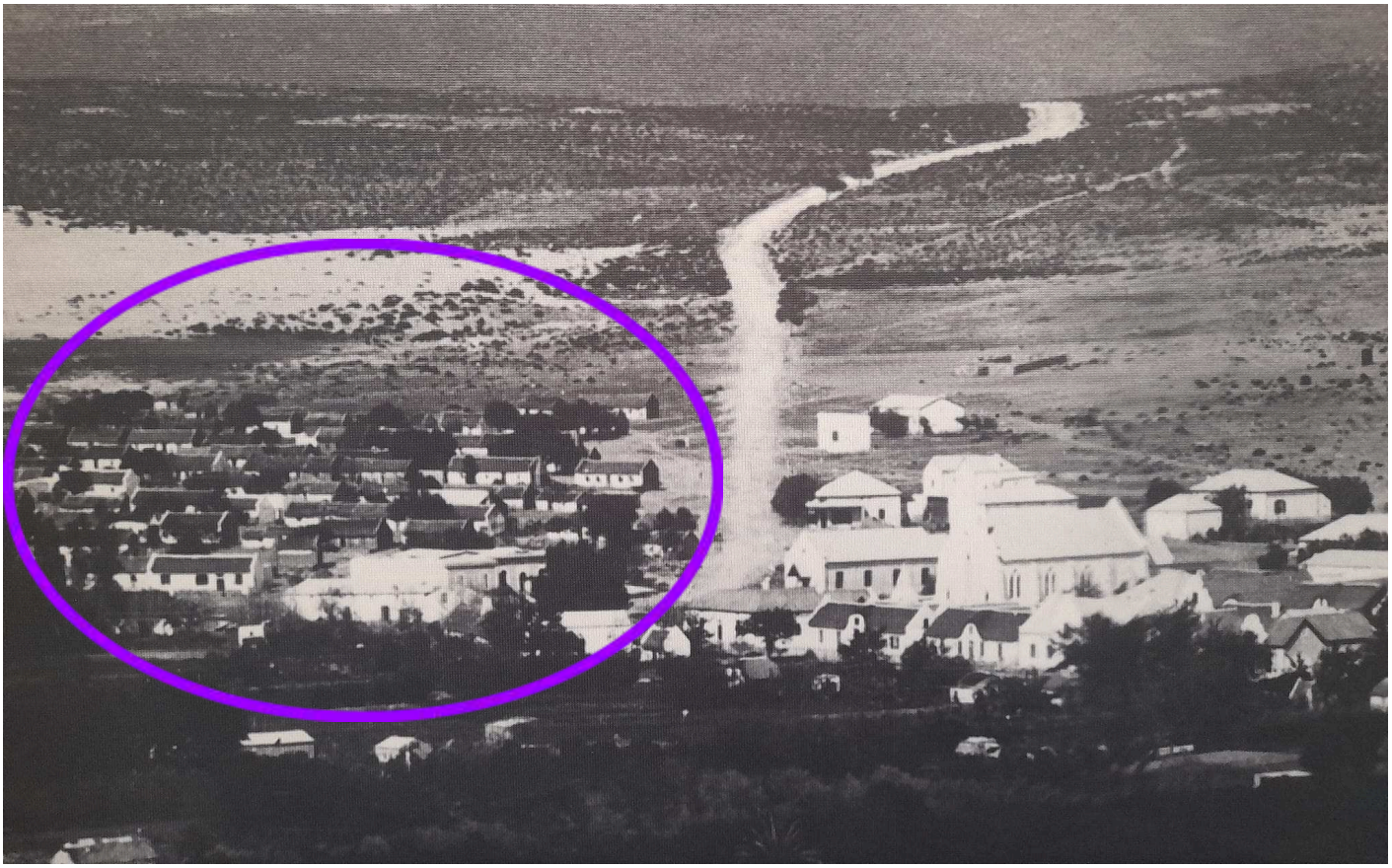


**Figure 5.10.16 Ou Kapse Road stretching southwest away from the town centre with the NG Kerk and the old Goal visible and Sederville indicated in purple, with the goal in the foreground**

***Clanwilliam Spatial Development Framework (2023)***

According to the Cederberg SDF (2023, Figure 7), Clanwilliam is the administrative centre for the Cederberg Municipality and is the Rooibos tea capital of Olifants River Valley as well as the gateway to Cederberg Wilderness Area. Clanwilliam is located between western slopes of Cederberg Mountains and Jan Dissel River, bordering the eastern bank of the Olifants River, at Clanwilliam dam and Ramskop Nature Reserve. Historic buildings, cultural history, rooibos tea and leather shoes ("veldskoene") are all associated with the town. Clanwilliam has a dominant agricultural character, especially with Rooibos.

The SDF (2023) notes that Clanwilliam consists of two residential nodes, one south and another north. These nodes are linked by business, industrial and mixed including residential uses, structured along Main Road (primary activity axis) and around the T junction with Augsberg street (east- west). The town of Clanwilliam evolved along a grid pattern alignment, a common theme among rural towns in the Western Cape. As noted in the SDF, it is proposed by the Cederberg Municipality to register the Main, Park, Visser and Love Street area (in Zone E and G in Figure 5.10) as a "Heritage Zone" (assume Heritage Area or HPOZ equivalent). These areas are located on either side of this proposed development area. Zone E is described as "*Zone E includes large residential erven along Jan Dissels River and Park Street. Park Street is a tourism and heritage activity street with a strong focus on accommodation. This zone further includes historic furrows. Development to be sensitive to Heritage resources and furrows within this zone.*" Zone E loosely aligns with the historic Park Street precinct and garden erven. Zone G is described as containing "*a historic high density residential area with supporting educational and institutional uses, identified as a heritage precinct, and has potential for tourism development. Small secondary business nodes proposed adjacent Bloekom Avenue and Denne Street.*" Zone G loosely aligns with the location of the historic Sederville.

The other adjacent areas to the proposed development are Zone H and K. Zone H is a high-density residential area with relevant supporting social services and a small secondary business node. Zone K consists of the Augsburg agricultural school, training centre, and farm.

The area proposed for development is located within an area that has mixed-use zoning in the Cederberg SDF for Clanwilliam (2023) - Zone I. This zone is earmarked for proposed mixed use development with supporting institutional and commercial uses such as a correctional services facility (juvenile detention centre) and a cemetery site; the zone is also home to the Khayelitsha informal settlement. Infill medium density residential expansion is proposed along the DR 2183/ R539, with the cemetery site to be expanded. This Zone also includes a secondary business node along Park Street and notes that development should be sensitive to furrows within this zone.

The following proposals are provided for in the SDF (2023) for Clanwilliam that are relevant to this development:

- Enhance settlement pattern and layout.
- Maintain overall mass and scale, new similar-use buildings should blend into existing mass and scale:
    - Introduce single and double-story dwellings, commercial and institutional buildings.
    - Cautiously introduce industrial buildings of similar scale and avoid bulky robust buildings e.g. citrus packing sheds.
- Protect eclectic built form and distinctive style of church and administrative buildings.
- Enhance growth potential and locational advantage as the main Cederberg settlement.
- Support higher density developments in the south eastern precinct.
- Protect low densities along water and conservation bodies (i.e. Jan Dissels River, Clanwilliam Dam) yet allow for limited densification.
- Promote infill development on large, vacant residential erven and higher density residential infill development, closer to the central business district.
- Promote mixed use, including residential, in the central business district.
- Provide different housing types (accommodating a wider market and promote densification).
- Formalise Informal Settlement Area in Zone I (old and new Kayalitsha).
- Identification and subsidised housing development in Zone I (on part of existing golf course and areas east and south of the golf course).
- Attend to interface with existing development and with proposed development.
- Promote Land Reform in area identified south of Zone I to facilitate small farming and community gardens on municipal commonage

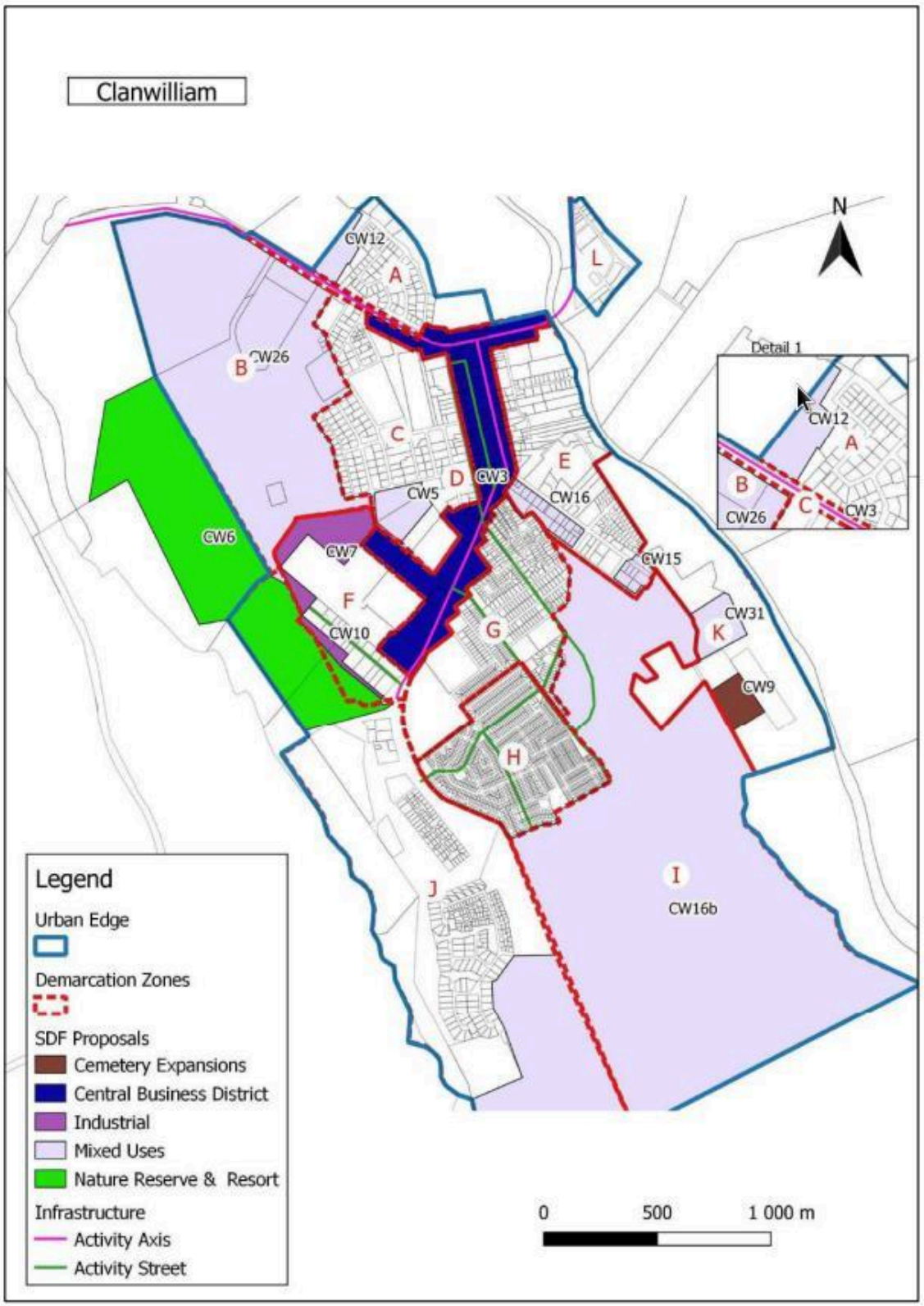



**Figure 5.10 SDF Map**. For Clanwilliam 2023

***Statement of Significance***

The broader Cederberg area is renowned for its rock art and significant associated archaeology. Clanwilliam and its access via the Botterkloof Pass road act as a gateway from the N7 into the rest of the Cederberg area. Clanwilliam retains a number of historic farmsteads in the area, as well as excellent examples of vernacular architecture and Provincial Heritage Sites all oriented along the structuring elements of Hoof Street, Park Street and Ou Kaapse Road. As noted above, Clanwilliam suffered  when the community of Sederville was moved and their houses demolished and as a result, very little historic fabric remains within the Sederville area.

The area proposed for development (Zone I) is positioned between Zone E (Park Street precinct) and Zone G (Sederville precinct). Both of these areas align with the earliest establishment of Clanwilliam and are proposed as "Heritage Zones" in the Cederberg SDF (2023). Zone E is oriented east of Hoof Street and around Park Street down to the river. The topography of the development area slopes down from west (highest point) to east towards the Jan Disselsrivier (lowest point).

Based on the analysis completed, Clanwilliam is an historic agricultural town that consists of a number of elements that contribute to the heritage significance of the town. These include:

- The position of the town between the Clanwilliam Dam and Jan Dissels River
- The evolution of the town around the Jan Dissels River
- The historic grid alignment of the town and associated structuring elements of Hoof Street, Park Street and Ou Kaapse Road
- The narrow garden erven and their relationship to the Jan Dissels River
- The significant Provincial Heritage Sites in the town
- The historic streetscapes of Hoof Street and Park Street
- Remnant historic built fabric within the Sederville area
- The historic Clanwilliam commonage
- Sufficient breathing space for the historic precincts associated with Park Street and Sederville

## 4.2 Summary of Specialist Reports

### *4.2.1 Archaeology (Appendix 1)*

As noted earlier in this report, there are a few buildings currently holding Provincial Heritage Site status as they were declared as National Monuments before the NHRA (Act 25 of 1999) was promulgated. Additional buildings in Park Street were briefly assessed during the survey in terms of potential impacts from the "back" end of these properties due to infill development. Most of the PHSs in Clanwilliam should be listed as Grade IIIa buildings and de-proclaimed as they are of local (high) significance, not of Provincial significance. A full heritage inventory of the townscape and the other locally significant heritage resources should be commissioned by the Cederberg Municipality as this is required in terms of the NHRA.

The golf course has transformed the topsoil of about 50% of the main section of the study site but Later and Middle Stone Age stone tool scatters remain relatively undisturbed to the east of the golf course. These scatters are on and near a series of local silcrete outcrops and these have been quarried to produce the silcrete flakes and cores. Quartz debitage and flakes were also noted in the assemblages. The slope climbs up towards the church in the northwestern side and much of the archaeological material disappears where the soil is deeper and turned over by burrowing animals. There are no overhangs or large enough rock boulders on the study which could have provided locations for rock paintings which are ubiquitous in the surrounding area.

The farm of Warmhoek, southeast of the study site, has hosted numerous UCT Archaeology field schools and there are a number of sites there. There is an avenue of gum trees leading up to the werf off Reservoir Street and the buildings are currently occupied. Most of the structures were built in the 20th century and a couple of early 20th century ruins are also present on this end. The werf, buildings and surrounding clumps of trees are currently in a degraded state and have not retained a sense of place and integrity.

### *4.2.2 Palaeontology (Appendix 2)*

Geologically, the site is underlain by the Nardouw Subgroup of the Table Mountain Group, specifically the Rietvlei Formation. The formations predominantly consist of quartzitic sandstone with minor shale components. Historically, they have shown low palaeontological sensitivity, with limited fossil discoveries, primarily trace fossils such as burrows and marine ichnofacies. No significant body fossils have been recorded in the immediate area, further reducing the likelihood of encountering valuable palaeontological resources during construction.

The potential impact of the proposed development on palaeontological resources is expected to be minimal. The construction activities will involve shallow excavations for foundations, roads, and utility installations, limiting the extent of disturbance to the underlying geological formations. Given the geological characteristics of the area, the

probability of uncovering significant fossil material is low. Even without mitigation measures, the impact on palaeontological resources is classified as low.

While no specific mitigation strategies are required, it is recommended that the Chance Fossil Finds Procedure be implemented during the construction phase. This protocol will ensure that any unexpected fossil discoveries are promptly reported and appropriately managed, safeguarding potential heritage resources.

### 4.3 Heritage Resources Identified

In terms of the heritage resources identified in the archaeological field assessment, see Table 3 below and Appendix 1 for full descriptions and images.

**Table 3: Artefacts identified during the field assessment development area**

| POINT ID | Description | Density | Type | Period | Co-ordinates | | Grading | Mitigation |
|---|---|---|---|---|---|---|---|---|
| 1 | Vrede Oord Cemetery | n/a | Graves/ Burial Grounds | Modern | -32.190127 | 18.904338 | IIIA | No buffer needed, clearly delineated in urban area |
| 10 | VGK church with fairly prominent steeple, perched on crest of hill. | n/a | Structure | Modern | -32.187335 | 18.895701 | IIIA | No buffer needed, clearly delineated in urban area |
| 11 | Thatched langhuis, various windows altered, two wooden shutters still intact | n/a | Structure | Historic | -32.182234 | 18.89385 | IIIB | No buffer needed, clearly delineated in urban area |
| 12 | Hipped corrugated iron roof, early 20th c building | n/a | Structure | Historic | -32.18417 | 18.89729 | IIIC | No buffer needed, clearly delineated in urban area |
| 15 | Sandstone church, 1924 | n/a | Structure | Historic | -32.183623 | 18.897476 | IIIA | No buffer needed, clearly delineated in urban area |

In terms of the significant aspects of Clanwilliam, the following heritage indicators must be considered in the layout of the proposed development:

- The position of the town between the Clanwilliam Dam and Jan Dissels River
- The evolution of the town around the Jan Dissels River
- The historic grid alignment of the town and associated structuring elements of Hoof Street, Park Street and Ou Kaapse Road
- The narrow garden erven and their relationship to the Jan Dissels River
- The significant Provincial Heritage Sites in the town
- The historic streetscapes of Hoof Street and Park Street
- Remnant historic built fabric within the Sederville area
- The historic Clanwilliam commonage
- Sufficient breathing space for the historic precincts associated with Park Street and Sederville

## 4.4 Mapping and Spatialisation of Heritage Resources

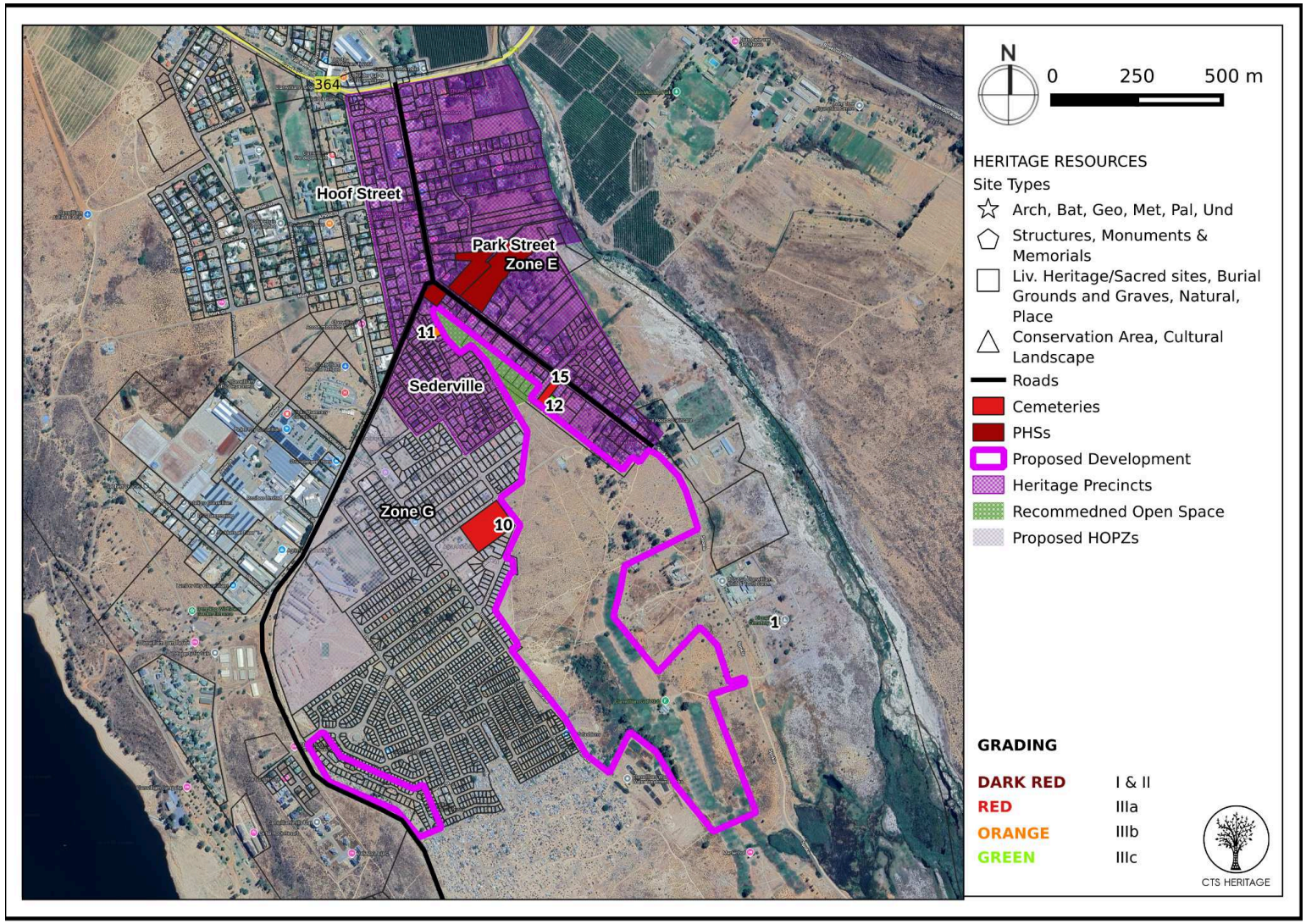



**Figure 6.1.1: Map of heritage resources identified in close proximity to the development area**

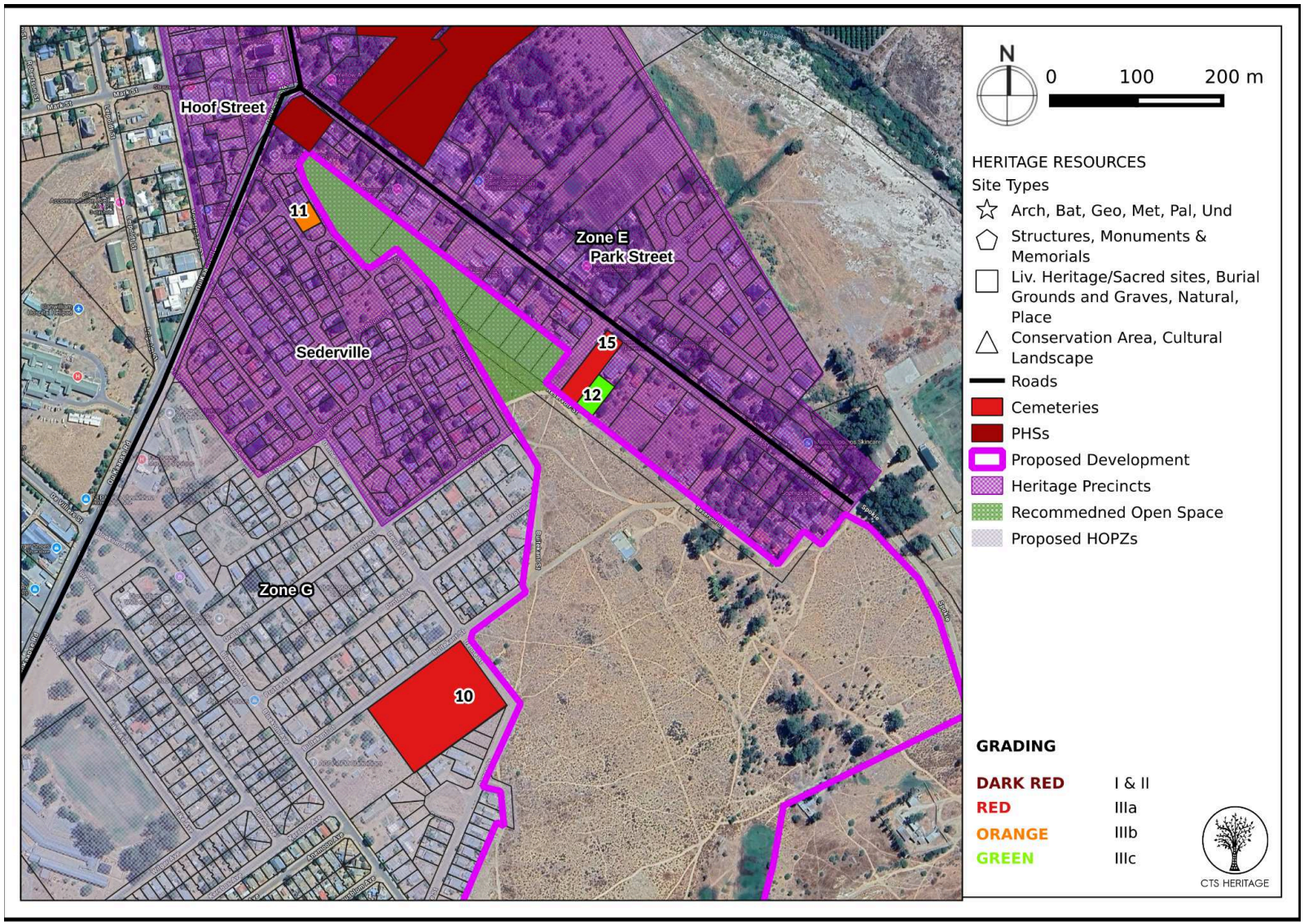



**Figure 6.1.2: Map of heritage resources identified in close proximity to the development area**

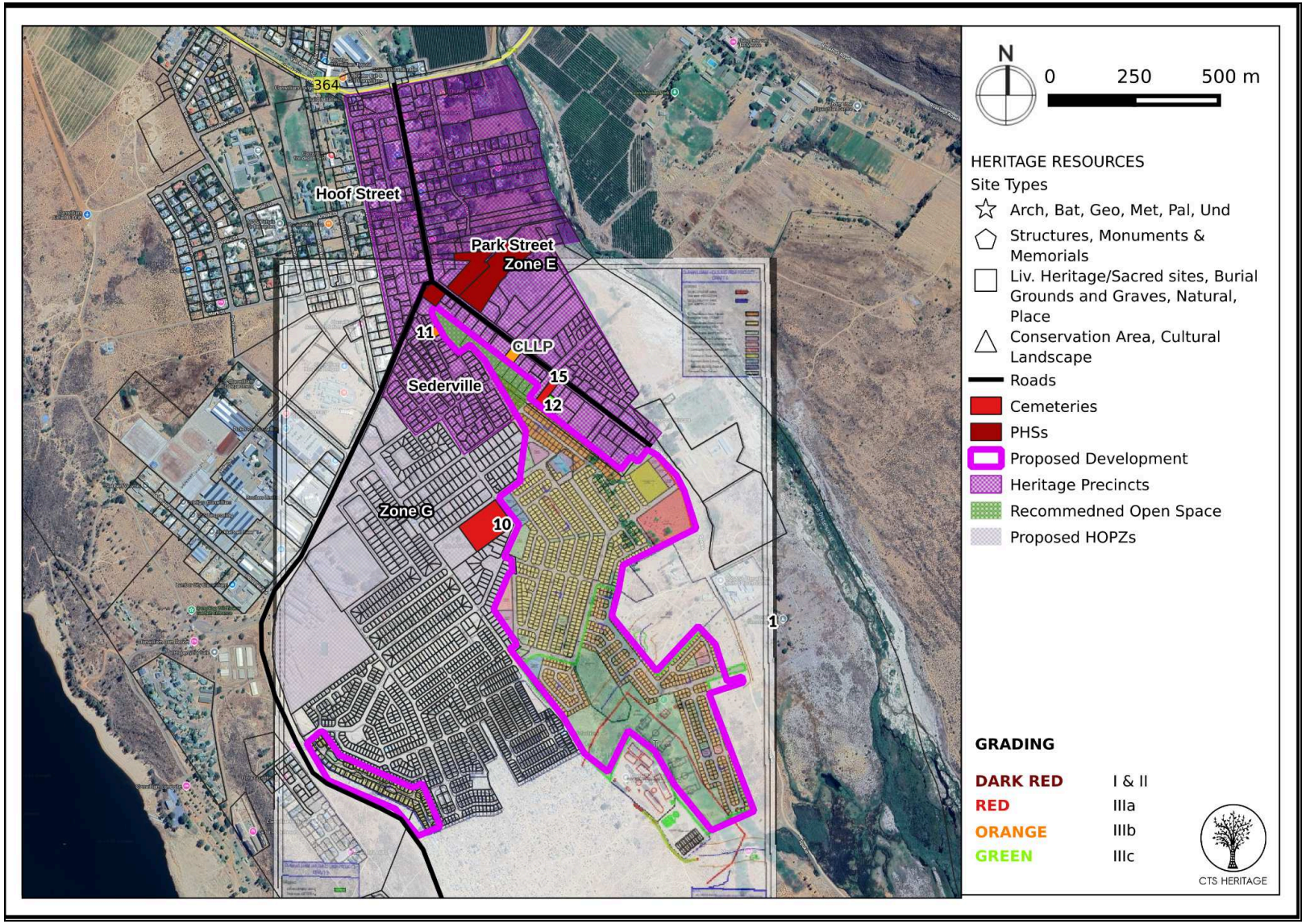



**Figure 6.2.1: Map of heritage resources identified in close proximity to the development area**

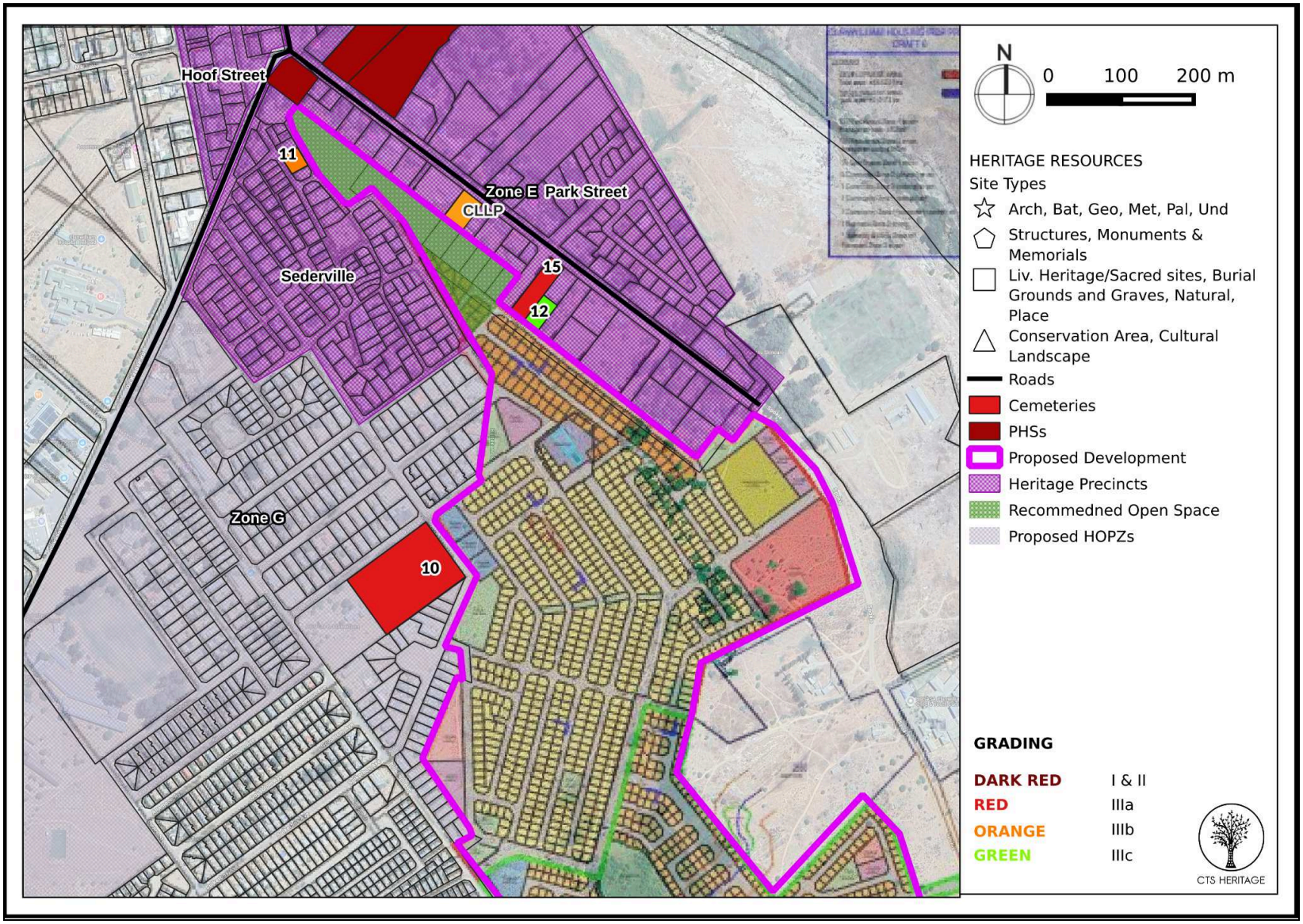



**Figure 6.2.2: Map of heritage resources identified in close proximity to the development area**

## 5. ASSESSMENT OF THE IMPACT OF THE DEVELOPMENT

### 5.1 Assessment of Impact to Heritage Resources

#### 5.1.1 Cultural Landscape and VIA

This application is for the proposed infill residential development within the urban edge of Clanwilliam. As noted in the NID submission submitted to HWC;

"*The proposed development is not expected to negatively impact any scenic routes in the area, such as Old Cape Road and Park Street. The scale and nature of the development are appropriate and will seamlessly integrate with the existing surrounding residential neighbourhoods. Additionally, a bus route will be incorporated into the development and may include street furniture, lighting, and wide sidewalks, thereby enhancing the aesthetics, functionality, and safety of the neighbourhood.*

*The Cederberg Municipal Spatial Development Framework provides the planning guidelines that guide forward planning and development in Clanwilliam and the Cederberg Municipal Area as a whole. Broad overarching objectives of the MSDF which include; densification within the urban edge and protecting the place identity and town character are all supported by the development proposal.*

*Considering that the development areas are located within the urban edge of Clanwilliam, there are proposals at settlement level. With reference to the Spatial Proposal Map for Clanwilliam, the development areas is located within Zone I. In accordance with the MSDF this zone is "earmarked for proposed mixed use development with supporting institutional and commercial uses such as a correctional services facility (juvenile detention centre) and a cemetery site the zone is also home to the Khayelitsha informal settlement. Infill medium density residential expansion is proposed along the DR 2183/ R539, with cemetery site. Allow for expansion of the cemetery site. This Zone also includes a secondary business node along Park Street and development should be sensitive to furrows within this zone.*

*The surrounding area is primarily characterised by residential neighbourhoods ranging from low to high densities including some institutional uses (east of proposed development) and the golf course south of the development area. The proposed development consisting of mainly residential erven as well as supporting land uses will thus seamlessly integrate with the existing surrounding residential neighbourhoods hence supporting appropriate infill development.*"

Due to the topography of Clanwilliam's position between the Clanwilliam and Jan Dissels River, the area proposed for development is not visible from the N7 or the Botterkloof Pass road. Additionally, the proposed development will have limited visual exposure to the main public street network through the historic core of Clanwilliam due to its position away from significant Hoof, Park and Ou Kaapse Roads.

