AVEC LA TERRE

[DRAFT] Visual Impact Assessment

Ptn. 11 of Farm 1426, Paarl

December 2022

Revision 0

Prepared by: FILIA Visual

Authored by: Fi Smit

For: Plutus Development Properties

FILIA Visual

17 La Verona, Pintail Way
Somerset West, Cape Town
(+27) 79 841 0340
filia.visual@gmail.com

[DRAFT] VISUAL IMPACT ASSESSMENT

For the

PROPOSED DEVELOPMENT OF PORTION 11 OF FARM 1426

PAARL

Submitted to:

Plutus Development Properties

On behalf of their client:

Future Megawatt

H/V Oosterland en Driebergenstraat
Eenheid H, Dal Josafat
Paarl 7620

Prepared by:

Filia Visual (Pty) Ltd

17 Pintail Way, La Verona
Somerset West, Cape Town 7130

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1. Declaration and Statement of Independence

Statement of Independence and Disclaimer

The author hereby declares that they act as an independent specialist in this matter and will perform the work relating to the matter in an objective manner, even if this results in views and findings that are not favourable to interested parties. Neither Filia Visual, nor any of the authors of this report have any material present or contingent interest in the outcome of this Project, nor do they have any pecuniary or other interest that could be reasonably regarded as affecting their independence or that of Filia Visual. Filia Visual has no beneficial interest in the outcome of the assessment which is capable of affecting its independence, and it should be noted that Filia Visual does not have any interests in secondary or downstream applications that may arise from the granting of the application and proposed development. The opinions, views and findings contained in this report are based on the information supplied to Filia Visual by the Client and project professional team. The author has exercised all due care and diligence in reviewing the project information supplied at the time of the writing of this report, however conclusions from the review remain reliant on the accuracy and completeness of the data and project information supplied. Filia Visual cannot accept responsibility for errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting therefrom. Filia Visual accepts no liability or responsibility whatsoever in respect of any use of or reliance upon this report by any third party. The findings of this report are based on the site conditions, proposal and receiving environment features as they excited at the time of investigation and writing, and those that are reasonably foreseeable, to the exclusion of conditions and features that present after the date of such site investigations and this report.

Experience and Compliance

Fioné Smit, the report author, has been appointed to prepare this report, and has expertise in conducting the specialist report relevant to this matter, including knowledge of regulations and guidelines that have relevance to the proposed activities. She is a SACLAP registered Landscape Architect, a member of ILASA and IAIAsa, and an Independent Visual studies practitioner. Filia Visual and its representatives will comply with the appropriate Acts, regulations and all other applicable legislation, undertaking to disclose to interested parties and the competent authority (CA) all material information in her possession that reasonably has or may have the potential of influencing any decision to be taken with respect to these matters by the CA; and the objectivity of any report, plan or document to be prepared.

Declaration

This specialist report has been prepared for Plutus Development Properties (Pty) Ltd (on behalf of their client, Future Megawatt) and is subject to and issued in accordance with the agreement between these parties. The author herewith confirms the correctness of the information provided in this report, including supporting documents and reports.

Fioné Smit
Director, Filia Visual (Pty) Ltd.

2. INTRODUCTION

Filia Visual was appointed to prepare an independent Visual Impact Assessment (VIA) for the proposed Mixed-Use development at Portion 11 of the Farm 1426, Paarl in the Western Cape.

2.1. Need for Visual Impact Assessment

This specialist study is conducted to inform the Environmental Impact Assessment (EIA) process undertaken by Doug Jeffery Environmental consultants that will be submitted to the Department of Environmental Affairs and Planning (DEA&DP) in terms of the National Environmental Management Act, 1998, Act 107 of 1998 (NEMA)). The Department of Environmental Affairs & Development Planning (DEA&DP) is the competent authority for the consideration of the NEMA authorisation application.

A Visual Statement was submitted in November 2022 to inform and accompany the Land Use Planning application that was submitted to the Drakenstein Municipality by A Roux Town Planning for the Rezoning and Subdivision[1] of the property from Agriculture Zone to Subdivisional Area.

The request for visual impact assessment within the Drakenstein Municipality originated from the May 2022 Pre-application meeting, wherein:

- Mr. Clive Theunissen (Heritage) indicated that consideration of the visual impact of the R301 interface with the proposed development would be important and require special attention from a design point of view (even though commercial development on the R301 Scenic route boundary would not necessarily be problematic).
- Therefore, a visual impact assessment would be required, and would need to be done during the current rezoning application rather than being deferred to a future application as part of the SDP process for the commercial / mixed-use site.

Heritage Western Cape (HWC) indicated that the proposed development is not expected to impact on Heritage Resources, and so the visual specialist input will not be required to accompany an HIA.

2.2. Background, Purpose and Classification of this report

According to the DEA&DP Guideline for involving visual & aesthetic specialists in EIA processes, this VIA requires specialist involvement at **Pre-application planning**[2] stage, and at the **Scoping**[3] stage, followed by the **Impact assessment stage**[4], which is the focus of this report.

The chief purpose of any visual impact specialist study is to ensure that the visual & aesthetic consequences of the proposed project are understood and adequately considered in the [environmental] planning process (Young, 2014).

[1] The application also includes application for Council's Consent, Departures and Approval of street names.
[2] Pre-application planning stage: To identify scenic resources, and visually sensitive areas or receptors, which may determine site selection, and layout of the project, and to determine potential fatal flaws, significant negative impacts and possible alternatives.
[3] Scoping stage: To identify key concerns or issues relating to potential visual impacts arising from the project, and to determine boundaries and parameters for visual input.
[4] Impact assessment stage: To determine the character and visual absorption capacity of the landscape, the visibility of the proposed project, the potential visual impact on visual / scenic resources, and the nature, extent, duration, magnitude, probability and significance of impacts, as well as measures to mitigate negative impacts.

The DEA&DP Guidelines for involving visual & aesthetic specialists in EIA processes (Oberholzer, 2005) recommends an initial classification of projects to determine the level of assessment required, according to the type of development that is proposed and the type of environment where the development is proposed. Based on the project information at hand at the outset of the study, the proposed development is for a **Category 4 development**[5] within an **area or route of Medium to High scenic, cultural and historical significance**.

Based only on the nature of the development and a high-level assessment of the nature of the receiving environment (RE) prior to the initiation of this study, **High Visual Impact**[6] was expected, and a **Level 4 Assessment** recommended (Oberholzer, 2005, pp. 13, Table 2).

This VIA report ultimately aims to test and determine the actual significance of the expected visual impacts through visual analysis and simulation. The results are then interpreted in order to determine the suitability and acceptability of these impacts and changes (given the visual and aesthetic sensitivities of the receiving environment and visual receptors).

This report must be read in context of the previous and current land use and other planning, or environmental approvals associated with this development proposal. Whereas this report focuses primarily on visual and aesthetic criteria, cognizance of other factors (social, heritage, cultural, environmental, ecological, etc.) are acknowledged and will be addressed in the report with the information at hand, and in consultation with the Heritage Practitioner as necessary.

2.3. Scope of Work, Approach and Methodology

The aim of the Visual Statement was to:

i. Identify scenic resources, and visually sensitive areas or receptors which may influence the design and layout of the project;
ii. Determine potential fatal flaws, significant negative impacts and possible alternatives;
iii. To identify key concerns or issues relating to potential visual impacts arising from the project;
iv. And to determine boundaries and parameters for visual input during Impact Assessment.

Filia Visual has also been appointed to conduct an independent Visual Impact Assessment report in order to:

i. Determine the character and visual absorption capacity of the landscape;
ii. Determine the visibility of the proposed project;

[5] **Category 4 Development:** e.g., medium density residential development, sports facilities, small-scale commercial facilities / office parks, one-stop petrol stations, light industry, medium-scale infrastructure. (as per Box 2, page 7 of the DEA+DP Guidelines, 2015). *(*Medium density developments are generally 1 to 3-storey structures, including cluster development, usually with more than 25% of the area retained as green open space..).*

[6] Please note the following key principles and concepts that should be considered and described in terms of visual input into the EIA process:

- 'Visual' implies the full range of visual, aesthetic, cultural & spiritual aspects of the environment that contribute to sense of place;
- Both the natural and the cultural landscape and their inter-relatedness including all scenic resources, protected areas, and sites of special interest, together with their relative importance in the region must be considered;
- Visual studies are underpinned by an understanding of the landscape processes, including geological, vegetation and settlement patterns, which give the landscape its character or scenic attributes;
- Both quantitative and qualitative criteria are necessary to describe visual aspects.

iii. Determine the potential visual impact on visual / scenic resources;
iv. Determine the nature, extent, duration, magnitude, probability and significance of impacts;
v. And finally to determine measures to mitigate negative impacts.

The existing project information, reports and studies comprising the project history were consulted during the Initiation stage. A desktop survey using digital topographical survey maps and available GIS databases was undertaken to describe the site setting, identify landform, landscape, and built form patterns of the receiving environment, and to situate the proposed development in the spatial planning policy context of the receiving environment. Aerial photography from a variety of sources as well as Digital Terrain Modelling (Google Earth and the QGIS[7]) was used to assist in this part of the study, and the 3D model was transferred from SketchUp to Google Earth and QGIS for Line of sight (LoS) testing and visibility analysis.

Following the desktop study, a site visit was undertaken to confirm land use, assess the landscape character, identify sensitive receptors and conduct fieldwork. This included the capture of site photographs from and toward key views and viewers. The report was then drafted according to the findings of the desktop study, the site visits, and standard recommended VIA methodology.

The basic components comprising an accepted methodology for visual studies include:

- Desktop study, site visit and fieldwork;
- Identification of landscape types, landscape character and sense of place, generally based on geology, landforms, vegetation cover and land use patterns;
- Identification of viewsheds and view catchment areas, generally based on topography;
- Identification of important viewpoints and view corridors within the affected environment, including sensitive receptors;
- Indication of distance radii from the proposed project to the various viewpoints and receptors;
- Determination of the visual absorption capacity (VAC) of the landscape, usually based on vegetation cover or urban fabric in the area;
- Determination of the relative visibility, or visual intrusion, of the proposed project.
- Determination of the relative compatibility or conflict of the project with the surroundings;
- Determine the Significance of the Visual Impact and population of the EAP's detailed Impact Assessment tables.
- Proposal of mitigation measures and other recommendations to address potential visual impact.
- Visual impact statement and professional opinion.

2.4. Project introduction

The subject site is located south of the town of Paarl in the Berg River Valley along the R301 Wemmershoek Road (C/o Schuurmansfontein Road and R301). The 27,48 Ha site falls within the urban edge according to the 2018 Drakenstein Municipality SDF.

The proposal is for the Rezoning and Subdivision of Portion 11 of Farm 1426 into 236 portions to facilitate the establishment of (a) upmarket residential gated security-controlled estate and (b) a separate Mixed-Use site with office, retail, hotel and / or sectional-title residential opportunities. The proposed development consists of 216 Residential units (zoned for Conventional Housing), with internal roads and bulk service areas (5 and 3 portions zoned for Transport and Utility, respectively) with 11 portions zoned for Open space, and 1 large portion zoned Mixed-Use along the R301.

[7] ASTER GDEM v2 Worldwide Elevation Data (1 arc-second Resolution) data set.

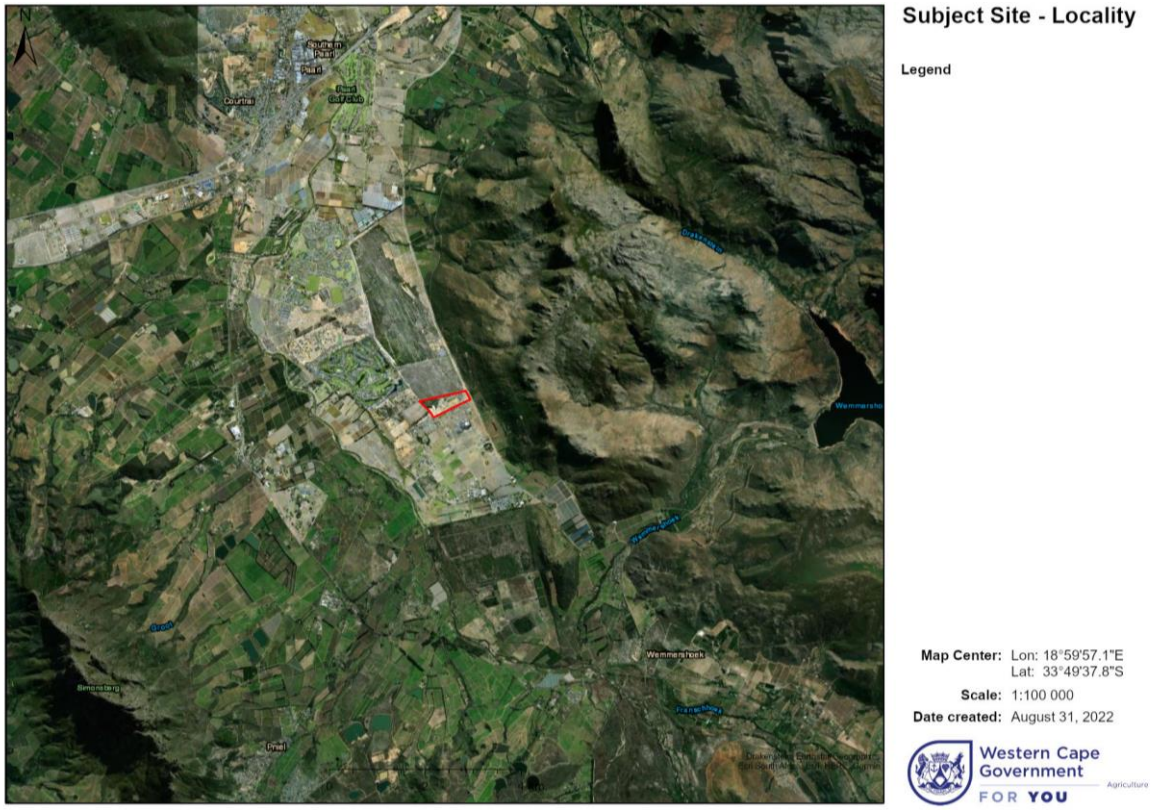

Figure 1: Site boundary shown over Aerial location imagery (Cape Farm Mapper, 2022)

The subject site is located within a transitional zone between the peri-urban, rural agricultural and wilderness domains in a broader landscape setting. The increasingly heavily trafficked R301 is surrounded by a variety of land uses which are progressively being dominated by gated residential estates. According to the Planning report, this is "in response to the Municipality's spatial vision for this area as a low- to middle-density urban environment which functions as an expansion of the existing Paarl town." (ARoux Town Planning, 2022).

Currently the surrounding land uses include agricultural, commercial, agri-industrial and semi-industrial, conservation (i.e., the Hawequa Nature Reserve and mountain slopes) infrastructural (communications, power and transport infrastructure) tourism and residential (smallholding and low to medium density). This land use mix is fairly typical of an area on the periphery of the urban edge within the Cape Winelands region.

The details of the subject site:

Physical address	*La Paris Farm, R301 Wemmershoek Road*
Portion and Farm name	*Portion 11 of Farm 1426, Paarl*
Municipality	*Drakenstein*
Coordinates	*33°49'36.1"S 18°59'59.1"E*
Extent of Property	*27,8417 Ha*
Current use	*Residential (smallholding), vacant*
Current zoning	*Agriculture Zone*

The R301 is a Scenic Route, and therefore a section of the subject site falls within the demarcated Scenic Routes area of control in terms of the Drakenstein Municipality Zoning Scheme: Scenic Route Overlay Zone. While the Building development parameters in this overlay zone apply, the SDF identifies the R301 as an urban development corridor which promotes mixed land uses along this important connecting route between Paarl and Franschhoek.

Figure 2: R301 Scenic Route (Smit, 2022)

The effect of the proposed development on the visual amenity of the scenic route will therefore be the focus of the current specialist input and the future VIA. This will be informed by potential effects on the surrounding Cultural Landscape as well as sensitive receptors, both of which will be identified during the course of the study.

This VIA assesses visual impact for the No-Go Alternative, Alternative 1 Option A, and Alternative 1 Option B (Preferred).

2.5. Key issues at the outset

2.5.1 Categories of Issues

For **High** visual impact expected, the following are listed as expected issues according to the DEA&DP Guidelines involving visual & aesthetic specialists in EIA processes (Oberholzer, 2005, pp. 7, Box 3):

- Potential intrusion[8] on protected landscapes or scenic resources;
- Noticeable change[9] in visual character of the area;
- Establishes a new precedent for development in the area.

2.5.2 Key Issues

Key issues are those raised during the desktop study, scoping process or included as part of the visual specialist's brief which require further investigation (Oberholzer, 2005, p. 28).

In order to fulfil the requirements of a Scoping report, the Visual Statement submitted in November 2022 was required to identify key concerns or issues relating to potential visual impacts arising from the project, and to determine boundaries and parameters for visual input during the VIA.

[8] Visual intrusion describes the level of compatibility or congruence of the project with the particular qualities of the area, landscape and surrounding land uses, or its 'sense of place', measured against the degree to which it is in discord, or contrasts with these.
[9] Noticeable change is defined as: "Clearly visible within the view frame & experience of the receptor".

The following aspects will be assessed during impact assessment stage, in Chapter 6 of this report:

- Effect on **Cultural landscapes and scenic resources**, with specific reference to:
  - The effect on the rural sense of place of the Cape Winelands Cultural Landscape.
    - *This includes interruption to the continuity of settlement patterns, landscape and agricultural patterns (windbreaks, dams, etc.); as well as transformation of Land-Use from vacant/agriculture to Mixed-Use and residential – clearing of vegetation to replace with development).*
  - The effect on the visual amenity of the Scenic route.
    - *This includes changes to or interruption of characteristic long views over the agricultural landscape towards the encircling mountains; the introduction of new built form, associated infrastructure and landscape features into the foreground of scenic views; and the loss of rural / agricultural interface conditions).*
  - Effect on local heritage and other protected resources.
    - *E.g.; the Taal Monument, Mandela house, Hawequa Nature Reserve, Wemmershoek HOZ etc.).*

- Effect on **sensitive receptors** with specific reference to:
  - Commuters on the R301 Scenic route.
    - *This includes assessment of the effect on sensitive viewers moving along the R301 Scenic route in both directions, and assessment of the proposal in terms of the R301 and the Schuurmansfontein Road interfaces which are visible from the scenic route over the open fynbos landscape of Farm 888).*
  - Local sensitive receptors [within 800m].
    - *Potential impacts include visual intrusion and overall visibility of development, increased traffic on the R301, reduction of rural 'sense of place' for locals and other sensitive receptors, lighting impacts at night, and the appropriateness of the Schuurmansfontein road interface with the public realm and future proposed public route).*

2.6. Assumptions and Limitations

The following assumptions and limitations apply to this report:

- The author assumes that where information is supplied by others, this information is correct and up to date unless otherwise stated by the client, project team or source. No responsibility is accepted by Filia Visual for incomplete or inaccurate data supplied by others;
- Filia Visual's assessment of the significance of impacts of the proposed project on the receiving environment has assumed that the activities will be confined to the areas for which impacts have been anticipated;
- Where detailed information is not available, the precautionary principle, i.e., a conservative approach that overstates negative impacts and understates benefits, has been adopted;
- It is assumed that any Public Participation or formal commenting and objections processes undertaken by others has identified and incorporated all relevant concerns and comments of stakeholders;

- Filia Visual assumes that the applicant will in good faith implement the mitigation measures identified in this report and elsewhere. In this regard, it is assumed that the applicant will commit sufficient resources and employ suitably qualified personnel to undertake such mitigation;
- It is assumed that the 3D model is an accurate approximation of the proposed development's eventual built form.
- The viewshed analysis is based on the available Digital Elevation/Surface Model datasets available (SRTMGL1 V003 from NASA Shuttle Radar Topography Mission Global 1 arc second – 30m). It should be noted that viewshed analyses are not absolute indicators of either visibility of the level of significance (magnitude) of the impact in the view, but a statement of the fact of potential visibility. Visual analysis using the available Digital Elevation/Surface Models as a dataset only establish the lines of sight (LoS) between the observer and the proposed development and does not consider trees, buildings and other visual barriers that constitute solid protrusions. Empirical testing to consider the visibility of view-limiting structures within urban space (be it a city or cultural landscape), requires either a precise Digital Surface Model (DSM, with raster resolution at most 2 x 2 m (Hlavatá and Oťaheľ 2010])), or on-site LoS testing supported by 3D modeling. LiDAR (Light Detection and Ranging) improves the accuracy of viewsheds and visibility analyses by including these elements, especially for visual studies conducted in urban areas. South Africa does not have LiDAR data available. For this reason, a viewshed analysis using LiDAR data could not inform this report. However, the assumption is that the GIS Viewshed and LoS methods of analysis employed in this report will satisfy the requirements of the brief.
- The Coordinate system used is the Pseudo Mercator (EPSG: 3857).
- Additionally, readers should note that the aim of photography and photomontage in visual studies is to represent the receiving environment under consideration and the proposed development, both as accurately as is practical. However, two-dimensional photographic images and photomontages alone cannot capture or reflect the complexity underlying the visual experience and should therefore be considered an approximation of the three-dimensional visual experiences that an observer would receive in the field (The Landscape Institute, 2011).
- Please note that simulations and 3D models overlaid on to the site model do not indicate site clearance or removal of vegetation. The impression of visual absorption capacity will therefore be higher than that of the actual development.
- This study assumes that the development proposal will not be amended significantly after the issue of this report, and that any guidelines or recommendations will be interpreted in way not significantly deviating from the interpretation of this study.
- Finally, when determining the significance of the visual impact of the Proposed development (with mitigation), the assumption is that the mitigation measures proposed will be correctly and effectively implemented and managed throughout the life of the project.

Notwithstanding the above, the authors are confident that these assumptions and limitations will not compromise the overall findings of this report.

3. SITE AND RECEIVING ENVIRONMENT STUDY

This section contains descriptions of the subject site and its receiving environment. The information presented here is based on desktop studies, aerial photographs, an overview of local policy and project information at hand; as well as the observations of the specialist during the site visit and fieldwork conducted in August and October 2022[10].

3.1. The Subject site

The subject site is a rectangular (somewhat trapezoidal) piece of land located on the eastern side of the Berg River Valley between Paarl and Franschhoek, at the meeting of the topographically flat alluvial plain and the lower foothills of the Drakenstein and Wemmershoek Mountains that slope upward to the east of the site.