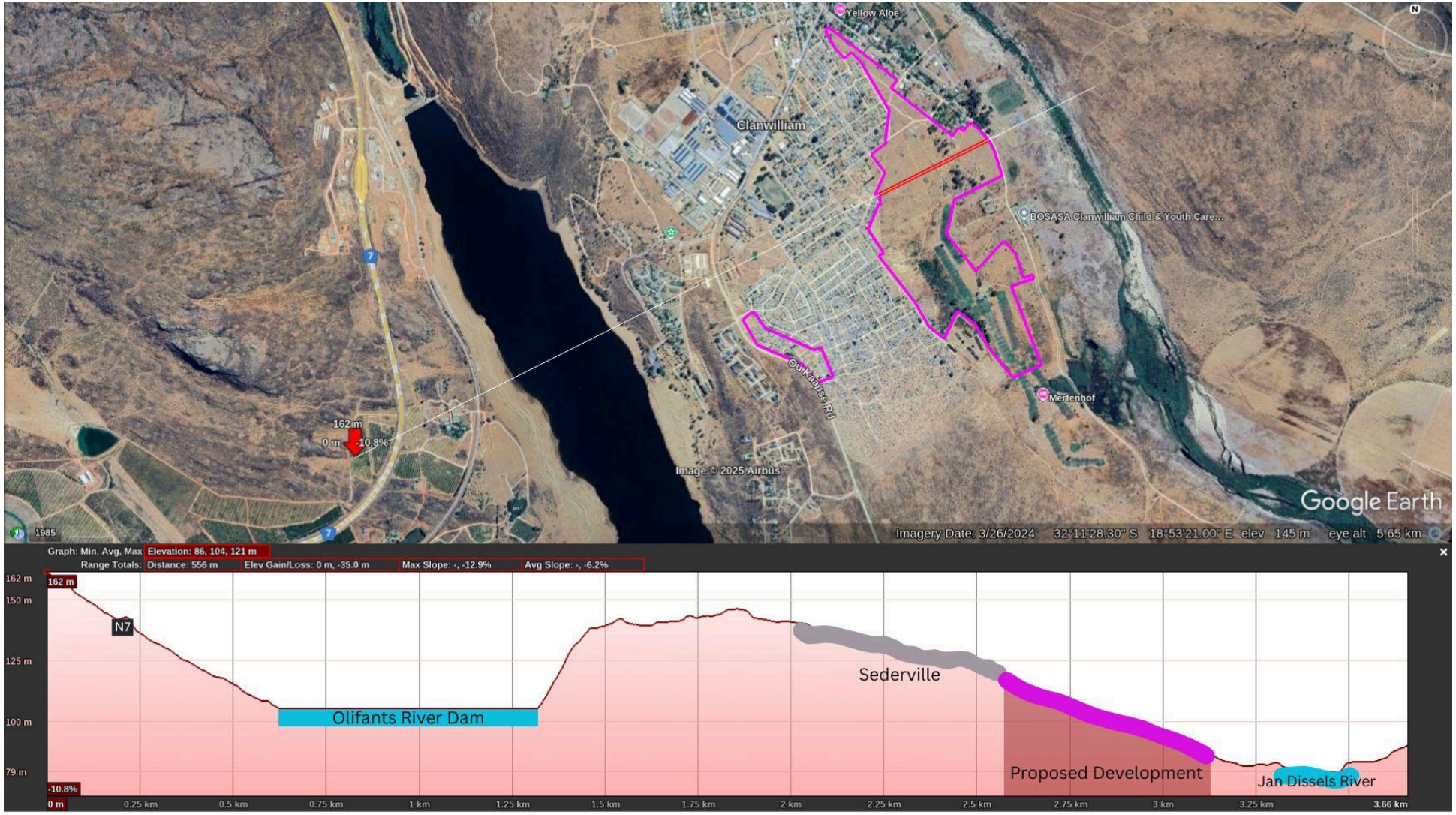



**Figure 7.1: Topographic profile from the N7 in the west to the Jan Dissels River in the east**

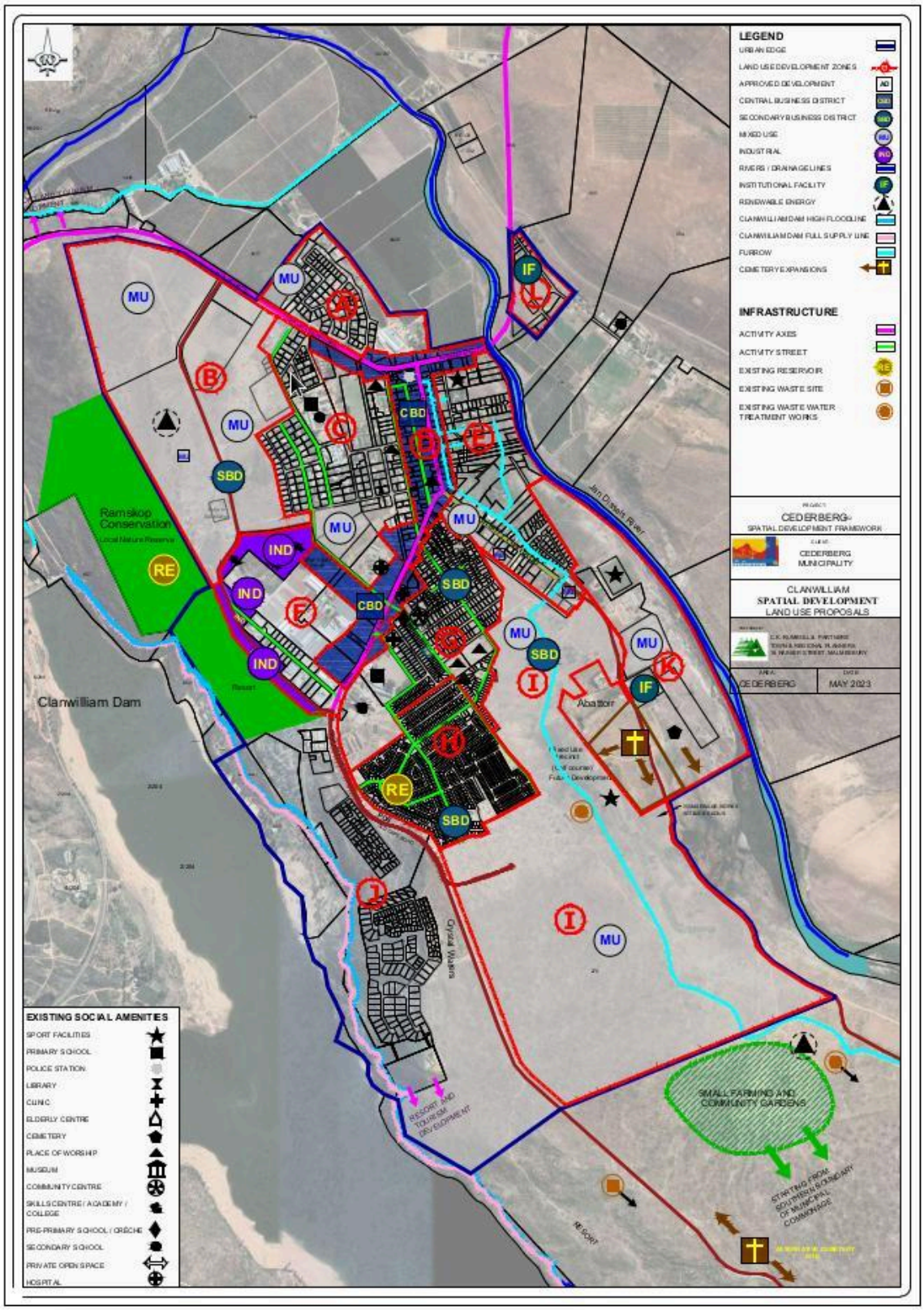



**Figure 7.2: Clanwilliam SDF Spatial Proposal map**

### 5.1.2 Built Environment and Settlement

The proposed development on the subject site already conforms to the key settlement structures apparent within the topographic constraints of Clanwilliam town in some key ways. Firstly, the proposed new development is located on the upward slopes of the Jan Dissels River, between the river course and the existing residential development to the west.

***Road Alignment***

No impact to the old wagon road in the form of Ou Kaapse Road is anticipated in the proposed design. This route pre-dates the N7 as the old approach to Clanwilliam. As such, the relationship between Ou Kaapse Road, Hoof Street and Park Street set the geometry of access routes across the site. This geometry is considered in the proposed layout provided. The proposed street alignments work with the existing street alignments and provide a logical integration with the existing infrastructure. The proposed development layout also respects the hierarchy of roads, retaining Hoof, Park and Ou Kaapse Roods as dominant and structuring elements in the town.

***Cadastral Layout***

The proposed cadastral layout has been reviewed considering the “allotment” and “urban” type plots that exist in Clanwilliam. Plot alignments have been regularised in order to create a linear grid system that runs largely perpendicular to the river course.

In the area proposed for development, there are 130 Residential Zone 1 erven (GAP Housing) proposed which are on average 280m2 in size. These erven are positioned between Zone G and Zone E in order to create an appropriate transition between the significant historic areas of Clanwilliam and the new proposed low-cost housing proposed for the rest of the development area. These erven are oriented along the logical extensions of the existing street-grid alignments and as such, are appropriate.

This development activity comprises infill development within the existing urban edge of Clanwilliam. The area proposed for development is located between two areas that have been identified as having historic value and are proposed as “Heritage Zones” (Park Street precinct - Zone E - and Sederville precinct - Zone G) in the Clanwilliam SDF (2023, Figure 7). In order to ensure that the proposed development fits into this infill space, the following recommendations are proposed:

- Open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space
- Larger erven are positioned in the space between Zone G and Zone E
- Architectural guidelines are developed for the area between Zone G and Zone E

- Adherence to the historic grid alignment oriented around Park Street, Hoof Street and Ou Kaapse Road
- Sufficient breathing space and appropriate hierarchies in response to the significant heritage resources identified

As per the correspondence received from the Cederberg Municipality upon review of the draft updated HIA, the area recommended to be retained as Open Space (Figure 6.2.2) includes already registered erven zoned Single Residential Zone 1 (erven 1422, 359, 148, 147, 144, 143) with only a portion zoned as Public Open Space (Portion of erf 279).

The proposed layout assessed herein indicates that erven 1422, 359, 148, 147, 144 and 143 are proposed to be subdivided and re-organised to accommodate GAP or FLISP housing to address the need for affordable housing in Clanwilliam. According to the Cederberg Municipality, as "*the land is already zoned for residential purposes, "densification in this case is a policy aligned approach that curbs urban sprawl.*"

While the above positions are noted, very high levels of heritage value have been identified as being impacted by the densification proposed for erven 1422, 359, 148, 147, 144 and 143. As such, while it is preferred that the identified area as per Figure 6.2.2 is kept as public open space, at a minimum is it recommended that these erven remain in their current form and layout and that the proposed subdivision and re-organisation of these erven is not approved.

***Existing Historic Fabric***

No historic structures are located within the development area and as such, any impact to historic fabric will be indirect in nature.

For the most part, the historic structures located along Park Street face Park Street with their backs against the area proposed for development. As such, the proposed new development will not impact on the views from these structures, nor will the development impact on the associational relationship between these structures and the Jan Dissels River, which has been identified as having heritage value. This is the case for the Gereformeede Kerk (sandstone building dated 1924, Site 15, Graded IIIA) and its neighbour, Site 12 described as a hipped corrugated iron roof residential structure from the early 20th C (Grade IIIC). Both of these structures will back onto the new GAP housing proposed here, but will be separated from the new development by Reservoir Road.

The historic fabric along Milner street consists of what little heritage built fabric remains of Sederville. This includes Site 11 (Thatched langhuis, various windows altered, two wooden shutters still intact, Grade IIIB). In the proposed SDP, the structures along Milner road will face the new GAP housing proposed here but will be separated from the new development by Milner Street. This is not appropriate from a heritage perspective. As

noted above, it is recommended that open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space. This would require the reallocation of approximately 50 GAP housing erven.

***Built Form Typology***

At this stage of the project, no information is available regarding the proposed architectural language to be employed in the proposed development. This is one area of concern where mitigation is required in terms of the overall pattern of settlement evident in the landscape.

It is therefore recommended that, due to the position of the proposed development between two areas that have been identified as having heritage value, additional design detail be submitted to HWC for approval as a condition of a positive comment on this HIA. The architecture of the proposed development should adhere to the Guidelines collated by Abrahamse (2022) and based on the work completed for the Overstrand Heritage Survey by Baumann, Attwell, Clift, Deacon, Jacobs, Oberholzer and Winter (2009) included as Appendix 3.

**Table 4: GUIDELINES RELATED TO LANDSCAPES OF SIGNIFICANCE and DEVELOPMENT IN RURAL AREAS**

| Guideline | Proposal |
|---|---|
| Establish conservation corridors along the coastline, estuaries, wetlands and rivers, to provide continuity within the conservation network, and to ensure the viability of ecosystems. | Not applicable as the development is located within the urban edge |
| **Respect Cultural Landscapes**<br>Any new interventions in rural landscapes need to understand the heritage significance of such landscapes and need to respond positively to the heritage values identified. | There are 130 Residential Zone 1 erven (GAP Housing) proposed which are on average 280m2 in size.<br><br>*It is recommended that open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space. This would require the reallocation of approximately 50 GAP housing erven.* |
| **Achieving a balance between settlement structures, planted and cultivated landscapes and wilderness areas.**<br>Careful consideration should thus be given to the granting of new development rights outside existing urban edges. A policy of appropriate densification related to existing movement routes should rather be adopted. | Not applicable as the development is located within the urban edge |
| **Positive response to the integrity of the agricultural landscape**<br>The subdivision of agricultural land should thus be avoided at all costs. Care should also be taken to protect the productive nature of agriculture and to avoid ornamental agriculture where planting occurs for predominantly | Not applicable as the development is located within the urban edge |

| | |
|---|---|
| aesthetic or ornamental reasons. | |
| **Acknowledge the underlying logic of settlement structures in regard to landform, riverine corridors and movement routes**<br>This pattern should be respected in any new development. New development should not be permitted in the higher mountain slopes or along the dynamic coastal zone. | There are 130 Residential Zone 1 erven (GAP Housing) proposed which are on average 280m2 in size.<br><br>*It is recommended that open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space. This would require the reallocation of approximately 50 GAP housing erven.* |
| **Acknowledge existing patterns of subdivision**<br>New subdivisions should only be permitted if there is a positive response to the historical context and pattern of development. Suburban type layouts, particularly "gated" villages should not be permitted in rural areas. | There are 130 Residential Zone 1 erven (GAP Housing) proposed which are on average 280m2 in size.<br><br>*It is recommended that open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space. This would require the reallocation of approximately 50 GAP housing erven.* |

### 5.1.3 Archaeology

The field assessment proceeded with no major constraints or limitations. The archaeological observations noted primarily consist of surface scatters of Middle and Later Stone Age artefacts made of silcrete. None of these observations have sufficient cultural value to warrant protection and as such, these resources are determined to be Not Conservation-Worthy. They have been sufficiently recorded in this report and no further mitigation is recommended.

The significant heritage resources identified during the field assessment consist of historic structures (Sites 10, 11, 12 and 15) located on the boundary of the proposed development area and the Vrede Oord Cemetery (Site 1) located to the east of the proposed development area. All of the significant heritage resources identified are located within the existing urban fabric that surrounds the proposed development area. No direct impact to these resources is anticipated. The indirect impact anticipated from the proposed residential development area is limited due to the location of the development within the existing urban edge.

As noted above, the archaeology field assessment did not identify any visible evidence of the supply depot and field hospital located on the Clanwilliam commonage from the South African War mentioned above, although buried evidence of this infrastructure may be present beneath the ground surface.

As such, no impacts to significant heritage resources are anticipated, although care should be taken with regard to possible buried historical archaeological material associated with the supply depot and field hospital.

### 5.1.4 Palaeontology

The proposed development of a residential area and associated infrastructure will involve minor earthworks limited to localised construction footprints, such as around individual erven and along interlinking access roads, water pipelines, or electrical connections. These activities have the potential to cause direct, though limited, impacts on the underlying rock formations and palaeontological resources associated with the Nardouw Subgroup and Rietvlei Formation. However, no significant indirect impacts on palaeontological heritage are anticipated for this project area. The overall impact severity is closely tied to the nature and extent of the activities and is expected to remain low.

The primary concern arises during the construction phase, where direct interactions with geological formations that may contain fossil material are likely. Earthworks for foundations, underground utilities, and access roads may involve excavations through surface sediments (e.g., soil) or into the underlying bedrock. In areas where the Nardouw Subgroup and Rietvlei Formation are exposed, excavation activities may negatively affect the bedrock, posing a risk of displacing, damaging, or permanently sealing in fossil resources. This would hinder their availability for scientific research or heritage preservation.

The impact assessment for the proposed development, conducted without mitigation, classifies the potential impact as low (negative). Even with mitigation measures in place, the impact remains low (negative), consistent with findings by Almond (2010). The limited extent of excavations, which are expected to reach only superficial depths of a few metres, will further minimise disturbance to the surrounding geological environment.

It is therefore not anticipated that significant palaeontological resources will be impacted by the proposed development and as such, no further palaeontological studies are recommended. However, it is recommended that the HWC Chance Fossil Finds Procedure be implemented for the duration of all excavation activities.

## 5.2 Sustainable Social and Economic Benefit

According to information provided by the client, the following socio-economic benefits are anticipated:

**A. Improved Living Standards**

- **Access to housing**: The primary benefit of the housing project is the provision of affordable, safe, and decent housing and services for families who may otherwise be unable to secure a home in the private market. This helps reduce overcrowding, homelessness, and informal settlements, improving the overall quality of life.
- **Improved health outcomes**: Better housing leads to better living environment, reducing health risks associated with poor housing (e.g., infectious diseases, respiratory diseases, injuries from poor infrastructure).

- **Increased access to services**: the housing project will provide improved infrastructure to over 1300 families (e.g., roads, sanitation, water supply), leading to better access to essential services.

**B. Job Creation**

- **Construction employment**: building the housing development will require a significant workforce. This creates direct employment opportunities in construction, ranging from skilled labor (electricians, plumbers, carpenters) to unskilled labor (construction workers).
- **Local supplier opportunities**: Construction materials such as bricks, cement, and steel are often sourced from local suppliers, creating downstream economic activity and providing jobs in local businesses.
- **Empowerment of local communities**: By prioritizing local labor and businesses in the housing project, the community can build a more self-sustaining economy, reducing reliance on outside labor and services.

**C. Economic Stimulus**

- **Local business growth**: The development can stimulate demand for goods and services (e.g., grocery stores, retail shops, schools, healthcare facilities), supporting local businesses and entrepreneurs.
- **Spill-over effects**: The housing project could attract other developments, such as commercial spaces, schools, clinics, and recreational facilities, stimulating further economic activity.

**D. Social Stability and Integration**

- **Reduced inequality**: Providing housing helps address the housing backlog and inequality in South Africa. It helps provide a social safety net for low-income families, leading to more equitable access to housing and improving social mobility.
- **Stronger social cohesion**: By providing stable housing in a planned environment, the project can promote community cohesion, reducing tensions and potential conflicts that arise from inadequate housing or informal settlements.
- **Improved education and social outcomes**: Stable housing enables children to attend school regularly, contributing to better educational outcomes. Additionally, better living conditions support healthier lifestyles, which can lead to improved social outcomes.

**E. Improved Infrastructure and Public Amenities**

- **Upgraded infrastructure**: the proposed housing development will allow for significant upgrades to infrastructure (e.g., roads, water supply, sanitation, electricity), which benefits not only the beneficiaries but the wider community as well.

- **Enhanced public services**: New housing developments can prompt the development of essential public services such as schools, clinics, and transport networks, which benefits both new and existing residents. Erven was created in the development for such services.

**F. Urban and Rural Development**

- **Revitalization of rural areas**: Clanwilliam, a relatively small town, could see revitalization through the introduction of new housing and infrastructure, contributing to the growth and development of the rural economy.
- **Balanced urbanization**: By focusing on housing projects outside major urban areas, like Cape town, the government can help balance population growth and reduce pressure on already congested urban centres. This helps prevent urban sprawl and provides people with an alternative to living in overcrowded cities.

**G. Social and Environmental Sustainability**

- **Green and energy-efficient design**: The housing project will include energy-efficient features or sustainable building materials, it could contribute to environmental sustainability by reducing energy consumption and waste production.
- **Resilience to climate change**: the incorporation of climate-resilient infrastructure (e.g., flood mitigation, water conservation measures) can increase the community's ability to withstand climate-related challenges.

The Proposed Housing Project in Clanwilliam has the potential to provide significant socio-economic benefits, including enhanced living conditions, job creation, economic stimulation, and improved social outcomes. It can contribute to reducing inequality, promoting sustainable development, and fostering long-term economic growth in both Clanwilliam and the broader Western Cape region. The project would not only address immediate housing needs but also help build a foundation for future prosperity and social stability.

This is an appropriate use of the Clanwilliam commonage in 2025. Based on the outcomes of this heritage assessment, the anticipated socio-economic benefits to be derived from the project outweigh any anticipated negative impacts to heritage resources ***on condition that the recommendations made below are implemented***.

### 5.3 Proposed Development Alternatives

No alternatives have been proposed for the proposed development by the applicant and the Site Development Plan as mapped in this report is considered the only option.

The outcomes of this analysis propose a heritage sensitive alternative in which open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space. This would require the reallocation of approximately 50 GAP housing erven. This alternative is indicated in Figure 6.2.1 and 6.2.2.

As per the correspondence received from the Cederberg Municipality upon review of the draft updated HIA, the area recommended to be retained as Open Space (Figure 6.2.2) includes already registered erven zoned Single Residential Zone 1 (erven 1422, 359, 148, 147, 144, 143) with only a portion zoned as Public Open Space (Portion of erf 279).

The proposed layout assessed herein indicates that erven 1422, 359, 148, 147, 144 and 143 are proposed to be subdivided and re-organised to accommodate GAP or FLISP housing to address the need for affordable housing in Clanwilliam. According to the Cederberg Municipality, as "*the land is already zoned for residential purposes, "densification in this case is a policy aligned approach that curbs urban sprawl.*"

While the above positions are noted, very high levels of heritage value have been identified as being impacted by the densification proposed for erven 1422, 359, 148, 147, 144 and 143. As such, while it is preferred that the identified area as per Figure 6.2.2 is kept as public open space, at a minimum is it recommended that these erven remain in their current form and layout and that the proposed subdivision and re-organisation of these erven is not approved.

## 6. RESULTS OF PUBLIC CONSULTATION

As this application is made in terms of a land use planning process, the public consultation on the HIA will take place with the broader public consultation process required for the land use process and will be managed by the lead planning consultants on the project.

There are no registered conservation bodies for the proposed development area. As the local authority is the project proponent, they are inherently supportive of the proposed development.

## 7. CONCLUSION

The broader Cederberg area is renowned for its rock art and significant associated archaeology. Clanwilliam and its access via the Botterkloof Pass road act as a gateway from the N7 into the rest of the Cederberg area. Clanwilliam retains a number of historic farmsteads in the area, as well as excellent examples of vernacular architecture and Provincial Heritage Sites all oriented along the structuring elements of Hoof Street, Park Street

and Ou Kaapse Road. As noted above, Clanwilliam suffered when the community of Sederville was moved and their houses demolished and as a result, very little historic fabric remains within the Sederville area.

The proposed development site is predominantly underlain by the Nardouw Subgroup, specifically the Rietvlei Formation. Both the Nardouw Subgroup and the Rietvlei Formation are characterised by low palaeontological sensitivity, as they generally do not contain fossils of significant scientific or heritage value. This conclusion aligns with previous studies, which have consistently indicated that these formations are not typically rich in palaeontological resources.

The potential impact of the proposed development on palaeontological resources is assessed as minimal, with a low likelihood of encountering any significant fossil material during construction. Additionally, the Goudini, Skurweberg, and Rietvlei Formations, which are also present in the broader area, share similarly low palaeontological sensitivity. As a result, no specific mitigation measures are required for the proposed residential development. While no specific mitigation strategies are required, it is recommended that the Chance Fossil Finds Procedure be implemented during the construction phase. This protocol will ensure that any unexpected fossil discoveries are promptly reported and appropriately managed, safeguarding potential heritage resources.

As noted above, the archaeology field assessment did not identify any visible evidence of the supply depot and field hospital located on the Clanwilliam commonage from the South African War mentioned above, although buried evidence of this infrastructure may be present beneath the ground surface.

This development activity comprises infill development within the existing urban edge of Clanwilliam. The area proposed for development is located between two areas that have been identified as having historic value and are proposed as “Heritage Zones” (Park Street precinct - Zone E - and Sederville precinct - Zone G) in the Clanwilliam SDF (2023, Figure 7). In order to ensure that the proposed development fits into this infill space, the following recommendations are proposed:

- Open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space
- If the above is not possible, it recommended that these erven remain in their current form and layout and that the proposed subdivision and re-organisation of these erven is not approved (erven 1422, 359, 148, 147, 144, 143)
- Larger erven are positioned in the space between Zone G and Zone E
- Architectural guidelines are developed for the area between Zone G and Zone E
- Adherence to the historic grid alignment oriented around Park Street, Hoof Street and Ou Kaapse Road

- Sufficient breathing space and appropriate hierarchies in response to the significant heritage resources identified

In order to ensure that no impact to heritage resources occurs during the construction or operational phases of the development, recommendations are made below.

## 8. RECOMMENDATIONS

There is no objection to the proposed development from a heritage perspective on condition that:

- Open space is retained in the area indicated between the Park Street precinct and the Sederville precinct in order to retain a remnant of the Clanwilliam commonage, and to provide these significant historic precincts and remnant historic built fabric with sufficient breathing space. This would require the reallocation of approximately 50 GAP housing erven.
- If the above is not possible, it recommended that these erven remain in their current form and layout and that the proposed subdivision and re-organisation of these erven is not approved (erven 1422, 359, 148, 147, 144, 143)
- Due to the position of the proposed development between two areas that have been identified as having heritage value, additional design detail be submitted to HWC for approval as a condition of a positive comment on this HIA. The architecture of the proposed development should adhere to the Guidelines included as Appendix 3.
- The attached Chance Fossil Finds Procedure is implemented for the duration of construction activities
- Should any buried archaeological resources or human remains or burials be uncovered during the course of development activities, work must cease in the vicinity of these finds. Heritage Western Cape (HWC) must be contacted immediately in order to determine an appropriate way forward.

## 9. REFERENCES

| Heritage Impact Assessments | | | | |
|---|---|---|---|---|
| 4004 | Jonathan Kaplan | 01/06/1999 | AIA Phase 1 | Archaeological Study Portion 1 of Farm Keurbos No. 274, Clanwilliam |
| 4006 | Jonathan Kaplan | 01/03/2002 | AIA Phase 1 | Phase 1 Archaeological Study a Portion of the Farm Hollandsebos Clanwilliam |
| 4007 | Jonathan Kaplan | 01/03/2002 | AIA Phase 1 | Phase 1 Archaeological Study, Portion 26 of the Farm Jan Dissels River No. 270 Clanwilliam |
| 4009 | Dave Halkett | 01/02/2003 | AIA Phase 1 | An Assessment of Aspects of a Rock Art Trail on the Farm Warmhoek, Clanwilliam District |
| 4010 | Anthony Manhire | 01/10/2004 | AIA Phase 1 | Assessment of the Farm Jan Dissels River No. 270 (known as Dwarsrivier) Clanwilliam, West Coast District |
| 4011 | Jonathan Kaplan | 01/04/2005 | AIA Phase 1 | Phase 1 Archaeological Impact Assessment a Portion of Portion 2 of the Farm Kransvlei No 205/11 Clanwilliam |
| 4012 | Jonathan Kaplan | 01/06/2005 | AIA Phase 1 | Phase 1 Archaeological Impact Assessment Proposed Subdivision of Erven 164 & 658 Clanwilliam |
| 4016 | Sarah Wurz | 13/02/2007 | AIA Phase 1 | Phase 1 Archaeological Impact Assessment for Elephant Creek Resort CC. Clanwilliam District, Western Cape |
| 4038 | Jonathan Kaplan | 01/08/2006 | AIA Phase 1 | A Phase 1 Archaeological Impact Assessment of Six Borrow Pits Alongside Divisional Roads 2178, 2181 &2184 Citrusdal South Western Cape |
| 6420 | Jayson Orton, Timothy Hart | 01/10/2005 | AIA Phase 1 | Heritage Impact Assessment the Proposed Raising of the Clanwilliam Dam Wall, Olifants River Valley, Clanwilliam District |
| 6421 | Jonathan Kaplan | 15/12/2008 | AIA Phase 1 | Archaeological Impact Assessment: Proposed 1.5 Ml Reservoir and 315 Mm Gravity Water Main Pipeline Clanwilliam, Western Cape Province |
| 8416 | Dave Halkett | 01/06/2009 | HIA Phase 1 | An Assessment of the Impacts on Heritage of the Proposed 66 kV Overhead Powerline Between the Towns of Clanwilliam and Graafwater |
| 140547 | Billy De Klerk | 03/01/2011 | PIA Phase 1 | Palaeontological heritage impact assessment of the proposed Happy Valley wind energy facility on a site east of Humansdorp, Eastern Cape |
| 329752 | Madelon Tusenius | 01/08/2012 | AIA Phase 1 | Archaeological Impact Assessment Of The Proposed Extension Of A Borrow Pit On Farm No. 581 (Keurbos), Clanwilliam District, Western Cape |
| 329798 | Madelon Tusenius | 01/08/2012 | AIA Phase 1 | Archaeological Impact Assessment Of The Proposed Extension Of Two Borrow Pits On Ptn. 7 Of Fredericks Dal 60 & Ptn. 10 Of Elizabethfontein 59, Cederberg, Clanwilliam District, Western Cape |
| 356873 | John Almond | 01/02/2010 | PIA Desktop | PALAEONTOLOGICAL IMPACT ASSESSMENT: DESKTOP STUDY Proposed 66 kV overhead powerline Clanwilliam and Graafwater, Western Cape |

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# APPENDICES

## APPENDIX 1: Archaeological Assessment (2024)

# ARCHAEOLOGICAL SPECIALIST STUDY

In terms of Section 38(8) of the NHRA for a

## Proposed Residential Development in Clanwilliam, Western Cape


**Prepared by**

CTS HERITAGE

Jenna Lavin
Nic Wiltshire
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In Association with

**CK Rumboll**


October 2024

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## EXECUTIVE SUMMARY

The proposed development entails the rezoning of a portion of Erf 279 Clanwilliam to Sub-divisional Area which includes the creation of medium to high-density residential erven including supporting land uses such as open spaces, crèches, churches, community centre, commercial as well as a school site. The development footprint covers approximately 49,16 hectares of Erf 279. Furthermore, Erf 279 will be subdivided into two portions namely: the newly created Portion (portion of Erf 279) and Remainder of Erf 279.

The project area was comprehensively surveyed for heritage resources. Some Later Stone Age archaeology of limited scientific value was identified. However, the majority of the significant heritage resources identified relate to the historic development of Clanwilliam. None of the heritage resources identified fall within the area proposed for development and as such, no direct impact to significant heritage resources is anticipated.

In order to ensure that no impact to the identified resources occurs during the construction or operational phases of the development, recommendations are made below.

***Recommendations***

There is no objection to the proposed development from an archaeological perspective on condition that:

- Should any buried archaeological resources or human remains or burials be uncovered during the course of development activities, work must cease in the vicinity of these finds. Heritage Western Cape (HWC) must be contacted immediately in order to determine an appropriate way forward.



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# 1. INTRODUCTION

## 1.1 Background Information on Project

### Locality

Erf 279 in Clanwilliam is designated as part of the municipal commonage. The largest portion of the development area stretches from the southern boundary of the existing urban development and is located between the Jan Disselsriver (east), Clanwilliam golf course (south) and the existing residential neighbourhood (west). A portion of the proposed development is located west of the existing neighbourhood and east of the Old Cape Road. Furthermore, it should be noted that this area constitutes an approved layout, however, minor amendments have been made to the layout in this proposal.

### Property Details

**Table 1: The property details are as follows**

| **Erf 279** | |
|---|---|
| **Extent** | 926,5469 ha |
| **Owner** | Cederberg Municipality |
| **Servitudes** | Leasehold area L1 (SG no. 8293/1960)<br>Nature Reserve Area (SG no. 8128/1967)<br>Leasehold area (SG no. 6543/1979)<br>Servitude road (SG no. 5311/1990) |
| **Zoning** | Rural Community Zone |
| **Land Use** | The majority of the development area remains undeveloped. However, it does include the existing Wastewater Treatment Works and a portion of the golf course. The portion of the development area along the Old Cape Road is occupied by informal structures. |
| **Title Deed** | CLF3-10/1925 |

### Land use aspects

The Cederberg Municipal Spatial Development Framework provides the planning guidelines that guide forward planning and development in Clanwilliam and the Cederberg Municipal Area as a whole. Broad overarching objectives of the MSDF which include; densification within the urban edge and protecting the place identity and town character are all supported by the development proposal.

Considering that the development areas are located within the urban edge of Clanwilliam, there are proposals at settlement level. With reference to the Spatial Proposal Map for Clanwilliam, the development areas is located within Zone I. In accordance with the MSDF this zone is “earmarked for proposed mixed use development with supporting institutional and commercial uses such as a correctional services facility (juvenile detention centre) and a cemetery site the zone is also home to the Khayelitsha informal settlement. Infill medium density residential expansion is proposed along the DR 2183/ R539, with cemetery site. Allow for expansion of the cemetery site. This Zone also includes a



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secondary business node along Park Street and development should be sensitive to furrows within this zone".

The surrounding area is primarily characterised by residential neighbourhoods ranging from low to high densities including some institutional uses (east of proposed development) and the golf course south of the development area. The proposed development consisting of mainly residential erven as well as supporting land uses will thus seamlessly integrate with the existing surrounding residential neighbourhoods hence supporting appropriate infill development.

**Development Proposal**

The proposed development entails the following:

Rezoning of a portion of Erf 279 Clanwilliam to Subdivisional Area which includes the creation of medium to high-density residential erven including supporting land uses such as open spaces, crèches, churches, community centre, commercial as well as a school site. The development footprint covers approximately 49,16 hectares of Erf 279. Furthermore, Erf 279 will be subdivided into two portions namely: the newly created Portion (portion of Erf 279) and Remainder of Erf 279.

Subsequently, the newly created portion will be further subdivided to allow for the creation of individual land units zoned as follows:

I. Single Residential Zone 1
II. Single Residential Zone 2
III. Local Business Zone 2
IV. Community Zone 1 & 2
V. Open Space Zone 1
VI. Transport Zone 1

**General Comments**

The development proposal primarily involves infill development of a residential nature including supporting uses, within the demarcated urban edge. It appears to be unlikely that the development areas is of any heritage significance or that the proposed development will have a significant impact on existing heritage resources within the area.

### 1.2 Description of Property and Affected Environment

The proposed infill urban development is split into two parts in Clanwilliam in the Western Cape. The smaller, southwestern segment is already mostly occupied with informal housing and the rezoning and planning mechanisms will formalise this area. The main and larger segment of the development footprint is currently unoccupied and consists of open public space and a golf club bounded by Viooltjie Street, Park Street, Spokie and Bloekom Avenue. The Clanwilliam Golf Club's greens and fairways cover about 50% of study area and the Clanwilliam Waste Water Treatment Works (WWTW) lie to the southeast end.

The Jan Dissels River runs to to the east and northeast of the study site and joins up with the Olifants River further north. The Clanwilliam Cemetery East, BOSASA Clanwilliam Child & Youth Care Centre and Clanwilliam Sports Grounds lie along the east side of Spokie and Park Street overlooking the Jan Dissels River. The western side of the development area rises up to a slight ridge and is completely built over with housing built in the last two decades while the northern and eastern buildings were primarily built in the 20th century.



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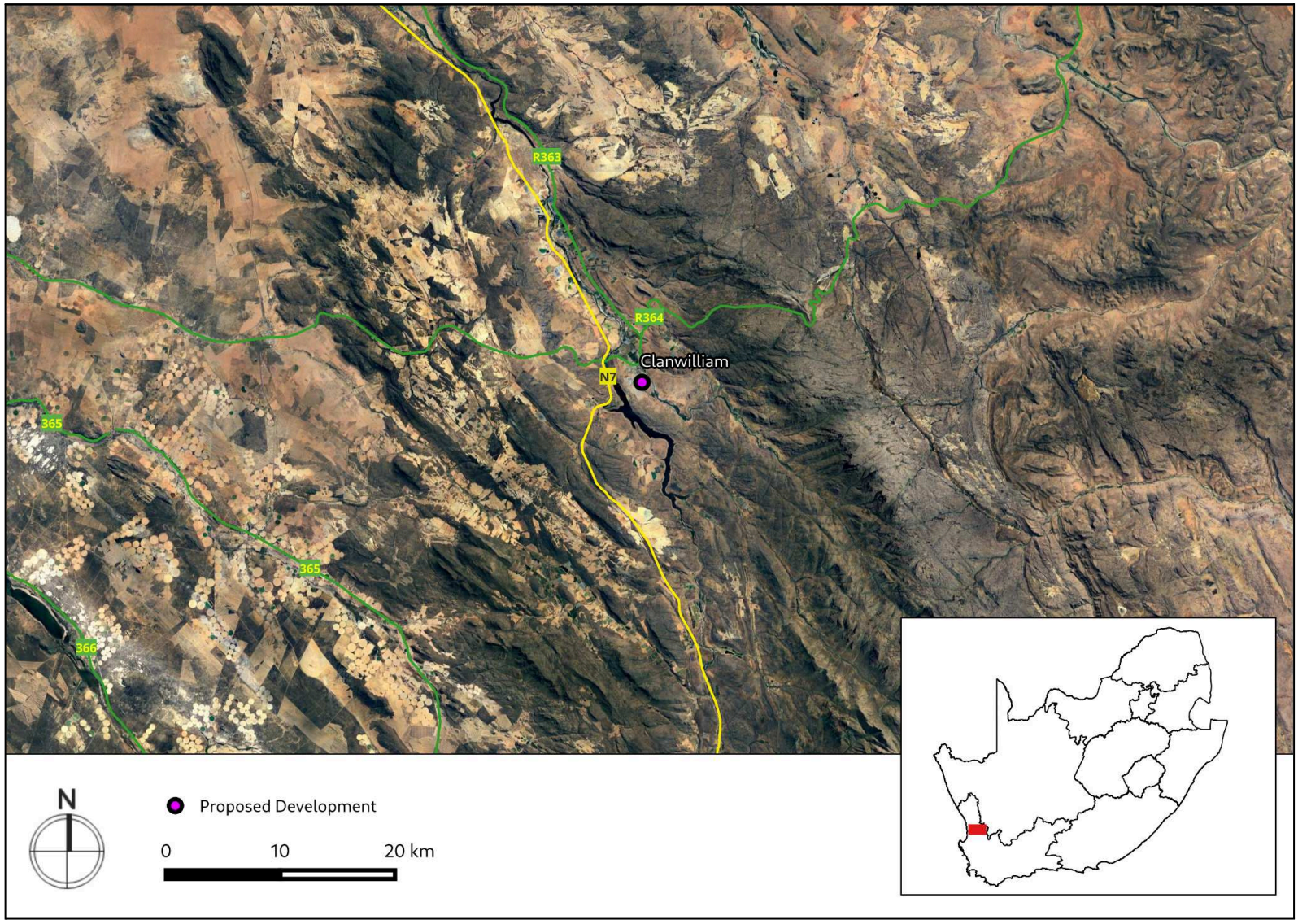


**Figure 1.1: Satellite image indicating proposed location of development**



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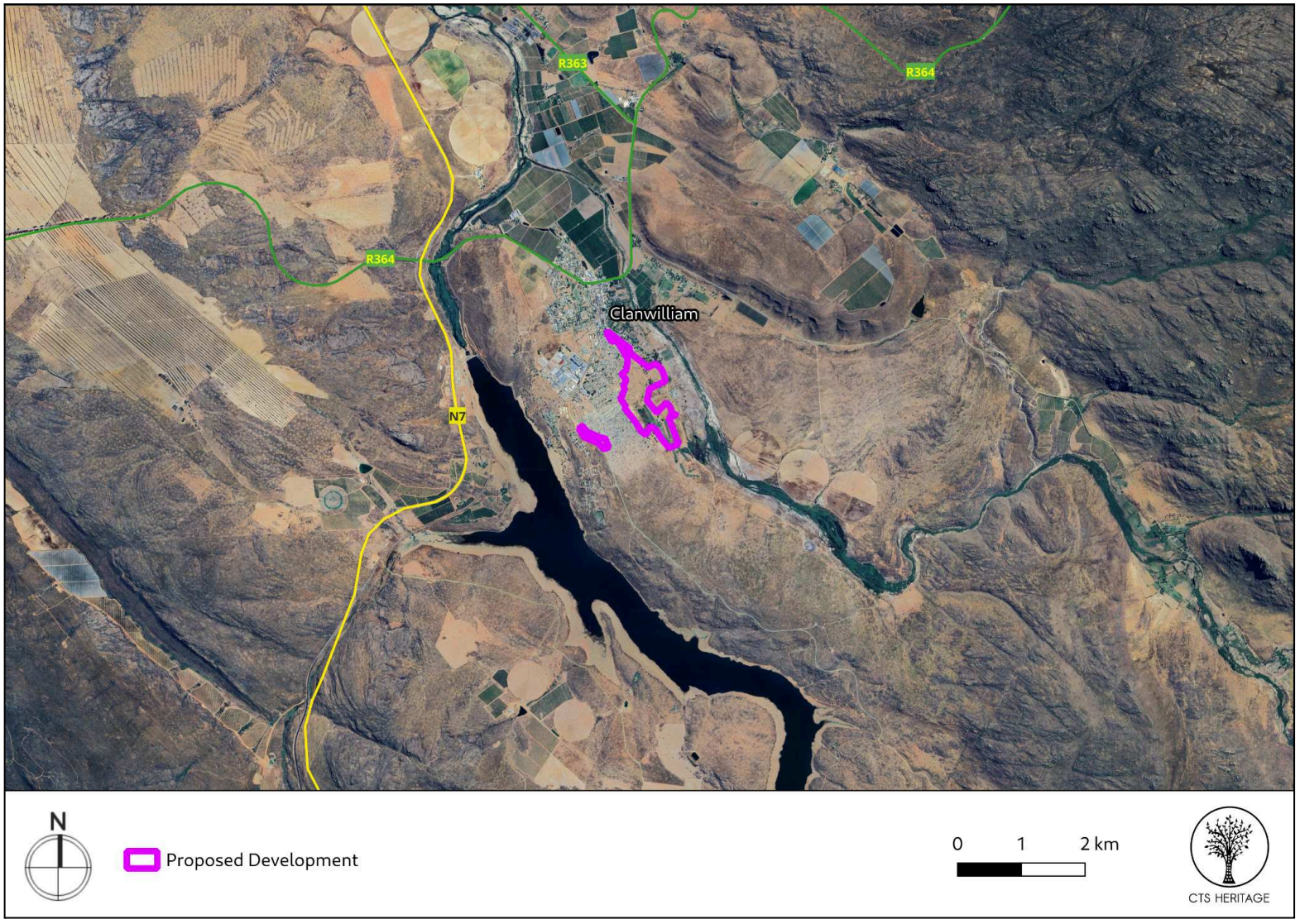


**Figure 1.2: Proposed project boundary**



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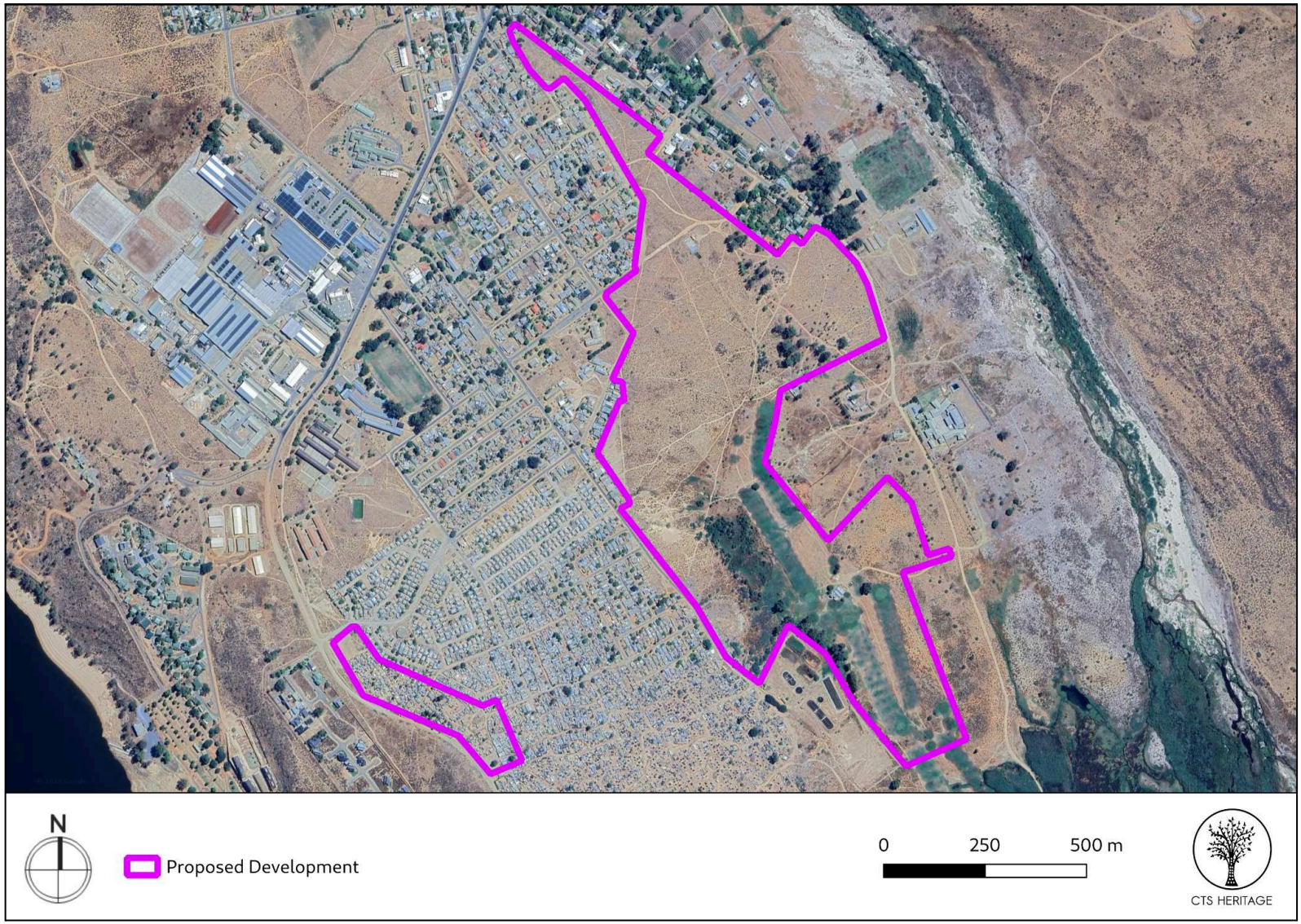


**Figure 1.3: Proposed project boundary**



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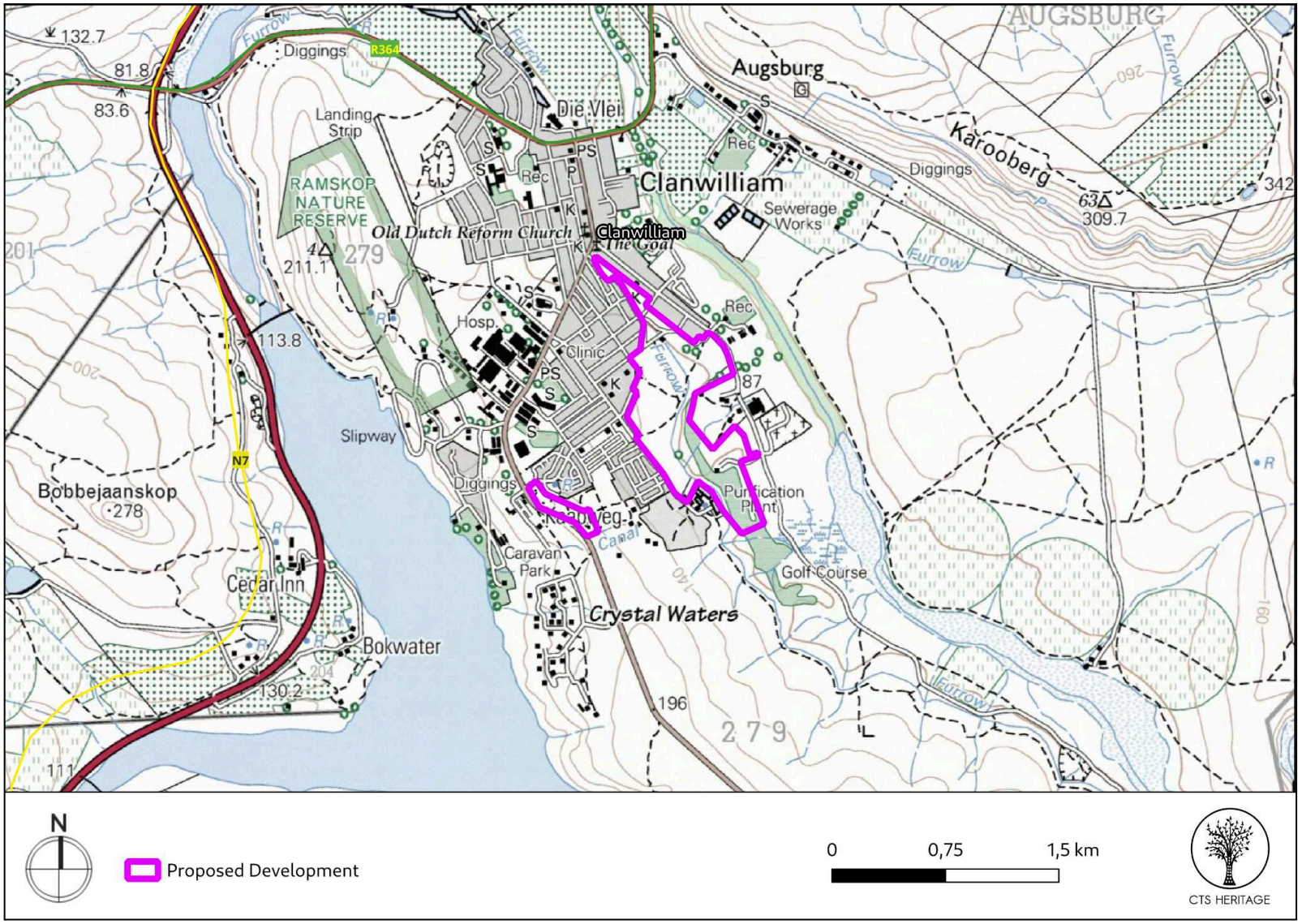


**Figure 1.4: Proposed project boundary indicated on the 1:50 000 Topo Map**



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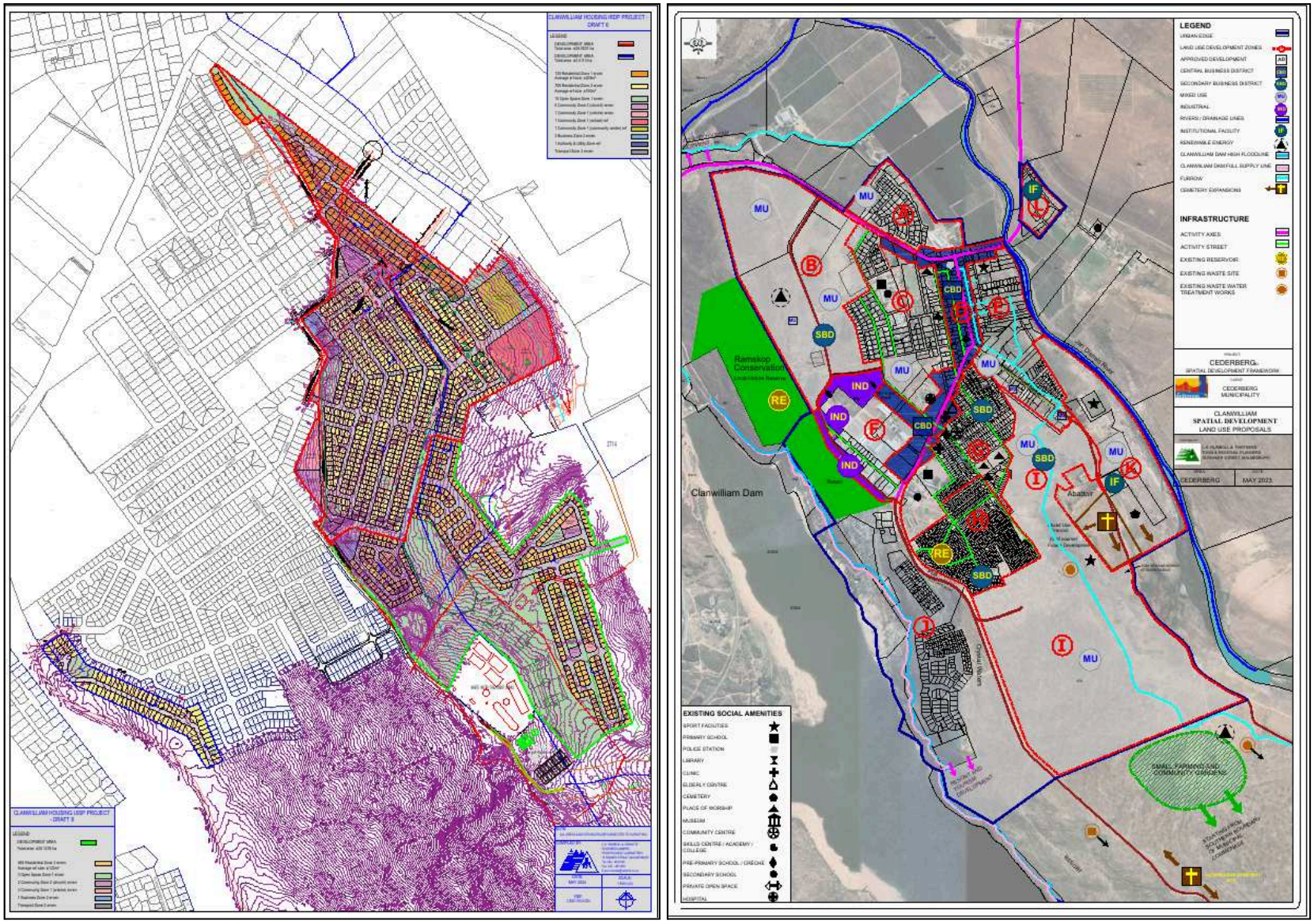


**Figure 1.5-1.6 SDP and SDF Map**. SDP and SDF provided by client



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## 2. METHODOLOGY

### 2.1 Purpose of Archaeological Study

The purpose of this archaeological study is to satisfy the requirements of section 38(8), and therefore section 38(3) of the National Heritage Resources Act (Act 25 of 1999) in terms of impacts to archaeological resources.

### 2.2 Summary of Steps Followed

- An archaeologist conducted a survey of the site and its environs on 7 October 2024 to determine what archaeological resources are likely to be impacted by the proposed development of the PV facility and grid connection.
- The area proposed for development was assessed on foot, photographs of the context and finds were taken, and tracks were recorded using a GPS.
- The identified resources were assessed to evaluate their heritage significance in terms of the grading system outlined in section 3 of the NHRA (Act 25 of 1999).
- Alternatives and mitigation options were discussed with the Environmental Assessment Practitioner.

### 2.3 Constraints & Limitations

The southwestern segment is completely occupied by housing structures but the main and larger section of the study site remains largely open as the golf course occupies the lower half of the site. The northern half is currently open space and this area was also easily surveyed. The vegetation is relatively sparse and the visibility of archaeological material on the surface is good. The study therefore achieved a high level of coverage of the area.



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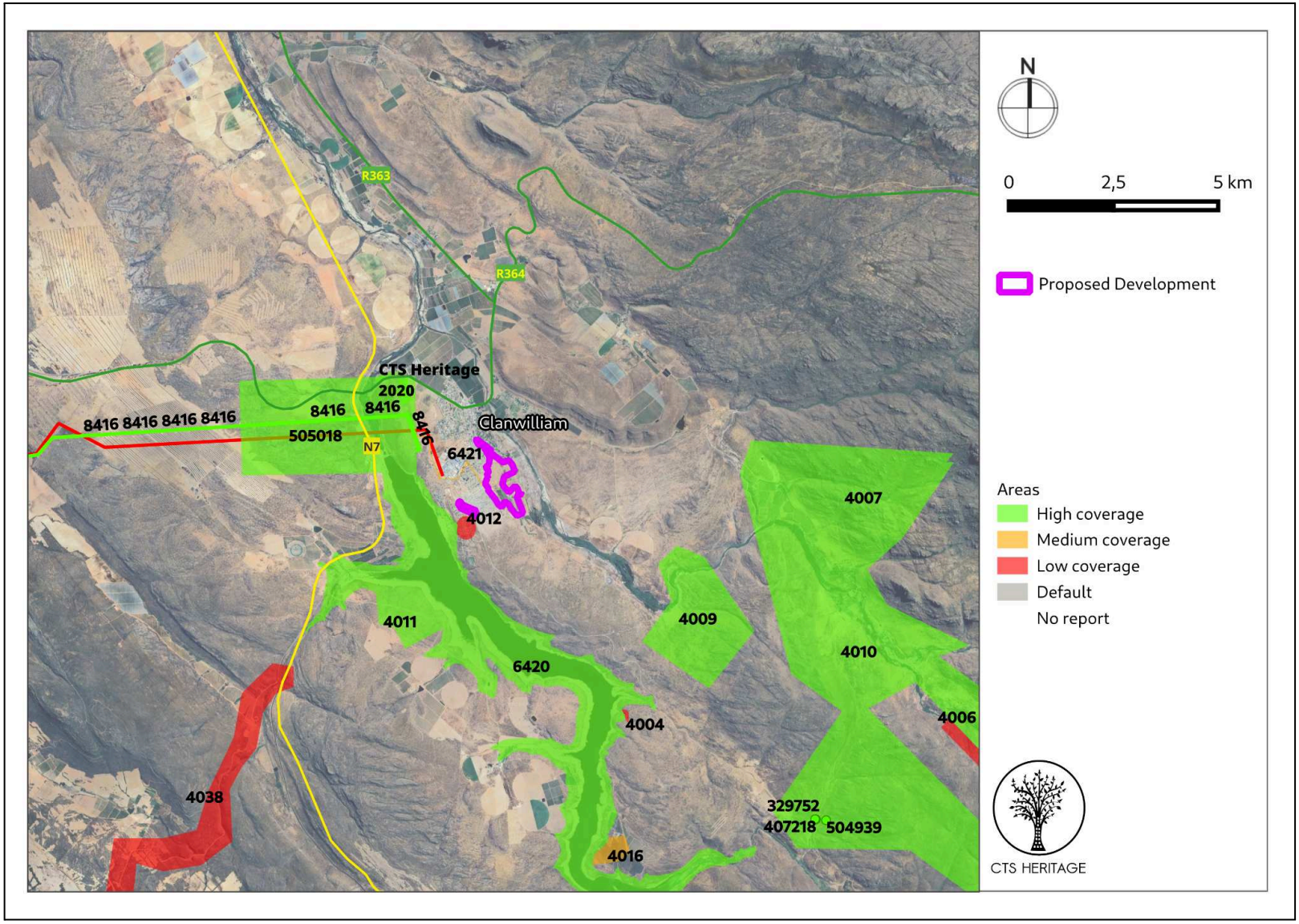


**Figure 2: Close up satellite image indicating proposed location of development in relation to heritage studies previously conducted**



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## 3. HISTORY AND EVOLUTION OF THE SITE AND CONTEXT

### 3.1 Background

This application is for a proposed residential development in Clanwilliam, in the Western Cape province. The town of Clanwilliam is located where the Olifants and Jan Dissels rivers meet. Originally it was known as Jan Disselsvlei as it was laid out on the farm of Jan Disselsvlei. It was renamed Clanwilliam by Sir John Cradock, Governor of the Cape, on 1 January 1814, and attained municipal status in 1901 (Raper et. al., 2018). The original farm was named after botanist Jan Dissel. It was renamed Clanwilliam, after the Earl of Clanwilliam. The first mayor was Charles Fryer, an Irish descendant of the 1820 Settlers, who settled along the Jan Dissels River (CK Rumboll and Partners, 2023).