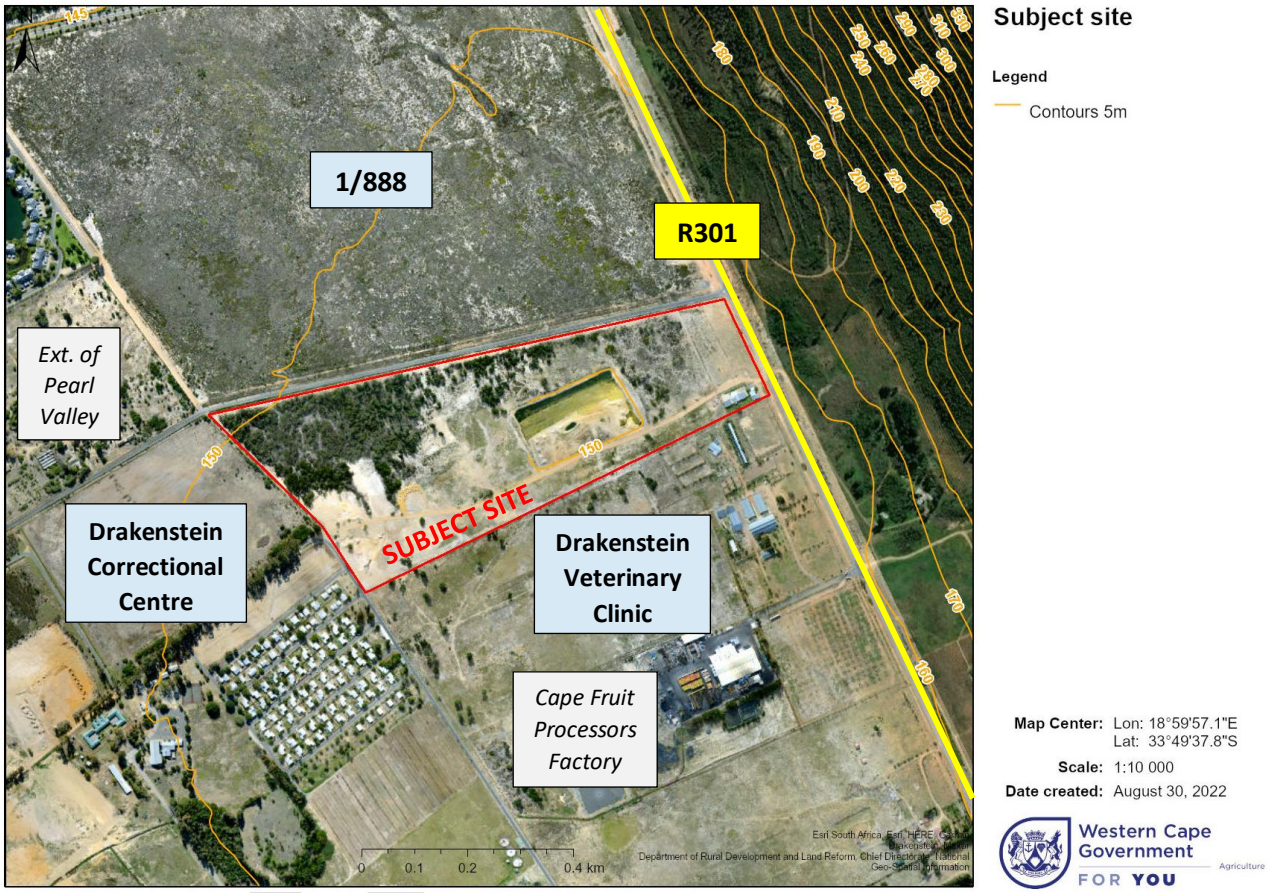

Figure 3: Subject site property boundary and immediate context. Note the position of the subject site in relation to topographical relief rising to the east and flattening out to the west (Cape Farm Mapper, 2022)

In terms of its immediate neighbouring context, the site's narrow eastern boundary abuts the R301 Wemmershoek road, while the Schuurmansfontein Road delineates the long northern property boundary across from a large open tract of land (Portion 1 of Farm 888 La Paris) which has been cleared of invasive vegetation and is managed as a conservation area. Its long southern boundary is shared with the Drakenstein Veterinary Clinic (and an associated residential smallholding), while the western property boundary is shared

[10] The season of the site visit has limited bearing on the visual study. Local vegetation is either predominantly evergreen or part of the cultivated landscape. Seasonal climatic variations should also not affect the visibility of the proposed development in terms of visual and aesthetic considerations.

with two farm potions contained within the Drakenstein Correctional Centre (an open field, and the staff housing suburb of the prison).

Figure 4: Easternmost site interface with the R301 Wemmershoek Road, looking north towards Paarl Mountain (top), south (middle) and east towards the mountain slopes across the road (bottom) (Smit, 2022)

Figure 5: Site interface with the Schuurmansfontein Road on the northern property boundary, looking west towards Simonsberg (top), east towards the R301 (middle) and north over Portion 1 of Farm 888 looking towards Paarl Mountain in the distance (bottom) (Smit, 2022)

Figure 6: Site interface with the neighbouring residential area (located within the Drakenstein Correctional Centre) which is situated to the west of the subject site (Smit, 2022)

The property is undeveloped except for a cluster of residential buildings in the south eastern corner and a central in-situ untarred road that bisects the site parallel to the southern boundary. The remainder of the site is highly transformed from the natural state (which according to the Vegetation Map of South Africa, Lesotho and Swaziland, 2018 would have contained Swartland Alluvium Fynbos) and is overgrown with alien invasive species (mostly *Pinus pinaster*, a class II invader). Generally, the site shows signs of significant disturbance, which includes a large, water-filled depression and various areas of significant soil disturbance.

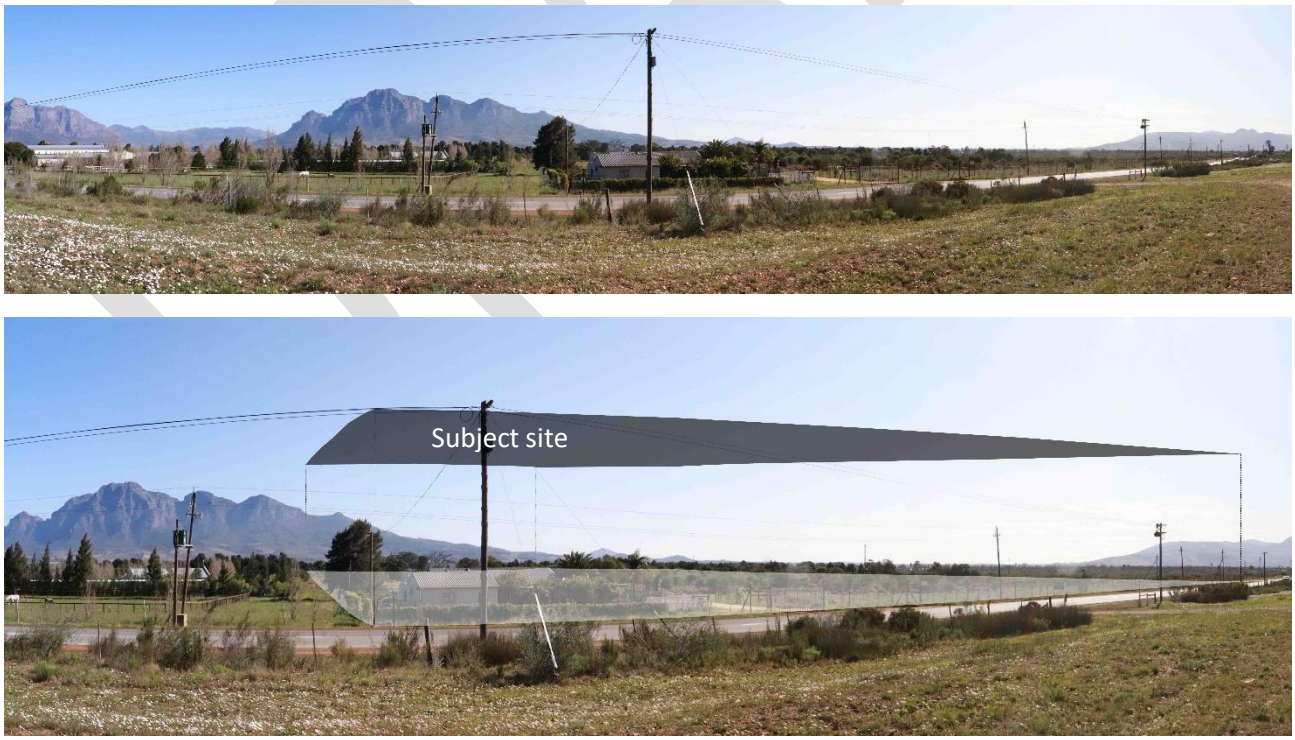

Figure 7: Graphic taken from across the R301 illustrating the axonometric footprint of the site from slightly higher elevation (Smit, 2022)

Figure 8: Site Photograph illustrating the R301 entrance and existing residential buildings (Smit, 2022)

Figure 9: Site Photograph illustrating the open views towards the surrounding mountains (Smit, 2022)

Figure 10: Site Photograph illustrating the water-filled depression in the centre of the site (Smit, 2022)

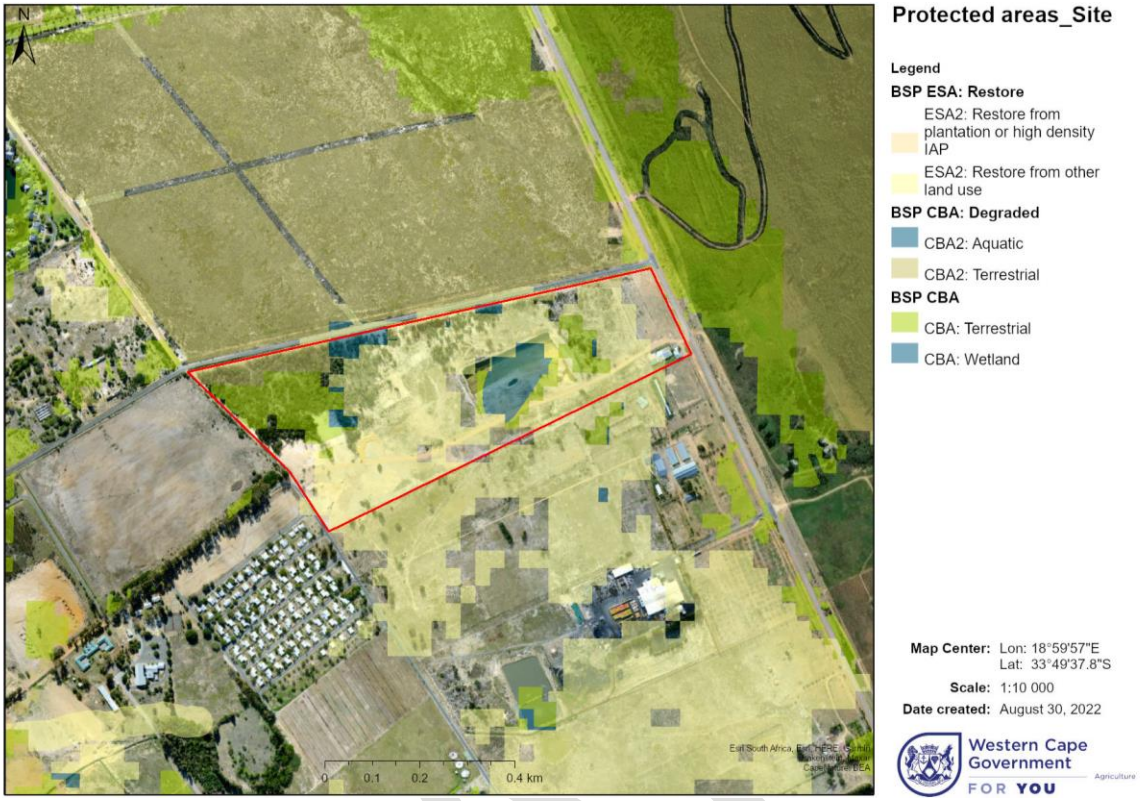

Figure 11: Mapped Biodiversity Spatial Plan areas (Critical Biodiversity and Ecological Support Areas) associated with the site and the immediate surroundings (Cape Farm Mapper,2022)

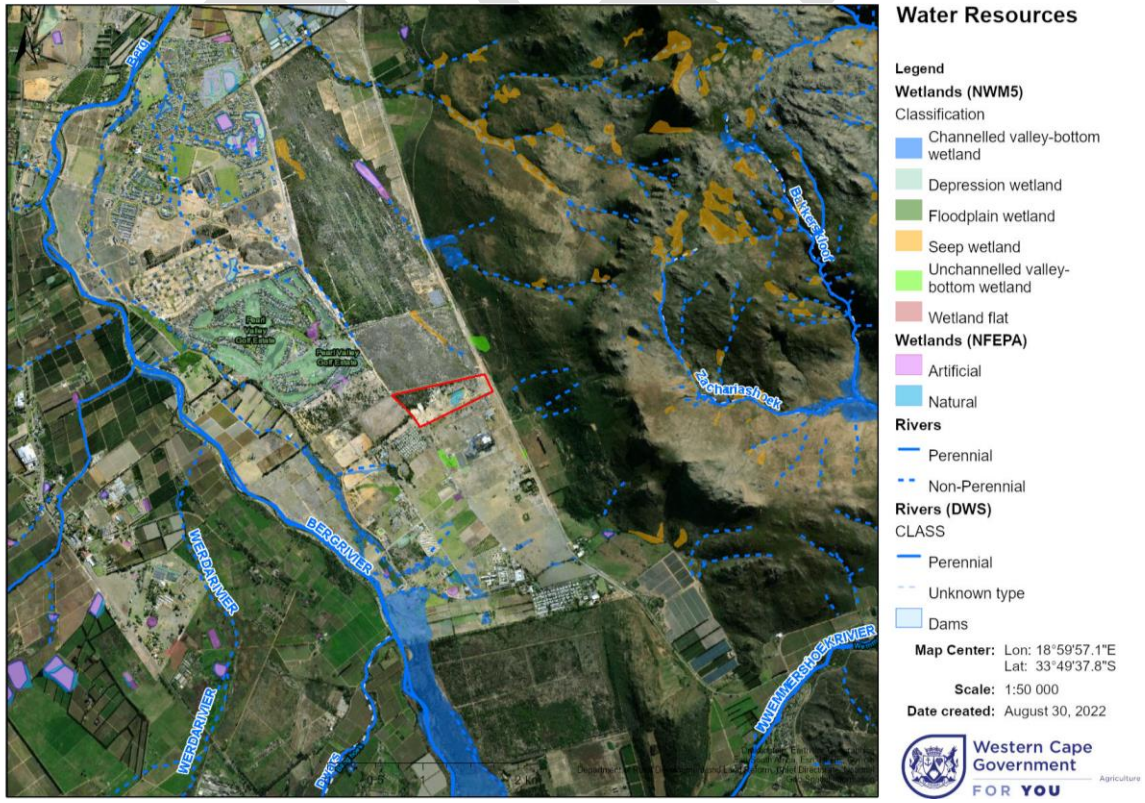

Figure 12: Water resources of the subject site and the area indicating the site position in relation to the Berg River (Cape Farm Mapper,2022)

3.2. The project within the local planning context

The following section describes the site within the local planning context and identifies key informants, limitations, principles and guidelines that must be taken into consideration during the course of this study.

The property is located within the urban edge[11] of the Drakenstein municipality just south of Paarl, in the Western Cape. The 2020-2025 Drakenstein Municipality Spatial Development Framework (the SDF) (Aurecon, 2018) also notes that areas such as those surrounding Paarl are targeted for strategic infrastructure interventions like public transport and upgrading, due to their strategic locality. With this in mind, a relevant key challenge identified by the Provincial SDF is how to promote development in the rural agricultural context without compromising biodiversity, heritage, and scenic resources (Western Cape Government, 2014, p. 46). This report and the subsequent VIA aim to enable both the applicant and the decision making authorities to do so.

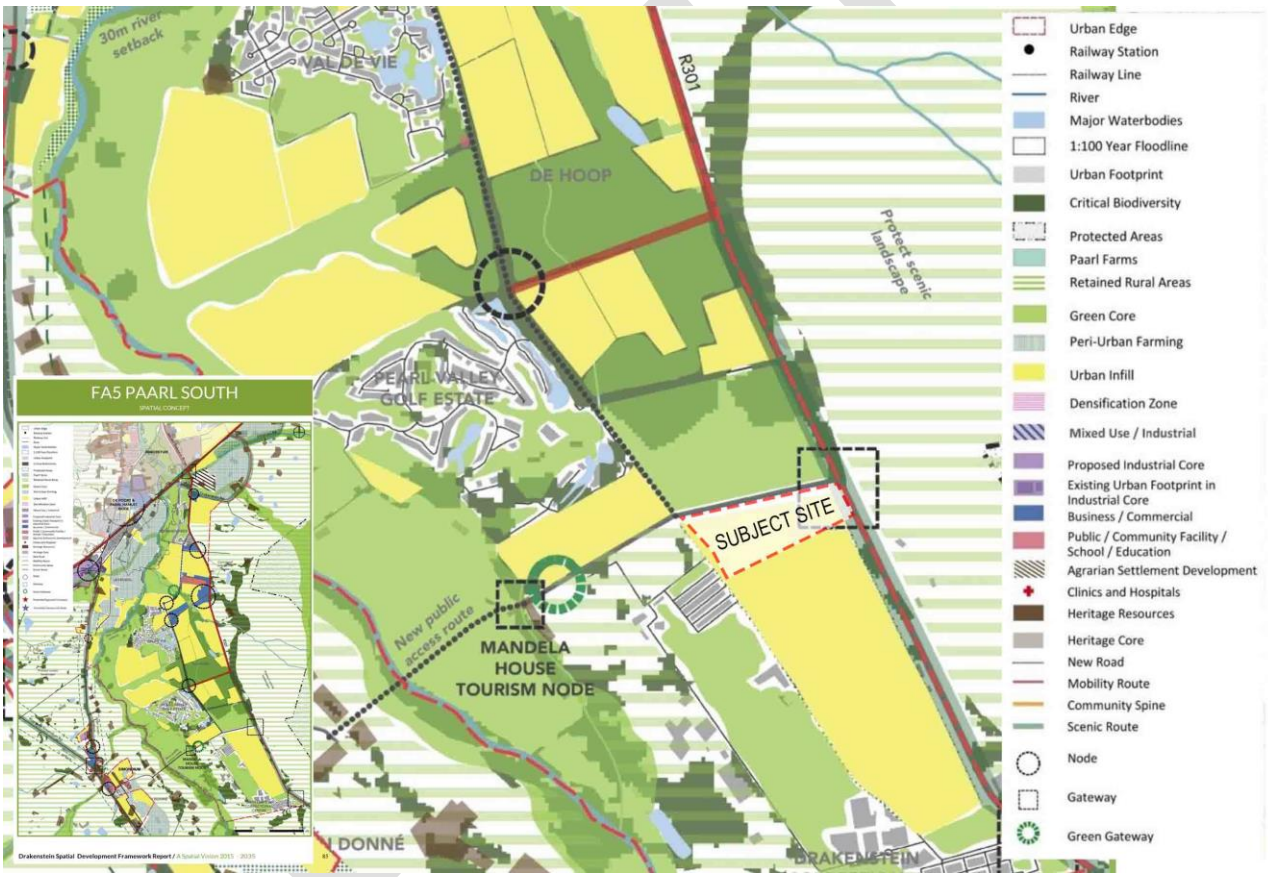

Figure 13: The Paarl South Spatial Framework Concept Map showing the site earmarked for Urban Infill and within the urban edge (Aurecon, 2018, p. 111)

According to the Drakenstein Heritage Survey Report (Winter, Jacobs, Baumann, & Attwell, 2012), the site is located within the **Lower Berg River Valley Broad Landscape Character Zone**.

- This is a highly complex valley landscape (the Berg River Valley) defined by the prominent Drakenstein/Wemmershoek Mountains to the east and the iconic quality of the Paarl Mountain

[11] According to the 2020-2025 Drakenstein SDF (Drakenstein Municipality, Annual Review 2017/2018).

to the west, within which there are distinctive sets of urban and rural conditions operating at different scales, e.g. rooms, blocks, cells, corridors, ensembles, gateways, vistas.

- There is a strong north-south linear pattern of urban settlement which is both informed by and reinforced by the alignment of the Berg River, and framed at a larger scale by the surrounding mountains.
- This Landscape Character Zone contains a juxtaposition of rural and urban landscapes arising from a variety of topographical conditions e.g. exposed slopes, riverine corridors, ridgelines.
- Landscape patterns of cultivation are defined predominantly by vineyards and the distinctive patterns of tree planting, forming avenues, windbreaks or clusters/rows around farm buildings.

Heritage overlay Zones proposed by the Drakenstein Heritage Survey Report surround the subject site and are illustrated in Figure 14. These are: the Dwars and Berg River Corridors HOZ and the Wemmershoek Slopes HOZ. However, the subject site itself does not fall within either of these Heritage Overlay Zones, and the properties located between these protected areas (including the subject site) are not considered to form part of a landscape of heritage significance (Postlethwayt, 2022, p. 34). The VIA does however need to consider the visual impact of the proposed development on these surrounding areas nevertheless, especially that of the Wemmershoek Sleops HOZ, given its proximity to the subject site.