### 3.2 Archaeology

A number of AIA and HIAs have been completed in the vicinity of the study area; and extensive rock art surveys of the surrounding mountains and kloofs have been completed by the Eastern Cederberg Rock Art Group (eCRAG). Tusenhuis (2012, SAHRIS NID 329798) summarised the known archaeological sensitivity of the region and a brief summary is provided here: *The Cederberg, Olifants River Valley, and Doring River area have been inhabited for over 500,000 years, with archaeological evidence from the Early Stone Age, Middle Stone Age, Later Stone Age, and colonial times (Orton & Hart 2005; Halkett et al. 1997). Stone Age artefacts, often scattered due to erosion, are found on the surface, while some Middle and many Later Stone Age sites are preserved in rock shelters. The region is notable for its rock art, particularly in the northern Cederberg, which has been extensively studied academically (e.g., Maggs & Sealy 1983; Manhire 1998; Manhire et al. 1983; Yates et al. 1985; Yates & Manhire 1991) and is featured in popular literature (e.g., Deacon 1994; Parkington 2003). Well-known rock art sites include the Sevilla Trail, Leipoldt's Grave, and Bushmanskloof. Excavations in the Pakhuis Pass region, such as at De Hangen (Parkington & Poggenpoel 1971) and Klein Kliphuis Shelter (Van Rijssen 1992), have revealed significant archaeological layers, including Middle Stone Age layers below Late Holocene Later Stone Age deposits (Orton & Mackay 2008).*

In 2005, Orton and Hart conducted an HIA for the development of the Clanwilliam Dam (SAHRIS NID 6420). They provided a thorough history of place and archaeological background of the area, of which the main points are summarised here. Since the late 1960s, the Department of Archaeology at UCT and Iziko Museum have conducted research in the Olifants River Valley, mainly focusing on rock art and Stone Age heritage in the northern Cederberg Mountains. The Department of Geography also conducted geomorphological and palaeoclimatic studies. Research on the Early and Middle Stone Age (ESA and MSA) has been limited, with most finds being surface artefact scatters due to erosion. Significant sites include Klipfonteinrand, Klein Kliphuis, and Hollow Rock Shelter. However, many ESA and MSA artefacts are found disturbed on the landscape. The LSA of the Olifants River Valley is well-researched, particularly through rock art and excavations in rock shelters. Several deposits at sites like De Hangen and Klipfonteinrand provide insight into subsistence practices. Open artefact scatters have also been found at farms like Malgashoek and Andriesgrond. The Clanwilliam area has a long history of colonial settlement, dating back to the 1720s. Historical research has focused on frontier status and infrastructure development, while oral history is expected to provide more details during future research. The area also contains numerous ruins of farmhouses, likely abandoned during the early 20th century due to events like the Spanish flu and the Great Depression (Orton & Hart, 2005, SAHRIS NID 6420).

During the archaeological survey for the Clanwilliam Dam, Orton and Hart (2005, SAHRIS NID 6420) identified 120



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heritage sites. These comprise a large portion of the Heritage Resources on SAHRIS within a 4km radius of the proposed development. Their findings were that the Early and Middle Stone Age artefacts found around and below the Full Supply Level (FSL) are generally in secondary contexts, meaning their disturbance would not significantly impact heritage value, as most artefacts are not in their original positions. Some scattered artefacts might even become more accessible for study during times of low water. The Later Stone Age rock art, however, is highly vulnerable to water damage, including mechanical weathering and salt crystallisation, which can lead to severe deterioration or total loss of the artwork. Several significant painted rock art sites close to the water are already showing signs of damage. While some artefact scatters in the area have limited heritage significance due to their open context, those with rock art or archaeological deposits hold higher significance. Historical structures, such as early road infrastructure, quarries, and the Clanwilliam Dam itself, also face potential flooding, with the significance of their loss ranging from low to medium-high. Sites of importance include rock art panels, prehistoric kraals, and graveyards, all of which are highly valued for their cultural and historical significance. As all of these sites fall outside the project area, impact is unlikely, but Orton and Hart's findings provide insight into which types of heritage resources can exist within the project area.

In 2008, Kaplan conducted an AIA located less than 2km west of the proposed development (SAHRIS NID 6421). Kaplan identified no significant heritage resources. CTS Heritage also conducted an HIA located less than 5km northwest of the project area. Their findings were "*A total of 9 observations were made during the survey. A modern complex of temporary shelters is located on the western end of erf 478 just below the level of the R364. It was not possible to determine who has been using these areas as they were unoccupied during the survey but blankets, torn clothing items and plastic debris have been left here. The concrete canal, built in the 1920s, is still in a very good condition and looks to be well maintained. An older internal farm track lined with standing stones was also found on erf 478 but most of it disappeared during the construction of the R364 and subsequent dumping activities mentioned previously. The rest of the observations consisted of isolated Later and Middle Stone Age stone artefacts that were found in very low numbers across the site. This was not surprising given that the lower lying, level ground had already been taken up by agricultural activities and that there were no suitable rock shelters and boulders. Only observation #9 contained more than a couple of flakes and this lies just outside of the development area in a heavily disturbed drainage channel next to the R364. The archaeological sensitivity of erf 912 and erf 478 is therefore very low and no further work is recommended.*"

As part of the NID application for this project, CK Rumboll included the following information regarding archaeological resources, "*The Cederberg Mountains surrounding Clanwilliam are renowned for their ancient San (Bushman) rock art. The rock art of the Cederberg area is very diverse, and perhaps the most appealing of heritage resources in the area (Infinity Environmental, 2021). As mentioned previously Erf 279 in Clanwilliam is designated as part of the municipal commonage bordered by the Jan Disselsriver (east) and the Olifants River Valley (west). Previous studies conducted on Erf 279 have identified archaeological resources, such as rock shelters with rock art, artefacts, and rocky outcrops, along the Olifants River Valley (Clanwilliam Dam). The development site is situated approximately 1,2 km north of these known archaeological resources. Additionally, the property is relatively flat with very few rocky outcrops"* (CK Rumboll, 2024).



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### 3.3 Built Environment and Streetscape

Four Provincial Heritage Sites (PHS) are located within 200m of the proposed development. Three of these, SAHRIS IDs 28961, 28962, and 28966, are on the other side of Park Street, and the proposed development is unlikely to have a significant impact on these three sites. However, SAHRIS ID 28973, known as Clanwilliam Museum (Ou Tronk), Main Street, Clanwilliam touches on the northwestern end of the project area (Figure 3.2). Further southeast, the Clanwilliam Cemetery East is also located within 70m of the proposed development. Burial grounds and graves have high levels of local social and spiritual significance and as such, are graded IIIA. It is important that the sense of place associated with these human remains is retained. The cemetery is separated from the project area by Spokie Road, an informal gravel road, which should mitigate impact.

CK Rumboll also noted the following regarding the influence the proposed development will have on the streetscape: "*The proposed development is not expected to negatively impact any scenic routes in the area, such as Old Cape Road and Park Street. The scale and nature of the development are appropriate and will seamlessly integrate with the existing surrounding residential neighbourhoods. Additionally, a bus route will be incorporated into the development and may include street furniture, lighting, and wide sidewalks, thereby enhancing the aesthetics, functionality, and safety of the neighbourhood.*" (CK Rumboll, 2024)

**Table 2: Grade II Sites within 500 of the study area**

| SAHRIS ID | Site Number and Name | Description | Site Type and Grade | Image |
|---|---|---|---|---|
| 28961 | 9/2/022/0016<br>Die Erf, 5 Park Street, Clanwilliam | The property with the house known as "Die Erf" thereon. being the remaining portion of certain Erf or Lot of land situate in the Municipality and Division of Clanwilliam and marked No.1 (now known as Erf 94 Clanwilliam). measuring as per remaining extent two hundred and fifty-eight (258) square roods. twenty-two (22) square feet. Deed of Transfer 17786/1968. dated 14 August 1968 (paragraph 1). Historical and architectural interest This house in the Cape Dutch style housed one of the drostdy officials shortly after the establishment of a sub-drostdy at Clanwilliam in 1808. 10/2/678. | Building<br>Grade II |  |
| 28962 | 9/2/022/0025<br>Old Residency, 3 Park Street, Clanwilliam | The Property With The Old Residency Of The Deputy Landdrost Thereon, At 3 Park Street, Clanwilliam<br>The property with the Old Residency of the Deputy Landdrost thereon, being the Remainder of Erf 95, situated in the Municipality and Division of Clanwilliam, in extent 5 667 (five thousand six hundred and sixty·seven) square metres.<br>Deed of transfer T9286/1966, dated 18 May 1966. | Building<br>Grade II | |
| 28966 | 9/2/022/0015<br>2 Park Street, Clanwilliam | The property with the Old Landdrost Office thereon, being Erf 920, Clanwilliam, situated in the Municipality and Division of Clanwilliam, in extent 1 063 (one thousand and sixty-three) square metres.<br>Deed of Transfer T38395/1974, dated 13 November 1974. | Building<br>Grade II |  |



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| | | | | |
|---|---|---|---|---|
| 28973 | 9/2/022/0005 | History: This Georgian building, the core of which was probably erected as early as 1808, is a prominent architectural feature in the historic core of Clanwilliam. Visual Description: Symmetrical stone building with three-bay central pavilion. Plaster decorations at windows and corners. Round-headed openings. Left hand side has addition constructed c1890. Parapets with moulded cornices conceal low-pitched roof. Condition: Fair - The unfortunate alterations, which include the incorrect addition of shutters and vertical application of slasto, require attention. Construction Date: c1860 | Building |  |
| | Clanwilliam Museum (Ou Tronk), Main Street, Clanwilliam | | Grade II | |



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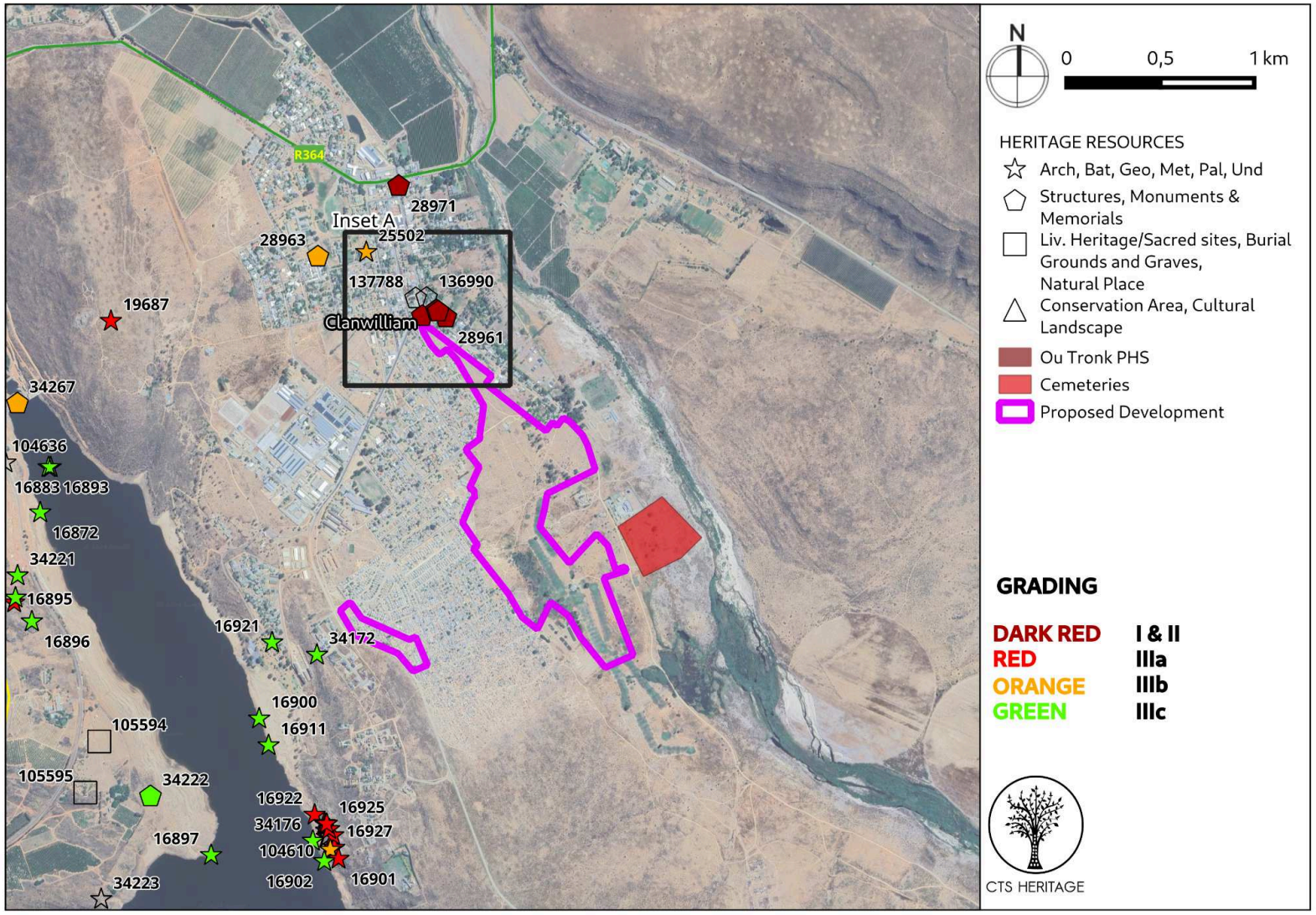


**Figure 3. Heritage Resources Map. Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs indicated**



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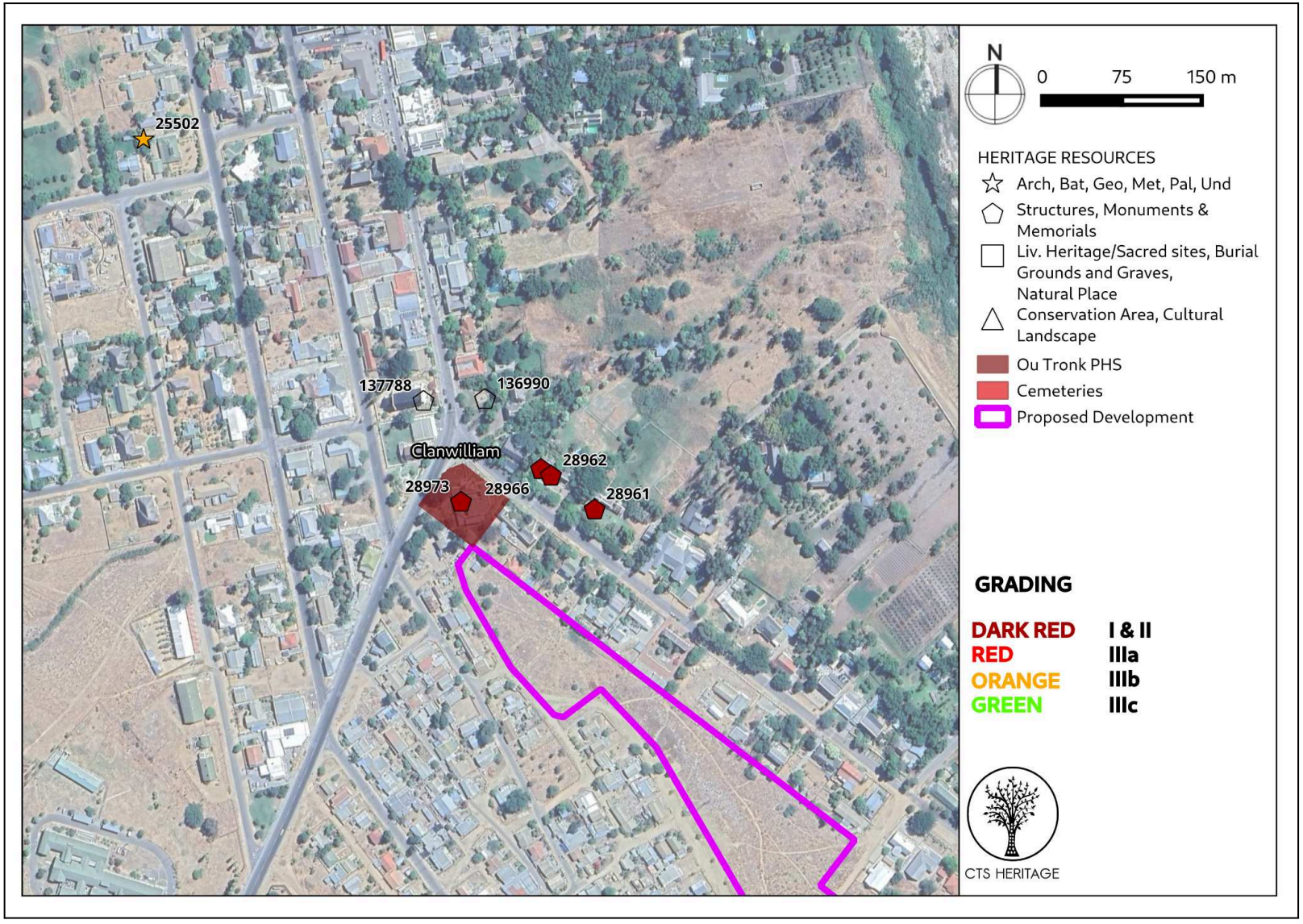


**Figure 3.2 Heritage Resources Inset Map A.** Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs indicated.



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## 4. IDENTIFICATION OF HERITAGE RESOURCES

### 4.1 Field Assessment

As noted earlier in this report, there are a few buildings currently holding Provincial Heritage Site status as they were declared as National Monuments before the NHRA (Act 25 of 1999) was promulgated. Additional buildings in Park Street were briefly assessed during the survey in terms of potential impacts from the "back" end of these properties due to infill development. Most of the PHSs in Clanwilliam should be listed as Grade IIIa buildings and de-proclaimed as they are of local (high) significance, not of Provincial significance. A full heritage inventory of the townscape and the other locally significant heritage resources should be commissioned by the Cederberg Municipality as this is required in terms of the NHRA.

The golf course has transformed the topsoil of about 50% of the main section of the study site but Later and Middle Stone Age stone tool scatters remain relatively undisturbed to the east of the golf course. These scatters are on and near a series of local silcrete outcrops and these have been quarried to produce the silcrete flakes and cores. Quartz debitage and flakes were also noted in the assemblages. The slope climbs up towards the church in the northwestern side and much of the archaeological material disappears where the soil is deeper and turned over by burrowing animals. There are no overhangs or large enough rock boulders on the study which could have provided locations for rock paintings which are ubiquitous in the surrounding area. The farm of Warmhoek, southeast of the study site, has hosted numerous UCT Archaeology fieldschools and there are a number of sites there. There is an avenue of gum trees leading up to the werf off Reservoir Street and the buildings are currently occupied. Most of the structures were built in the 20th century and a couple of early 20th century ruins are also present on this end. The werf, buildings and surrounding clumps of trees are currently in a degraded state and have not retained a sense of place and integrity.



**Figure 4.1: View looking southeast towards Warmhoek farm in the distance from the study site.**



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**Figure 4.2: View looking northwest past the Clanwilliam Golf clubhouse from the study site.**



**Figure 4.3: View looking north in the direction of the sports grounds.**



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**Figure 4.4: View of the currently developed ridge overlooking the study site from the west as well as the fairways.**



**Figure 4.5: View from one of the greens at the golf club.**



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**Figure 4.6: View looking south in the golf club area.**



**Figure 4.7: Fairway in the golf club with gum trees lining the edge.**



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**Figure 4.8: View from the edge of the WWTW area onto the golf club.**



**Figure 4.9: The slope climbs up to the church on the left with sparse vegetation and sandy soils.**



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**Figure 4.10: View looking down the slope towards the Jan Dissels River.**



**Figure 4.11: View along Viooltjie Street showing the interface of the infill area and the existing buildings.**



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**Figure 4.12: View from the infill area onto the back end of the Park Street buildings.**



**Figure 4.13: View in the common open space area north of the golf course.**



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**Figure 4.14: View looking south from the open space.**



**Figure 4.15: View of the smaller southwestern segment which has already been built over with structures.**



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**Figure 4.16: View of the smaller southwestern segment which has already been built over with structures.**



**Figure 4.17: View of the smaller southwestern segment which has already been built over with structures.**



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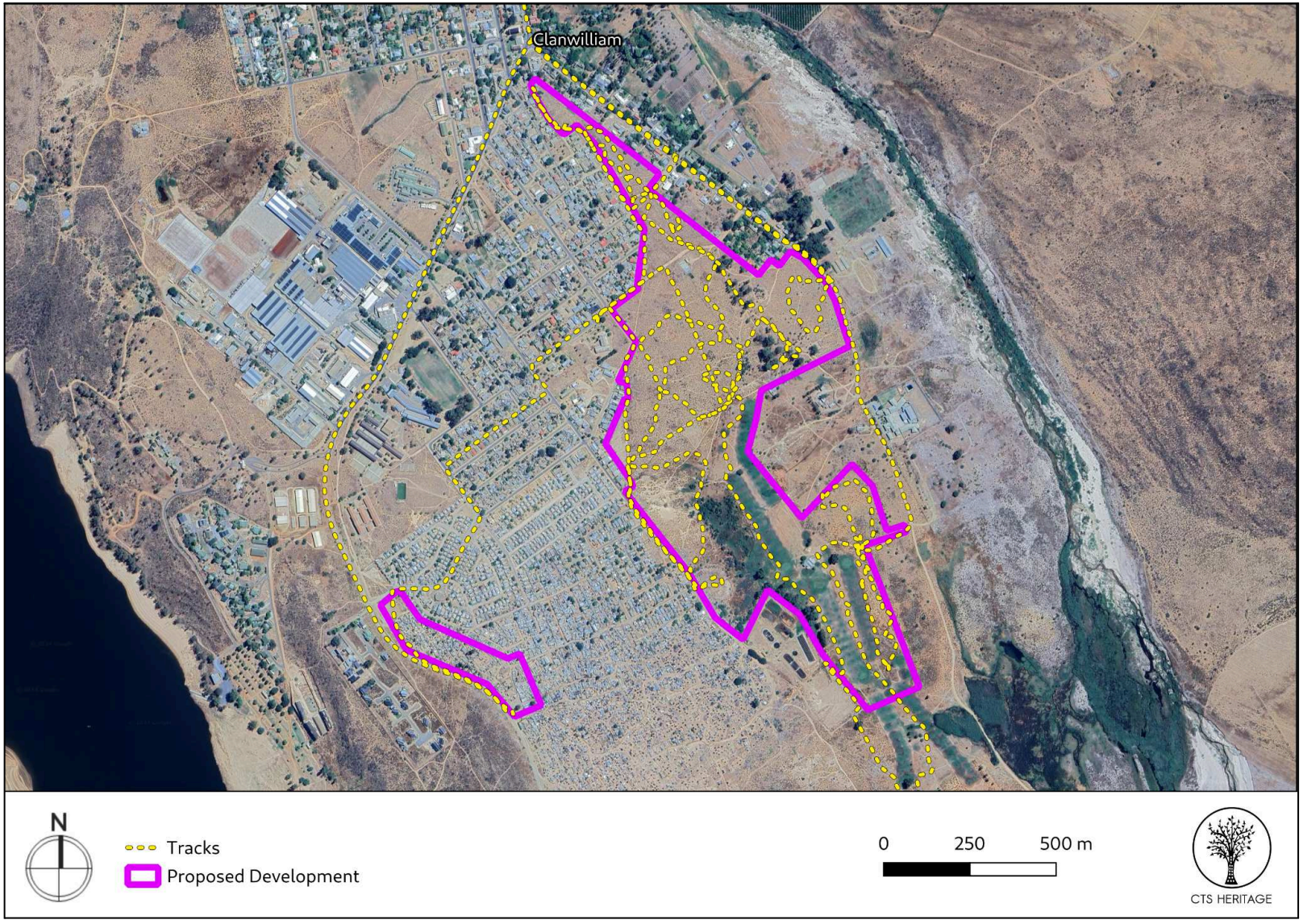


**Figure 5.1. Track paths of archaeological field assessment**



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## 4.2 Archaeological Resources Identified

**Table 3: Observations noted during the field assessment**

| POINT ID | Description | Density | Type | Period | Co-ordinates | | Grading | Mitigation |
|---|---|---|---|---|---|---|---|---|
| 1 | Vrede Oord Cemetery | n/a | Graves/ Burial Grounds | Modern | -32.190127 | 18.904338 | IIIA | No buffer needed, clearly delineated in urban area |
| 2 | Various silcrete and quartz points, flakes and blanks, near outcropping of silcrete | 30+ | Artefacts | LSA+MSA | -32.191765 | 18.902225 | NCW | N/A |
| 3 | Golf course clubhouse, modern | n/a | Structure | Modern | -32.192178 | 18.901033 | NCW | N/A |
| 4 | More MSA silcrete flakes | 5 to 10 | Artefacts | MSA | -32.191187 | 18.901994 | NCW | N/A |
| 5 | Ruined 20th c building | n/a | Ruin | Modern | -32.190468 | 18.901258 | NCW | N/A |
| 6 | Lots of silcrete cores, chunks, blanks, debitage on silcrete outcrop | 30+ | Artefacts | LSA+MSA | -32.19057 | 18.901712 | NCW | N/A |
| 7 | Another raw material quarry and production area with debitage, cores, flakes on silcrete outcrop | 30+ | Artefacts | LSA+MSA | -32.191377 | 18.902691 | NCW | N/A |
| 8 | Silcrete nodule with flake scars and blanks, flakes | 5 to 10 | Artefacts | LSA+MSA | -32.192682 | 18.902641 | NCW | N/A |
| 9 | Couple of silcrete flakes in grassy knoll inbetween golf course greens and fairways | 0 to 5 | Artefacts | MSA | -32.194417 | 18.902952 | NCW | N/A |
| 10 | VGK church with fairly prominent steeple, perched on crest of hill. | n/a | Structure | Modern | -32.187335 | 18.895701 | IIIA | No buffer needed, clearly delineated in urban area |
| 11 | Thatched langhuis, various windows altered, two wooden shutters still intact | n/a | Structure | Historic | -32.182234 | 18.89385 | IIIB | No buffer needed, clearly delineated in urban area |
| 12 | Hipped corrugated iron roof, early 20th c building | n/a | Structure | Historic | -32.18417 | 18.89729 | IIIC | No buffer needed, clearly delineated in urban area |
| 13 | Silcrete blade struck flake | 0 to 5 | Artefacts | MSA | -32.184612 | 18.897598 | NCW | N/A |
| 14 | Avenue of pine trees, context lost | n/a | Observation | Historic | -32.186081 | 18.898953 | NCW | N/A |
| 15 | Sandstone church, 1924 | n/a | Structure | Historic | -32.183623 | 18.897476 | IIIA | No buffer needed, clearly delineated in urban area |
| 16 | Silcrete flake near path | 0 to 5 | Artefacts | MSA | -32.186806 | 18.901346 | NCW | N/A |
| 17 | Silcrete flake blank, secondary scarring | 0 to 5 | Artefacts | MSA | -32.18837 | 18.897225 | NCW | N/A |
| 18 | Silcrete and quartz flakes | 5 to 10 | Artefacts | LSA | -32.189706 | 18.897316 | NCW | N/A |
| 19 | Silcrete chunk in field sloping towards gum trees | 0 to 5 | Artefacts | MSA | -32.187315 | 18.898649 | NCW | N/A |



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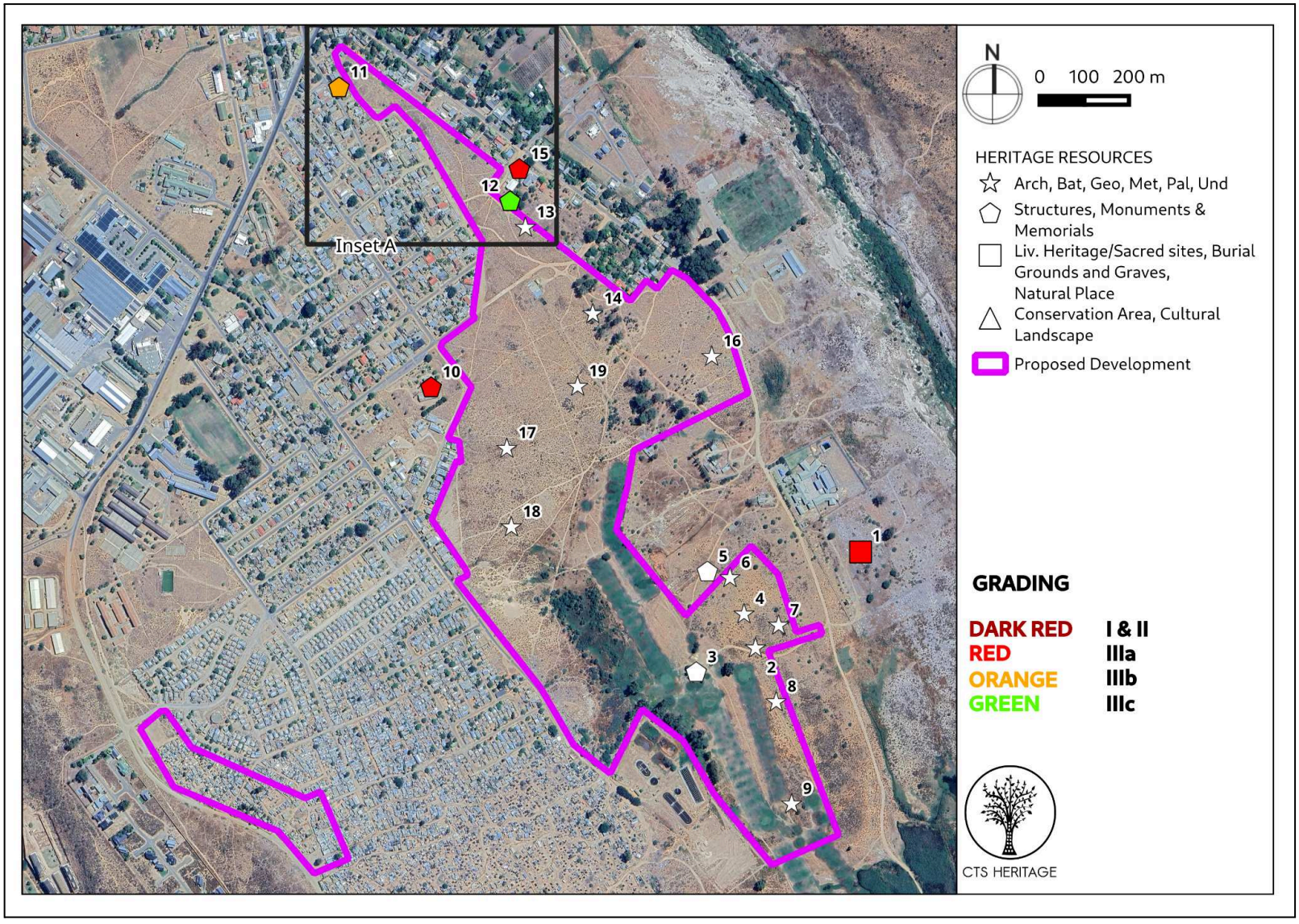