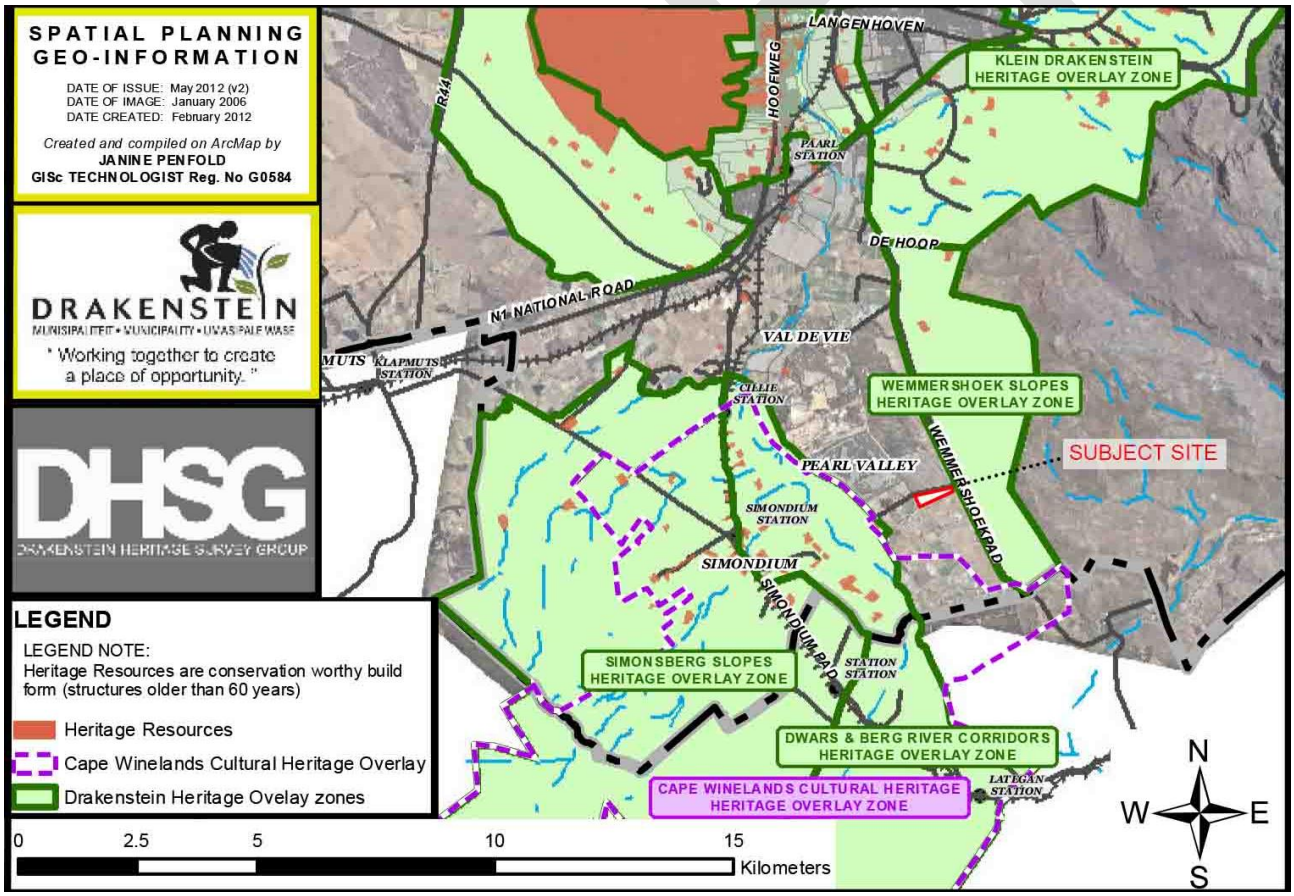

Figure 14: Heritage overlay Zones proposed by the Drakenstein Heritage Survey Report (Winter, Jacobs, Baumann, & Attwell, 2012)

The **Wemmershoek slopes HOZ** is a cultural landscape of considerable heritage significance, according to the Drakenstein Heritage Survey Report. It has high scenic value in terms of views upwards toward the Klein Drakenstein slopes from the R301. Scenic values relate primarily to the relationship between the vineyard setting in the foreground and the dramatic mountain backdrop and the relatively intact, undisturbed nature of this landscape. It represents a highly distinctive, legible, intact and enduring pattern of historical farm werfs in vineyard settings located between a river course and a mountain setting.

Figure 15: Wemmershoek HOZ (Winter, Jacobs, Baumann, & Attwell, 2012)

The **Dwars and Berg River Corridors HOZ** is a historical rural landscape of high heritage significance, according to the Drakenstein Heritage Survey Report. It is highly representative of the Cape Winelands Cultural Landscape in terms of the visual dominance of a productive agricultural landscape and pattern of vineyards, dramatic mountain-valley setting, and collection of historical farm werfs (Winter, Jacobs, Baumann, & Attwell, 2012, p. 99). The HOZ is characterised by a distinctive and highly representative historical pattern of settlement and agriculture, which has evolved over time in response to natural land form, water courses and the movement network, with farm werfs strung along the Berg and Dwars Rivers and overlooking an intensively cultivated riverine terrace.

According to the Drakenstein Mountain Slope policy, the subject site and surrounds are classified under Domain C in terms of its Landscape Character Areas. The site falls within the extents of the Wemmershoek Corridor Landscape Character Area (C2) according to this policy (see Figure 17).

Figure 16: Dwars and Berg River Corridors HOZ (Winter, Jacobs, Baumann, & Attwell, 2012)

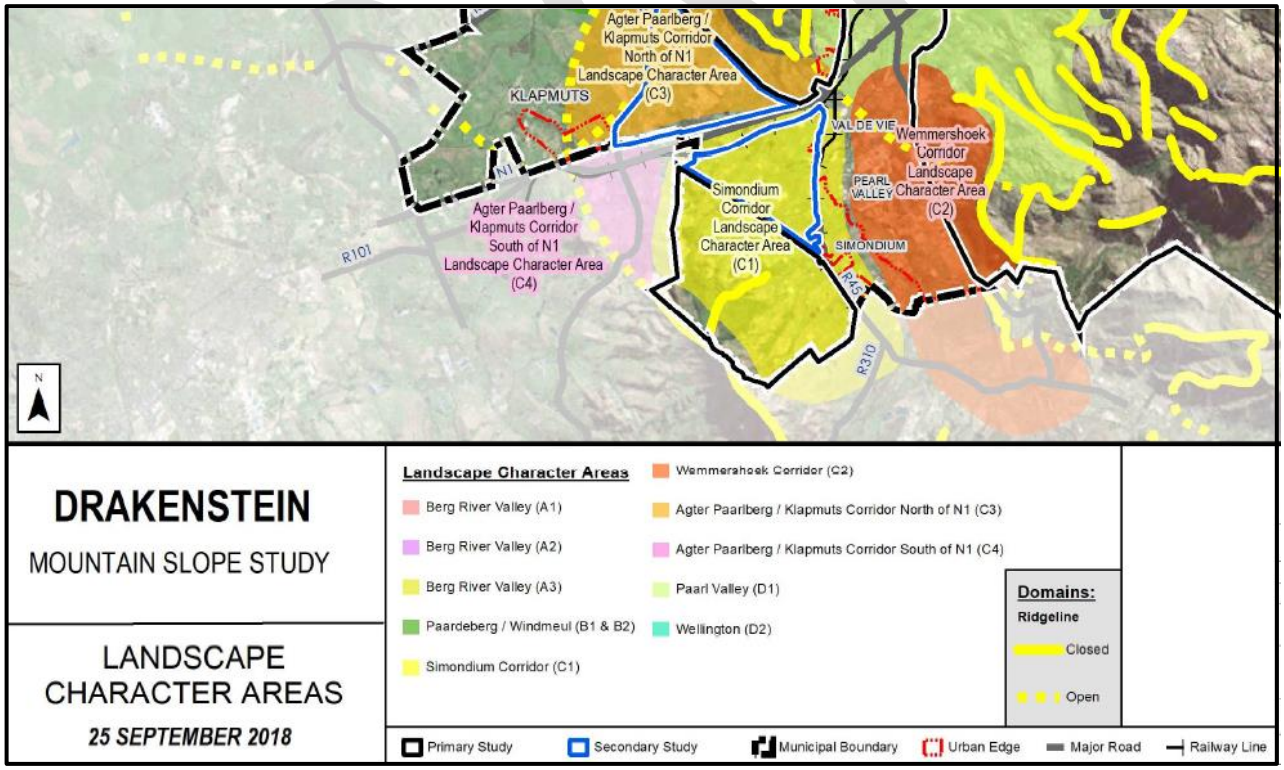

Figure 17: Drakenstein Mountain Slope Study: Landscape Character Areas - Figure 3 (Drakenstein Municipality, 2019, p. 4)

In terms of the Drakenstein Spatial Planning policy, the subject site is located within the South City Corridor Catalytic Zone (which refers to a spatial location on a broader scale) according to the Drakenstein IDP (Drakenstein Municipality, 2020 / 2021). Catalytic Zones are intra-municipal zones of spatial and economic activity which are largely aligned to the Spatial Development Framework (which identifies this area as Focus Area 4: Drakenstein South).

> *"The South City Corridor… is gaining popularity due to its strategic location within the Drakenstein Municipal boundaries and its accessibility to the City of Cape Town… Furthermore, the dramatic scenic landscape, the setting of iconic built heritage resources and provision of quality services has highlighted this area's role as a catalytic zone.*
>
> *The creation of the South City Corridor is focused on an efficient and integrated urban structure, inclusive of a variety of housing typologies, commercial opportunities, social and community facilities with well-connected open spaces which caters for different income groups." (Drakenstein Municipality, 2020 / 2021, p. 150)*

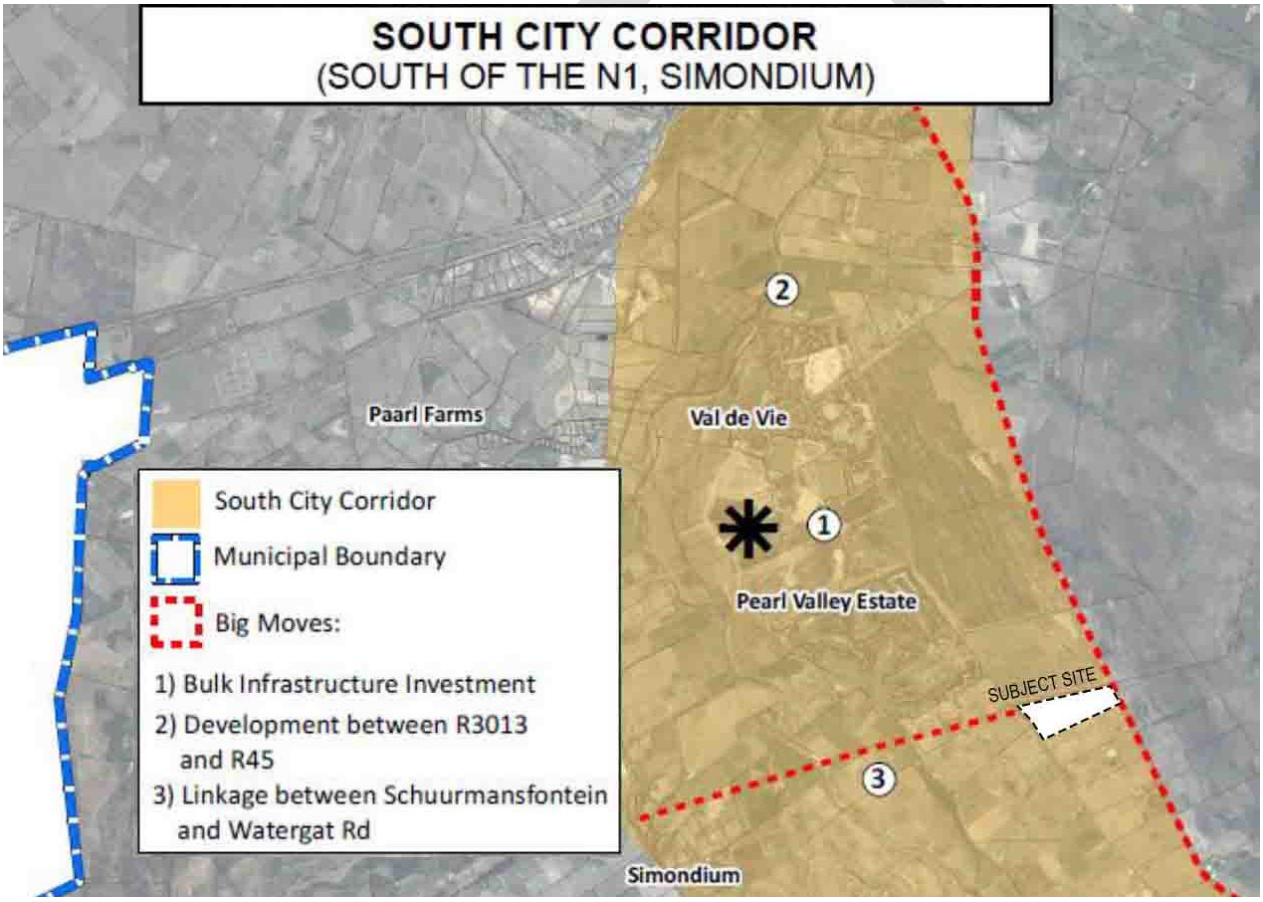

Figure 18: The South City Corridor Spatial Framework Concept Map showing the site within the urban edge, earmarked for Urban Infill (Aurecon, 2018, p. 111)

Spatial Focus Area 4 (FA04) within Drakenstein South is described as being under pressure for the development of high-income, low-density, gated community residential developments. The FA is strategically located and offers good access to the rest of the region, which has led to a landscape

predominantly characterised by agricultural and natural land uses becoming more and more dominated by large-scale, high-income residential developments such as Pearl Valley and Val de Vie.

Map 4.8 and 4.8(a) in the 2022/2023 SDF indicate a Gateway point[12] at the north eastern corner of the subject site (Drakenstein Municipality, 2022/27, p. 114). This Gateway refers to a planned tourism gateway leading to the Mandela House National Heritage Resource along the proposed Watergat/Schuurmansfontein Integration Route (Drakenstein Municipality, 2022/27, p. 124). Map 3.6 in the Draft 2022/2023 SDF illustrates areas where opportunities for high density/Mixed-Use/infill development/upgrading should be explored by the Municipality in support of realizing Concept 7 (Promoting Spatial Transformation toward Resilient, Inclusive, Smart and Sustainable Settlements). The subject site falls within this area.

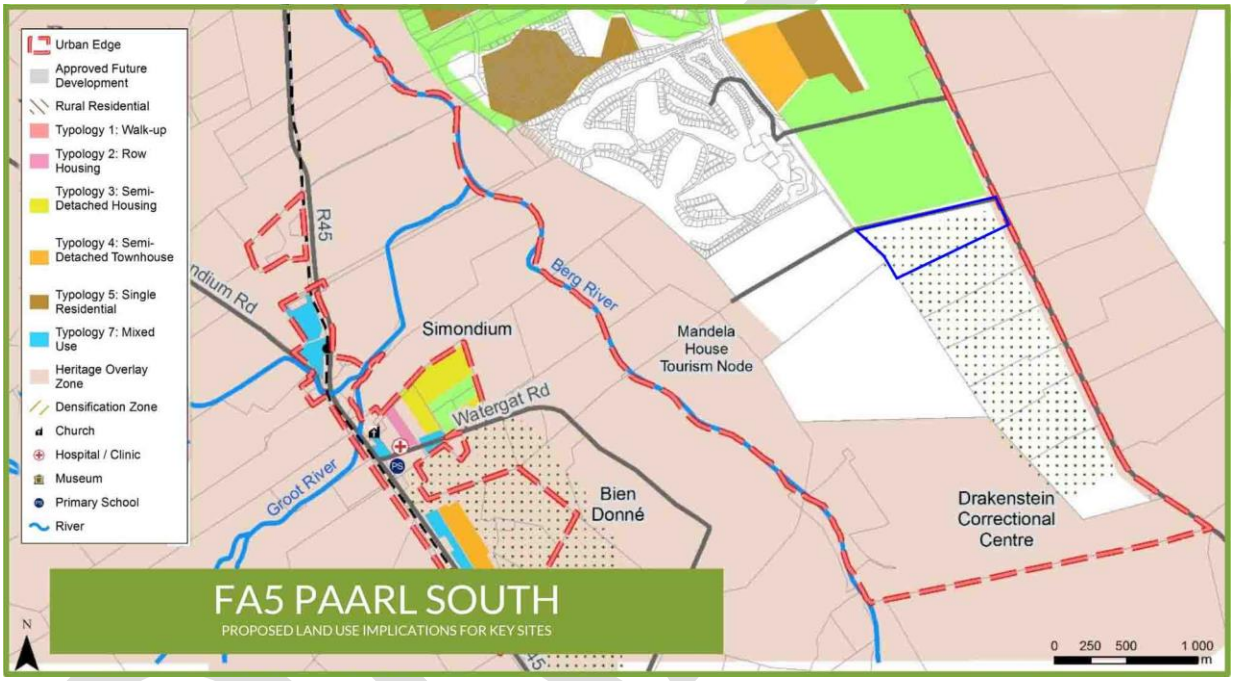

Figure 19: Paarl South Land Use Implications plan. (Source: Drakenstein SDF, 2018)

Relevant Spatial interventions associated with FA04 include:

i. Retain and improve the relationship between residential developments and surrounding agricultural land.
ii. Safeguard local landscape and scenic value, and protect mountain view sheds.
iii. Retain the rural and natural character of the area by prohibiting development on the eastern side of the R301 road especially within rural landscapes and rural-urban interfaces.
iv. Contain the urban footprint within the urban edge.
v. (New) Corridor development (appropriate intensification) along the R45 and R301 Roads.
vi. (New) Develop the Watergat/Schuurmansfontein Integration Route to enable integration between east and west. All new road developments must cater for NMT.
vii. (New) R301 Road upgrade.

[12] This Gateway refers to a planned tourism gateway leading to the Mandela House National Heritage Resource along the proposed Watergat/Schuurmansfontein Integration Route (Drakenstein Municipality, 2022/27, p. 124).

Scenic routes refer to routes that provide vistas over scenic landscapes and the experience of a sense of place. Scenic Routes are recognized by the municipality as assets under its curatorship, and the strategy of the SDF is to protect and enhance the history, culture and aesthetic value of these assets (Drakenstein Municipality, 2022/27, p. 54). The subject site is located along the R301 Scenic Route (Route #24).

Land use management for scenic routes should be aimed at retaining the sense of place of and important vistas from these routes. The focus is thus largely on managing development adjacent to these routes. The R301 offers a variety of views ranging from dramatic distant views towards the mountains and focused views towards landmarks and historic buildings. The landscape character of the Scenic route also evolves along the length of the route. It begins at the entrance to Pearl valley, where it has emerged out of an urbanising area with a number of discordant elements (and a somewhat mixed character - see Figure 20) into a landscape with wide open views over fynbos for approximately 750m (see Figure 21), before transitioning into a more distinctly rural and agricultural landscape with higher integrity, coherence and scenic value (see Figure 22).

Figure 20: Site photograph illustrating the character of portions of the R301 nearer to Paarl (Smit, 2022)

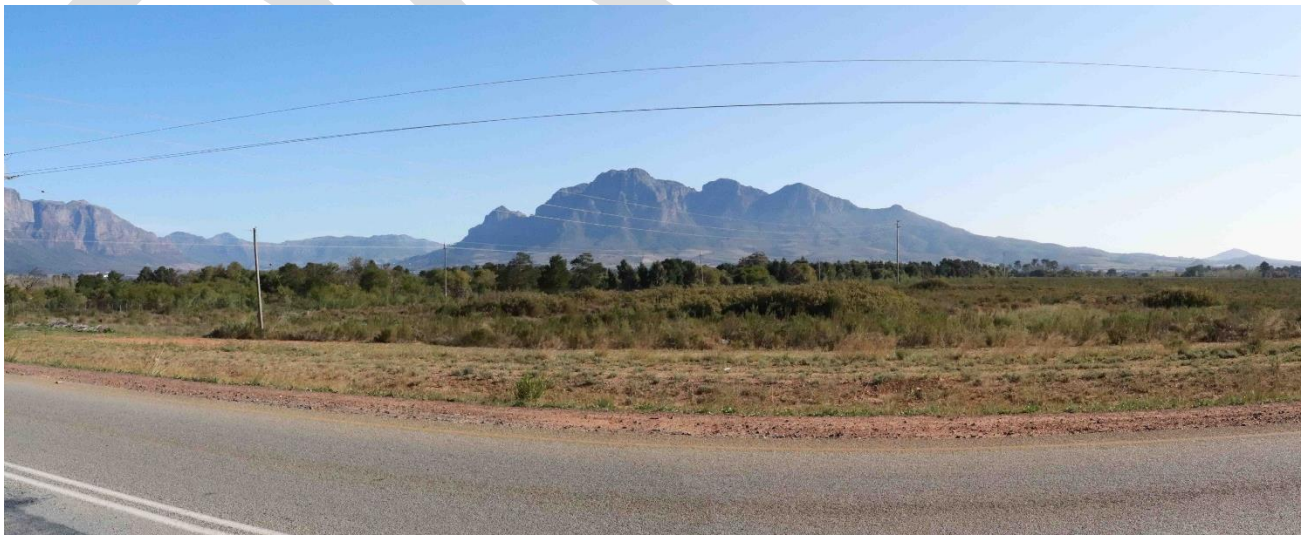

Figure 21: Site photograph illustrating the character of the Scenic route along Ptn. 1 of Farm 888, which will remain undeveloped as a conservation area by the landowners (Smit, 2022)

Figure 22: Site photographs illustrating the character of the Scenic route south of the subject site, en route to Franschhoek. Note increase in scenic value and coherence more typical of the Cape Winelands cultural landscapes (Smit, 2022)

The Drakenstein Municipality Zoning Scheme Bylaw (2018) has designated formal Scenic Route Overlay Zones for Scenic Routes within the Municipality. It is key to note that the purpose of this overlay zone is not to reduce existing development rights or to hinder development. The purpose of the HOZ is rather to allow input in terms of the position and design of buildings and structures to reduce impacts on the scenic routes which are important for the character of the cultural landscape (which in turn are important economic drivers in the Municipality) (Aurecon, 2018, p. 64). Scenic routes in the study area have a 200m an "area of control" buffer on either side (outside of urban areas).