**Figure 6.1: Map of all sites and observations noted within the development area**



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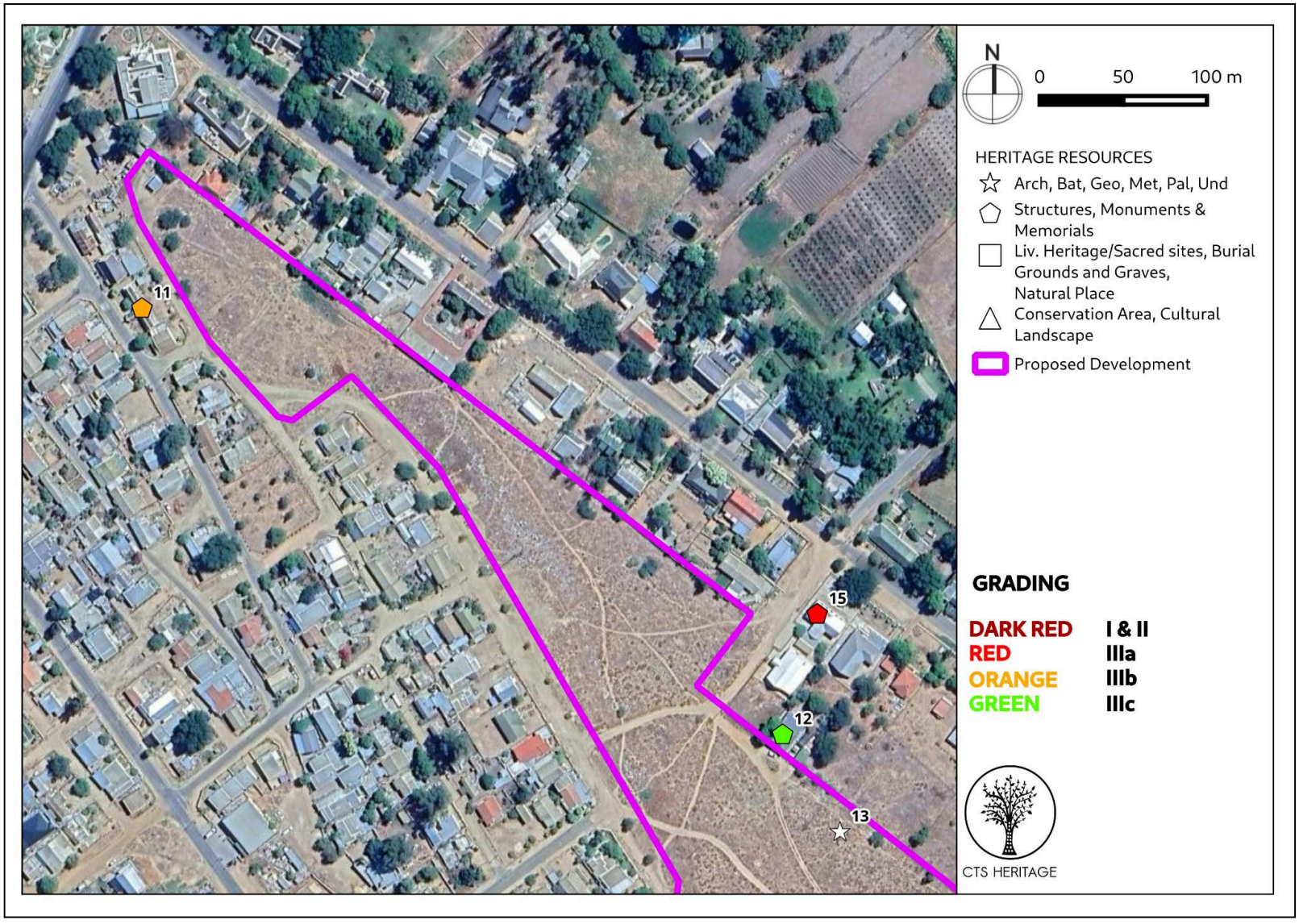


**Figure 6.2: Map of all sites and observations noted within the development area**



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## 4.3 Selected Photographic Record

(a full photographic record is available upon request)



**Figure 7.1: Observation 001**



**Figure 7.2: Observation 002**



**Figure 7.3: Observations 003 and 004**



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Figure 7.4: Observations 005 and 006



Figure 7.5: Observation 007



Figure 7.6: Observations 008 and 009



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Figure 7.7: Observation 010



Figure 7.8: Observations 011 and 012



Figure 7.9: Observations 013 and 014



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**Figure 7.10: Observation 015**



**Figure 7.11: Observations 016 and 017**



**Figure 7.12: Observations 018 and 019**



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## 5. ASSESSMENT OF THE IMPACT OF THE DEVELOPMENT

### 5.1 Assessment of Impact to Archaeological Resources

The field assessment proceeded with no major constraints or limitations. The archaeological observations noted primarily consist of surface scatters of Middle and Later Stone Age artefacts made of silcrete. None of these observations have sufficient cultural value to warrant protection and as such, these resources are determined to be Not Conservation-Worthy. They have been sufficiently recorded in this report and no further mitigation is recommended.

The significant heritage resources identified during the field assessment consist of historic structures (Sites 10, 11, 12 and 15) located on the boundary of the proposed development area and the Vrede Oord Cemetery (Site 1) located to the east of the proposed development area. All of the significant heritage resources identified are located within the existing urban fabric that surrounds the proposed development area. No direct impact to these resources is anticipated. The indirect impact anticipated from the proposed residential development area is limited due to the location of the development within the existing urban edge.

As such, no impacts to significant heritage resources are anticipated.

## 6. CONCLUSION AND RECOMMENDATIONS

The project area was comprehensively surveyed for heritage resources. Some Later Stone Age archaeology of limited scientific value was identified. However, the majority of the significant heritage resources identified relate to the historic development of Clanwilliam. None of the heritage resources identified fall within the area proposed for development and as such, no direct impact to significant heritage resources is anticipated.

In order to ensure that no impact to the identified resources occurs during the construction or operational phases of the development, recommendations are made below.

***Recommendations***

There is no objection to the proposed development from an archaeological perspective on condition that:

- Should any buried archaeological resources or human remains or burials be uncovered during the course of development activities, work must cease in the vicinity of these finds. Heritage Western Cape (HWC) must be contacted immediately in order to determine an appropriate way forward.



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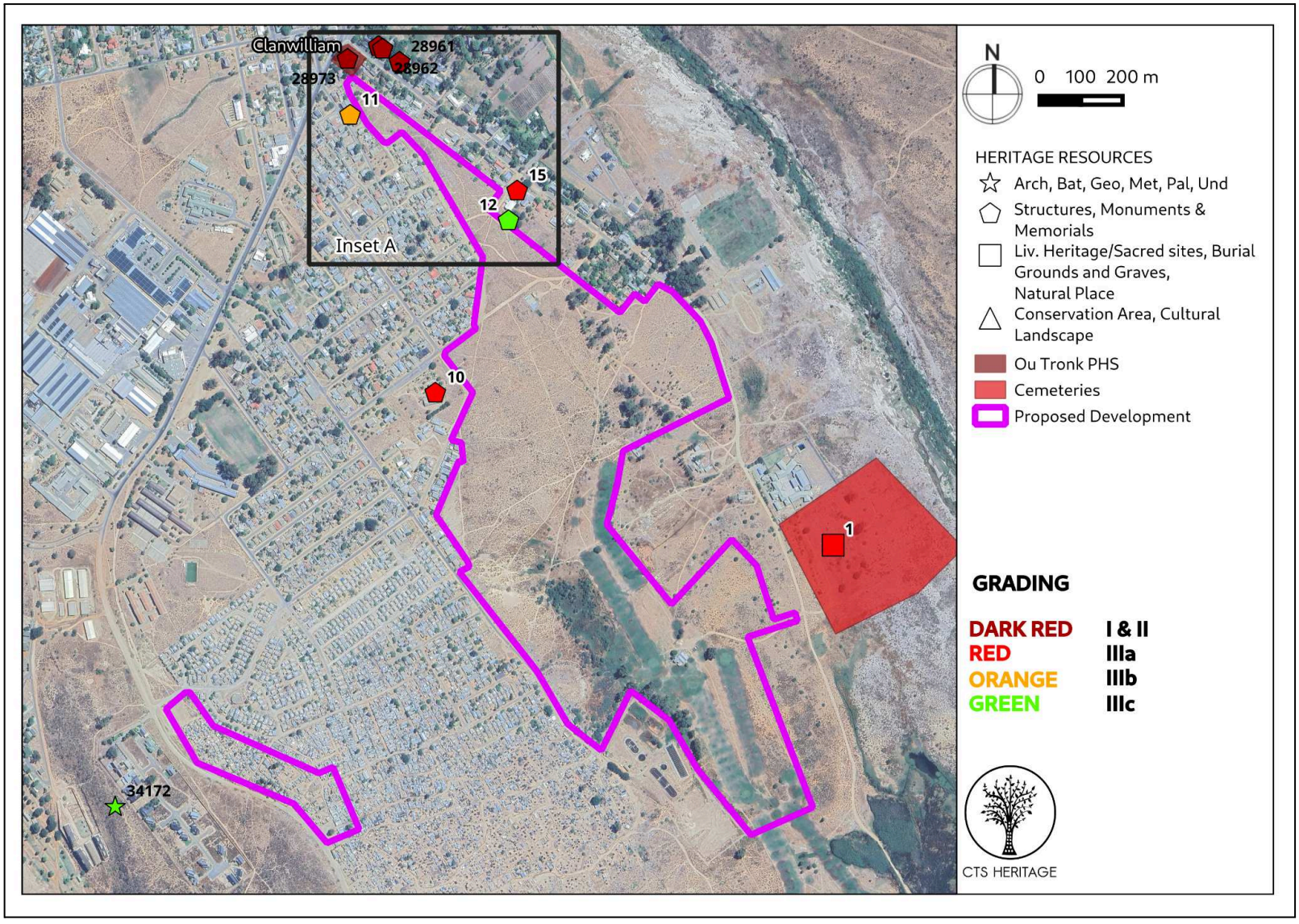


**Figure 8.1: Map of all sites and observations noted within the development area as well as proposed mitigation measures**



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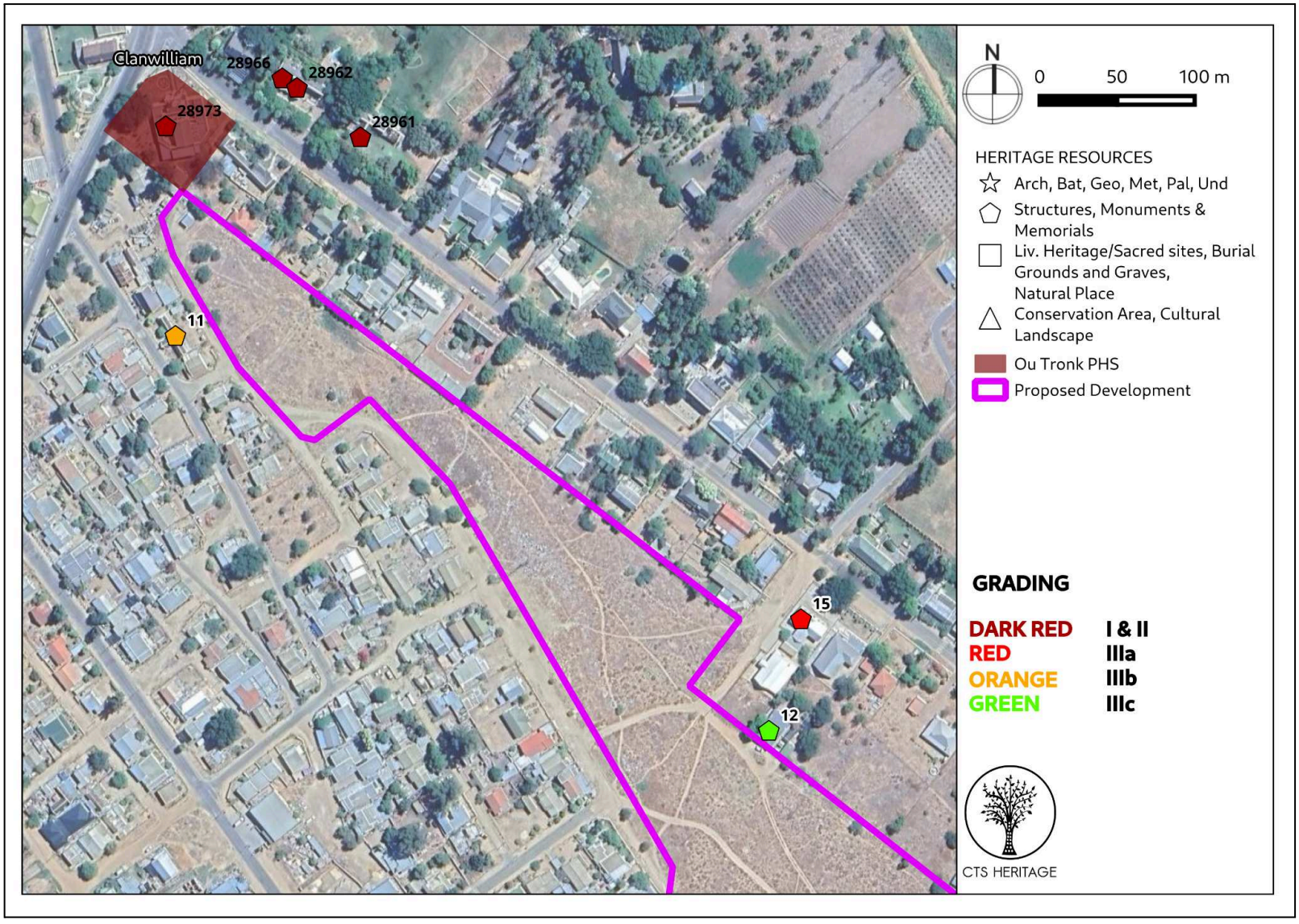


**Figure 8.2: Inset Map A of all sites and observations noted within the development area as well as proposed mitigation measures**



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## 7. REFERENCES

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|---|---|---|---|---|
| **NID** | **Author(s)** | **Date** | **Type** | **Title** |
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| 4012 | Jonathan Kaplan | 01/06/2005 | AIA Phase 1 | Phase 1 Archaeological Impact Assessment Proposed Subdivision of Erven 164 & 658 Clanwilliam |
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## APPENDIX 2: Palaeontological Assessment (2024)

PALAEONTOLOGICAL SPECIALIST STUDY

# Proposed Residential Development in Clanwilliam, Western Cape


**Prepared by**

CTS HERITAGE

And

Ryan Nel

In Association with

**Client**


October 2024

## EXECUTIVE SUMMARY

This Palaeontological Impact Assessment (PIA) was conducted for the proposed residential development on Erf 279 in Clanwilliam, Western Cape, South Africa. The objective of the study is to evaluate the potential impact of the development on palaeontological resources and to ensure compliance with the National Heritage Resources Act (Act 25 of 1999).

The proposed project involves the creation of medium to high-density residential areas, complemented by supporting facilities such as schools, open spaces, and community infrastructure. The development will cover approximately 49.16 hectares of Erf 279, which lies within the urban boundary of Clanwilliam. The plan aligns with the Cederberg Municipal Spatial Development Framework, which encourages infill development. The site is bordered by existing residential neighbourhoods, informal housing, and key amenities, including a golf course and wastewater treatment works.

Geologically, the site is underlain by the Nardouw Subgroup of the Table Mountain Group, specifically the Rietvlei Formation. The formations predominantly consist of quartzitic sandstone with minor shale components. Historically, they have shown low palaeontological sensitivity, with limited fossil discoveries, primarily trace fossils such as burrows and marine ichnofacies. No significant body fossils have been recorded in the immediate area, further reducing the likelihood of encountering valuable palaeontological resources during construction.

The potential impact of the proposed development on palaeontological resources is expected to be minimal. The construction activities will involve shallow excavations for foundations, roads, and utility installations, limiting the extent of disturbance to the underlying geological formations. Given the geological characteristics of the area, the probability of uncovering significant fossil material is low. Even without mitigation measures, the impact on palaeontological resources is classified as low.

While no specific mitigation strategies are required, it is recommended that the Chance Fossil Finds Procedure be implemented during the construction phase. This protocol will ensure that any unexpected fossil discoveries are promptly reported and appropriately managed, safeguarding potential heritage resources.



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# 1. INTRODUCTION

## 1.1 Background Information on Project

### Locality

Erf 279 in Clanwilliam is designated as part of the municipal commonage. The largest portion of the development area stretches from the southern boundary of the existing urban development and is located between the Jan Disselsriver (east), Clanwilliam golf course (south) and the existing residential neighbourhood (west). A portion of the proposed development is located west of the existing neighbourhood and east of the Old Cape Road. Furthermore, it should be noted that this area constitutes an approved layout, however, minor amendments have been made to the layout in this proposal.

### Property Details

**Table 1: The property details are as follows**

| Erf 279 | |
|---|---|
| **Extent** | 926,5469 ha |
| **Owner** | Cederberg Municipality |
| **Servitudes** | Leasehold area L1 (SG no. 8293/1960)<br>Nature Reserve Area (SG no. 8128/1967)<br>Leasehold area (SG no. 6543/1979)<br>Servitude road (SG no. 5311/1990) |
| **Zoning** | Rural Community Zone |
| **Land Use** | The majority of the development area remains undeveloped. However, it does include the existing Wastewater Treatment Works and a portion of the golf course. The portion of the development area along the Old Cape Road is occupied by informal structures. |
| **Title Deed** | CLF3-10/1925 |

### Land use aspects

The Cederberg Municipal Spatial Development Framework provides the planning guidelines that guide forward planning and development in Clanwilliam and the Cederberg Municipal Area as a whole. Broad overarching objectives of the MSDF which include; densification within the urban edge and protecting the place identity and town character are all supported by the development proposal.

Considering that the development areas are located within the urban edge of Clanwilliam, there are proposals at settlement level. With reference to the Spatial Proposal Map for Clanwilliam, the development areas is located within Zone I. In accordance with the MSDF this zone is “earmarked for proposed mixed use development with supporting institutional and commercial uses such as a correctional services facility (juvenile detention centre) and a cemetery site



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the zone is also home to the Khayelitsha informal settlement. Infill medium density residential expansion is proposed along the DR 2183/ R539, with cemetery site. Allow for expansion of the cemetery site. This Zone also includes a secondary business node along Park Street and development should be sensitive to furrows within this zone".

The surrounding area is primarily characterised by residential neighbourhoods ranging from low to high densities including some institutional uses (east of proposed development) and the golf course south of the development area. The proposed development consisting of mainly residential erven as well as supporting land uses will thus seamlessly integrate with the existing surrounding residential neighbourhoods hence supporting appropriate infill development.

**Development Proposal**

The proposed development entails the following:

Rezoning of a portion of Erf 279 Clanwilliam to Subdivisional Area which includes the creation of medium to high-density residential erven including supporting land uses such as open spaces, crèches, churches, community centre, commercial as well as a school site. The development footprint covers approximately 49,16 hectares of Erf 279. Furthermore, Erf 279 will be subdivided into two portions namely: the newly created Portion (portion of Erf 279) and Remainder of Erf 279.

Subsequently, the newly created portion will be further subdivided to allow for the creation of individual land units zoned as follows:

I. Single Residential Zone 1
II. Single Residential Zone 2
III. Local Business Zone 2
IV. Community Zone 1 & 2
V. Open Space Zone 1
VI. Transport Zone 1

**General Comments**

The development proposal primarily involves infill development of a residential nature including supporting uses, within the demarcated urban edge. It appears to be unlikely that the development areas is of any heritage significance or that the proposed development will have a significant impact on existing heritage resources within the area.



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### 1.2 Description of Property and Affected Environment

The proposed infill urban development is split into two parts in Clanwilliam in the Western Cape. The smaller, southwestern segment is already mostly occupied with informal housing and the rezoning and planning mechanisms will formalise this area. The main and larger segment of the development footprint is currently unoccupied and consists of open public space and a golf club bounded by Viooltjie Street, Park Street, Spokie and Bloekom Avenue. The Clanwilliam Golf Club's greens and fairways cover about 50% of study area and the Clanwilliam Waste Water Treatment Works (WWTW) lie to the southeast end.

The Jan Dissels River runs to to the east and northeast of the study site and joins up with the Olifants River further north. The Clanwilliam Cemetery East, BOSASA Clanwilliam Child & Youth Care Centre and Clanwilliam Sports Grounds lie along the east side of Spokie and Park Street overlooking the Jan Dissels River. The western side of the development area rises up to a slight ridge and is completely built over with housing built in the last two decades while the northern and eastern buildings were primarily built in the 20th century.



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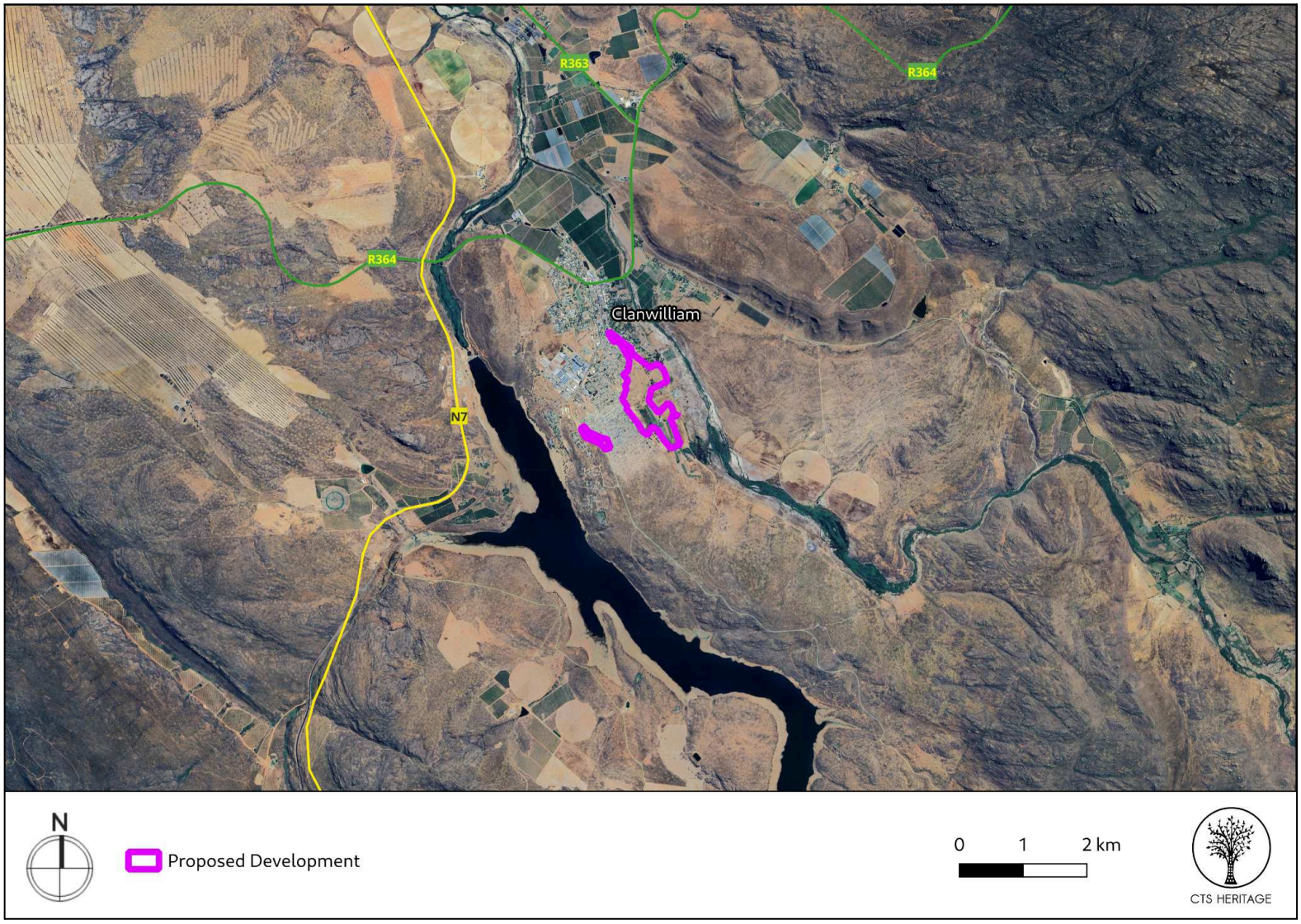


**Figure 1.1: Close up satellite image indicating proposed location of study area**



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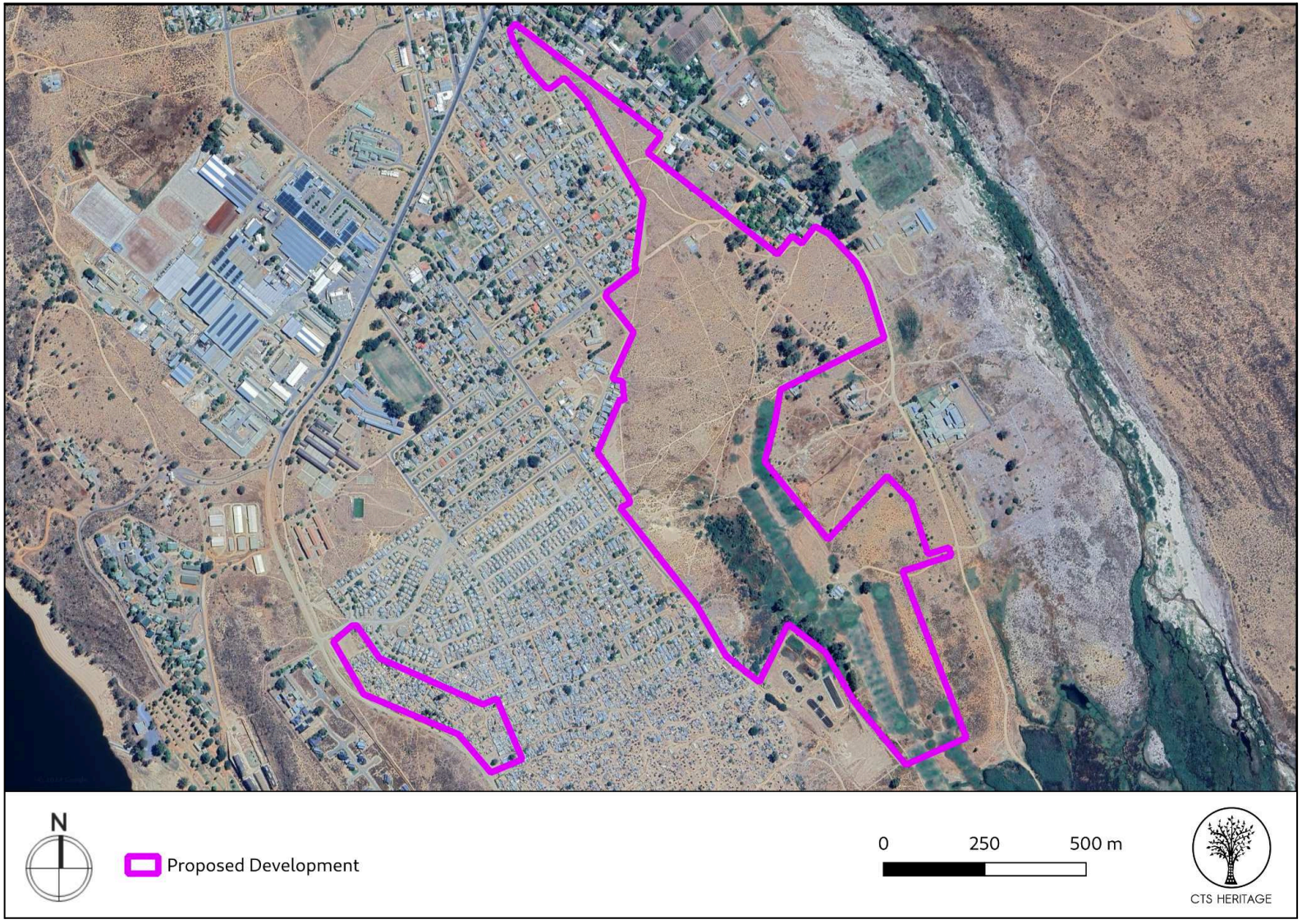


**Figure 1.2: Study Area**



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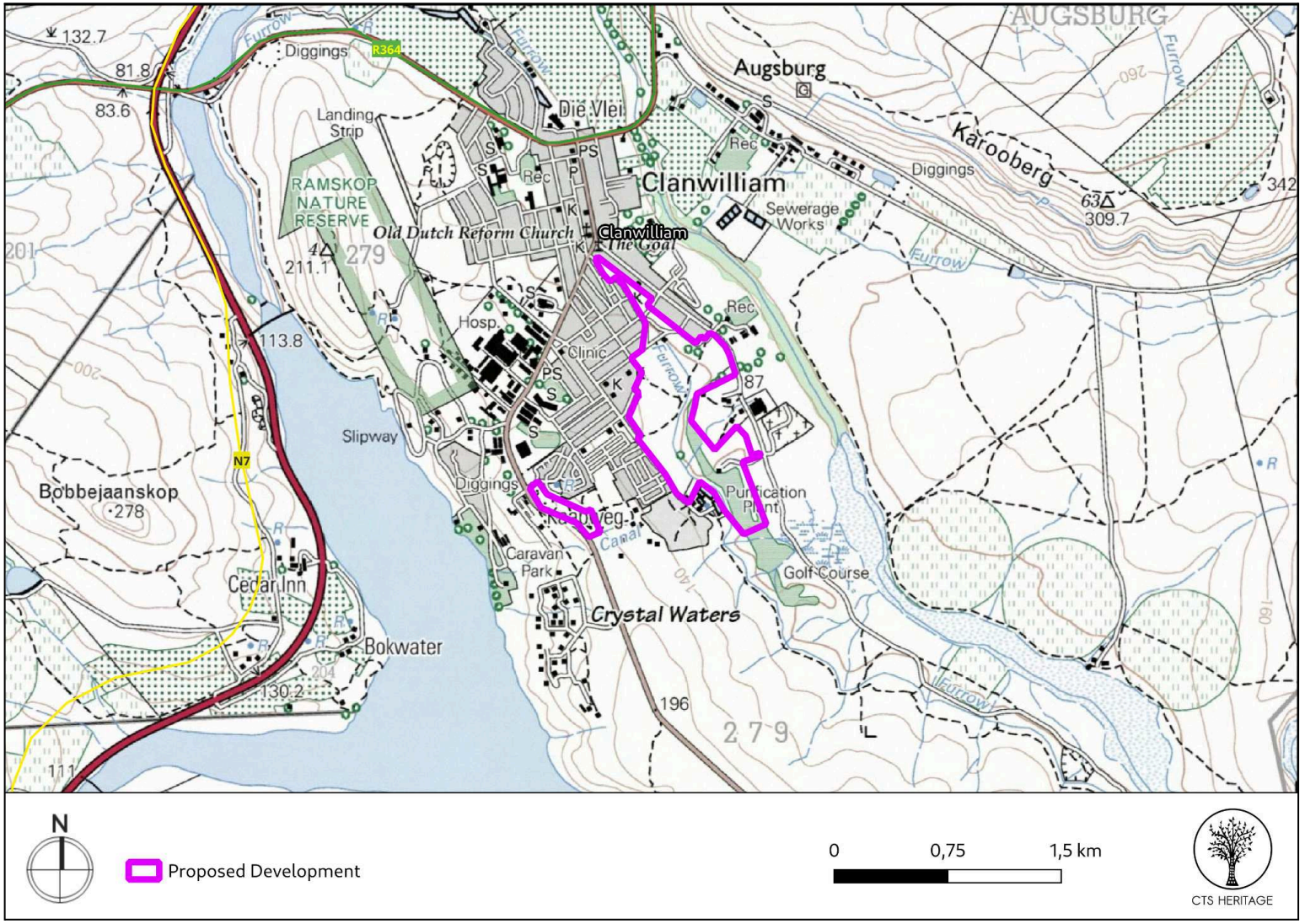


**Figure 1.3: Study Area reflected on the 1:50 000 Topo Map**



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## 2. METHODOLOGY

### 2.1 Purpose of Palaeontological Study

According to the SAHRIS Palaeosensitivity Map (Figure 2), the area proposed for development is underlain by rocks with a high palaeontological sensitivity. The purpose of this palaeontological study is to satisfy the requirements of section 38(8), and therefore section 38(3) of the National Heritage Resources Act (Act 25 of 1999) in terms of impacts to palaeontological resources. This report adheres to the content requirements for specialist reports following Appendix 6 of the EIA Regulations 2014, as amended.

### 2.2 Summary of steps followed

- Primary research literature was consulted for detailed accounts of the geology and palaeontological representation across the study area. References of these primary research articles are provided.
- Geological maps (provided at various scales by CTS Heritage and the South African Council for Geosciences) were consulted to identify represented geological contexts within the study area.
- Constraints:
    - PIA desktop studies require extrapolation of fossil data from comparable rock units in other locations due to the subordinate palaeontological studies done in most regions of South Africa.
    - Field assessments can significantly improve the reliability of palaeontological impact assessments.
    - Areas outside the immediate project site, such as riverbanks, erosional gullies, and burrowing pits, can provide information about the underlying strata.
    - Fossils are often found in subsurface strata and may be covered by surface deposits like soil and vegetation.
    - Observing subsurface strata often involves examining exposed bedrock in nearby locations or even from exposures further away from the study site.
- Limitations:
    - The absence of a comprehensive South African fossil heritage database.
    - Varying accuracy levels in geological maps, affecting the reliability and precision of desktop studies.
    - Insufficient explanations accompanying geological maps.
    - Unavailability of published palaeontological materials.
    - Lack of a dependable database cataloguing fossil collections within South African institutions.
    - Neglecting on-site walkovers during PIA desktop studies, can undermine the reliability and precision.
    - Limited palaeontological studies conducted in most regions of South Africa, leading to reliance on extrapolation from other locations.
- Where possible, other PIA were consulted to provide additional information on local geomorphological, geological and palaeontological contexts. These often provide valuable additional information to primary research publications and formal geological maps, which can lack resolution at a local scale and it is important that discussions regarding alternative stratigraphic attributions of exposed rocks are noted and considered.



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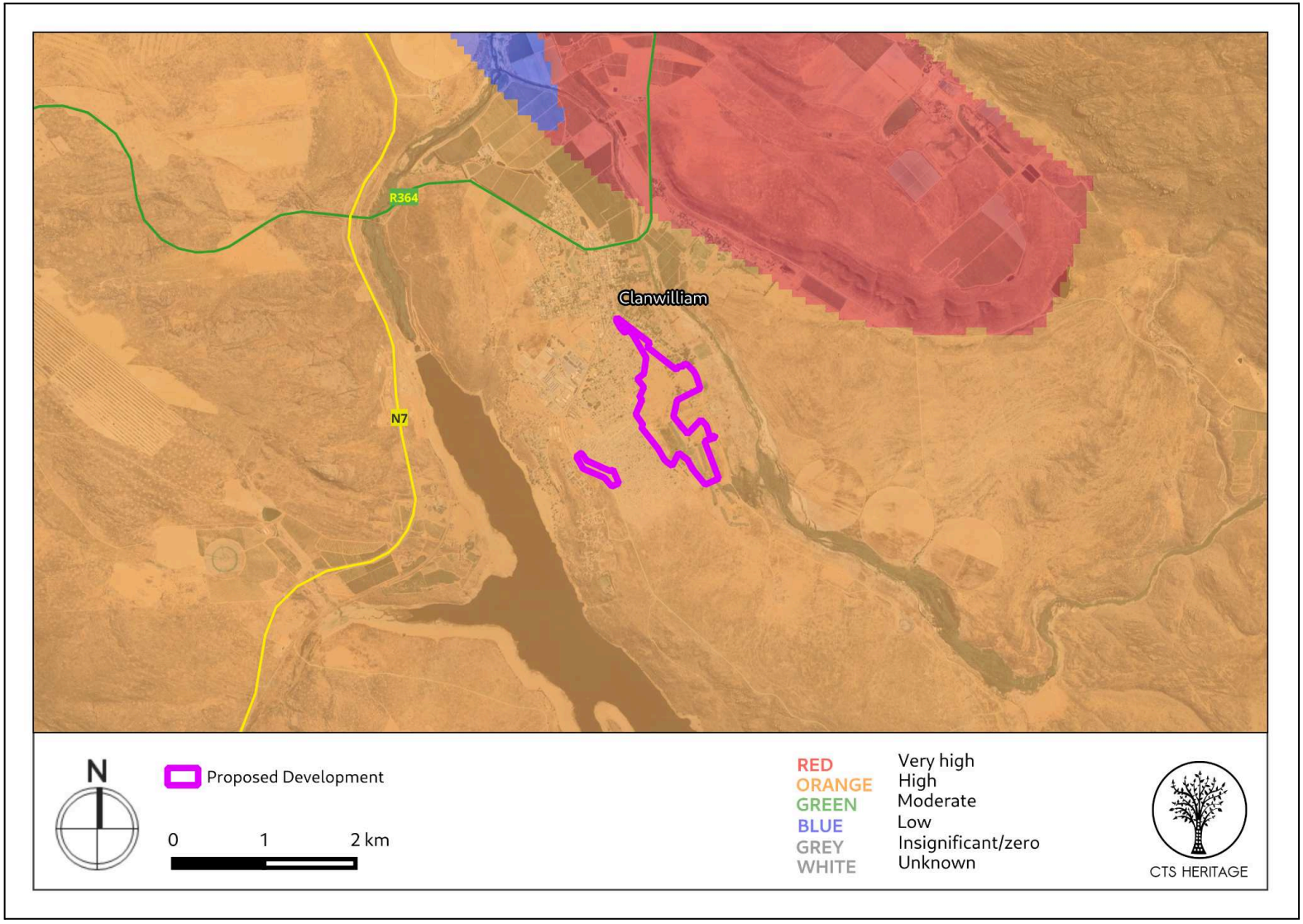


**Figure 2: Palaeontological sensitivity of the development area from the SAHRIS PalaeoMap**



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## 3. SITE SENSITIVITY

According to the SAHRIS Palaeosensitivity Map, the development sites are underlain by sediments of High fossil sensitivity (Figure 2). According to the extract from the CGS 3218 Clanwilliam Geology Map, the development area is underlain by the Nardouw Subgroup, Table Mountain Group. The **Nardouw Subgroup** sediments are made up of quartzitic sandstone, and minor shale and have **High Palaeontological Sensitivity**. The Nardouw Subgroup consists of the Goudini, Skurweberg, and Rietvlei formations (west of 21°E). East of 21°E, the equivalent to the Rietvlei Formation is the Baviaanskloof Formation. "*The bulk of all the sediment that makes up these rocks are generally sandy in nature (MacRay, 1999, p.106) and apart from occasional trace fossils are generally devoid of invertebrate body fossils. The Baviaanskloof Formation (Db) however has, in the past, yielded a marine shelly fauna like brachiopods, molluscs (bivalves & gastropods) and rare trilobites, bryozoans etc. This particular unit is regarded as having a reasonably high palaeontological significance."* (De Klerk, 2011, SAHRIS NID 140547).

As part of the HIA completed for the upgrade of the intersection between the N7 and the R364 (ACO, 2012, SAHRIS NID 503706), Avery (2012) completed a Palaeontological Assessment located in the same geological formations as this development. Avery (2012) concluded that "*Topography is rocky and hilly, comprising primarily elements of the Cape SuperGroup Table Mountain Series sandstones with some shale lenses, neither of which is likely to yield fossils. Sandy patches occur on the surrounding slopes and Quaternary-aged alluvial sediments are along the river. The latter could contain fossils and sub-fossils. Any alluvial deposits (should river crossings be intersected) should be carefully assessed. The existence of fossils in the very ancient underlying hard rocks in the area concerned is extremely unlikely but younger sediments may contain ancient wetland deposits, which preserve pollens and/or more-recent fossils.*"

Avery (2012) goes on to note that "*While the occurrence of fossils in underlying hard rock sediments in the area concerned is unlikely, any excavation that penetrates into Pleistocene or Recent sediments may have potential." In the palaeontological assessment conducted for the proposed upgrade of the N7 between Clanwilliam and Trawal, Avery (2012) concludes "The likelihood that palaeontological remains will be encountered during the proposed (development) is minimal but, if encountered, such material is important and must be recorded by an appropriately-qualified person.*" It is therefore not anticipated that significant palaeontological resources will be impacted by the proposed cultivation and as such, no further palaeontological studies are recommended. However, it is recommended that the HWC Chance Fossil Finds Procedure be implemented for the duration of all excavation activities.

As part of the NID submission, CK Rumboll included the following information regarding the palaeontological sensitivity of the development area, "*The development site is underlain by quartzitic sandstone with thin shale and conglomerate lenses of the Nardouw Subgroup comprising three subunits Goudini, Skurweberg and Rietvlei Formations (Almond, 2010). According to Almond (2010:8) "few fossils of any sort have been found within the Rietvlei Formation in the Clanwilliam sheet area where the succession is dominated by clean-washed, pebbly sandstones of braided fluvial to coastal facies. Bioturbation occurs intermittently, especially in finer- grained interbeds [and] vertical burrows with funnel-shaped entrances and annulated walls (Monocraterion) are reported from Kerskop Pass near Wuppertal, while Skolithos "pipe rock" occurs just north of the map area near Doringbos". With reference to the SAHRIS palaeo-sensitivity*



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*map (attached herewith), the proposed development site is in an area of high palaeontological sensitivity. However, according to Almond (2010), the sedimentary formations beneath the site are of low paleontological sensitivity."*

It is therefore not anticipated that significant palaeontological resources will be impacted by the proposed development and as such, no further palaeontological studies are recommended. However, it is recommended that the HWC Chance Fossil Finds Procedure be implemented for the duration of all excavation activities.



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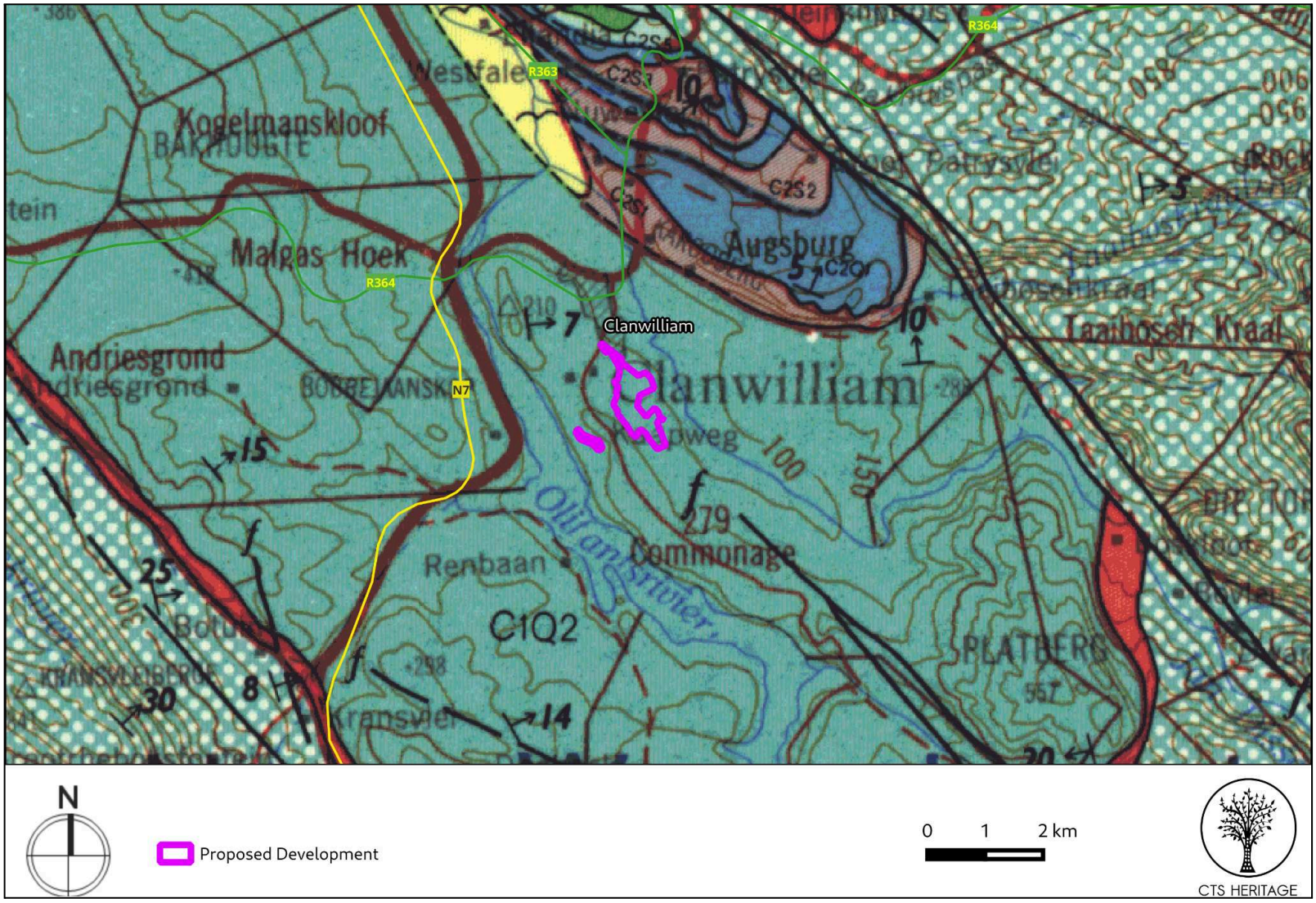


**Figure 3. Geology Map. Extract from the CGS 3218 Clanwilliam Geology Map indicating that the development area is underlain by C1Q2 Quartzitic sandstone with thin shale and conglomerate lenses in the Tafelberg Series.**



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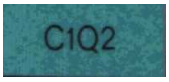
**Table 1: Geological Summary Table**

| Geological unit | Age | Lithology | Symbol on figure 3 | Fossil heritage | Palaeontological sensitivity (Almond and Pether 2008) | Recommended mitigation |
|---|---|---|---|---|---|---|
| Cape Supergroup, Table Mountain Group, Nardouw Subgroup, Rietvlei Formation | Devonian (Pragian) - 443.8 mya - 419.2 mya | Quartzitic sandstone with thin shale and conglomerate lenses |   | Trace fossils are rare and are of marine origin and restricted to the uppermost Rietvlei Formation. | Medium - Low | No action required; however, any fossil discoveries must be reported by the developer |



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## 4. IDENTIFICATION OF HERITAGE RESOURCES

### 4.1 Underlying geology of development area

The geology of the proposed residential development is mapped on the 1:250 000 geological sheet 3218 Clanwilliam (CGS), as shown in Figure 3 and summarised in Table 1. According to this sheet, the area is underlain by the Nardouw Subgroup of the Table Mountain Group (C1Q2). Additionally, the more detailed 1:50 000 geological sheet 3218BB Clanwilliam (CGS, 2020) places the site specifically within the Rietvlei Formation (Dr) in the upper Nardouw Subgroup. A stratigraphic section is provided showing the different stratigraphic units (Fig. 4).

**Table Mountain Group**

The Table Mountain Group forms the lowermost sequence of the Cape Supergroup. It consists of several formations that vary geographically, based on their position in South Africa's geology. The proposed development site lies west of the 21°E meridian, where the Table Mountain Group is divided into two subgroups: the Nardouw Subgroup and the Winterhoek Subgroup, comprising a total of eight successive sedimentary formations (Thamm & Johnson, 2006). These formations span the Middle-Upper Ordovician to the Early Devonian and were deposited in a variety of environments, ranging from offshore marine and shallow-shelf settings to coastal fluvial braidplains and glacial environments (Thamm & Johnson 2006).

**Nardouw Subgroup**

The study area is situated within the Nardouw Subgroup, the upper unit of the Table Mountain Group. This subgroup consists of three primary formations, Goudini Formation (Lower), Skurweberg Formation (Middle), Rietvlei Formation (Upper) (Thamm & Johnson, 2006). Sedimentation took place on a stable, shallow marine shelf that graded into a fluvial coastal platin (Rust, 1967, 1973; Thamm, 1984, 1987, Theron and Thamm, 1990)

- The **Goudini Formation** comprises interbedded siltstone and very fine-grained, non-amalgamated quartz-wacke sandstones, with heterolithic layers of laminated siltstone and sandstone at the base. These transition upwards into amalgamated, fine-grained quartz-wacke sandstones, followed by medium- to coarse-grained quartz arenite and subarkose sandstones, with occasional conglomeratic stringers. Key features include channel cut-and-fill structures, trough and tabular cross-bedding, and planar lamination. The quartzites in the Goudini Formation are interpreted as fluvial deposits, while the interbedded siltstones indicate sporadic marine incursions (Thamm & Johnson, 2006).
- The **Skurweberg Formation** consists of coarse to very coarse-grained quartz arenite and subarkose sandstones, interspersed with occasional conglomerate beds and pebble stringers. These deposits exhibit channel cut-and-fill structures, trough and tabular cross-bedding, and planar lamination. The formation represents sandy alluvial braid plains, with sediments deposited by multiple river channels (Theron & Basson, 1989).
- The **Rietvlei Formation** (Theron & Basson, 1989) comprises conglomeratic and pebbly, coarse-grained quartz arenite and subarkose sandstones, which fine upwards into medium- and fine-grained sandstones. These



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sandstones display trough and tabular cross-bedding along with planar lamination. Sharp-based channel cut-and-fill structures appear within the lower strata, with evidence of slumping and soft-sediment deformation becoming more prominent towards the top of the sequence. The upper portion of the formation features non-amalgamated quartz-wacke sandstones with wave ripple lamination and hummocky cross-stratification. These sandstones intercalate with heterolithic, laminated mudstone and sandstone, which progressively fine upwards into mudstones that mark the transition to the overlying Gydo Formation.

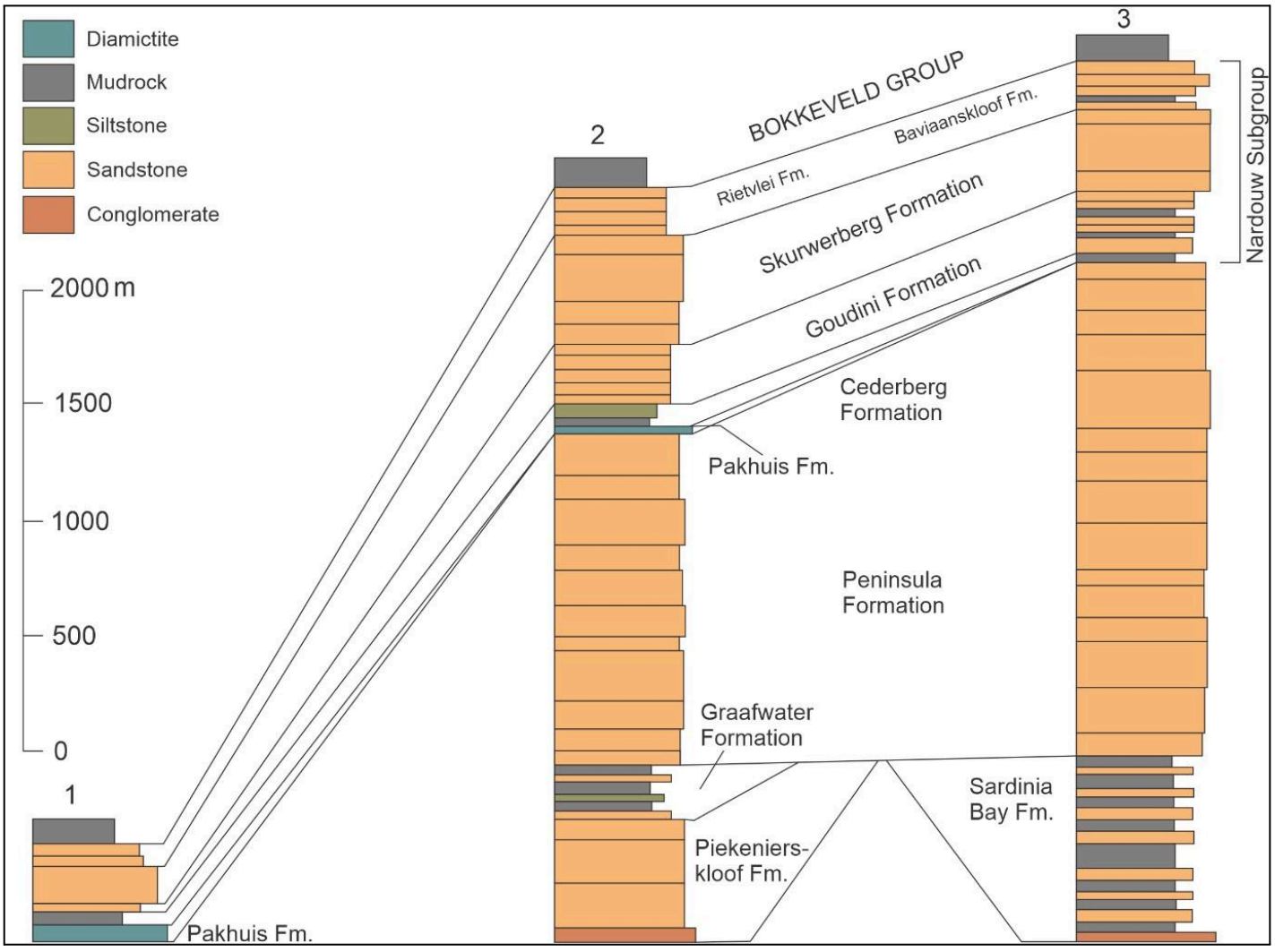


**Figure 4. A stratigraphic illustration of the Table Mountain Group, depicting the succession of its constituent formations across various sections (adapted from Johnson et al., 1999). Column 2 highlights the formations relevant to the current project area, while Column 3 presents the eastern sedimentological equivalent of the western deposits within the Table Mountain Group.**



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### 4.2 Palaeontological Sensitivity of the Development Area

According to the SAHRIS Palaeosensitivity Map (Fig. 2), the development site is underlain by sediments classified as having High fossil sensitivity, contrary to the classification by Almond (2008). Almond (2008), in his review of the eight formations within the Table Mountain Group in the 1: 250 000 Clanwilliam 3218 geological sheet, assessed the overall palaeontological sensitivity of the group across the Western Cape as Moderate to Low. In this section, an overview of palaeontology of all the Nardouw Subgroup geological units will be provided with particular focus on the Rietvlei Formation.

On the 1:250 000 geological map (sheet 3218 Clanwilliam; CGS), the proposed development area falls within the Nardouw Subgroup of the Table Mountain Group (Fig. 3), which predominantly consists of quartzitic sandstone with minor shale. This subgroup is known for its High palaeontological sensitivity. On the 1:50 000 geological map (sheet 3218BB Clanwilliam; CGS, 2020), the area is further designated as part of the Rietvlei Formation (Dr). Below follows a description of the fossils found in the Nardouw Subgroup in the Clanwilliam area.

The fossil record within the Nardouw Subgroup is limited (Almond, 2008). Sparse, low-diversity ichno assemblages have been identified across all three formations—Goudini, Skurweberg, and Rietvlei (Rust, 1967, 1981; Marchant, 1974; Theron & Basson, 1989; Malan et al., 1989; De Beer et al., 2002). These ichnofacies include Skolithos ichnofacies and horizontal epichnial burrows, possibly linked to the Scolicia group, suggesting gastropod activity (Almond, 2010).

- The **Goudini Formation** encompasses rare remnants of trace fossils, which have been documented in the Western Cape. However, it's worth noting that no body fossils have been reported from the Goudini Formation to date (Thamm & Johnson, 2006).
- The **Skurweberg Formation** exhibits occasional complex burrows, such as *Arthrophycus,* a palmate burrow system (Marchant, 1974). While body fossils are absent, the formation contains trace fossils such as trilobite scratch burrows, arthropod tracks, and feeder burrows within finer-grained mud beds, indicating deposition in shallow marine or estuarine environments. Sandier beds within the Skurweberg Formation contain vertical tube burrows, likely created by suspension-feeding invertebrates (Pether, 2022).
- The **Rietvlei Formation** has rare remains of fossils. Some evidence of bioturbation is present (Theron & Basson, 1989), along with vertical burrows featuring funnel-shaped openings and annulated walls (*Monocraterion*) as well as Skolithos burrows (Rust, 1967). However, the brachiopod-rich faunas typical of the Rietvlei Formation's eastern outcrops in the Little Karoo have not been recorded in the Clanwilliam area (Almond, 2010).

Significant fossils have been discovered in the eastern equivalent of the Rietvlei Formation, the Baviaanskloof Formation. The upper unit of this formation hosts a diverse array of marine invertebrates, including homalonotid trilobites, articulate and inarticulate brachiopods, nuculid and other bivalves, plectonotid gastropods, and bryozoans (Boucot et al., 1963; Toerien & Hill, 1989; Theron et al., 1991; Johnson, 1976; Hill, 1991; Rossouw et al., 1964). Additionally, fossils of ophiuroids, including *Krommaster spinosus*, and a poorly preserved specimen of *Hexuraster weitzi*, a cheiropterasterid also found in the slightly younger Bokkeveld Group, have been identified (Reddy et al., 2023).



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The formation has also produced fossils of early land plants (Gess & Prestianni, 2021). This site is notable for its exceptionally well-preserved and diverse flora, comprising approximately fifteen taxa, including new species such as *Krommia parvapila*, *Elandia itshoba*, and *Mtshaelo kougaensis* (Gess & Prestianni, 2021). Of particular importance are species belonging to the genus Cooksonia, which provide valuable insights into the evolution of early land plants and the environmental conditions of the period.

## 5. ASSESSMENT OF THE IMPACT OF THE DEVELOPMENT

### 5.1 Assessment of Impact to Palaeontological Resources

The proposed development of a residential area and associated infrastructure will involve minor earthworks limited to localised construction footprints, such as around individual erven and along interlinking access roads, water pipelines, or electrical connections. These activities have the potential to cause direct, though limited, impacts on the underlying rock formations and palaeontological resources associated with the Nardouw Subgroup and Rietvlei Formation. However, no significant indirect impacts on palaeontological heritage are anticipated for this project area. The overall impact severity is closely tied to the nature and extent of the activities and is expected to remain low.

The primary concern arises during the construction phase, where direct interactions with geological formations that may contain fossil material are likely. Earthworks for foundations, underground utilities, and access roads may involve excavations through surface sediments (e.g., soil) or into the underlying bedrock. In areas where the Nardouw Subgroup and Rietvlei Formation are exposed, excavation activities may negatively affect the bedrock, posing a risk of displacing, damaging, or permanently sealing in fossil resources. This would hinder their availability for scientific research or heritage preservation.

The impact assessment for the proposed development, conducted without mitigation, classifies the potential impact as low (negative). Even with mitigation measures in place, the impact remains low (negative), consistent with findings by Almond (2010). The limited extent of excavations, which are expected to reach only superficial depths of a few metres, will further minimise disturbance to the surrounding geological environment.

At this stage, no alternative sites or layout plans are being considered. The implementation of mitigation strategies will ensure any interactions with potential fossil-bearing formations are managed appropriately, preserving palaeontological resources where feasible.



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## 6. CONCLUSION AND RECOMMENDATIONS

The proposed development site is predominantly underlain by the Nardouw Subgroup, specifically the Rietvlei Formation. Both the Nardouw Subgroup and the Rietvlei Formation are characterised by low palaeontological sensitivity, as they generally do not contain fossils of significant scientific or heritage value. This conclusion aligns with previous studies, which have consistently indicated that these formations are not typically rich in palaeontological resources.

The potential impact of the proposed development on palaeontological resources is assessed as minimal, with a low likelihood of encountering any significant fossil material during construction. Additionally, the Goudini, Skurweberg, and Rietvlei Formations, which are also present in the broader area, share similarly low palaeontological sensitivity. As a result, no specific mitigation measures are required for the proposed residential development. While no specific mitigation strategies are required, it is recommended that the Chance Fossil Finds Procedure be implemented during the construction phase. This protocol will ensure that any unexpected fossil discoveries are promptly reported and appropriately managed, safeguarding potential heritage resources.

This low-risk assessment provides confidence that the project will have minimal impact on palaeontological heritage, allowing development activities to proceed without the need for further palaeontological oversight.



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## APPENDIX 3: Guidelines related to Landscapes of significance (2022)

## GUIDELINES RELATED TO LANDSCAPES OF SIGNIFICANCE

The site is located on slopes within a well-formed river valley. While the nearby taller slopes of the Swartberg are not within the subject site, they are visually prominent, and so the entire "valley section" can be experienced and perceived within and adjacent to the subject site.

*Establish conservation corridors along the coastline, estuaries, wetlands and rivers, to provide continuity within the conservation network, and to ensure the viability of ecosystems.*

## GUIDELINES FOR DEVELOPMENT IN RURAL AREAS

### 1. Respect Cultural Landscapes.

Cultural landscapes may be defined as places of cultural significance which reveal qualities relating to aesthetic, architectural, historical, scientific, social, spiritual, linguistic, technological, archaeological or paleontological value. Cultural landscapes provide the essential context for a range of heritage resources and are a heritage resource in their own right. They may thus be regarded as the tapestry within which other heritage resources are embedded and which provides them with a sense of place and meaning. The concept of a cultural landscape gives spatial and temporal expression to the process and products of interaction with people and the environment.

*Any new interventions in rural landscapes need to understand the heritage significance of such landscapes and need to respond positively to the heritage values identified.*

### 2. Achieving a balance between settlement structures, planted and cultivated landscapes and wilderness areas.

For a large part, and up to the mid 20th century, a sense of balance between settlement structures, the planted landscape and the wilderness mountain areas is evident in the… area. However, from the latter half of the twentieth century, low density sprawl has occurred…. The decentralization of retail centres has contributed to urban sprawl and the distortion of the balance previously evident.