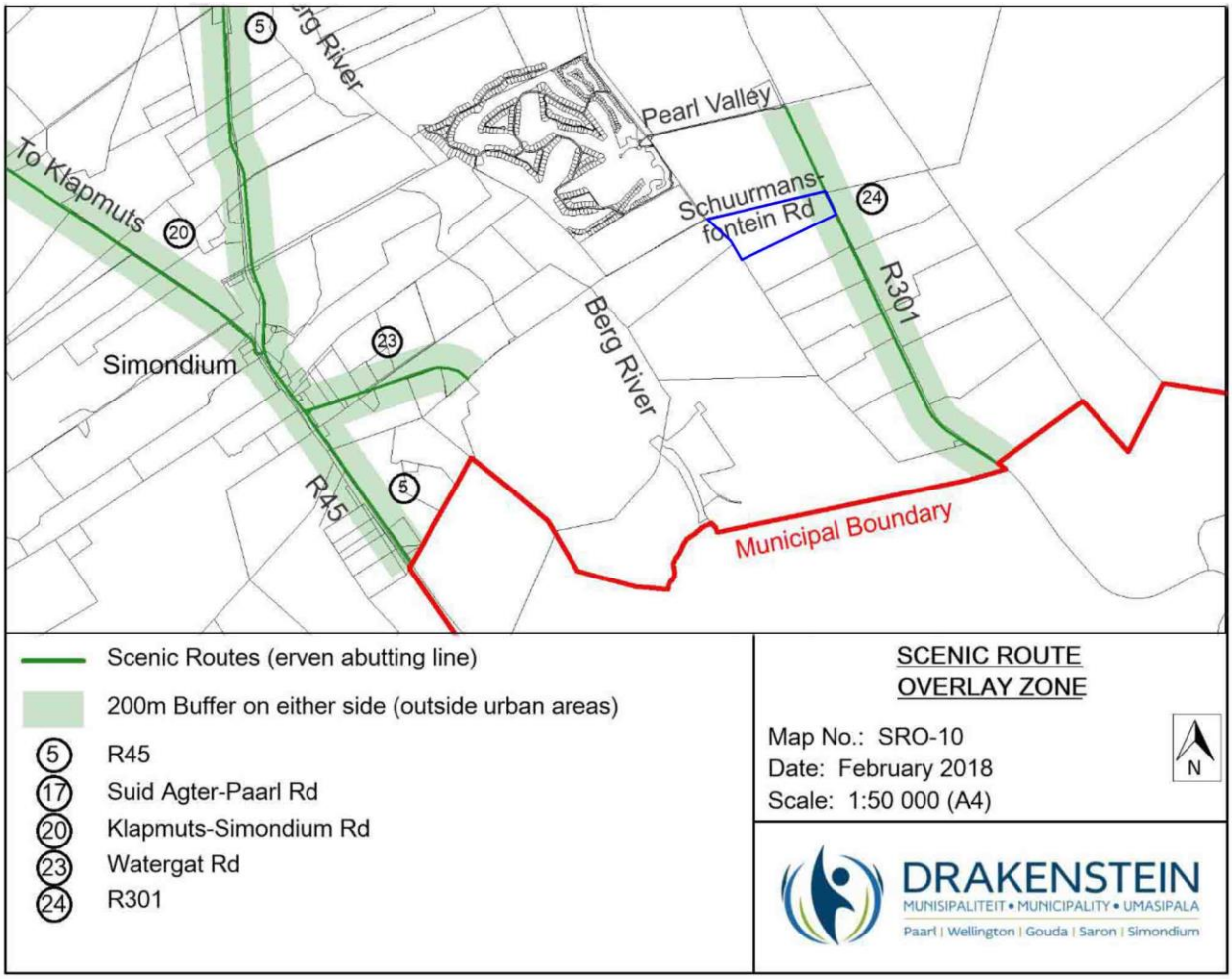

Figure 23: Scenic Route Overlay Zone diagram SRO-10 (Source: Drakenstein Municipality Zoning Scheme By-Law Chapter 21: Scenic Route Overlay Zone, 2018)

3.3. The Receiving Environment

A broad understanding of the context is important for determining the significance of individual scenic resources within an area.

The initial study area is delineated by a 10km radius[13] around the project site. The following section describes this area as the receiving environment (RE). Subsequent fieldwork confirmed that a +-5 km radius is an

[13] The upper limit of potential visibility for a development of this scale within this kind of receiving environment is between 5 and 10km. Views near to, at or at distances of more than 10km are considered negligible. After Visibility testing, this distance may decrease.

appropriate range for the description of the study area, as the receiving environment further that 5km will be negligibly affected by the proposed development in terms of visual and aesthetic considerations. The study area will later be reduced to focus on the Zone of Potential Visual Influence (ZoVI) after viewshed and line of sight testing.

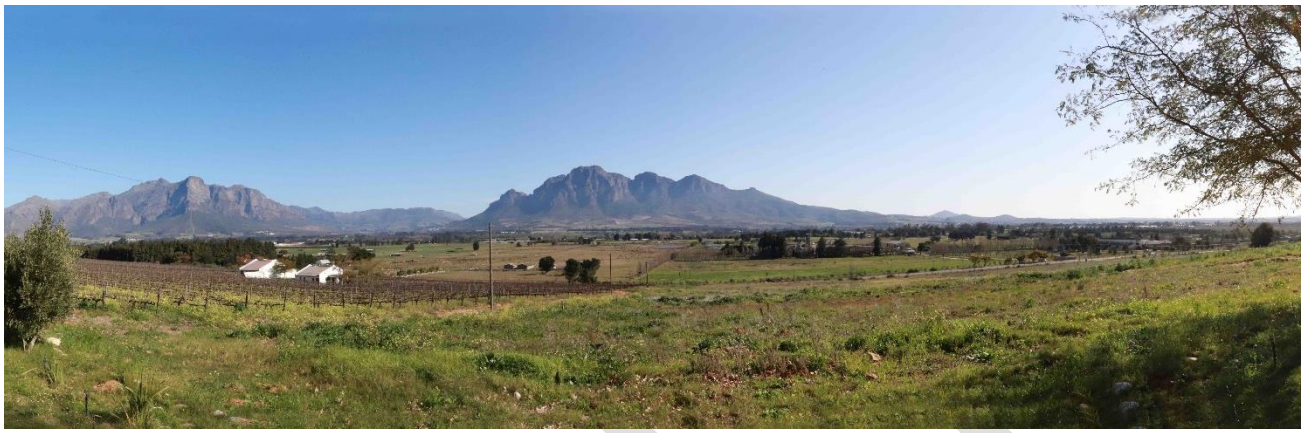

Figure 24: Site photograph taken from the Freedom Hill Vineyard parking lot, overlooking the receiving environment towards Simonsberg, at a slightly higher elevation than the subject site (which is located to the far right in this view) (Smit, 2022)

The study area is situated in the Cape Winelands District (CWD) within the Western Cape Province. The subject site falls under the jurisdiction of the Drakenstein Municipality, which is considered the most urban of the municipal areas within the Cape Winelands District (Aurecon, 2018). Being located along the R301, the property has a scenically dramatic valley setting which confers a sense of containment between the mountain slopes of the Simonsberg to the west, the Franschhoek mountains to the south and the Drakenstein Mountains to the east. Paarl CBD is located about 11km north of the subject site, and Klapmuts is located about 12km west.

Land use in the study area is dominated by agriculture, with vineyards and planted pastures being the most prolific. The area has a strong historical layering of its built form and agricultural related patterns of land use; farm werf, farm villages, mission settlement, agri-industry and railway network, social and tourism facilities and institutional uses such as prisons and agricultural research facilities. Other agricultural land uses include stock farming, small grain, various small perennial crops grown in tunnels, horse paddocks and fields for grazing. Within the encircling mountains, the study area falls within the undulating plain landscape type. This and the dominant agricultural land use accounts for the open landscape views across agricultural fields towards the surrounding mountains.

Tourism in the area is an important economic driver; with wine farms/estates, stud farms, wildlife parks and sanctuaries, restaurants and the craft food & beverage industry, wedding venues etc. attracting local and international tourists and residents.

Rapidly expanding residential land uses occur in the areas outside of the established Paarl and Franschhoek town limits.

> *"The countryside, its collective history, texture and ambience is perhaps the most significant heritage resource that that the region has to offer. It is a massive tourism and wealth generator, but further to this its setting, history and scenic beauty imparts identity to the region to the*

extent that the wine lands are a South African icon. Sadly, because the area is so cherished and valued it is being increasingly marketed locally and internationally as a highly desirable and prestigious place to live." (Hart, 2006, p. 17).

Figure 25: View of the extensive residential estate development within Berg River Valley between Paarl and Franschhoek, viewed from the Language Monument approach road (Smit, 2022)

The study area is a landscape in transition from a predominantly rural and agricultural to a mix of agricultural, industry, institutions, residential, peri-urban and low density residential gated-estates, all of which rely on the agrarian character and resources of the receiving environment. It is then exactly this character that is drawing the scores of individuals and businesses to invest in property in the Winelands (Jansen, 2022). Other land uses in this strategically located area include transport, light industrial, retail, commercial and supporting infrastructure, which might be expected from an area that is at the threshold of the highly productive Paarl valley to the north and the Franschhoek valley to the south.

Topographically, the study area is bordered to the north by the Paarl Mountain, to the east by the Wemmershoek Mountain range, and to the west by Simonsberg. Most of the study area (within the Berg River valley) is classified within the 0 – 10 slope Percentage class, consisting of gently undulating foothills and plains.

The immediate area slopes gently towards the west, roughly perpendicular to the R301. As illustrated in Figure 26, the relatively flat alluvial valley bottom of the Berg River to the west is contrasted with the rising slopes of the Wemmershoek mountains to the east of the site. The RE has a varied mountainous backdrop, with mountain views to varying heights which are most often jagged /rugged and dramatic. In the immediate site area, the landform gently undulated along the R301, cresting gently to the north of the subject site, and flattening out to the south. While the Berg River is an important and formative landscape feature in the receiving environment, it does not have a notable visual presence in relation to the site and its immediate surroundings.

Figure 26: Site visit photograph illustrating the typical form of the immediately local topography. Note that the R 301 delineates the boundary between sloping mountain and flat valley bottom (Smit, 2022)

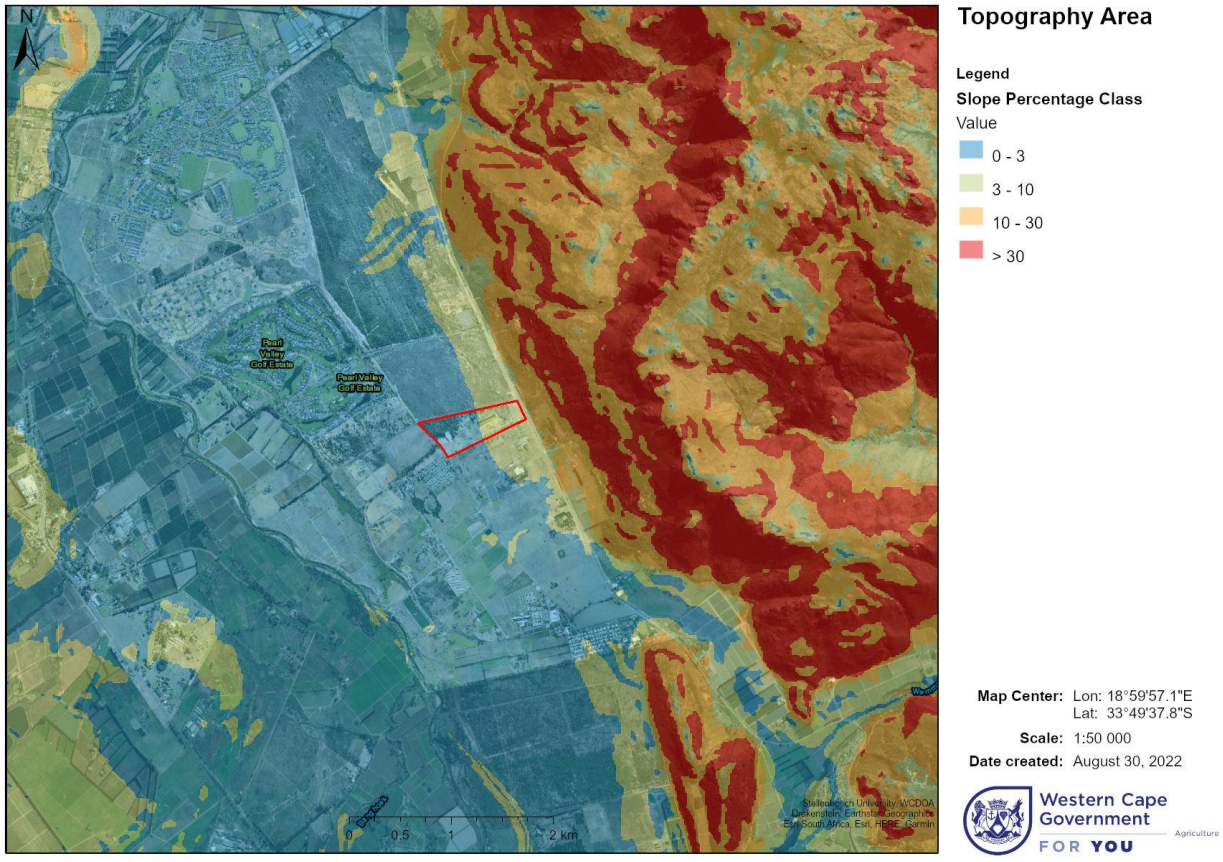

Figure 27: Aerial underlay showing contours and Slope percentage classes of the site & surrounds (Smit, 2020. Elsenburg Cape Farm Mapper)

Figure 28: View of the Wemmershoek mountain range (and part of the HOZ) from within the flat landscape alongside. This photograph is taken from within the subject site. (Smit, 2022)

The vegetation of the study area is dramatically transformed from the natural state by prolonged agricultural, human settlement and development activities. However, the hills and mountains in the area are generally under conservation and are highly valued as recreational and scenic resources. There are no formal Protected Areas within the study area, but the boundaries are characterized by mountainous wilderness areas with the Hawequa Nature Reserve to the East, the Paarl Mountain Nature Reserve to the North, and the Hottentots-Holland Mountain Catchment Area on the Simonsberg slopes to the south-west. These all contain Cape Nature Reserves (Jansen, 2022, p. 32).

Examples of vegetation patterns that are typical of the agricultural hinterland of the Western cape such as avenues and clumps of Pinus, Eucalyptus and other exotic tree species used either as windbreaks, route markers or property delineation are visible within the receiving environment. Settlement patterns have changed dramatically over the years, and many examples from various eras can be seen in the study area: historic homesteads nestled against the slopes of the mountains with expansive vineyards before them; small, dispersed collections of labourers' cottages and farm schools along minor routes; coarser grained semi-industrial and commercial development along the highway and at other junctions, and the dense order of the suburbs and main road of Paarl around the Paarl mountain to the north east.

Figure 29: Open agricultural lands with long views toward the surrounding mountains. Note the tree avenues used as windbreaks and agricultural edge markers, as well as to mark entrances and property boundaries (Smit, 2020)

Landmarks in the area include the Language Monument on Paarl Mountain, the Paarl Mountain itself, Simonsberg (which has iconic and landmark significance, and dominates long views to the west), wine farms and other tourist destinations in the area such as Freedom Hill Vineyards, La Paris Estate (to the east of the Berg River); as well as Rupert & Rothschild, Plaisir de Merle and Allee Bleue Wine Estates (to the west of the Berg River).

Figure 30: A view from the Language Monument landmark, looking south over the Berg River Valley with Simonsberg visible to the left (Smit, 2020)

3.4. Future development in the area

The proposed development is situated within an area which is rapidly developing to meet increasing housing demand within the Drakenstein Municipality, and will continue to undergo development either already approved and/or endorsed by local municipal and district policy frameworks, under consideration. As noted

in the Planning report, the proposal is in fact consistent in nature and scale to the existing and approved developments in the surrounding area (ARoux Town Planning, 2022, p. v).

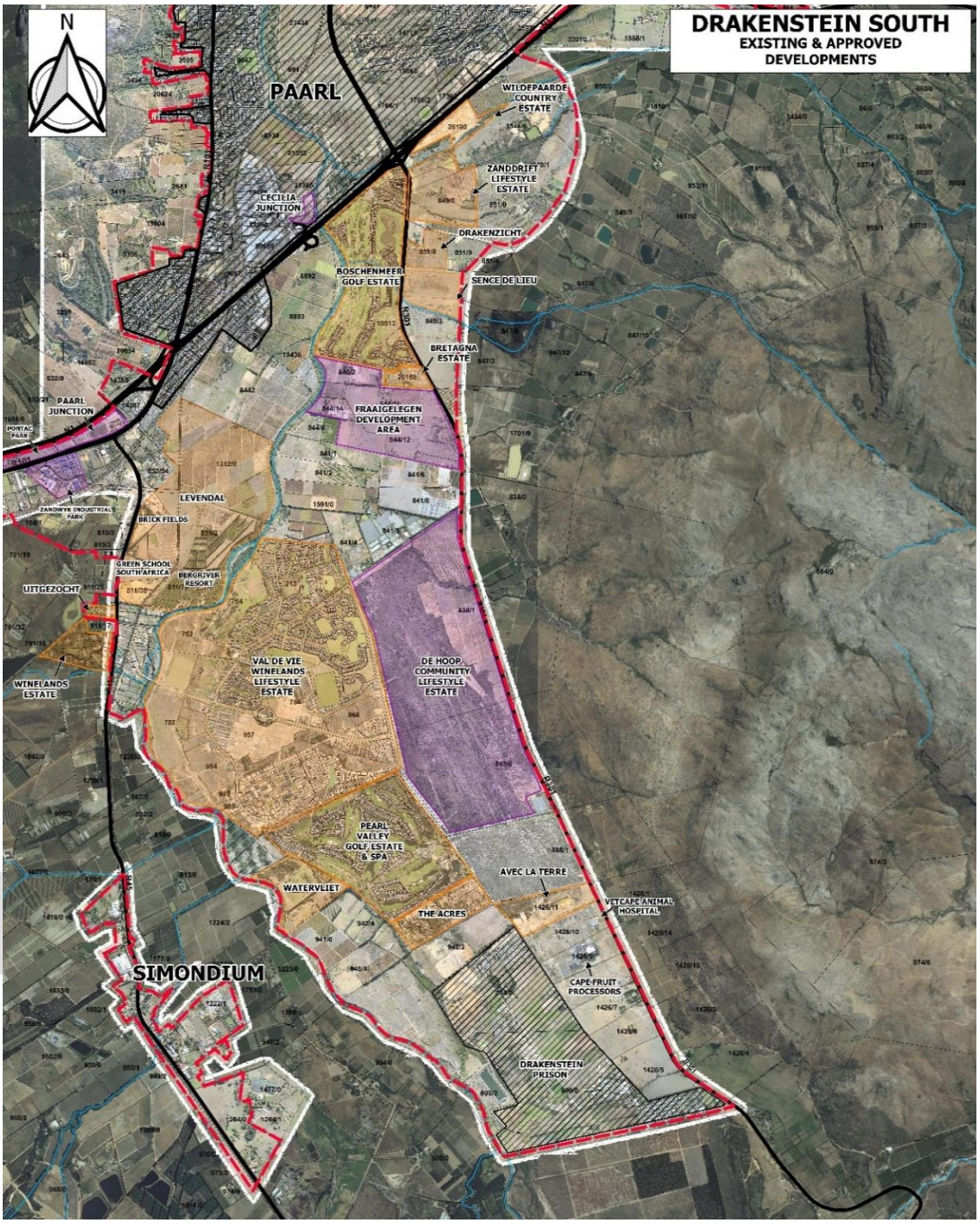

Figure 31: Existing and approved developments in the area (ARoux Town Planning, 2022)

Figure 31 shows the proposed Avec La Terre in the context of the surrounding properties that are earmarked for future development within the urban edge. This includes a number of approved new Mixed-Use developments which contain a greater mix of land uses and densities than the existing upmarket, low-density residential estates (i.e.; Val de Vie, Boschenmeer and Pearl Valley), such as De Hoop and Fraaigelegen.

Additionally, the R301 is earmarked for upgrade, construction of which has commenced in sections of the road north of the site (see Figure 20). The character of the route will therefore also undergo change as a result of this upgrade, which will add cumulatively to the gradual urbanization of the area.

It is clear that this development must be seen within the context of these planned future development that will collectively bring about notable changes to the landscape character of the receiving environment as well as generally increasing VAC, lowering viewer's sensitivity to this kind of development and adding cumulatively to the visual impact of urbanization within the Berg River valley in general.

3.5. Landscape Character Areas

Landscape Character areas (LCA) are identified in order to enable more accurate and locally responsive impact assessment and mitigatory responses to specific surrounding receiving environment conditions. Topography, vegetation patterns and land use are primary informants in determining Landscape Character areas (LCA), along with fieldwork observations and the existing classifications of relevant policy and planning documents.

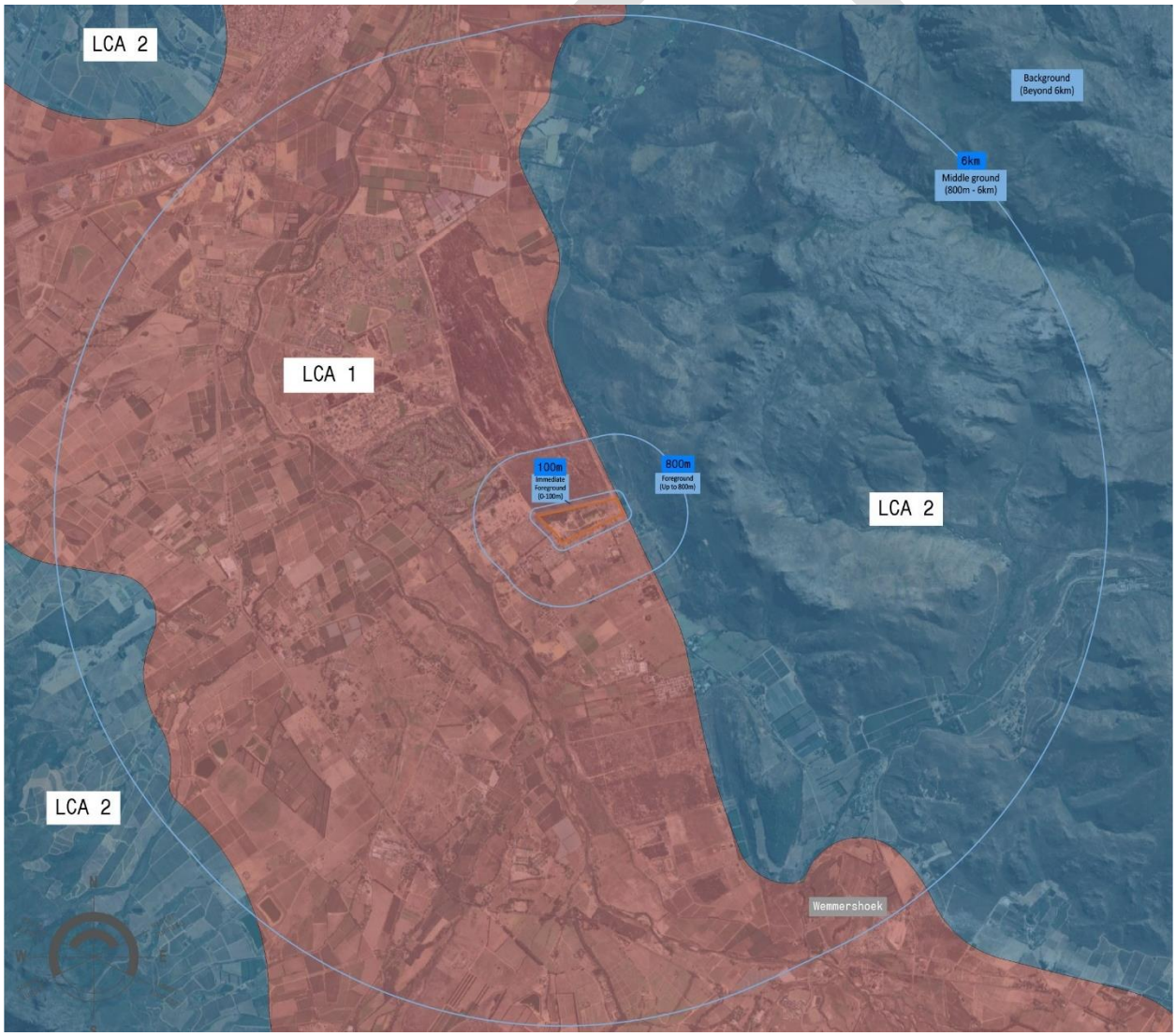

Figure 32: Landscape Character areas (Smit, 2022)

Landscape Character Area 2 describes the area established by the foothills of the Wemmershoek Mountains, which is distinct in visual and spatial terms from **Landscape Character Area 1**, which is the riverine corridor formed by the Berg River to the west of the Wemmershoek road. The subject site itself falls within Landscape Character Area 1.