*Careful consideration should thus be given to the granting of new development rights outside existing urban edges. A policy of appropriate densification related to existing movement routes should rather be adopted.*

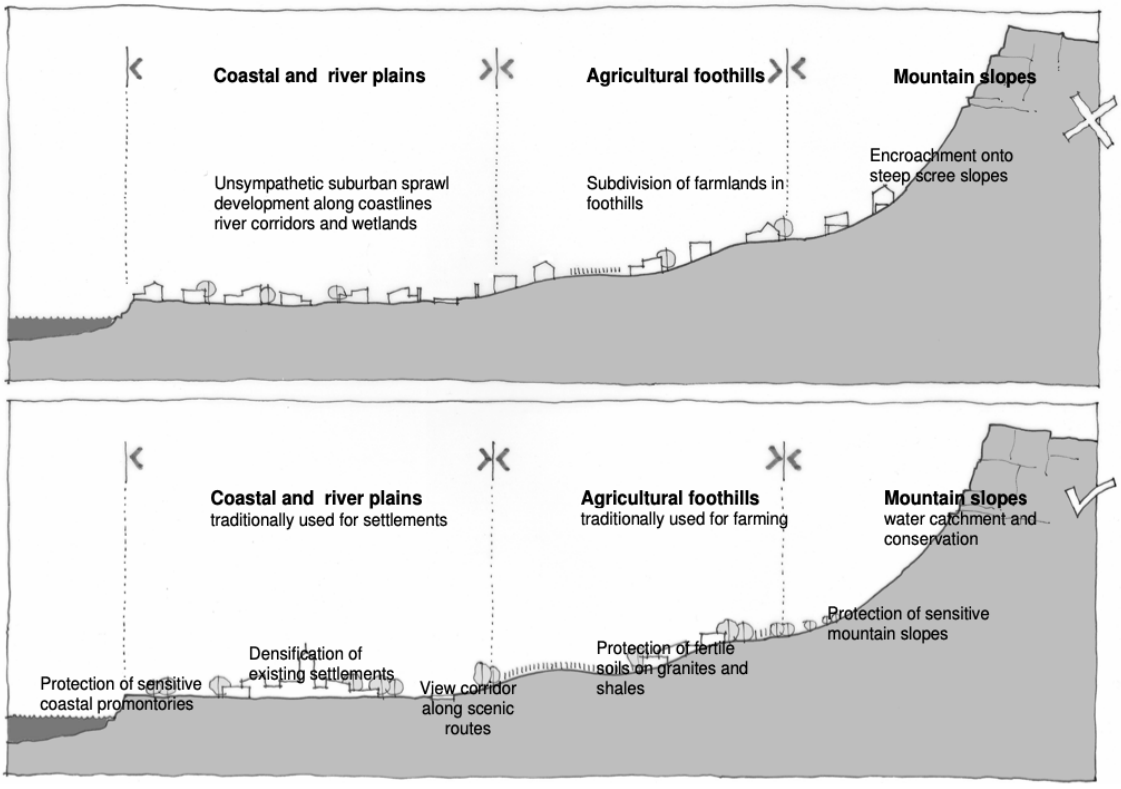



Figure 13B: New development must achieve a balance between settlement structures, planted and cultivated landscapes and wilderness areas. Overstrand Heritage Survey, 2009: 293.

**Diag. 8** The logic of landscape and settlement. Development should respond to the traditional use of coastal plains for settlements, the fertile foothills / valleys for agriculture, and the natural mountain slopes for conservation and water catchment.

### 3. Positive response to the integrity of the agricultural landscape

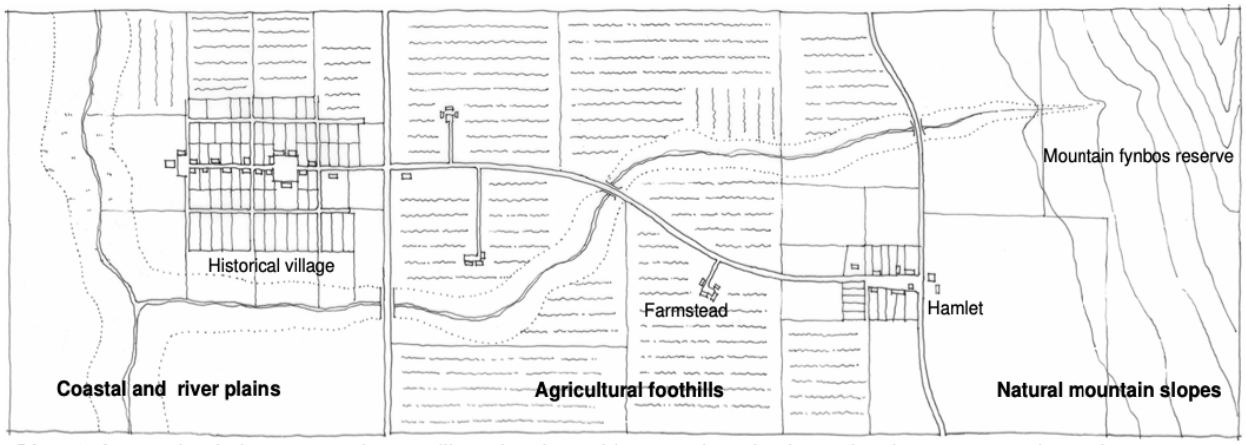
Existing patterns of agriculture contribute significantly to the character and sense of place in the area, particularly in instances where vineyards [and fields] are located adjacent to natural systems such as vlei areas [or river courses]…. Food security is increasingly becoming a significant social and political issue.

> *The subdivision of agricultural land should thus be avoided at all costs. Care should also be taken to protect the productive nature of agriculture and to avoid ornamental agriculture where planting occurs for predominantly aesthetic or ornamental reasons.*

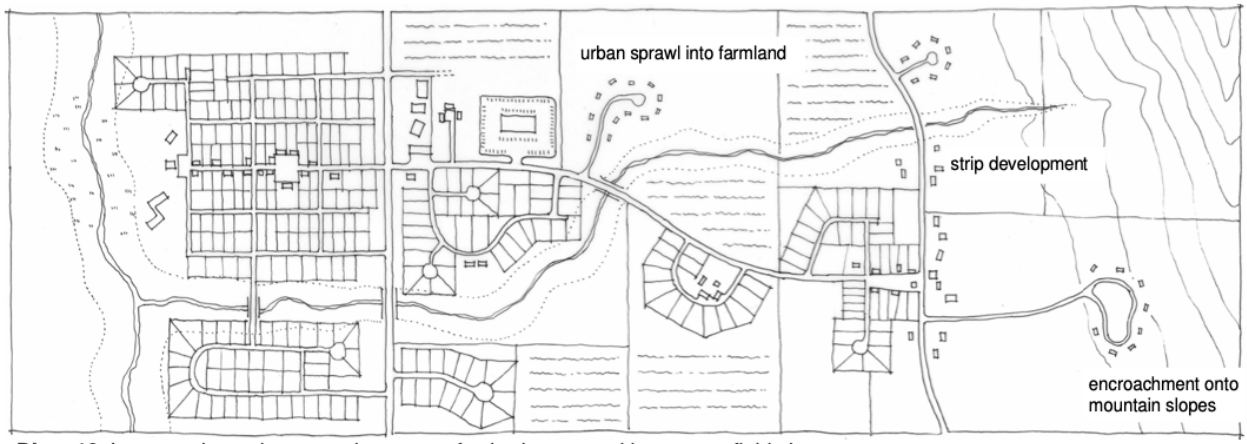
### 4. Acknowledge the underlying logic of settlement structures in regard to landform, riverine corridors and movement routes.

A logic is evident in the evolution of the settlement pattern, with movement routes responding to early wagon routes which responded to landform and topography, outspans located in response to convenient river crossings. A clear distinction was evident between the various villages that developed throughout the area, with each developing a character of its own and separated from each other by the natural green environment.

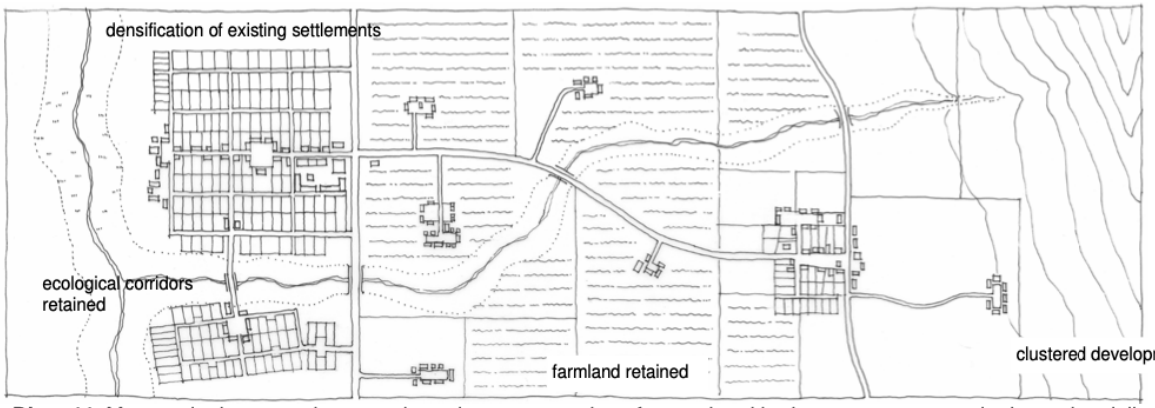
In terms of a cross section from mountain to coastline, movement routes and settlement occurred on [the lower, gentler slopes]. Steep mountain slopes were avoided as was the dynamic coastal zone.




**Diag. 9** A natural ordering system of town, village, hamlet and farmstead, evolved over time in response to the environment.




**Diag. 10** Inappropriate urban growth pattern of suburban sprawl into green-field sites.




**Diag. 11** Managed urban growth pattern based on conservation of natural and heritage resources, and urban edge delineation.

Figure 13C: New development must acknowledge the underlying logic of settlement structures in regard to landform, riverine corridors and movement routes. Overstrand Heritage Survey, 2009: 295-6.

*This pattern should be respected in any new development. New development should not be permitted in the higher mountain slopes or along the dynamic coastal zone.*

**5. Acknowledge existing patterns of subdivision**

Traditionally subdivision patterns responded to landform and access to water. The resultant built form response is a consequence of the underlying subdivision. Careful consideration thus needs to be given to subdivision applications which will inevitably result in densification in terms of coverage and bulk of the agricultural landscape and the consequent loss in character.

*New subdivisions should only be permitted if there is a positive response to the historical context and pattern of development. Suburban type layouts, particularly "gated" villages should not be permitted in rural areas.*

**6. The siting of new buildings**

The inappropriate siting of new buildings in rural contexts can have a dramatically negative impact on cultural landscapes. The suitable relationship between the building and the landscape is critical.

*Every attempt should be made to merge new buildings with the landscape by:*

- *Utilizing natural features such as hills and tree belts.*
- *Avoiding high, visually exposed slopes.*
- *Avoiding steep slopes (steeper than 1:6).*
- *Ensuring appropriate set backs from the road edge.*
- *Arranging buildings parallel to contours.*
- *Minimising the scale and massing of new structures by disaggregating building forms wherever possible.*
- *Merging new buildings into the slope as much as possible to avoid extensive cut and fill. Buildings should be cut into the slope rather than raised above it.*
- *Planting of new avenues of trees and clumps of trees close to buildings to settle new buildings into the landscape.*
- *Using architectural devices typical of the area such as dark roofs, small openings and the use of shutters and pergolas to minimise the impact of buildings on the landscape.*

**7. The scale of new buildings**

The scale of new buildings in rural or agricultural context can have dramatic visual impacts. New technologies relating to packaging, storage and tunnelling have resulted in building structures substantially larger than traditional farm buildings.

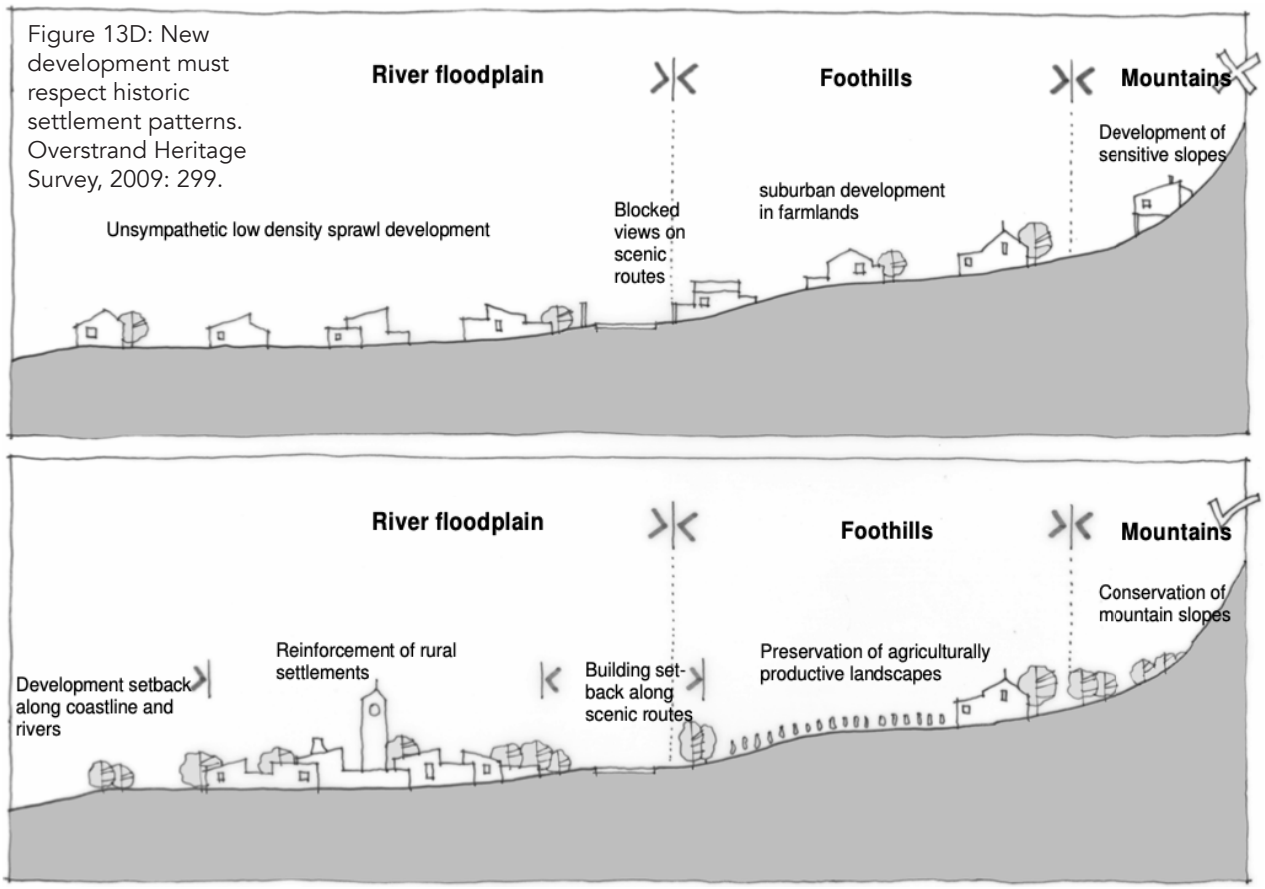
- *New buildings should respect the scale and layout of surrounding buildings in the immediate context. When forming part of a historical werf complex new buildings should not compete in height, scale and massing with existing structures, but should remain subordinate to them. The plan form of the werf should be respected with regard to new interventions. New developments should thus not locate in or immediately adjacent to them and should preferably be located in positions which are screened from public view.*
- *The height of buildings in rural areas rarely exceeds two storeys and this should be regarded as the height limit for new developments within historic werf areas.*
- *The roof ridge of residential buildings should thus not exceed 8m.*
- *With regard to solid void relationships a wall dominated architecture should predominate.*

**8. New architecture and the positive response to the vernacular**

Vernacular architecture refers to the interrelationship of climate, geology, landform, architecture and craft. It is a tradition of building that has evolved over time and which is context specific. It cannot be replicated. A balance thus needs to be made between an understanding of local architecture and context and the opportunities for appropriate interpretation rather than replication. Alternative materials and technologies can be used as long as they are subservient to the cultural context.

*New interventions in historic werfs should be quiet background buildings. Similarly the use of lavish decoration and decorative elements such as cast concrete sculptures and urns should be discouraged.*

Figure 13D: New development must respect historic settlement patterns. Overstrand Heritage Survey, 2009: 299.




**Diag. 12** Development in rural areas needs to respect and reinforce historical settlement patterns which have heritage value, and preserve productive agricultural areas.

## 9. The treatment of entry points and boundaries

The treatment of gateways and farm boundaries can have a substantial impact on the character of visual areas.

In general, entry points should complement the architectural language of the buildings on the farmstead in terms of scale, form, materials used and architectural language.

- *Entrance gateways should step back from the boundary line and side walls should not exceed 10m on either side of the gate opening.*
- *Alternative means to address security requirements need to be explored to avoid the location of high electrified fences on farm perimeters. Where such security is regarded as unavoidable such fences should be placed approximately 3 to 5 metres behind the boundary with the use of natural vegetation or traditional farm fences to demarcate the farm boundary.*
- *Dark black or green palisades fences without posts should be used. Elaborate palisade fences with brick piers, face-brick or unpainted concrete blocks should not be permitted. Similarly the use of lavish decoration and decorative elements such as cast concrete sculptures and urns should be discouraged.*

## 10. Signage

Inappropriate signage can have a substantial impact on the character of rural areas.

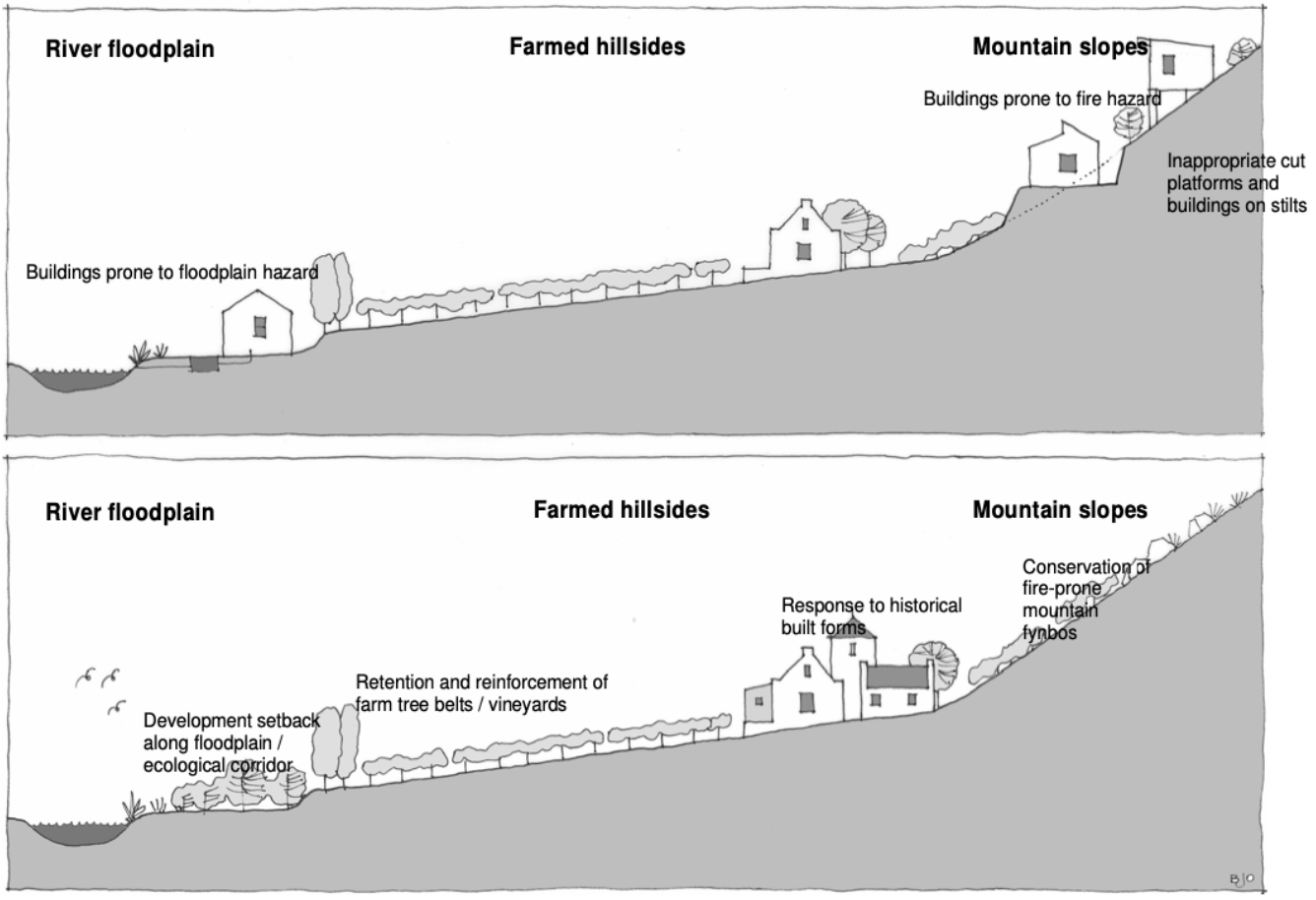
*No third party or bill board advertising should be permitted. Signage should be restricted to directional signage or to indicate the entrances to and the names of farmsteads. Such signage should be restricted in scale and should complement and form part of the architectural language of the gateway.*

## 11. Care and maintenance of farm buildings

The patina of old farm buildings contributes substantially to the character of rural areas. They need continuous care and maintenance to

avoid damp penetration and eventual decay. It is important that the appropriate materials are used. Mud plaster should be used in old buildings using a very weak mortar mixture to provide flexibility and to minimise the possibility of cracking.

- *White wash should be used for wall surfaces and roofs should be replaced with small profile corrugated iron.*
- *Existing joinery should be repaired wherever possible. Where unavoidable, new windows and doors should fit existing openings. Existing openings should not be widened.*
- *Where additional accommodation is required this should happen to the rear of existing dwellings in the form of abutments which would preserve the layering of the building and maintain the original geometry.*




**Diag. 13** Development needs to take place in response to the historical agricultural pattern and traditional siting and scale of farmsteads.

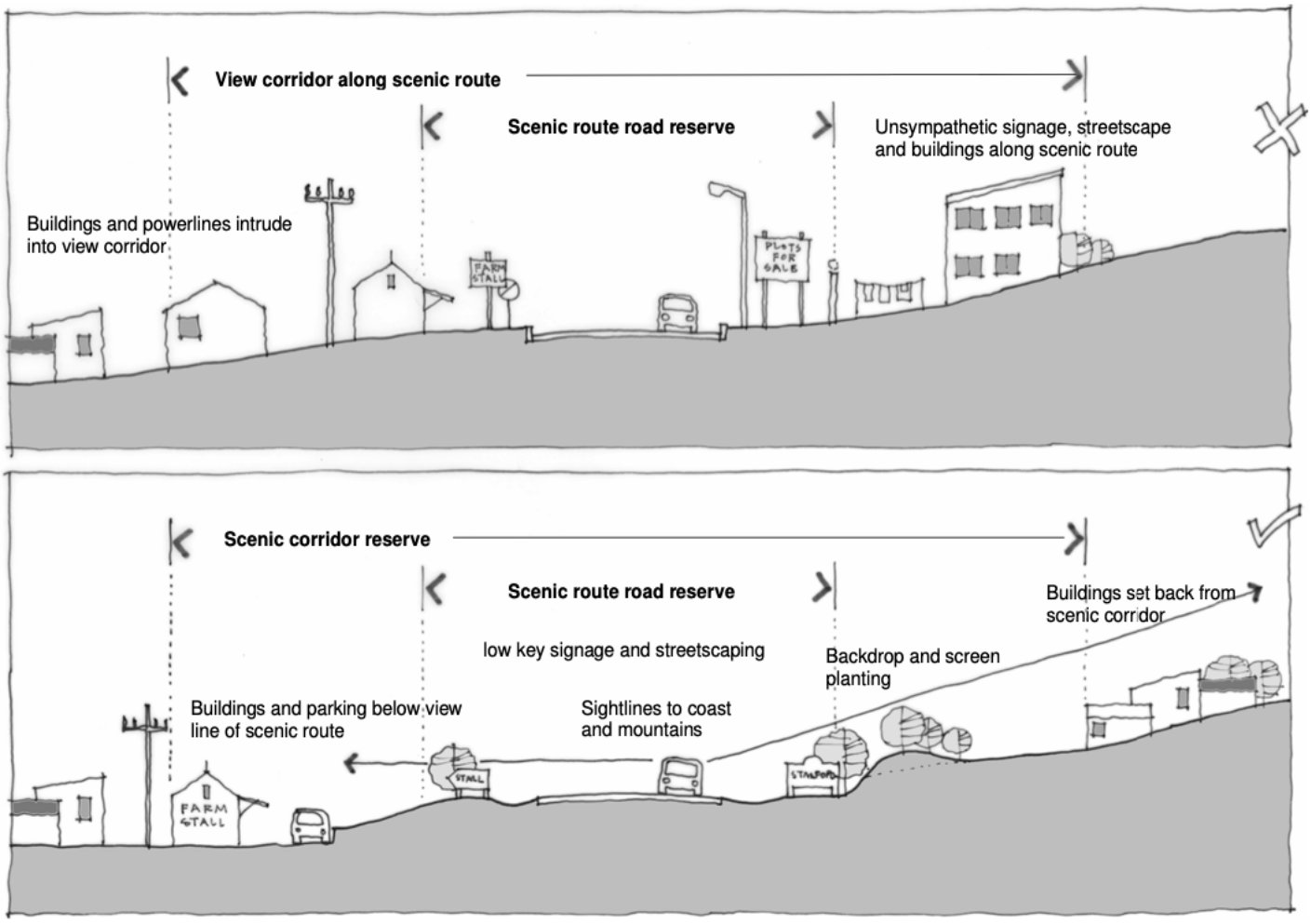
Figure 13E: New development must respect historic farm werfs and agricultural patterns. Overstrand Heritage Survey, 2009: 302.

## GUIDELINES RELATED TO SCENIC ROUTES

While not a formal, proclaimed Scenic Route, it is clear that the site forms part of a route that is of high scenic quality, and furthermore is a historical and present-day gateway into the town of Caledon.

- *Consider development restrictions in identified view corridors.*
- *Impose building set-backs and height restrictions along proclaimed scenic routes. Setback of 25m in urban areas, and 100m in rural and wilderness areas recommended.*
- *Provide appropriately designed route markers and other signage for tourism purposes.*
- *Ensure appropriate design of road verges along scenic routes, including stormwater structures, fencing, farm stalls, picnic sites and signage.*
- *Prevent inappropriate development and signage adjacent to these routes.*
- *Impose building set-backs and height restrictions along proclaimed scenic routes. Setback of 25m in urban areas, and 100m in rural and wilderness areas recommended.*
- *Prohibit obstruction of sea and mountain views along proclaimed scenic routes. Use berms and planting for screening.*
- *Locate signs against a backdrop to avoid silhouette effects on the skyline. Low signs are less obtrusive. Fix signs to buildings to avoid proliferation of poles.*
- *Prohibit visually intrusive structures, advertising (billboards), powerlines etc. adjacent to scenic routes.*
- *Prohibit precast concrete, 'Vibracrete' walls, unpainted cement block walls, high security fencing and razor wire along scenic routes.*

Figure 13F: New development must respect scenic movement routes. Overstrand Heritage Survey, 2009: 305.




**Diag. 14** Scenic routes and corridors need to be protected from inappropriate development and infrastructure

## GUIDELINES RELATED TO ARCHITECTURAL FORM

The site is not part of an established townscape or heritage protection overlay zone, but there is a clear architectural pattern established by the buildings making up the weft on Portion 29, and the werf on the opposite side of the river.

Therefore, some broad architectural guidelines are deemed appropriate in this instance.

**1. Respond positively to the existing development pattern** which has evolved in response to the natural environment and historical movement patterns and settlement hierarch;

**2. Avoid steep slopes to minimise visual impact and to avoid slope failure and erosion**. Traditional settlement patterns have occurred on gently sloping land and below contour levels demarcating the mountainous areas. Do not permit building platforms on stilts or pilottis. Buildings should be ground-hugging and aligned along the contour. An exception would be when building adjacent to wetland areas. In such instances piles may be preferable to strip foundations to allow drainage. Minimise cut and fill. Exposed slopes should be stabilised with dry pack-stone walls and appropriate vegetation. Retaining walls should not exceed 2m in height and 10m in length.

**3. Avoid wetlands and areas susceptible to flooding.**

**4. Ensure positive building-street relationships.** The size, height, width, proportions and level of detail of boundary walls should be consistent with the architectural character of the existing building and streetscape. The height of any boundary wall on a public street should not exceed 1.8m. At least a third of this height should be visually permeable. Garages and carports should not occupy more than a third of the street frontage and should preferably be located behind the façade of the building.

**5. Prevent the replication or reproduction of vernacular styles** and avoid the introduction of foreign stylistic devices. Do not replicate or reconstruct the form and style of historical buildings. Rather **re-interpret the principles evident in the older fabric in terms of massing, scale, height and form**. Clearly distinguish old from new but ensure visual harmony between the older fabric and new interventions.

**6. Ensure that the siting of new buildings respect traditional siting patterns evident in the context**. Buildings must be placed parallel to street boundaries, and should not be set far back from the street edge, but should reflect typical street setbacks in the historic parts of Caledon.

**7. Ensure that new buildings respect the overall pattern of massing in the area.** New buildings, unless quite small, are to be made up of carefully articulated small elements. Devices such as verandahs and pergolas should be utilised to reduce the sense of massing.

**8. New buildings should reflect the scale and proportion of existing buildings in the historic werf**. Stringent conditions to establish appropriate massing, scale, height, grain and appearance parameters must be developed for the scheme. New buildings must follow the proportional relationships evident in the heritage buildings on the site. Apertures should reveal a vertical emphasis. There should be a greater proportion of solid to void.

**9. New buildings should be limited in height to ensure visual harmony and consistency with the heritage werf**. Where additional height is required, setbacks must be incorporated.

**10. New buildings should be orthogonal in form. Simple, relatively narrow rectangular buildings are the predominant form** in the heritage areas in and around Caledon. Cross sections are generally less than six metres. Lean-to additions are used to create more space: lean-to additions should also be used as scaling elements and should not exceed the width of the main dwelling.

**11. Avoid the replication of existing vernacular styles.** Avoid replication or fake reconstructions. Rather an attempt should be made to re-interpret the planning and design principles of the original structures. Contemporary, understated new developments and interventions into existing fabric that clearly delineates new from old is encouraged. New buildings should be in visual harmony with the old.

**12. Ensure that roof forms are complementary to the roofscape evident in the historic werfs**. Roofs are a key unifying element in heritage environments and are an important scaling device. Roof forms in Caledon and its surrounds are generally double pitched with verandahs and lean to additions. A limited use of materials and colours is evident. This pattern should be followed in new buildings.

a. Unless a different pattern is evident in the area, roofs should be double-pitched with a minimum 30°and a maximum 45°.

b. Lean to elements should be subsidiary to the main pitched roof.

c. Large horizontal verandahs across the whole frontage of buildings should not be permitted on street facing facades or facades facing onto public rights of way. Instead, verandahs must be stopped short of the main facades and used to place emphasis on entrances.

d. Dormer windows in roofs should be subsidiary elements. They should not constitute more than a third of the roof space. They should be located at least 500mm below the ridge line, 500mm above the eaves line and 1m inside the gable line.

e. Dormers should preferably not occur on the street facade. Roof lights flush with the roofing profile are permitted and favoured in contemporary developments.

f. Roofs must be of a traditional pattern or profile painted corrugated iron sheeting or of slate or fibre cement shingle.

g. Colours for roofs are to be in the darker brown, grey and black ranges. Bright colours are not permitted.

h. Flat roofs can be used if screened by a parapet but these should not be permitted for more than a third of the roof space, and should be subsiduary to the main, pitched roof volume.

i. Do not use fake thatching, large profile fibre cement sheets or IBR sheeting.

j. When thatch has to be replaced, the pitch must be retained and a grey coloured Victorian profile or natural slate could be used if re-thatching is not possible. For the two historic buildings, thatching must be retained.

k. Overhanging eaves should not exceed 100mm.

**13. Ensure a walled architecture that is complementary to those in the historical areas of the town and the surrounding werfs**. Walls in Caledon are mostly plastered and painted in white or light shades. This pattern should be followed in the new development.

a. Walls are to be painted and plastered masonry. Face brick, shuttered concrete/pre-cast concrete or pebble dash is not permitted.

b. Clap board cladding can be used but only as a subsidiary element.