- **LCA 1:** The Berg River Valley (including areas of the Simondium and Wemmershoek Corridor Character areas as per the Drakenstein Mountain Slopes Study).

  Scenic value is derived from its broad valley setting, defined by the dramatic backdrop of the Simonsberg to the west, views towards Wemmershoek to the east and Paarl Mountain to the north. The distinct combination of landscape and anthropic elements are representative of the Cape Winelands Cultural Landscape, characterised by the visual dominance of a productive agricultural landscape (a mosaic of vineyards, farm werfs and other productive landscapes), and the dramatic mountain setting of historical, landmark and ecological significance.

  This Landscape Character area is increasingly occupied by predominantly residential development amidst the intensively cultivated riverine terrace.

Figure 33: Site photographs illustrating the landscape character of LCA 1 (Smit, 2022)

- **LCA 2:** The mountains and mountain slopes of the Berg River valley.

  These are predominantly natural areas (with some encroachment of agricultural activities on the midslopes) that are valued for their scenic and recreational amenity. Topographically diverse, this area's scenic values for viewers relate primarily to the relationship between the vineyard setting in the foreground and the dramatic mountain backdrop and the relatively intact, undisturbed nature of this landscape.

Figure 34: Site photographs illustrating the landscape character of LCA 1 (Smit, 2022)

3.6. Evaluation of the Visual resource in terms of Aesthetic value

According to the Western Cape's Provincial Spatial Development Framework (PSDF), the Western Cape economy is founded on the Province's unique asset base, which includes its varied scenic and cultural resources - attractions that make the Western Cape South Africa's premier tourism destination (Western Cape Government, 2014, p. 38). The following section defines and describes the Landscape Character, the Sense of Place and the Quality and Integrity of the landscape. The section concludes by providing a rating for the Aesthetic value of the Visual Resource.

3.6.1 Landscape Character

The overall **Landscape Character** of the Receiving Environment is that of a *large but fairly enclosed rural agricultural valley that is characterised by long views over a mosaic of landscapes (typical of the Cape Winelands) and dramatic scenery of the encircling mountains, arranged along a strong north-south linear pattern of settlement (informed by the alignment of the Berg River). The valley contains a diverse mix of urban and rural conditions e.g.: areas of intensive agriculture and viticulture (with high associated tourism value); rolling foothills with a mosaic of agricultural and peri-urban land uses; swathes of medium and low density residential areas as well as an industrial and commercial corridor along the N1.*

It is important to note that *the broader study area "is a landscape in transition from a predominantly rural and agricultural character to a mix of agricultural, industry, institutions, residential, peri-urban and gated-estates." (Jansen, 2022, p. 46).*

3.6.2 Sense of Place

The **Sense of Place** is the unique quality or character of a place, whether natural, rural or urban (Oberholzer, 2005, p. 28). According to Lynch (1992), sense of place "is the extent to which a person can recognize or recall a place as being distinct from other places – as having a vivid, unique, or at least particular, character of its own". It follows that an important aspect of Sense of Place is the uniqueness and distinctiveness of a landscape. According to Graham Young, the primary informant of these qualities is the spatial form and character of the natural landscape taken together with the cultural transformations and traditions associated with the historic use and habitation of the area.

The sense of place of the receiving environment follows that of the Landscape Character areas, meaning that it is not uniform throughout the RE, but generally identifiable along the lines illustrated in Figure 32.

i. *Sense of Place and tends to increase in coherence and value with proximity to natural features (topography or water resources) and landmarks, heritage resources or Heritage Overlay Zones (typically where dramatic views of the encircling mountains are available over rolling farmlands and pastoral scenes in the foreground).*
ii. *Sense of Place tends to decrease in value and distinctiveness as views become increasingly interrupted, urbanized and cluttered, and as the field of vision fills with discordant structures (such as telecommunication infrastructure, industrial land uses, and large areas of residential infill).*

The study area and receiving environment can be described as having a *strong and unique sense of place overall. Variances in Sense of Place are generally consistent with the boundaries of the LCA's, and are affected by topographical, land use (urban vs. rural agricultural) and landscape pattern differences.*

Table 1: Sense of Place

Landscape Character Area	Sense of Place
Landscape Character Area 1	*Rural and agricultural, expansive on very gently undulating topography, with long views but from lower elevations. Moderate in distinctiveness when experienced from within, highly distinctive when viewed from a distance. Contains some discordant elements, with some areas rapidly urbanizing.*
Landscape Character Area 2	*A band of rural, agricultural, tourism and conservation related land uses on the undulating topography of foothills, with long scenic views across the valley from raised elevations. Largely unimpacted natural landscapes on dramatic sandstone mountain slopes. Distinctive with aspects of wilderness and minimal discordant elements.*

3.6.3 Landscape Integrity

Landscape Integrity refers to "The relative intactness of the existing landscape or townscape, whether natural, rural or urban, and with an absence of intrusions or discordant structures" (Oberholzer, 2005, p. 28).

Table 2: Landscape Integrity

Landscape Character Area	Landscape Integrity
Landscape Character Area 1	*Moderate to High*
Landscape Character Area 2	*High*

In summary, the Landscape quality and integrity is ***High*** *for LCA 2, and* ***Moderate to High*** *for LCA 1.*

3.6.4 Quality and Aesthetic Value of the Visual Resource

Aesthetic value can be defined as an emotional response that is derived from the experience of the environment and its particular natural and cultural attributes.

> *"The response can be either to visual or non-visual elements and can embrace sound, smell and any other factor having a strong impact on human thoughts, feelings and attitudes (Ramsay, 1993). Thus, aesthetic value encompasses more than the seen view, visual quality, or scenery, and includes atmosphere, landscape character and sense of place (Schapper, 1993)." (Young, 2014, p. iv)*

Assigning values to visual resources is a subjective process, but based on industry-wide findings that there are consistent levels of agreement among individuals asked to evaluate visual quality. Humans have a preference for landscapes with a higher visual complexity (particularly in scenes with water or high relief), over homogeneous areas. On the basis of contemporary research, landscape quality increases when:

- Topographic ruggedness and relative relief increase;
- Where water forms are present;
- Where diverse patterns of grasslands and trees occur;
- Where natural landscape increases and man-made landscape decreases;
- And where land use compatibility increases and land use edge diversity decreases (Crawford 1994).

In determining the quality of the visual resource both the objective and the subjective or aesthetic factors associated with the landscape are considered. Many landscapes can be said to have a strong sense of place, regardless of whether they are considered to be scenically beautiful. However, where recognized landscape quality, aesthetic value and a strong sense of place coincide - the visual resource or perceived value of the landscape is considered to be very high.

The rating criteria used to determine the quality and aesthetic value of the Visual Resource is derived from the Landscape Institute with the Institute of Environmental Management and Assessment (2002). When considering both objective and subjective factors associated with the landscape there is a balance between landscape character and individual landscape features and elements, which would result in the values as follows:

Table 3: Rating the quality of the Visual Resource

High	Moderate	Low
(Modified from: The Landscape Institute with the Institute of Environmental Management and Assessment (2002)		
The Value of a visual resource is **High** under the following circumstances:	The Value of a visual resource is **Moderate** under the following circumstances:	The Value of a visual resource is **Low** under the following circumstances:
Areas that exhibit a very positive character with valued features that combine to give the experience of unity, richness and harmony. These are landscapes that may be considered to be of particular importance to conserve and which may be sensitive change in general and which may be detrimental if change is inappropriately dealt with. Where the landscape has a special quality of uniqueness that is identifiable. Multiple scales where there is a hierarchy or range of scales to the landscape pattern in relation to the human size.	Areas that exhibit some positive character (as in high valued landscapes). But which may have evidence of alteration to /degradation/erosion of features or discordant elements which tend to distract from the overall scenic and experiential quality of the landscape resulting in areas of mixed character. Potentially sensitive to change in general; again, change may be detrimental if inappropriately dealt with, but it may not require special or particular attention to detail.	Areas are generally negative in character with evidence of major alteration to/degradation/erosion of elements resulting in few, if any, valued features. Lack of diversity/complexity. No special quality or distinctness to the landscape. Scope for positive enhancement frequently occurs.
*The quality of the Visual Resource is **High** for **LCA 2***	*The quality of the Visual Resource is **Moderate** for **LCA 1***	*n/a*

A set of Rating Criteria for determining the value of a visual resource and scenic quality developed by the Department of the Interior of the USA Government, Bureau of Land Management is modified here for use in the South African context.

Table 4: Visual Resource Value Rating table

Key factors	Rating Criteria and Score

(Modified from The Visual Resource Management System, Department of the Interior of the USA Government, Bureau of Land Management)			
Landform	High vertical relief as expressed in prominent cliffs, or massive rock outcrops, or severe surface variation or highly eroded formations including dune systems; or detail features dominant and exceptionally striking and intriguing.	Steep canyons and 'kloofs'; or interesting erosional patterns or variety in size and shape of landforms; or detail features which are interesting though not dominant or exceptional.	Low rolling hills, foothills, or flat valley bottoms; or few or no interesting landscape features.
Score:	**5**	**3**	**1**
Vegetation and landcover	A variety of vegetative types as expressed in interesting forms, textures, and patterns.	Some variety of vegetation, but only one or two major types.	Little or no variety or contrast in vegetation.
Score:	**5**	**3**	**1**
Water	Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape.	Flowing, or still, but not dominant in the landscape.	Absent, or present, but not noticeable.
Score:	**5**	**3**	**0**
Colour	Rich colour combinations, variety or vivid colour; or pleasing contrasts in the soil, rock, vegetation, or water.	Some intensity or variety in colours and contrast of the soil, rock and vegetation, but not a dominant scenic element.	Subtle colour variations, contrast, or interest; generally mute tones.
Score:	**5**	**3**	**1**
Influence of adjacent scenery	Adjacent scenery greatly enhances visual quality.	Adjacent scenery moderately enhances overall visual quality.	Adjacent scenery has little or no influence on overall visual quality
Score:	**5**	**3**	**0**
Scarcity	One of a kind; or unusually memorable, or very rare within the region. Consistent chance for exceptional wildlife or wildflower viewing, etc. National and provincial parks and conservation areas.	Distinctive, though somewhat similar to others within the region.	Interesting within its setting, but fairly common within the region.
Score:	**5+**	**3**	**1**
Cultural modifications	Modifications add favourably to visual variety while promoting visual harmony.	Modifications add little or no visual variety to the area, and introduce no discordant elements.	Modifications add variety but are very discordant and promote strong disharmony.
Score:	**2**	**0**	**-4**

The table below summarises the Value of Visual Resource expressed as Scenic Quality, per Landscape Character Area, according to the rating chart above.

Table 5: Scenic Quality Evaluation Chart

Landscape Character Area:	Landscape Character Area 1	Landscape Character Area 2
Landform	*1*	*4*
Vegetation and landcover	*4*	*3*
Water	*3*	*2*

Colour	*4*	*4*
Influence of adjacent scenery	*5*	*5*
Scarcity	*3*	*5*
Cultural modifications	*0*	*2*
Visual Resource Quality	*Moderate*	*High*
Sense of Place	*Moderate to High*	*High*

Table 6: Value of the Visual Resource (Scenic Quality)

Landscape Character Area	Rating	Value of Visual Resource
Landscape Character Area 1	*C (20)*	*Moderate to High*
Landscape Character Area 2	*C (25)*	*High*

3.6.5 Visual Absorption Capacity

Visual Absorption Capacity (VAC) refers to the ability of the RE to accommodate physical and visual changes without a concurrent transformation in its visual character and quality, or the loss of visual amenity. This is a function of existing settlement / development patterns; the similarity or difference between existing features and proposed features; the amount of visual clutter, contrast and variability of visible features present in the landscape and finally how dramatic the local topography is. The sensitivity of landscape character and visual receptors is also considered.

To determine the VAC of the Landscape Character area within which the subject site is located (LCA1), it is tested against the extent and nature of the proposal. For instance, while grassland, undulating topography and agricultural or rural areas generally have a low VAC, the capacity of these areas to absorb a new coal mine vs. its capacity to absorb a new single sense of place

- A high VAC rating implies a high ability to absorb visual impact
- A low VAC implies a low ability to absorb or conceal visual impacts
- High VAC is a positive and low VAC is a negative.

Table 7: Visual Absorption Capacity

High	Moderate	Low
The receiving environment absorbs all or most of the proposed development successfully. • Limited views with low visual intrusion; • High compatibility with existing landscape character & built form etc. • Existing vegetation cover and/or structures such as buildings	The receiving environment absorbs parts of the development successfully. • *Views demonstrate moderate visual intrusion by the proposed development;* • *Proposed development is generally similar in nature (or presents an acceptable degree of change) to existing landscape character & built form.*	The receiving environment cannot visually absorb the proposed development. • Proposal introduces a contrasting built form or dramatic change in landscape character. • Many key views demonstrate high visual intrusion. • *Little or no visual screening is provided by vegetation cover*

screens or conceals the majority of the proposed development. • *Topography and terrain variability plays a role in absorbing visible elements.* • The proposed development is a common sight within the LCA.	• *A degree of visual screening is provided vegetation cover and/or structures such as buildings.* • Topography and terrain variability may play a role in absorbing visible elements. • *The proposed development is not unprecedented within the LCA.*	*and/or structures such as buildings.* • Topography and terrain variability do not play a significant role in absorbing visible elements. • The proposed development is unprecedented within the LCA.

***Landscape Character Area 1** has a Moderate VAC overall, with aspects of Low VAC (vegetation and buildings offer little visual screening) and High VAC (given that topography and terrain variability play a role in absorbing visible elements, and most views tested demonstrate low visual intrusion).*

4. PROPOSED DEVELOPMENT

The following section aims to briefly describe the proposed development in terms of key aspects related to visual impact.

The proposal is for the Rezoning and Subdivision of agricultural land to enable the development of a 216 unit Residential estate with a Mixed-Use component, which will include the establishment of an electrical substation, communal open spaces, utility zones and various internal road and parking infrastructure. The development will be rolled out in 5 Phases, with Phases 1 – 4 accommodating the residential estate followed by the Mixed-Use component as Phase 5, the last phase. The Planning report proposes that a Basket of Rights be approved for the Mixed-Use site (Phase 5) to allow flexibility for the future development of this site, and that this portion be made subject to a separate SDP approval.

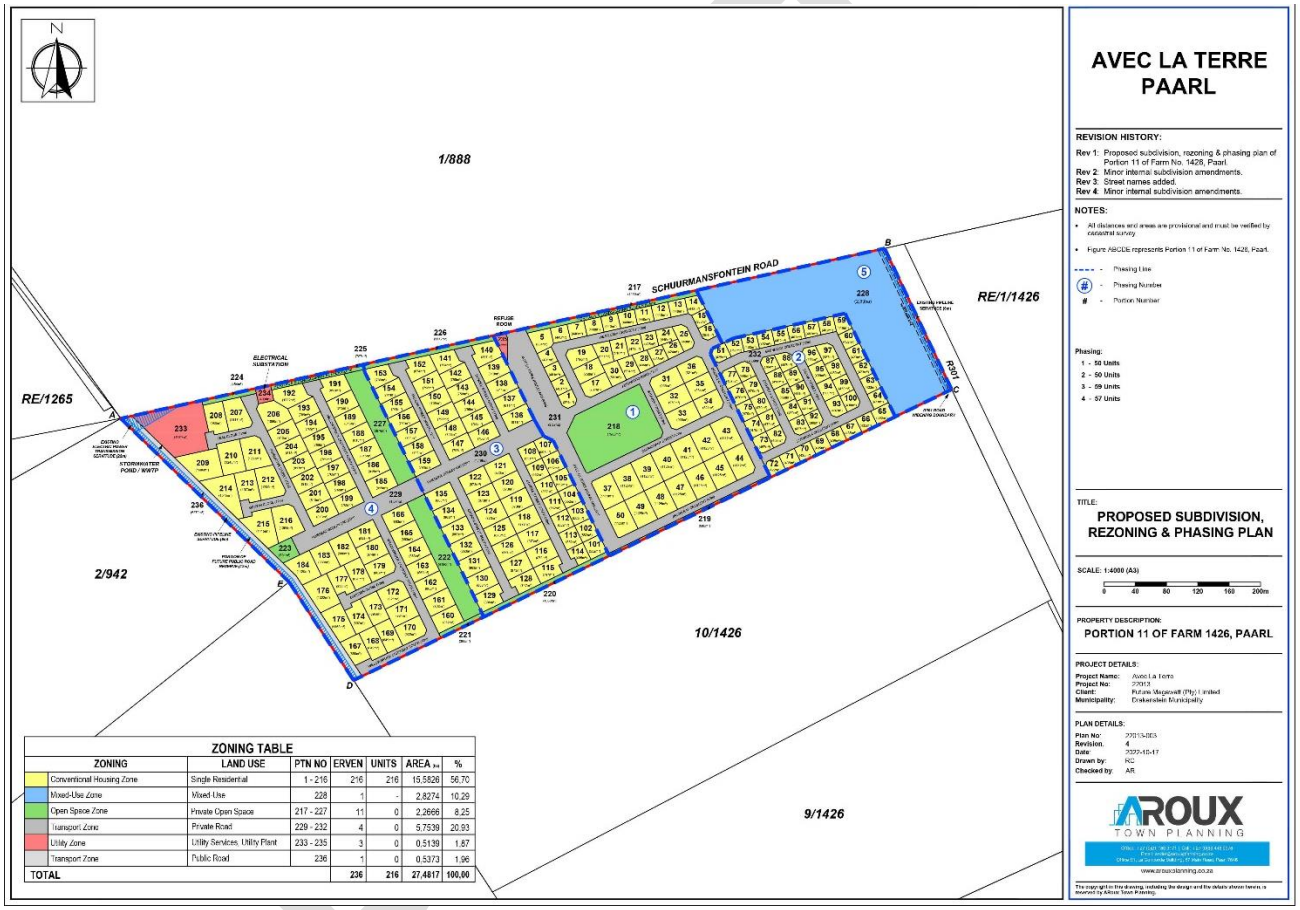

Figure 35: Proposed Subdivision Plan (ARoux Town Planning, 2022)

Please refer to Section 5.2 of the Planning report for a full list of structuring elements that informed the design of the proposed development from a high level planning and layout point of view. Aspects demonstrating sensitivity to visual impact include:

- An acknowledgement that the consideration of visual impact from the R301 Scenic route is important. Access to the site is taken from Schuurmansfontein Road.
- Road widening along the eastern boundary: A 12m road reserve must be provided along the site's eastern boundary to allow for a future Class 3 road.

- Landscape buffer: A landscape buffer must be created along the Schuurmansfontein boundary to screen the development from the north (from where it will be most visible).
- Existing dam area: A portion of the existing (man-made) dam area is proposed to be retained to function as a dam feature that forms part of the development's open space system.
- Mixed-use site on eastern portion: Due to the visibility from the R301 and this road's scenic route classification, a higher density mixed-use development is planned for the eastern portion of the site.

4.1. Architectural proposal: Alternative 1 (Preferred alternative)

The proposed development consists of two main components, namely the residential estate and the mixed-use site. The Architectural proposal is therefore considered in two parts for the purposes of visual impact assessment, separating the Mixed-Use component from the Residential component.

Figure 36: The overall Site Development Plan and 3D model (Bruce Wilson Architects, 2022)

4.1.1 Mixed use component

The proposed Mixed-Use site (approximately 2,8 ha in size) is situated on the eastern portion of the property, along the R301. It will be developed at a higher density, and the built form is envisioned to create a positive interface with the R301 which aims to reinforce a more defined built form along the R301 corridor, according to the planning report (ARoux Town Planning, 2022, p. 23).

The Mixed-Use site will accommodate a mix of land uses including office, retail, hotel and / or sectional title residential apartments, and will be accessed internally from the residential estate, as well as from the main access off Schuurmansfontein Road. Bruce Wilson Architects have provided two indicative site layouts for the Mixed-Use component. These are referred to as Alternative 1 (Option A), and Alternative 1 (Option B) (see Figure 37).

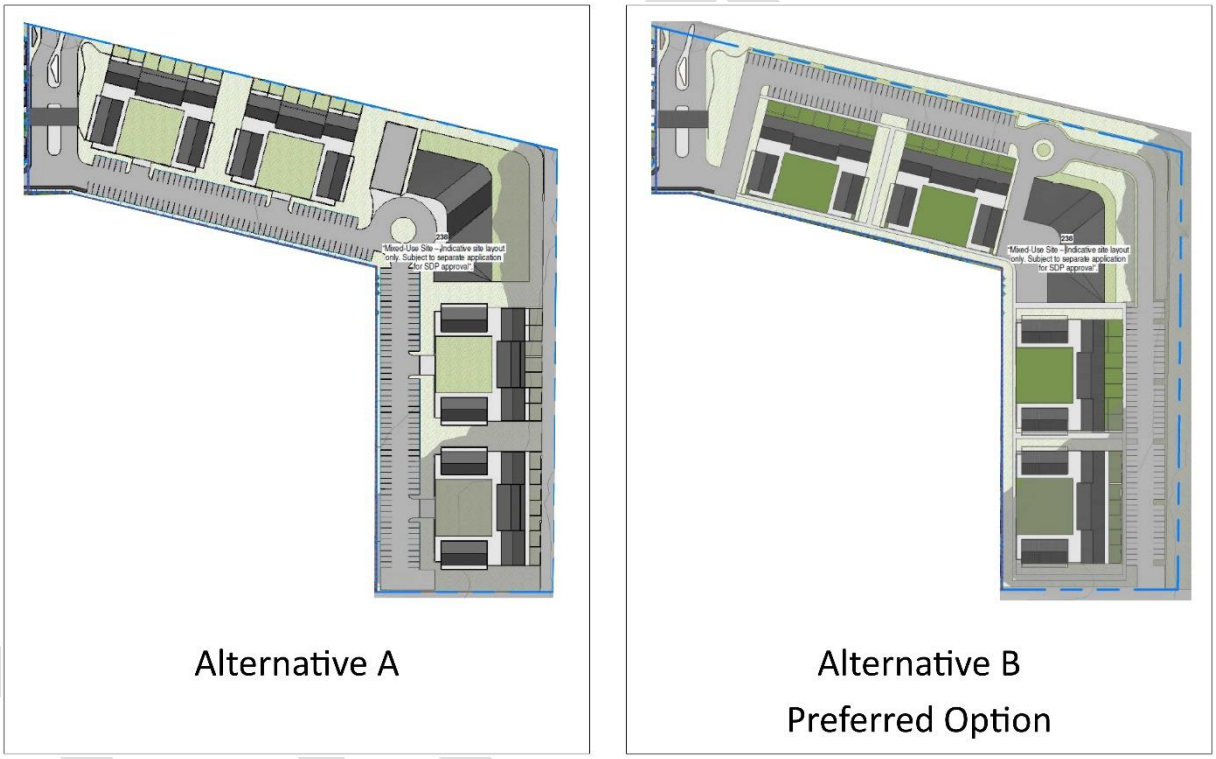

Figure 37: Mixed use Component Alternatives – Option 1A and 1B (Bruce Wilson Architects, 2022)

Only indicative site layouts are provided to enable the approval of a basket of rights at this time. The final SDP layout, breakdown of land uses, floor space and building massing will be subject to a separate application for SDP approval.

However, due to visual sensitivity associated with the Scenic route, some elements and principles (according to the Planning report) will be fixed. Any future Site development plan will need to conform with these principles, namely:

i. Maximum building height of 3 storeys;
ii. Buildings to be set back from the R301 boundary to prevent obstruction of the view corridors from the R301;

iii. Extensive landscaping (trees) along the R301 boundary, except near the R301 / Schuurmansfontein intersection to allow accentuation of the main building at the corner;
iv. Architecture and built form to be contemporary but complimentary to the local area, natural landscape and views.

No architectural guidelines have been developed for the Mixed-use component as of yet.

a. Alternative 1 Option A

The major difference between Option A and Option B of Alternative 1 is the position of the parking areas relative to the surrounding public roads and the proposed buildings. In Option A, development is not significantly set back from the R301 and Schuurmansfontein roads, with the private yards of a three-floor residential component terminating at the property boundary on ground floor. The parking lots and internal roads are located behind the proposed buildings, from which they take access into the courtyards.

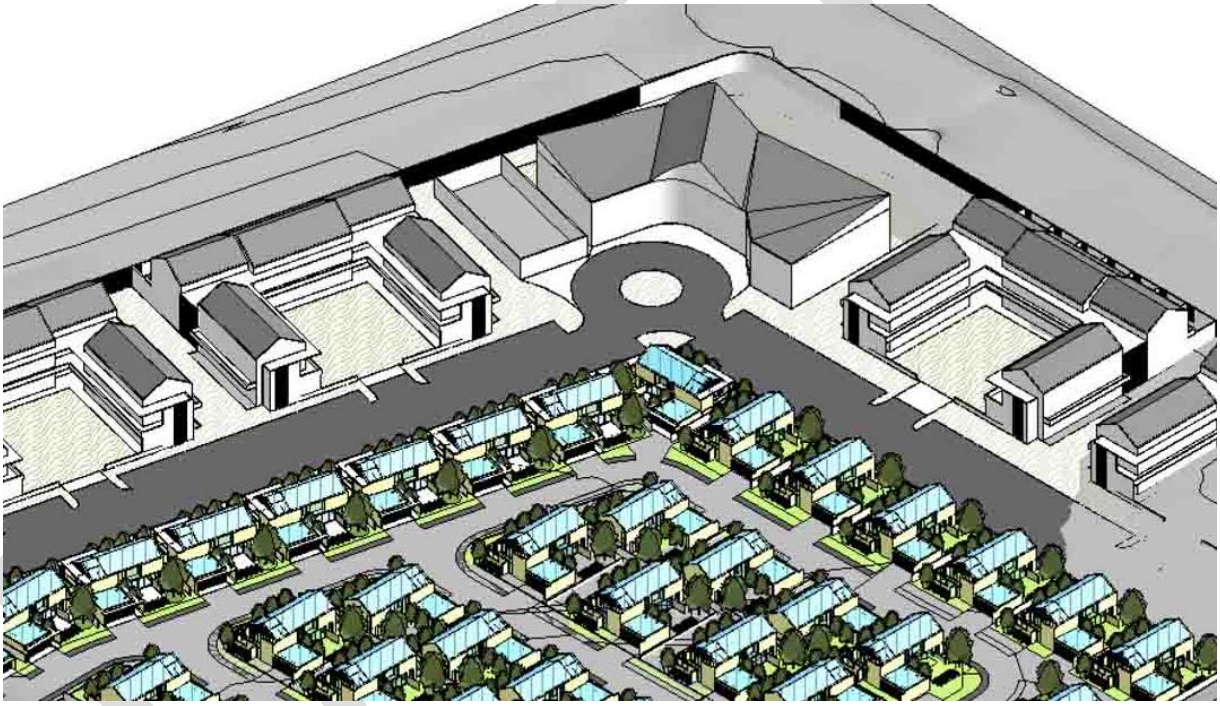

Figure 38: 3D model of the proposed mixed-use site (Option A), which will be subject to SDP approval in the future. Note parking areas behind the buildings from the R301 (Bruce Wilson Architects, 2022)

Although not shown in the 3D model below, this Option would have necessitated the inclusion of a noise barrier[14] of at least 3m high along the property boundary to mitigate noise impact, according to the Noise Impact Assessment.

"The only feasible means to reduce the rating level of noise from the R301 to that for "residential districts" would be to erect a noise barrier of at least 3 m high at the

[14] According to the NIA, "A noise barrier may comprise any vertical structure that is continuous and without apertures and with a minimum surface mass of 24 kg/m2. This includes walls made of brick or concrete, metal, safety glass, Perspex, wood and earth berms or any combination of these." (Jongens Keet Associates, 2022, p. 16)

property boundary. This would need to extend approximately 245 m along the northern and southern property boundaries." (Jongens Keet Associates, 2022, p. 16)

b. Alternative 1 Option B (Preferred)

Option B was developed in response to the recommendations of the NIA, negating the need for a 3m noise barrier along the adjacent public roads. The proposed buildings in Option B are identical in form, height and orientation to those in Option A. They are however set back from the R302 and Schuurmansfontein roads to accommodate parking lots and the internal road between the property boundary and the proposed buildings.

Figure 39: 3D model of the proposed mixed-use site (Option B), which will be subject to SDP approval in the future (Bruce Wilson Architects, 2022)

Figure 40: Architectural rendering – Proposal for the layout of the Mixed-use component illustrating possible building typology and adherence to high-level visual sensitivities identified during the pre-application planning phase (Bruce Wilson Architects, 2022)

The landscape Plan indicates tree planting along the eastern and northern edges of the parking lot, as well as at the foot of the central building. Soft landscaping is indicated on the road verge (a combination of Open Space planting, lawn areas and Boundary planting mixes).

Figure 41: Architectural rendering Option B - Proposed building layout and conceptual treatment of exterior architecture on the R301/Schuurmansfontein corner. Note building offset from the Scenic route, wide landscaped buffer (including parking areas) and visually permeable boundary treatments along both edges (Bruce Wilson Architects, 2022)

The two Alternative 1 Options do not indicate any difference between the proposals when it comes to the Residential component.

4.1.2 Residential component

The Design principles of the proposed development are focused on the creation of a high-end, high focus sustainability estate, with a deliberate aesthetic differentiation from neighbouring estates (such as Boschenmeer, Val de Vie, etc.). The planning report states that the proposed residential development is "… aimed to provide a tranquil and high-quality / upmarket residential environment. The estate therefore has a strong emphasis on quality open space provision and substantial landscaping within the open space areas / corridors and within the internal road reserves." (ARoux Town Planning, 2022, p. 24).

Draft Architectural Guidelines were provided, which focus on the correct implementation of the design concept for individual homeowners in terms of good siting practice, urban street form and overall adherence to the architectural vision. The architectural colour palette of the residential component is proposed to be 70% brilliant white, 5% charcoal and 25% grey. Conceptual images were provided to illustrate exterior architectural approach.

No overall development guidelines governing the timing and installation of landscaping, the design and specification of street lights or the maintenance of areas in the commonage (such as the planting of trees along Schuurmansfontein road) have been provided.

Figure 42: Proposed conceptual treatment of exterior architecture (Bruce Wilson Architects, 2022)

Figure 43: Rendered 3D model to illustrate look and feel of the proposed residential development (Bruce Wilson Architects, 2022)

Figure 44: 3D model views of proposed gate house off Schuurmansfontein Road for the residential component. Also note the density and nature of building form within the estate (Bruce Wilson Architects, 2022)

Figure 45: 3D model view of proposed residential development showing 4 bedroom double storey residence on large erven (Bruce Wilson Architects, 2022)

4.2. Landscape Architectural proposal

The Planning report notes that Landscaping forms a critical component of the proposed development. According to the Landscape master plan & development guidelines, the following:

> *"The proposed landscaping structure helps to integrate the development into its current and future context by providing sheltering windbreaks, shaded tree avenues, visual absorption and screening for an urban development within an area with an agricultural character." (Viridian Consulting Landscape Architects, 2022)*

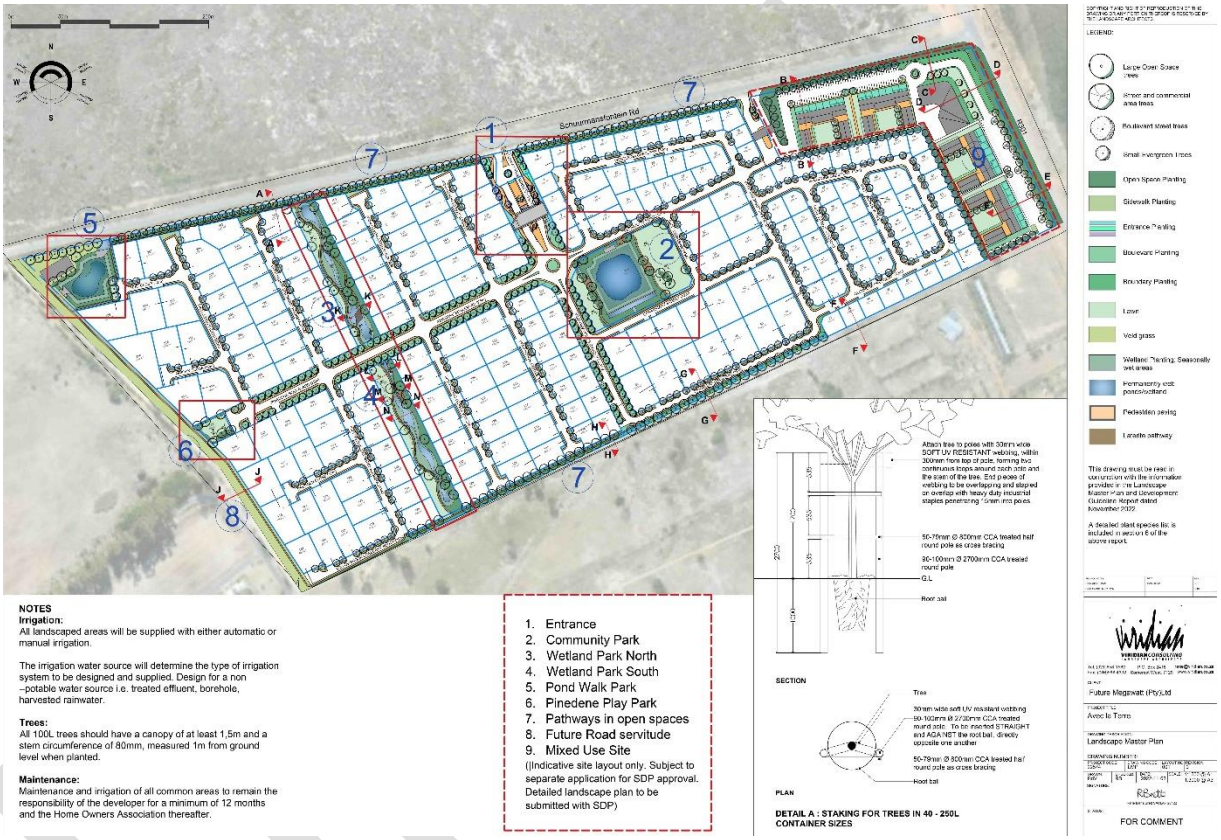

Figure 46: Landscape Master Plan (Viridian Consulting, 2022)

The landscape vision is for a residential development with a visual aesthetic and landscape character of a village within a natural agricultural context. Viridian Consulting also notes that the design aims to respond sensitively to its context alongside the R301 Scenic route. The planting strategy focuses on creating a rural rather than a suburban character and prioritizes two key aspects related to visual impact mitigation: interface and edge treatment with its surroundings, and tree structure/hierarchy. Provision is made in the master plan for the sufficient sourcing of water for irrigation to ensure the successful establishment of the proposed tree structure.

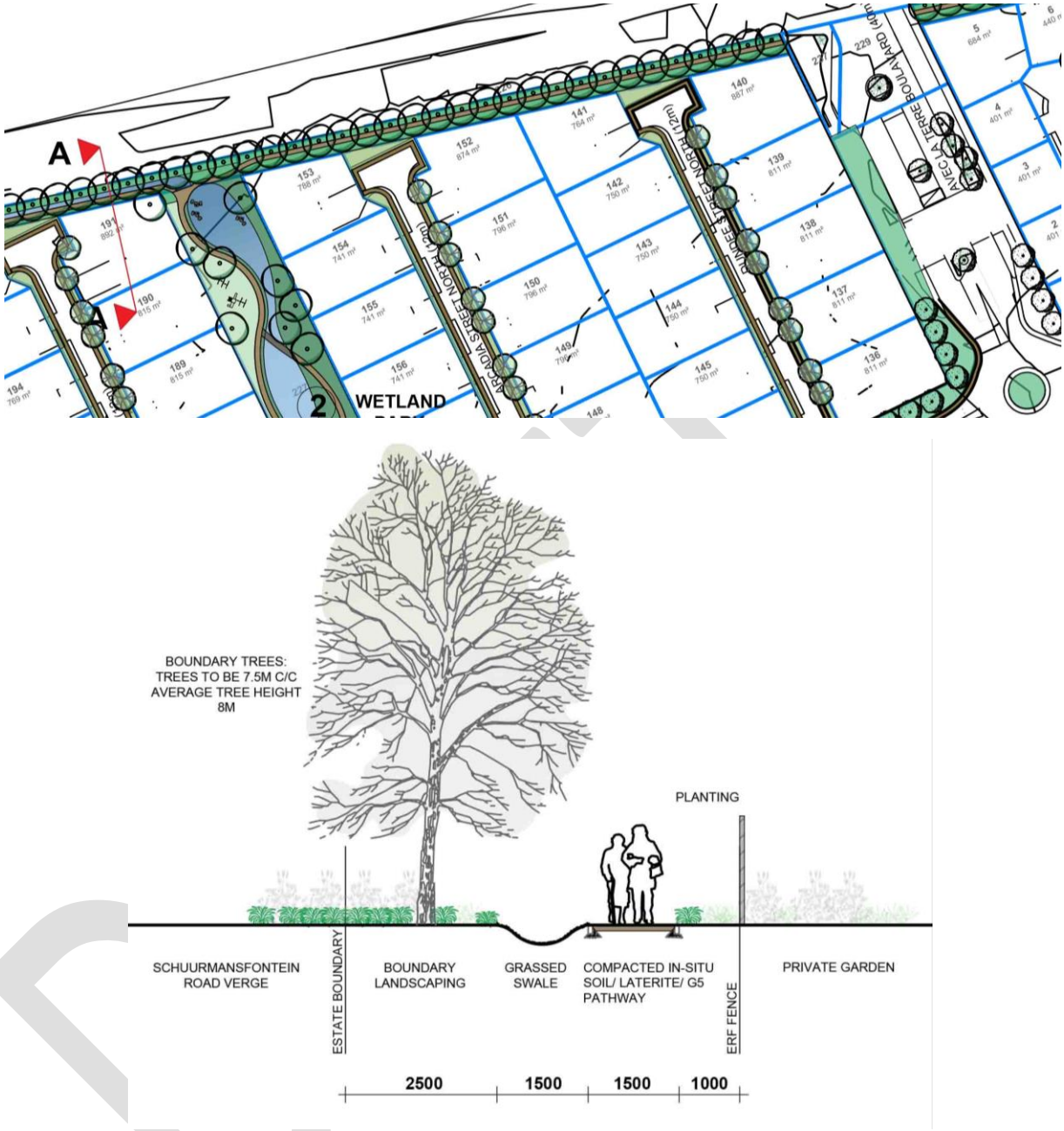

Figure 47: Landscape plan and cross section through the Schuurmansfontein road interface and 6,5m landscaped buffer (Viridian Consulting, 2022)

Trees planted along the estate boundary will be a combination of evergreen and deciduous, planted in continuous avenues. Viridian argues that this serves to provide strong spatial definition to interior landscaped spaces as well as screening the development from its surroundings. The proposed tree structure will increase the visual absorption capacity of the site and contribute to the protection and retention of the rural character of the surrounding landscape.

The planning report notes that the interface of the proposed development on Schuurmansfontein Rd required specific design attention due to its visibility for commuters traveling southbound along the R301 (across Portion 1 of Farm 888 which will remain open as a conservation area), and its role as an entrance

route from the R301 to the proposed development and areas further west, which include the Mandela House facility. A 6,5m wide buffer has been provided along this boundary and allow space for tree planting to appropriately screen the development, as well as stormwater swales and pedestrian paths.

The landscape proposal for the R301 interface includes the planting of an avenue of trees along the edge of the parking areas, which have been drawn away from the corner in favour of wider landscaped verges and a connecting access road in front of the central building.

Figure 48: Landscape plan and cross sections through the R310 Scenic route interface with the Mixed-Use component (Viridian Consulting, 2022)

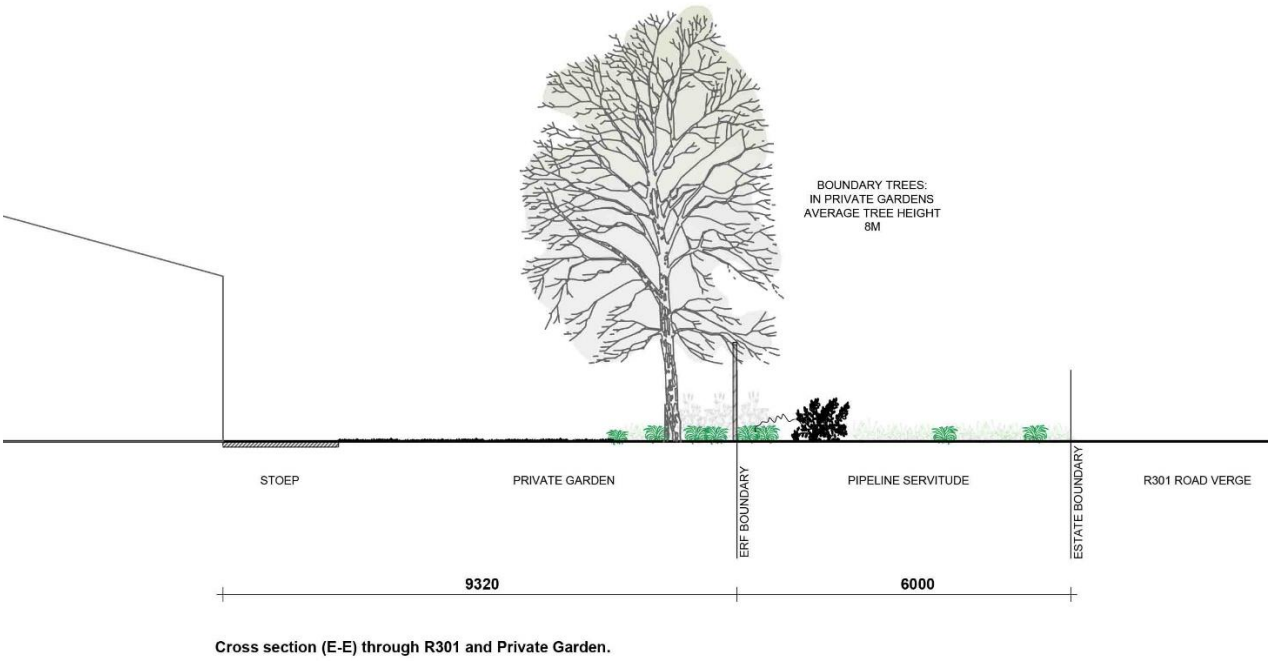

Figure 49: Landscape cross section through the R301 and a private garden on the Scenic route interface. Note the pipe servitude offsetting the development from the roadway (Viridian Consulting, 2022)

Estate perimeter fencing will be a 1,8m high visually permeable steel mesh fence fixed to cylindrical poles, to retain a rural character along Schuurmansfontein road. Electrical fencing will bring the height up to 2,2m in total, and a detail is provided in the Guidelines and Landscape plan set. The Landscape development guidelines provide limited notes on irrigation and the maintenance of Estate Common open spaces.

Figure 50: Proposed site perimeter fencing example (Viridian Consulting, 2022)

5. VISUAL ANALYSIS

The following section analyses various aspects regarding the visibility of the proposal within the receiving environment.

5.1. Preliminary visibility modelling, views affected and LoS testing

The site visits were conducted on 22 August and 10 October 2022, under sunny and clear weather conditions. Fieldwork tested views within the receiving environment from which the development would possibly be visible. The basic assumption for this mode of visibility testing is that the observer eye height is 1.8m above ground level, and preferences publicly or reasonably accessible places. Please refer to Figure 49 showing site visit photograph locations (indicated by a blue dot).