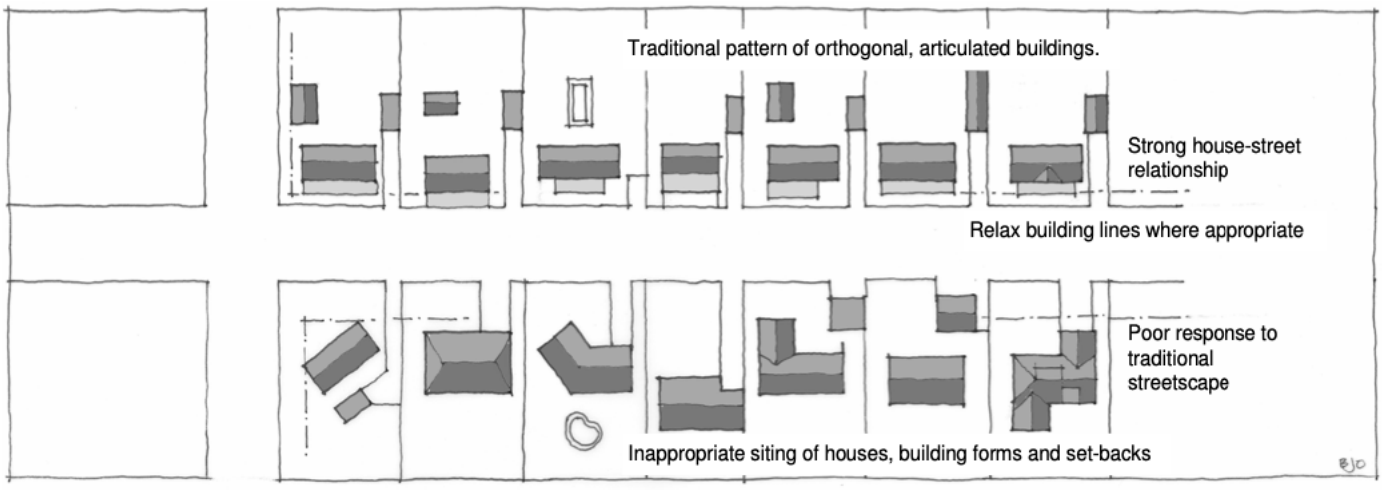
c. Bagged or textured plaster finishes should be limited as far as possible.

d. Doors and windows must have a predominantly vertical proportion.

e. Vertically proportioned openings should be used and any wall plane should not have more than 30% of voids.

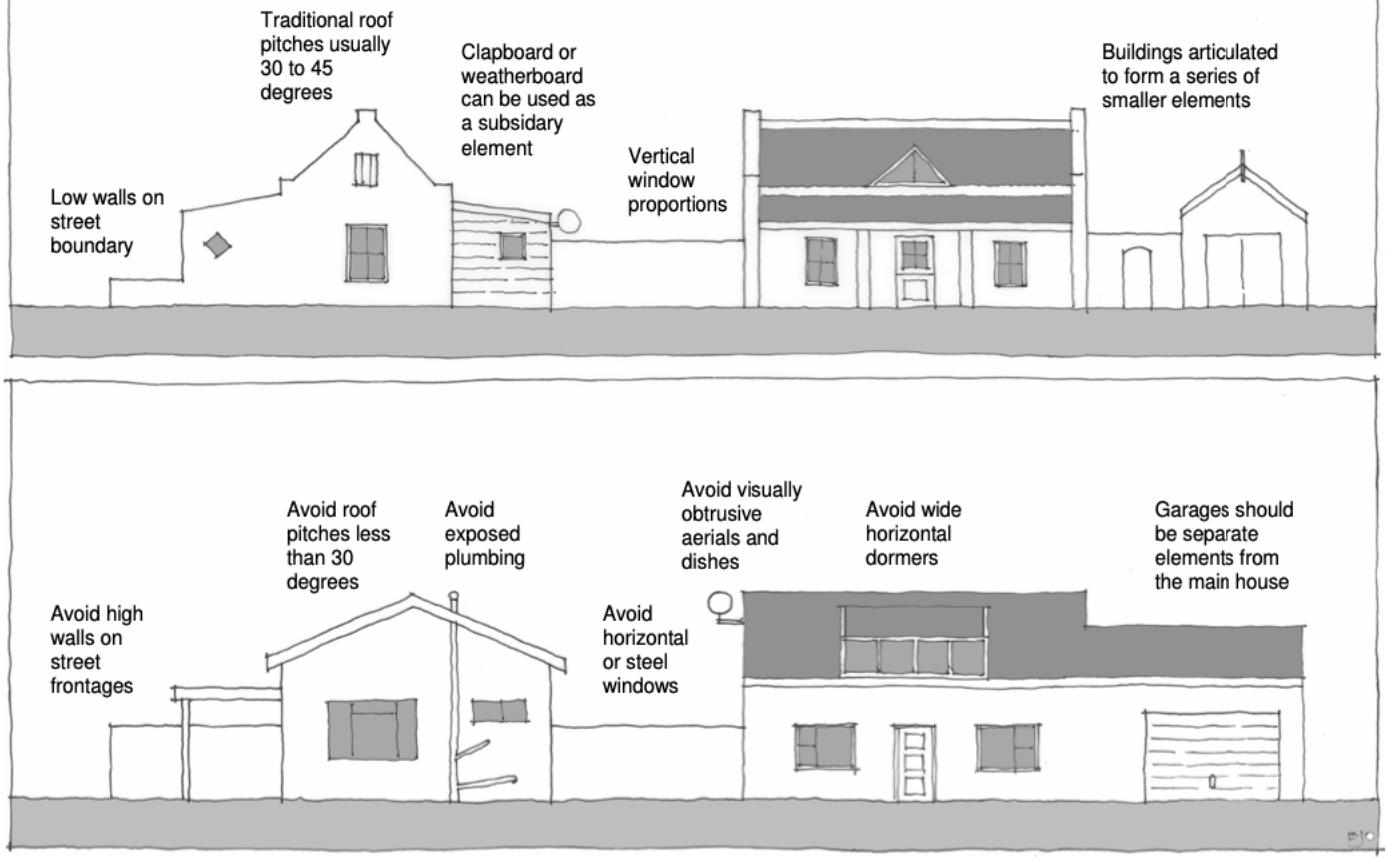
f. Large, openings such as sliding doors should be set back from the façade by at least 1.5m or screened by verandahs or pergolas.

Figure 13G: New development must respect historic placement of buildings. Overstrand Heritage Survey, 2009: 311.

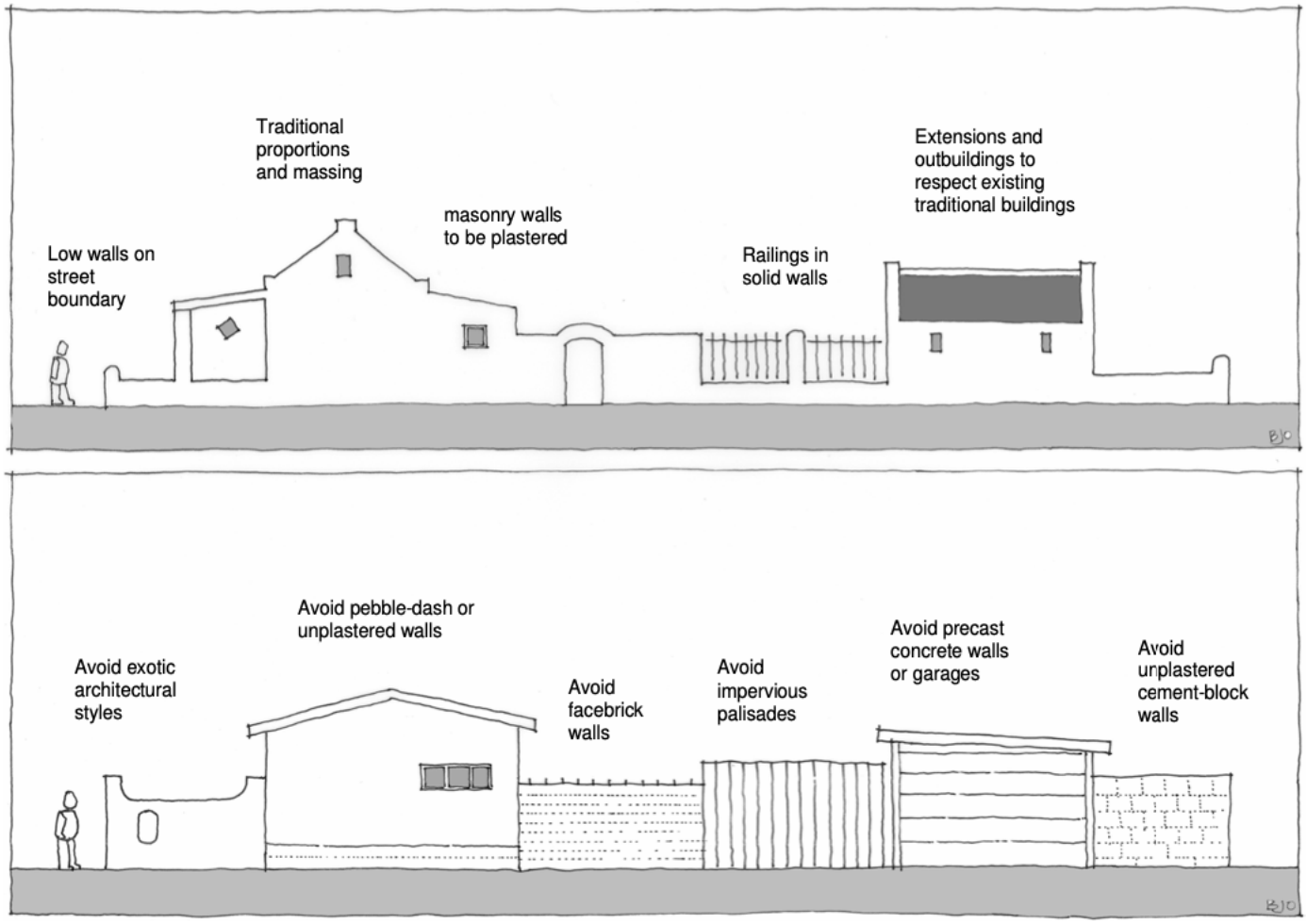



**Diag. 18** Buildings and boundary walls need to be responsive to the traditional streetscape.

Figure 13H: New development must rfollow architectural guidelines. Overstrand Heritage Survey, 2009: 319-20.




**Diag. 22** Architectural guidelines for use in heritage overlay zones




**Diag. 23** Architectural guidelines for use in heritage overlay zones (walls)

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UCT Special Collections.
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## APPENDIX 4: Correspondence from the Cederberg Municipality dated 28 August 2025

CEDERBERG
MUNISIPALITEIT | MUNICIPALITY | uMASIPALA

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*Verwysing / Reference:* Erf 279 Clanwilliam

Navrae / Enquiries: Office of the MM

**KANTOOR VAN DIE MUNISIPALE BESTUURDER/**
**OFFICE OF THE MUNICIAL MANAGER**

**Registered Mail**

28 August 2025

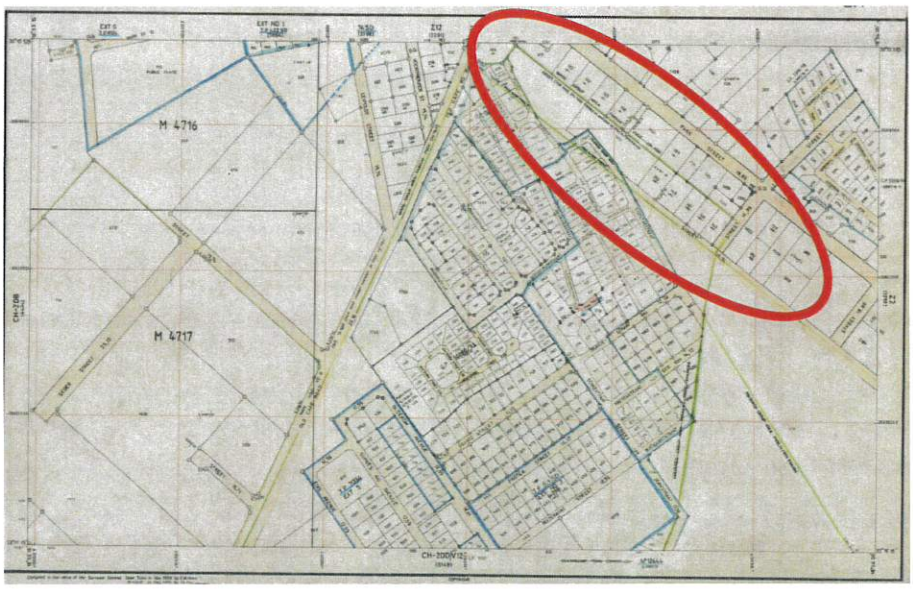
Heritage Western Cape
PO Box 1665
Cape Town
8000

To whom it may concern

**CEDERBERG MUNICIPALITY'S COMMENT REGARDING THE HERITAGE IMPACT ASSESSMENT**

Your request in the above regard, refers.

The municipality would like to provide our inputs/comments regarding to the area recommended for open space use in the Heritage impact Assessment (HIA) prepared by CTS Heritage updated July 2025. However, cadastral and zoning information confirms that most of this area consists of registered erven already zoned Single Residential Zone I, with only a portion zoned Open Space Zone I – Public Open Space. Therefore, proposal represents the redevelopment and densification of existing residential erven, not the conversion of undisturbed heritage land. The Zoning Certificate is attached herewith. See below an extract of Noting Sheet 2292 indicating the relevant erven.



The below provides the legal description of the subject properties and current zoning.

| Property Description | Title Deed No | SG Diagram No | Zoning |
|---|---|---|---|
| Erf 1422 | T78371/1990 | 9871/1986 | Single Residential Zone I |
| Erf 359 | T7902/1965 | 8696/1949 | Single Residential Zone I |
| Erf 148 | T26749/1974 | 841/1943 | Single Residential Zone I |
| Erf 147 | T26749/1974 | 842/1943 | Single Residential Zone I |
| Erf 144 | T10954/1969 | 5312/1944 | Single Residential Zone I |
| Erf 143 | T10954/1969 | 5313/1944 | Single Residential Zone I |
| Portion of Erf 279 | CLF3-10/1925 | 8293/1960 | Open space Zone I – Public Open Space |

The locality and zoning maps of these erven can be seen in Figure 1 and Figure 2 below.

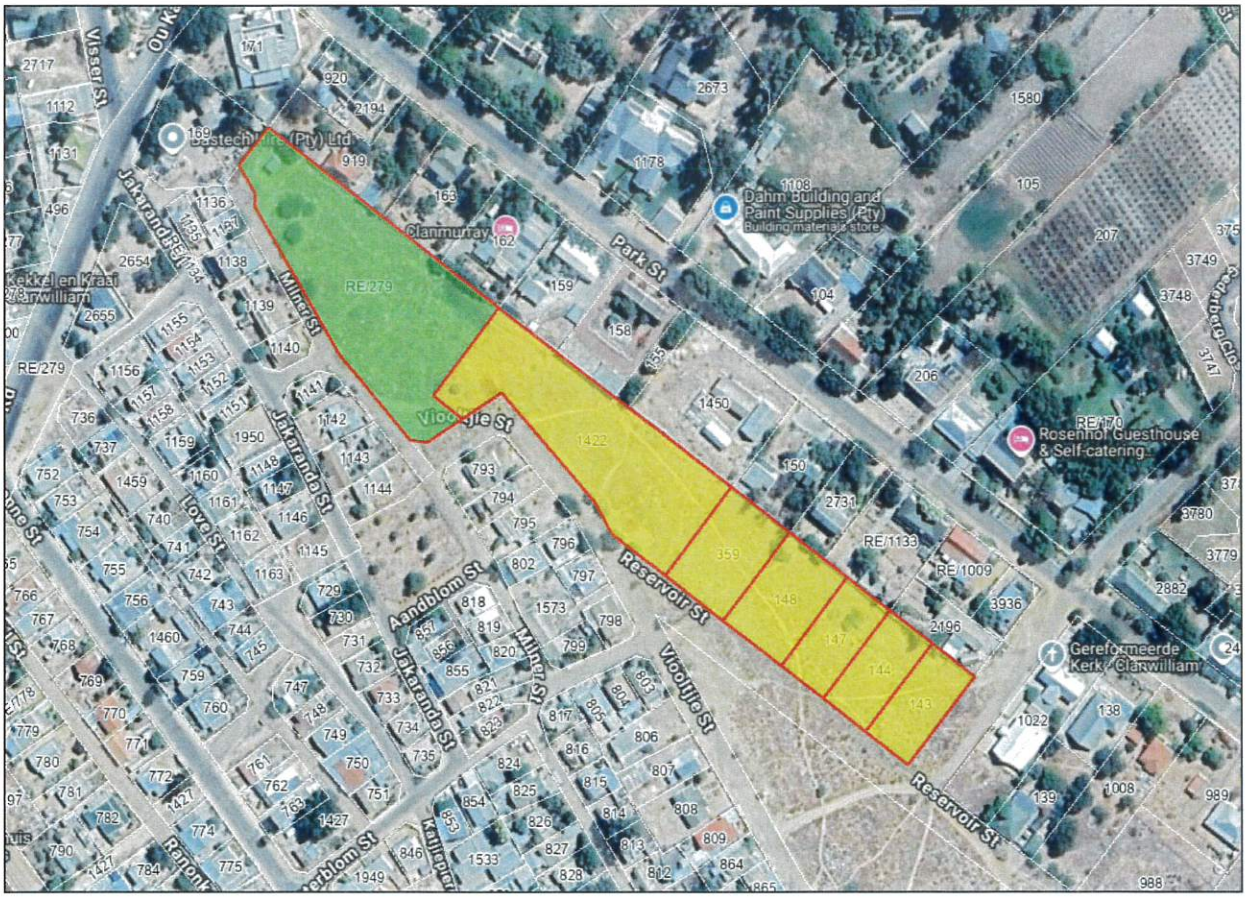



*Figure 1: Relevant area on aerial backdrop*

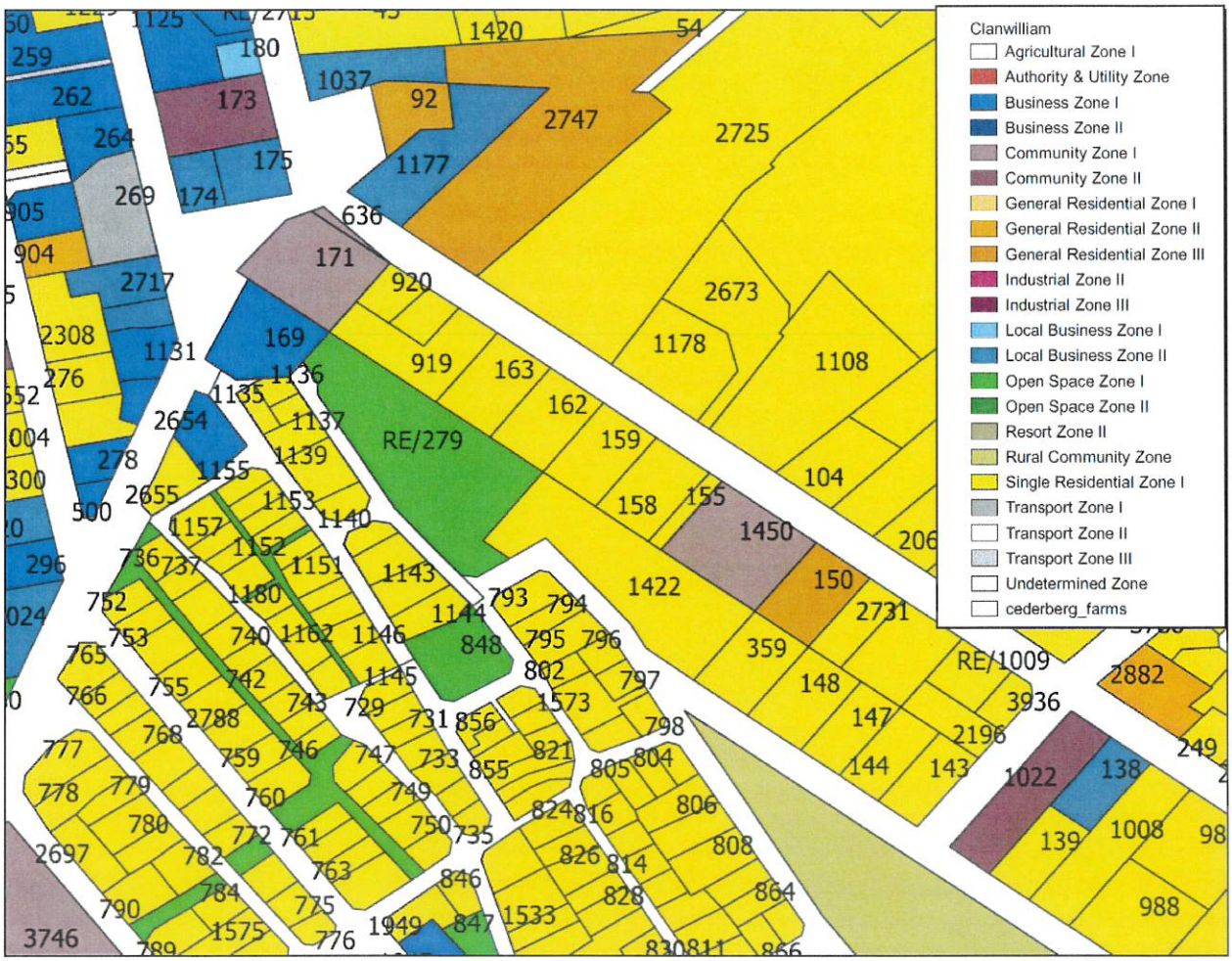



*Figure 2: Zoning Map extract*

As per the existing zoning of the registered erven, these erven can be developed within months of building plan approval. As can be seen from Figure 3 below the allocation of the area already approved for residential development and open space are proposed to accommodate more opportunities and a more effective open space area. The proposed layout allows for a ±7477m² open space erf over the existing 6280m² open space portion. The proposed development will not deteriorate or negatively impact on the existing valuable heritage properties. On the contrary the development of houses and a formal open space will prevent illegal dumping and opportunities for illegal access to adjacent properties. It further acts as a functional buffer zone that integrates communities rather than leaving the area derelict.

The proposed erven are earmarked for GAP or FLISP (Finance Linked Individual Subsidy Programme), which is focused on households who earn too much to qualify for a fully subsidised RDP house but too little to afford a traditional bonded house. The GAP or FLISP programme provides a once-off subsidy to reduce initial home loan amount, making home ownership accessible to all. These developments are usually located in areas available for infill development to promote spatial integration and provide an affordable and dignified home near economic opportunities. The proposed development is exactly that, seeing that it is located on derelict land within an existing residential area that can be used for infill development near economic opportunities and services.




*Figure 3: Proposed GAP or FLISP housing development on existing erven*

Further to the above, the proposal is solely residential in nature, hence demonstrating that it will be compatible with the intended historic use of these erven. The proposed layout constitutes a redevelopment of existing erven that aligns with national, provincial, and municipal objectives to promote sustainable densification, particularly through the FLISP programme, which addresses the dire need for affordable homeownership opportunities in Clanwilliam. As mentioned previously, the land is already zoned for residential purposes, so densification in this case is a policy-aligned approach that curbs urban sprawl. The current condition of the site — being used as an informal dumping ground — detracts from the character of the historic neighbourhoods, whereas redeveloping the area will enhance the visual quality of the area. Furthermore, the proposed erven allow for an appropriate transition between the two historic neighbourhoods.

I trust our comments will be considered favourably.

Kind regards

R de Ridder
Acting Municipal Manager
**CEDERBERG MUNICIPALITY**

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23 May 2024

**To whom it may concern:** Zanlle Nortje / CK Rumboll & Partners
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zanelle@rumboll.co.za / +27 22 482 1845

**ZONING SCHEME EXTRACT**

REMAINDER ERF 279 CLANWILLIAM

**On the date reflected above, the Cederberg Municipality's records indicated the property listed below to be zoned for the following purposes:**

| | |
|---|---|
| Property description | Remainder Erf 279 Clanwilliam |
| Physical address | Ou Kaapse Way, Clanwilliam |
| Applicable Zoning scheme | Cederberg Municipality Zoning Scheme By-law |
| Zone | Rural Community Zone (RCZ) |
| Primary land uses permitted | Rural-village |
| Additional use rights | Agriculture, and utility service. |
| Consent uses | Abattoir, airfield, aqua-culture, freestanding base telecommunication station, helicopter landing pad, off-road trail, quarry, renewable energy structure, and shooting range. |
| Other previously approved use rights (if any) | Multiple subdivision application has been lodged and approved on the subject property. |
| Additional information | This property is also known as the commonage of Clanwilliam. Multiple use rights, located on various areas, on the subject property have been vested. |

The following must be noted when reading the zoning extract:

- The above zone is subject to various development parameters and land use restrictions which are contained in the applicable zoning scheme regulations, a copy of which is either attached or available on request at the Town Planning & Building Control office.
- This document is provided for information purposes only.
- It is further noted that the above information doesn't necessarily include reference to all previous land use approvals, restrictions, exclusions, departures or may not reflect lapsing of approvals. The reader is advised to also check the records of any other previous approvals, consents, exclusions, departures granted from the zoning scheme regulations or whether an approval not exercised has lapsed as well as the title deed for other restrictions that might impact on the development of the property.
- Use of the property in accordance with the above specified zone does not exempt the owner/occupier from compliance with any other legal or statutory requirement which may affect the property.

Yours faithfully

A Neethling
**Manager : Town Planning & Building Control**
**Directorate: Technical Services**

| 1 | 2 | 3 |
|---|---|---|
| **Zoning** | **Primary use** | **Consent use** |
| **RURAL COMMUNITY ZONES** | | |
| **Rural Community Zone (RCZ)** | | |
| *The purpose of this zone is to support local governments in managing existing rural communities (such as agri-villages, commonage, missionary, forestry and conservation settlements) situated on rural land, i.e. to accommodate existing communities outside conventional towns (the formalisation of the urban component).* | **Primary use**<br>• Rural-village<br><br>**Additional use rights**<br>• Agriculture<br>• Utility service | • Abattoir<br>• Airfield<br>• Aqua-culture<br>• Freestanding base telecommunication station<br>• Helicopter landing pad<br>• Off-road trail<br>• Quarry<br>• Renewable energy structure<br>• Shooting range |
| **SINGLE RESIDENTIAL ZONES** | | |
| **Single Residential Zone I (SRZI)** | | |
| *The objective of this zone is to provide for residential development where the predominant type of accommodation is a dwelling house for a single family, where each dwelling has its own land unit, and adequate outdoor space. Limited employment and additional accommodation opportunities are possible as primary or consent uses, provided that the dominant use of the property remains residential, and impacts of employment and additional accommodation uses do not adversely affect the quality and character of the surrounding residential environment.* | **Primary use**<br>• Dwelling house | **Consent uses**<br>• Crèche<br>• Guest house<br>• Halfway house<br>• Home care facility<br>• House shop<br>• House tavern<br>• Place of worship<br>• Place of instruction<br>• Plant nursery<br>• Second dwelling (>80m²)<br>• Urban agriculture |

**"restaurant"**

**Land use description:** *"restaurant"* means a commercial establishment where meals and liquid refreshments are prepared or served or prepared and served to paying customers primarily for consumption on the property, and may include licensed provision of alcoholic beverages for consumption on the property, and the option for customers to purchase food for consumption off the property.

**Development parameters:**
Development parameters applicable to "business premises" apply.

**"retirement resort"**

**Land use description:** *"retirement resort"* means flats, group housing or town housing that conforms to the following additional conditions:

*(a)* each dwelling unit must be occupied by a retiree or pensioner or by a family of which at least one member is a retiree or pensioner; and

*(b)* a full spectrum of frail care and other facilities reasonably associated with a retirement resort may be provided at the retirement resort.

**Development parameters:**
Development parameters applicable to the primary use apply.

**"riding school"**

**Land use description:** *"riding school"* means a place or undertaking for the leasing of horses and riding instructions against payment, and includes the care and stabling of the horses.

**Development parameters:**
Development parameters as applicable to "agriculture" apply.

**"risk activity"**

**Land use description:** *"risk activity"* means an undertaking where the material handled or the process carried out is liable to cause extremely rapid combustion, give rise to poisonous fumes, or cause explosion, and includes major hazardous installations and activities involving dangerous and hazardous substances that are controlled in terms of national legislation.

**Development parameters:**
Development parameters applicable to "noxious trade" apply.

**"rooftop base telecommunication station"**

**Land use description:** *"rooftop base telecommunication station"* means a support structure attached to the roof, side or any part of a building and used to accommodate telecommunication infrastructure for the transmitting or receiving of electronic communication signals.

**Development parameters:**
The general provisions of section 33 of this By-law apply.

**"rural-village"**

**Land use description:** "rural-village" means an established private and/or public settlement (such as agri-villages, commonage, missionary, forestry and conservation settlements) of restricted size and that is usually managed by a legal institution that is situated within an agricultural area. The ownership of a property (where a rural-village is located) can be in the form of a Trust, Communal Property Association or Sectional Title.

**Development parameters:**

*(a)* The Municipality may require a site development plan for a rural-village.

*(b)* The site development plan as approved by the Municipality constitutes the development parameters.

*(c)* The provisions for a site development plan in this By-law apply.

**"scrap yard"**

**Land use description:** *"scrap yard"* means a property that is utilised for one or more of the following purposes:

*(a)* storing, depositing or collecting of junk, scrap material or articles that have value depending mainly or entirely on the material used during their manufacture;

*(b)* the dismantling of second-hand vehicles or machines to recover components or material; and

*(c)* the storage or sale of second-hand parts, pipes, poles, steel, wire, lumber yards, tyres, bricks, containers or other articles suited to being left in the open.

**Development parameters:**

Development parameters applicable to "industry" apply.

**"second dwelling"**

**Land use description:** *"second dwelling"* means another dwelling that may, in terms of this By-law, be erected on a land unit where a dwelling house is also permitted; and the second dwelling may be a separate structure or attached to an outbuilding or may be contained in the same structure as the dwelling house; provided that–

*(a)* a second dwelling may only be erected in a use zone where provision has been made in column 2 of the table set out in Schedule 1 for a second dwelling as a consent use; and

*(b)* the second dwelling must remain on the same land unit as the dwelling house and not be alienated separately.

**Development parameters:**

The development parameters applicable to "dwelling house" apply, together with the following additional parameters:

*(a)* the total floor space of a second dwelling may not exceed 150 m² including the floor space of all ancillary buildings;

*(b)* a second dwelling must be constructed in a style that is similar to the architecture of the main dwelling house;

*(c)* a second dwelling that is a separate structure to a dwelling house may not exceed a height of 8 metres from the base to the wall plate in all cases and 10 metres to the top of the ridge of the roof in the case of a pitched roof;

*(d)* a second dwelling that is contained within the same building as a dwelling house must be designed so that the building appears to be a single dwelling house; both units may have a ground floor, or one unit may be on the ground floor and the other unit above;

*(e)* the existence of a second dwelling may not in itself be sufficient reason for the Municipality to grant an application in terms of planning law to subdivide the land unit containing the dwelling units; and

*(f)* the construction of a second dwelling is subject to the Municipality's municipal services department certifying that adequate services network capacity is available to serve the needs of the second dwelling.

**"service station"**

**Land use description:** *"service station"* means property for the retail supply of fuel, and may include uses such as—

*(a)* washing of vehicles, sale of motor vehicles, open air motor vehicle display, service trade, a convenience shop and a restaurant; and

*(b)* does not include spray-painting, panel beating, motor repair garage or truck stop.