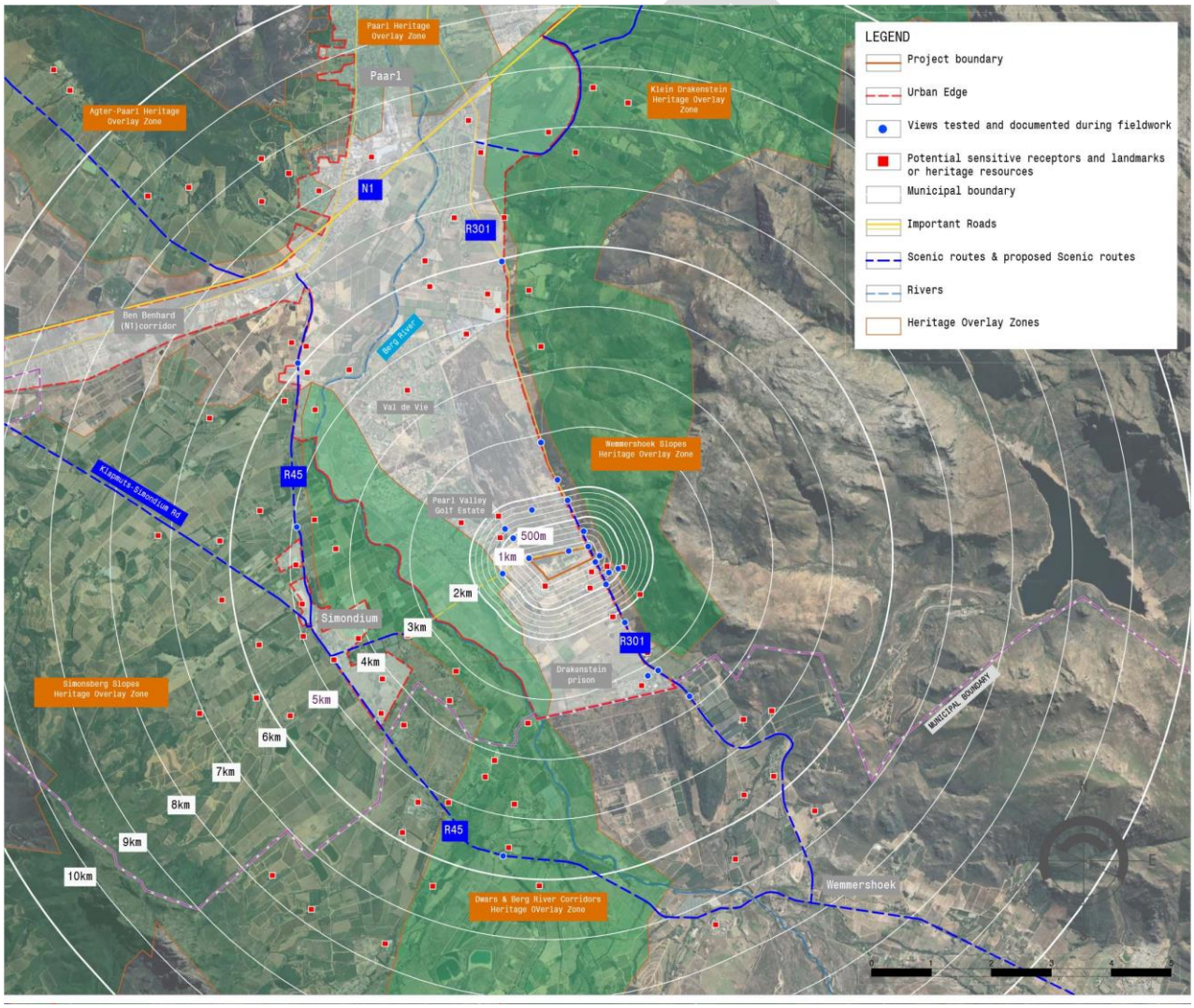

Figure 51: Graphic illustrating location of site photographs taken during fieldwork in the study area, as well as visual receptors, Cultural landscapes and other key spatial aspects (Smit & de Villiers, 2022)

The fieldwork was undertaken using a Canon EOS 550D (Canon EFS 18-55mm Lens), and recorded using georeferenced locations. A reference scale of 1km increments describe the range of distances from which the proposed development may be visible, as illustrated in Figures 49 and 50. Four distance zones are later used to determine and describe Visual Exposure (Immediate Foreground, Foreground, Middle ground and Background).

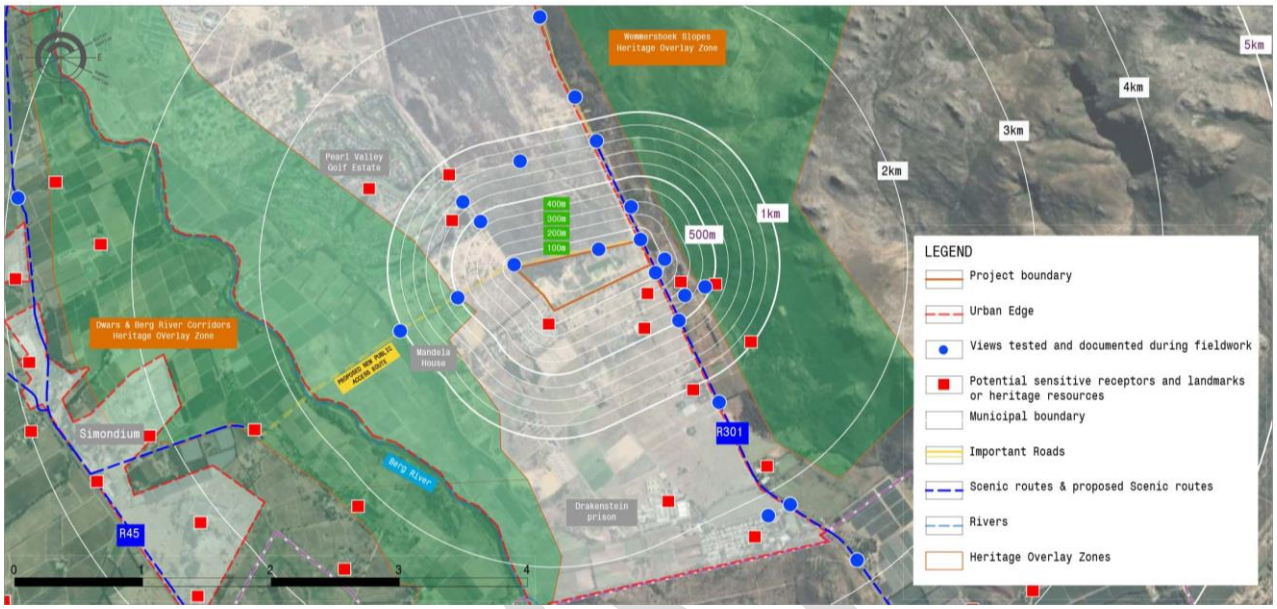

Figure 52: Site Visit Graphic - enlarged (Smit & de Villiers, 2022)

5.2. Viewshed analysis

Two viewshed analyses were conducted – the first using only topographical information, while the second (and subsequent) viewshed used the data provided by the project architects in the form of a 3D model. The topographical viewshed was undertaken in order to provide a high-level understanding of how local topography influenced the possible visibility of the proposed development, for the purposes of scoping. It should be noted that any viewshed is only as accurate as the quality and fineness of the data available[15].

The viewshed indicates that the features of the receiving environment (topography, and to a lesser degree local vegetation and elements of the built environment) play a significant role in reducing the overall potential visibility of the proposed development. Apart from the Wemmershoek mountains limiting views to the east, the immediately local "ridge" lines (low hills and undulations in the foothill topography) screen the subject site for viewers within the valley bottom. This limits the potential visual impact of the proposed development by virtue of a very limited visual catchment.

In the viewshed graphics below, the Residential portion and the Mixed-Use portion are analyzed separately (given the differences in architectural typology and heights).

[15] Line of sight testing during fieldwork is therefore critical to ground truth (confirm or adjust) the actual visibility and Zone of Visual Influence on in the study area. Due to the fact that local topographical features, built features and vegetation data are not fed into the viewshed analysis, the ZoVI typically has a smaller footprint than indicated graphically.

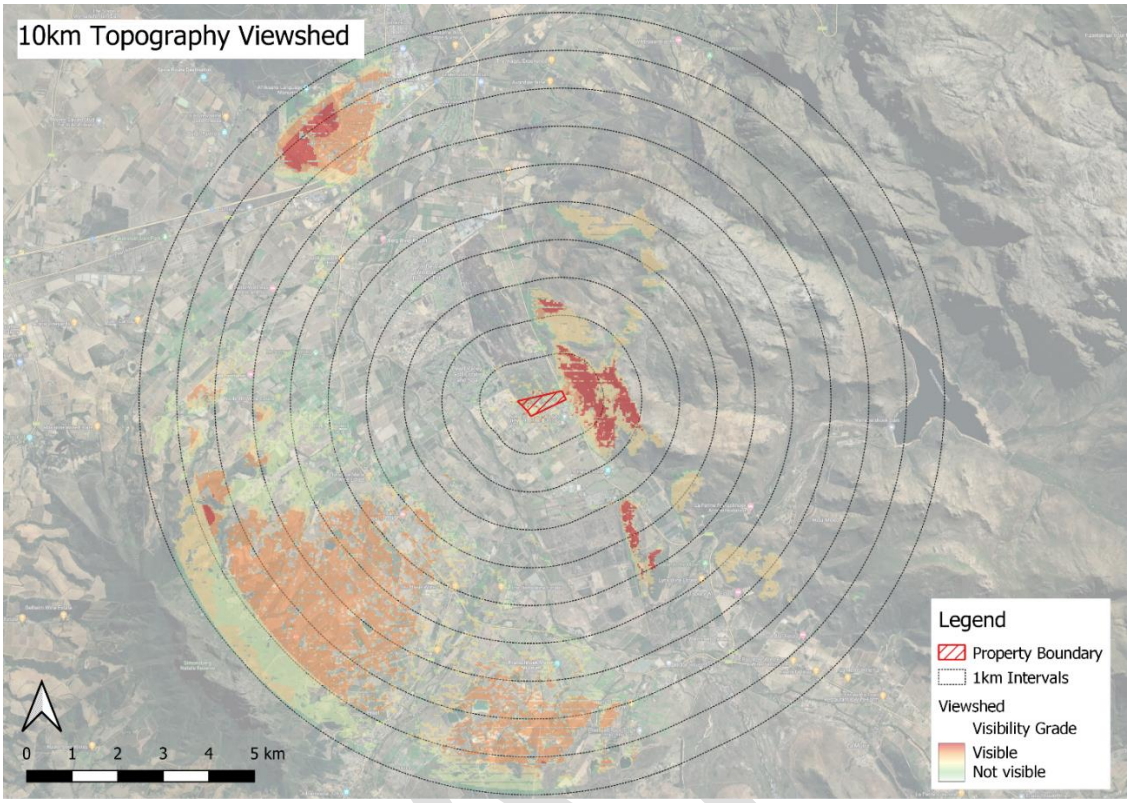

Figure 53: Viewshed 10km Topography only (Smit & de Villiers, 2022)

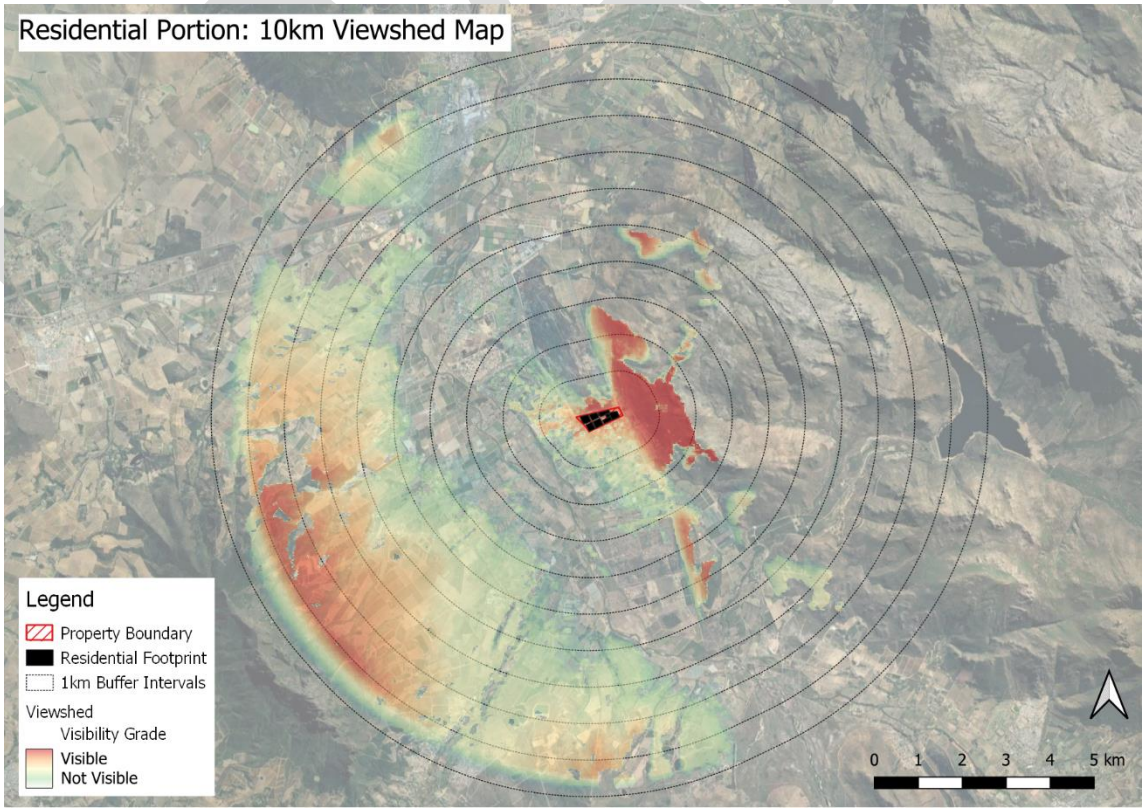

Figure 54: Viewshed 10km – Proposed development: Residential portion only (Smit & de Villiers, 2022)

The viewshed in Figure 52 indicates that the residential component will be visible from the slopes of Simonsberg at distances of more than 6km away (within the Background Distance zone). From these views (affecting very few receptors), the valley as a whole would have high scenic value in terms of the landscape context (dramatic encircling mountain views and infill of a rich mosaic of agricultural areas), but scenic value would be increasingly degraded by the residential, industrial, commercial and mixed land uses throughout the valley, thus reducing its sensitivity. While the views from the Wemmershoek mountains would be taken from much nearer (distances of 3km and less), very few receptors were recorded from these areas that demonstrate high visibility.

Note also that the majority of the surrounding Berg River valley landscape (including surrounding residential areas of Pearl Valley, Val de Vie and the nearby Drakenstein prison's residential suburb) demonstrates zero visibility for the proposed development.

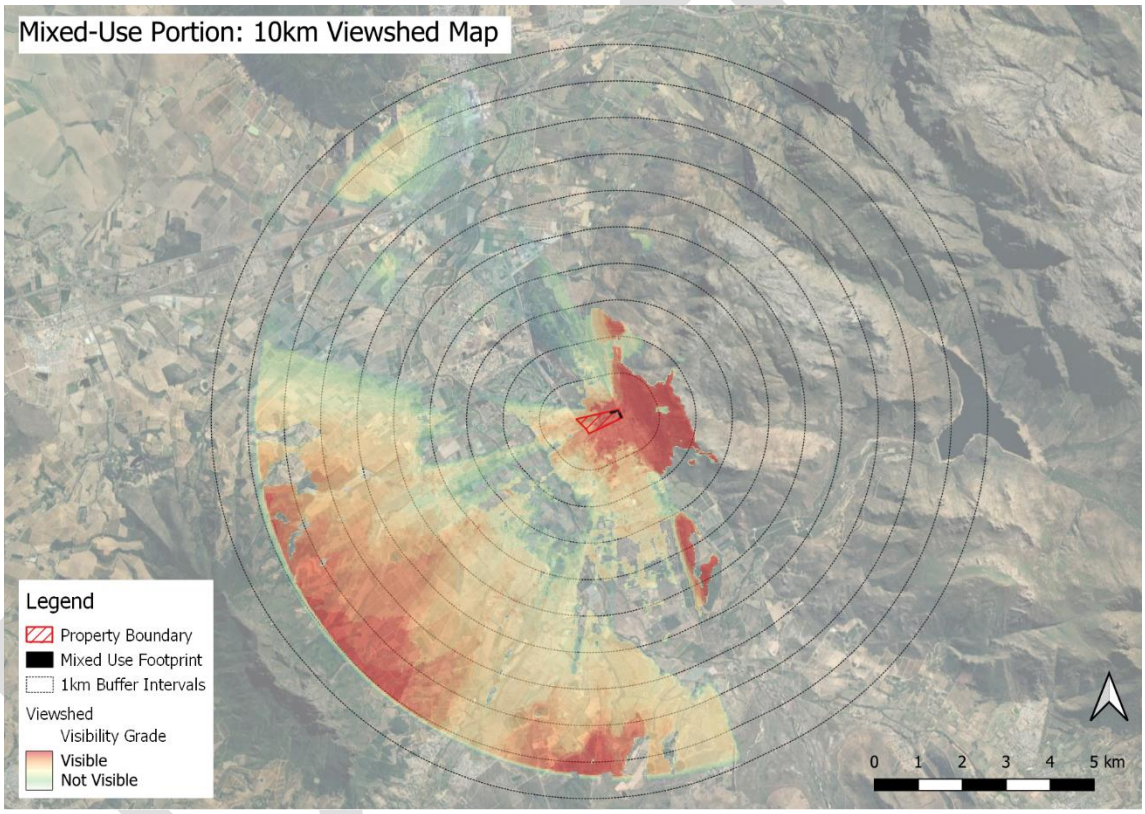

Figure 55: Viewshed 10km – Proposed development: Mixed Use portion only (Smit & de Villiers, 2022)

The Mixed use portion increases the footprint of the viewshed, but not dramatically. This is due to the slightly taller buildings, and the position of the Mixed-Use component of the proposed development on the higher eastern side of the site (in altitude ASL).

Based on fieldwork observations however, the visibility of the two components (residential and mixed use) should be generally comparable, given that local vegetation and buildings (mostly those to the south and west) would screen even taller buildings from distances of more than 500m away. The Mixed use portion is however visually exposed from the north and the east. This suggests that the focus of the visual impact assessment will be on the potential impacts on the scenic route, and the immediate receiving environment with its associated sensitive receptors (limited to within approximately 2km).

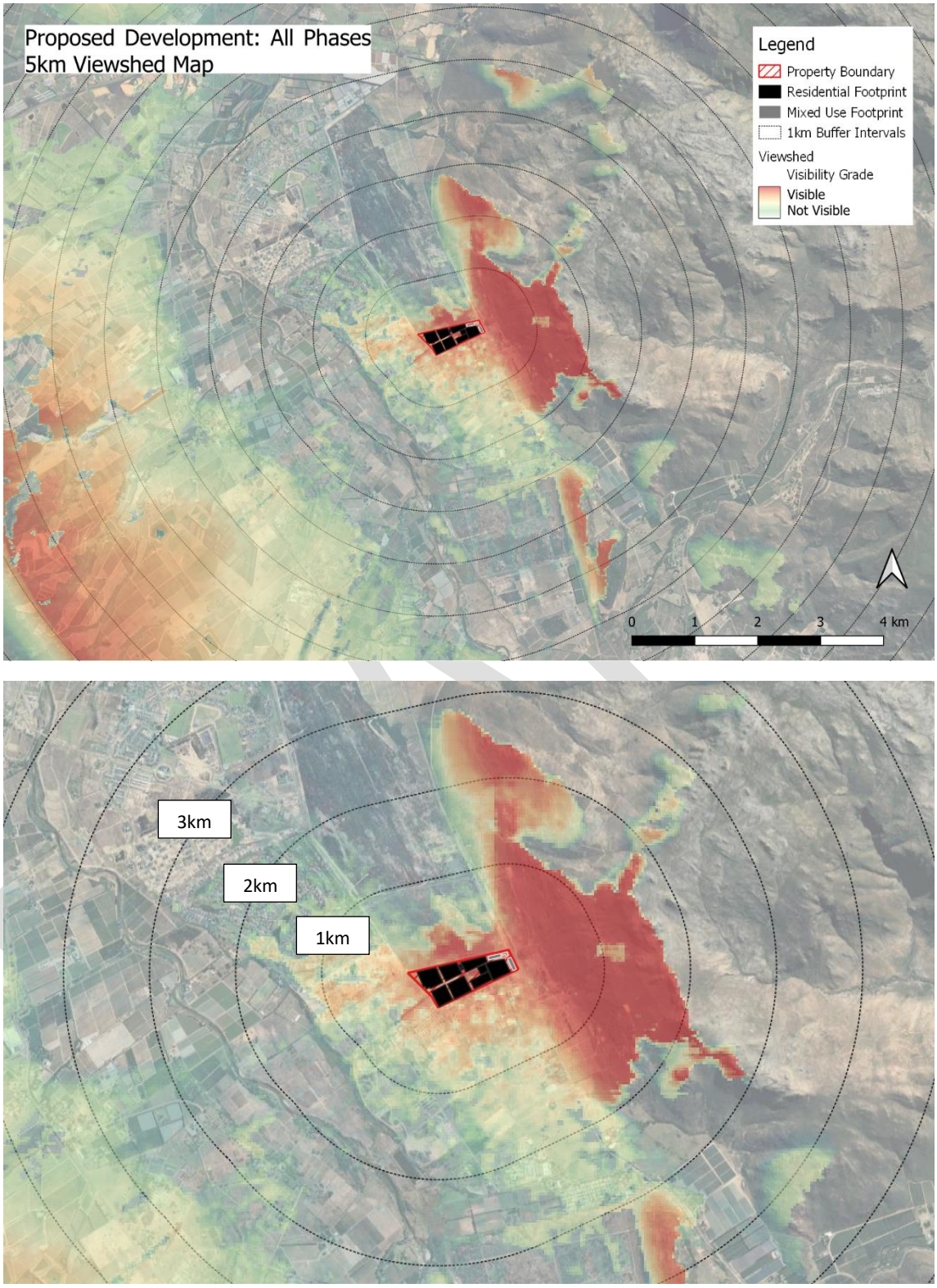

Figure 56: Viewshed 5km and 3km – Proposed development (all) (Smit & de Villiers, 2022)

5.3. Line of sight testing and visibility

The purpose of line of sight testing is to determine locations in the receiving environment from which the proposed development may be visible. The following series of site photographs illustrate the location of the site captured from a variety of distances during the site visit.

The intention of this section is to assist the reader to understand the visual context and illustrate the fieldwork observations. These observations record the actual potential visibility of the proposed development, noting features and objects that have an influence on visibility. From this process, the Zone of Visual Influence is determined, and Line of sight testing enables the visual specialist to correct any oversights or exclusions to the Viewshed.

The location of site photographs is indicated in Figures 49 and 50. Each figure that follows has a caption that provides the location of the view, the direction of the view, the distance of the viewer from the subject site and any other relevant notes (including notable features in the photograph and notes on the enlargement or modification of the photograph, if any). Please note that the following photographs generally attempt to place the subject site centrally in the field of view, and a selection of views are included to demonstrate whether the proposed development will be visible or not.

Figure 57: Visibility testing: view towards the subject site taken from the R301, looking south at approximately 1km away from the north eastern property boundary (Smit, 2022).

In Figure 55 above, the proposed Mixed use component will be barely visible (being set back from the R301), and the Schuurmansfontein road interface will be screened entirely by existing vegetation and buildings in the foreground. The proposed development will not be noticeable from this view. Note also the gently undulating topography north of which the site will not be visible at all.

In Figure 56 below, the proposed Mixed use component will be visible, but not prominent from this vantage point, especially given the emphasis on long views towards the encircling mountains. The residential component will be screened partly by topography, and partly by the proposed avenue of trees along Schuurmansfontein road.

Figure 58: Visibility testing: view towards the subject site taken from the R301, looking south at approximately 200m away from the north eastern property boundary (Smit, 2022).

In Figure 57 below is illustrated what is perhaps the most visually exposed view, where there is no vegetation (existing or proposed) to screen the Mixed-Use component in the foreground, and the residential component will be viewed along the broad side of the site over low fynbos on the neighbouring property at a distance of 100m and less (the Immediate Foreground).

Figure 59: Visibility testing: view from the R301 at approximately 100m (Smit, 2022).

Figure 60: View of the north eastern corner of the property, looking south west (Smit, 2022).

In Figure 58 above, note Schuurmansfontein road extending westward to the right of the photo, and the rising topography immediately left of the R301 scenic route on the left. Note also that the R301 is at a slightly higher level than the subject site. Note the high scenic value of views for commuters travelling south in contrast to the less dramatic mountain and landscape views available to commuters travelling north, shown in Figures 59 and 60 below.

Figure 61: View over the north western corner of the subject site (proposed Mixed use component), near the existing entrance (Smit, 2022).

The view in Figure 59 above is taken looking north west over the expanse of the Berg river valley, from low elevation. Paarl Mountain is visible (and notably not visually dominant) to the right, and Simonsberg (more dominant visually) is visible to the left. Note the openness of views and lack of features (vegetation or built form) in the foreground of views from the Scenic route in this area.

Figure 62: Visibility testing: Two images illustrating views from the R301 (now south of the subject site) from the vantage point of a commuter travelling north towards Paarl. The top view is located approximately 150m away from the property boundary, the bottom view is located at approximately 50m (the buildings in the Immediate Foreground will be removed, to be replaced by the Mixed use component (Smit, 2022)

Figure 63: Visibility testing: view from the Fields of Gold farm entrance road east of the R301, at slightly higher elevation. This view is located at approximately 50m away from the eastern property, looking west over the Berg River valley (Smit, 2022).

In Figure 61 above, note the flat open swathe of fynbos on the neighbouring property across Schuurmansfontein road (far right) in contrast to the distinctly rural agricultural landscape south of the subject site (left). This illustrates the evolving character of the views available from Scenic route (refer also to Figures 20 to 22). The graphic below (Figure 62) illustrates this observation/concept spatially.

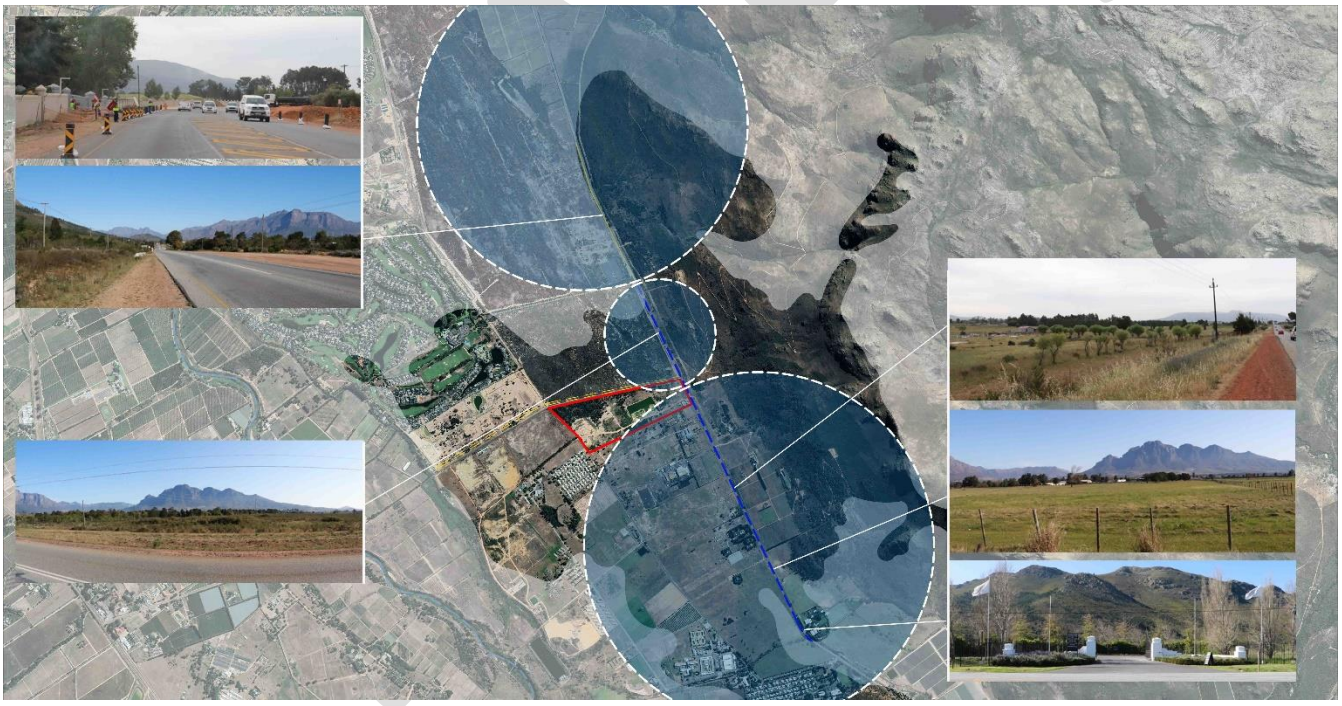

Figure 64: Graphic illustrating the changing character of the Scenic route, with the affected portion of the R301 indicated in blue (Smit, 2022).

Note the gentle undulations in topography visible along the R301 in Figure 63 below – this view is taken from a slight rise which screens any further views southward. The proposed Mixed use component will be visible, but not prominent from this vantage point. The residential component will be screened by existing vegetation and buildings in the foreground.

Figure 65: Visibility testing: view from the R301 looking north at approximately 400m away from the south eastern corner of the property boundary (Smit, 2022).

Figure 66: Visibility testing: view from the parking lot of Freedom Hill Wines, within the Wemmershoek HOZ at approximately 600m, and at higher elevation. (Smit, 2022).

In Figure 64 above, most of the roofscape of the proposed development will be visible, but the site is not central to the visual field, and the distance between viewer and proposed development reduces visual intrusion. For viewers within the Wemmershoek HOZ, the development will generally be visible and noticeable as a complete insertion into the landscape, replacing the existing vegetation cover associated with agricultural land uses. The proposed tree planting throughout the development (not only screening avenues) will increase the VAC of the site itself over time as the existing vegetation cover on the subject site is re-established.

The Mixed use component and medium density residential areas will introduce new elements of urbanity into a rural agricultural landscape previously dominated by the mosaic of landscape and settlement patterns described in Section 3.2 of this document from views within the Wemmershoek HOZ. This will add cumulatively to the visual impacts associated with existing developments such as Pearl Valley (an extension of which is being built in the immediate vicinity of the subject site) and reduce the scenic value of the views over the Berg River valley as a visual resource generally.

Figure 67: Visibility testing: view from the R301 looking north at approximately 800m away from the subject site (Smit, 2022).

In Figure 65 above, note again the gentle undulations in topography visible along the R301 that increases the VAC of the receiving environment significantly – this photograph is taken from one such slight rise, which screens any further views southward. The residential component and the mixed use component will be screened from view entirely by topography, existing vegetation and buildings.

Figure 68: Visibility testing: view from the R301 at approximately 2,5km, just beyond the entrance to the Drakenstein prison. The proposed development will not be visible due primarily to distance (Smit, 2022).

Figure 69: Visibility testing: view from Schuurmansfontein road at approximately 500m away from the western property boundary, looking north east towards the Wemmershoek mountains (Smit, 2022).

In figure 67 above, the easternmost buildings of the proposed development will be visible as a line of roof pitches and building edges (no screening trees are proposed along this edge). Also note the interface conditions of the new Pearl Valley extension on the left, and that of the Drakenstein prison on the left. Details relating to the upgrade of Schuurmansfontein road are not available (or yet developed), but the assumption is that public realm improvements will accompany upgrade project.

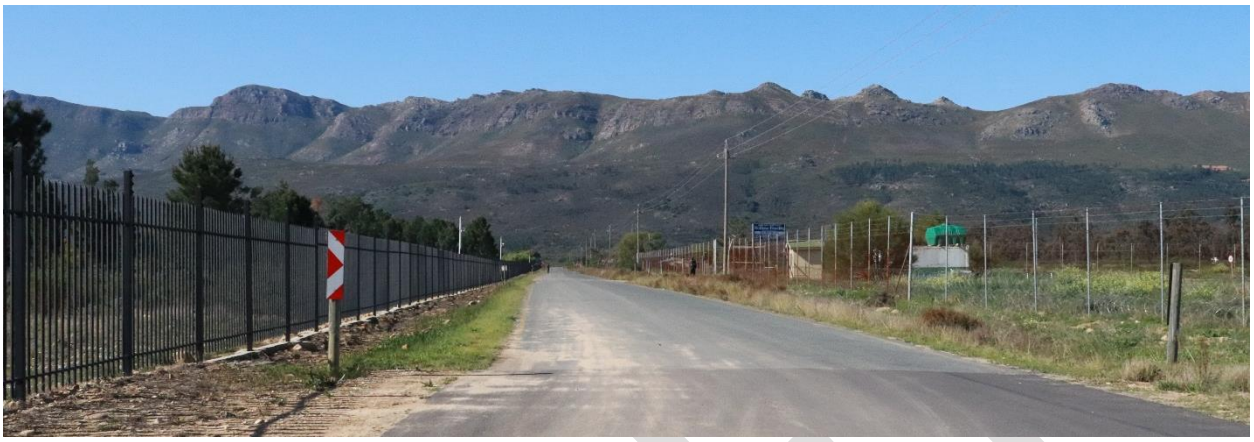

Figure 70: Visibility testing: view from Schuurmansfontein road at approximately 1km. Similar to Figure 67, the proposed development will be visible when the existing vegetation is removed (Smit, 2022).

Figure 71: Visibility testing: view from the extension of Schuurmansfontein road into the farmlands along the Berg River at 1,2km away from the subject site, looking north east (Smit, 2022).

In lieu of illustrating visibility from Mandela House (due to issues with access), Figure 69 illustrates how the topography falls off towards the riverine terrace, effectively screening any views from this lower elevation towards the foothills of the Wemmershoek range where the subject site is located. This limitation to visibility is illustrated in the viewshed analysis graphics.

Figure 72: Visibility testing: view from within Pearl Valley (the hotel component) at approximately 600m away, looking south east (Smit, 2022).

From the view illustrated in Figure 70 above, the Schuurmansfontein road interface of the proposed development may be visible from the neighbouring residential estate (Pearl Valley); but fences, buildings and vegetation in the Immediate Foreground of the receptor's view will screen the proposed buildings of the residential component and reduce visual intrusion.

Figure 73: Visibility testing: view from Jack Nicklaus Boulevard, the landscaped road giving access to Pearl Valley. This view is located approximately 800m from the northern property boundary (which is located along the avenue of existing trees visible in the Middleground, in this view), looking south across the open field of low fynbos (Smit, 2022).

Figure 71 illustrates the view that would be experienced by a receptor glancing perpendicular to their direction of travel through gaps in the highly landscaped Jack Nicklaus Boulevard. At this distance, and given the proposed treatment of the Schuurmansfontein road verge (avenue of trees and visually unobtrusive fencing materials), the proposed development should not be particularly noticeable. Please refer to Figure 74 for a graphic illustrating the Distance zones associated with the Avec La Terre project.

The following site visit observations are noted:

- *The subject site is not a visually prominent site.*
- *The topography around the site limits visibility to the site from surrounding areas and reduced the number of potential viewers significantly.*
- *The R301 is heavily trafficked and will have sustained views of the proposed development over the open conservation area of Farm 888 for commuters travelling south towards Franschhoek.*
    - *The receiving environment provides little screening within the Foreground Distance zone (800m) for this direction of travel.*
    - *This portion of the scenic route (from the entrance to Pearl Valley up to the property boundary) is however considered less sensitive than the portions further south, and long views across the landscape towards the encircling mountains will not be interrupted by the proposed development.*
    - *Nevertheless, this edge must be carefully articulated to prevent possibly high visual intrusion in an unbroken horizontal line along the broad side of the site (along the Schuurmansfontein road verge).*
    - *Insensitive boundary treatment will negatively impact the visual dominance of both the highly valued long views of the encircling mountains and the scenically valuable agricultural landscape context.*
- *Commuters travelling along the scenic route north towards Paarl benefit from significant screening by topography as well as existing vegetation and buildings. The southern and western interfaces are therefore of least concern in relation to the scenic route.*
- *The portion of scenic route affected is characterised by long views over the Immediate Foreground and Foreground Distance zones, which have a predominantly agricultural character and few visual obstructions/clutter/complexities. The proposed development will bring about changes to the perception of the scenic route (especially for commuters travelling south), which must be addressed by mitigation measures along the northern and eastern interfaces.*
- *Only approximately 3km of the R301 Scenic route will be affected.*
- *The viewshed indicates that the overall visibility of the proposed development amounts to a +-3km radius around the site, with notable exceptions. The proposed development will <u>not</u> be visible from:*
    - *Mandela House*
    - *The majority of Pearl Valley Estate*
    - *Any locations west of the Berg River nearer than 4km*
    - *are no views onto site from the surrounding scenic and other major roads (R311 and R46)*
    - *The R301 scenic route further than 1,2km south of the subject site.*
- *The proposed development will be barely visible or not visible from surrounding heritage landmarks and heritage resources (with the exception of the Wemmershoek HOZ).*
- *Residents of the Pearl valley extension and the existing Drakenstein prison staff housing area are the nearest sensitive receptors and will have views of the south and north eastern edges of the proposed development, although most will be screened by local vegetation and other buildings.*

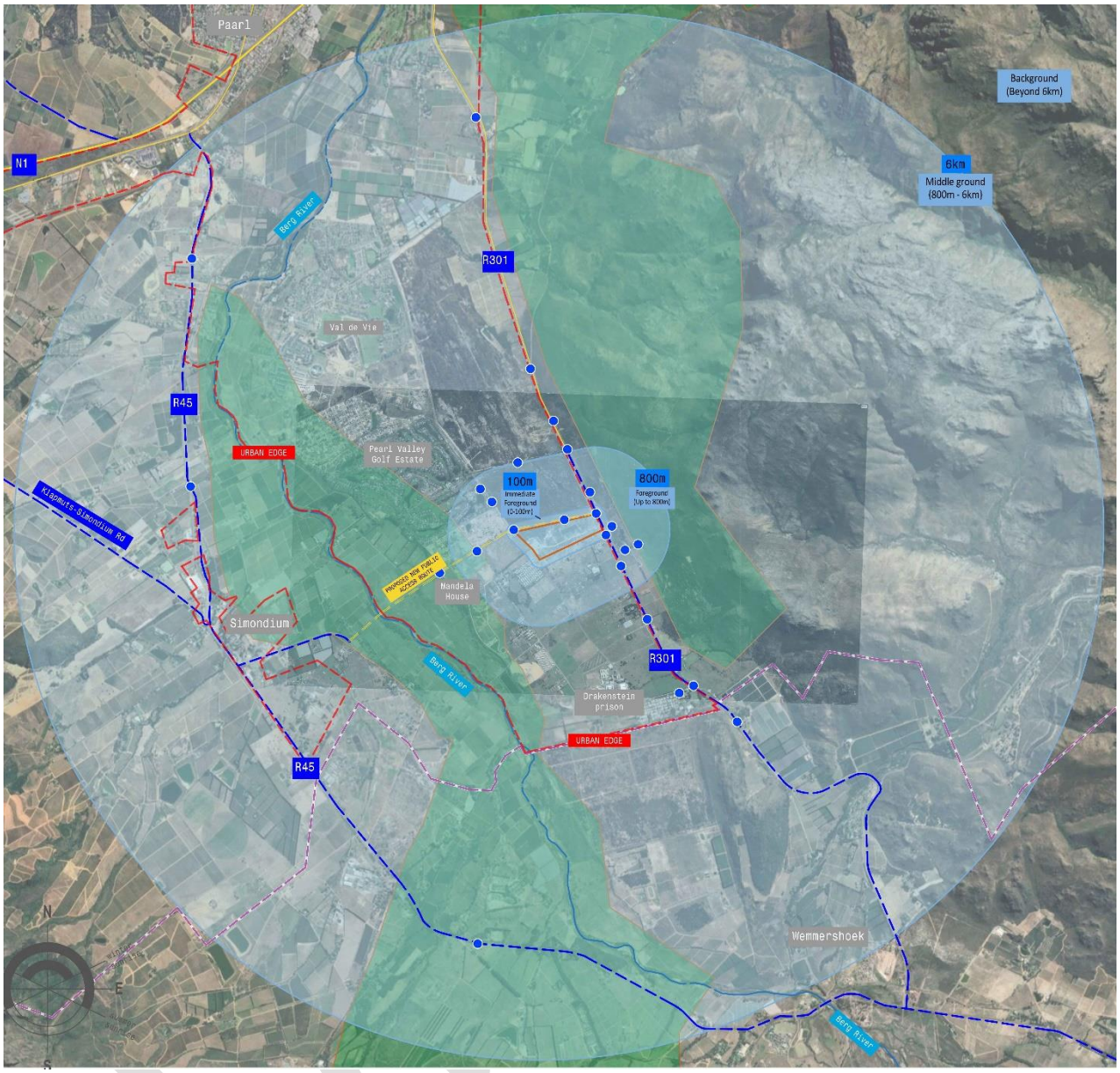

Figure 74: Distance zones Graphic (Smit, 2022)

5.4. Simulations

Simulated photomontages use photographs of an actual selected during firldwork, modified by the insertion of a representation of the visible changes brought about by the proposed development (The Landscape Institute, 2011). The visual simulations thus enable 'before' and 'after' comparisons of the proposed development within the receiving environment (Oberholzer, 2005, p. 18), depending on the accuracy of the Simulation.

3D modelling allows the specialist to navigate through the 3D environment with a visual representation of the height, massing and building configuration of the proposed development in its three-dimensional context. This enables more accurate identification of sensitive views, viewers and view corridors before fieldwork, to be tested and verified during and after the site visit is undertaken. Understanding the scale and potential visibility of the proposed development in relation to its context enables more accurate simulation and impact assessment.

A selection of site photographs have been overlaid with 3D models of the proposed development to support the findings of the Visibility analysis section and provide and assist the specialist to conduct the visual impact assessment. These simulations represent views from sensitive receptors and to illustrate typical views from various key distances or areas. Refer to Figure 75 for the location of Simulation views.

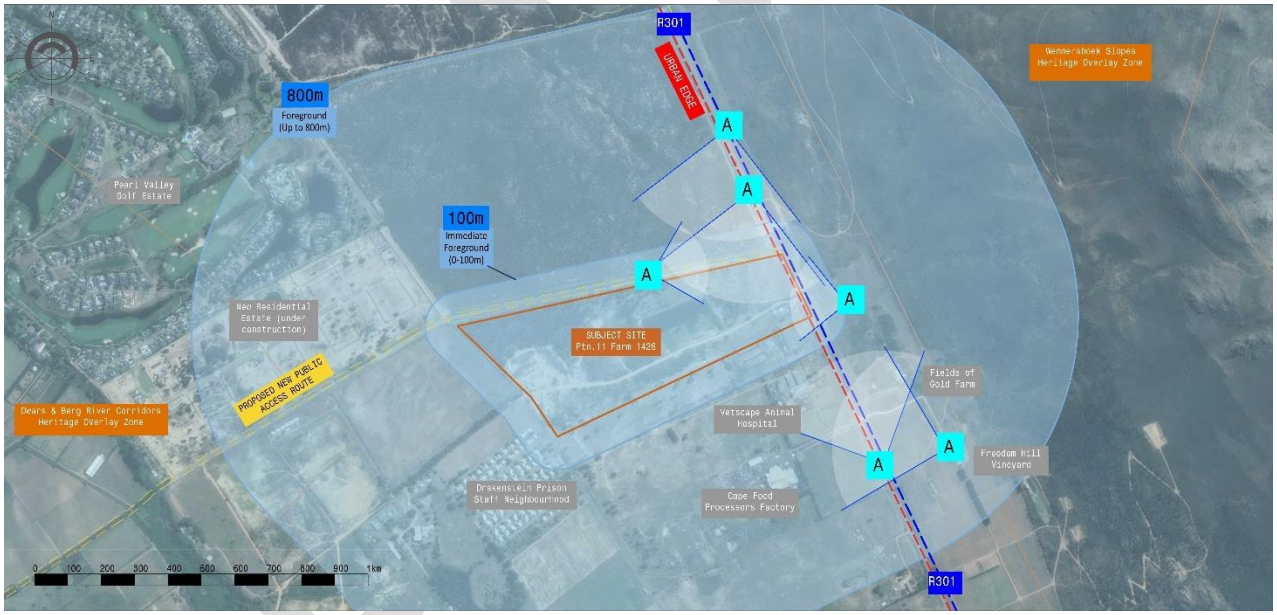

Figure 75: Location of Simulation views *[Sim numbering to be updated in the graphic above]* (Smit, 2022)

The Simulations were selected to represent typical views onto the project site from the locations of potentially sensitive viewers, and where the proposed project site would be likely to have noticeable visual impact; or the sims illustrate incidences of low visibility.

Note that all of the Simulations are from views within 800m of the proposed project (the Foreground distance zone). No significant views between 800m and 5km of the subject site (the outermost edge of the study area) were recorded. Fieldwork and line of sight testing showed that the proposed development would

either not be visible from these locations, or that visibility was so low that they did not warrant inclusion as Simulations (due to screening by topography, the built environment and existing vegetation).

[Simulations are being finalized and will be inserted here].

5.5. Visual Analysis

Based on 3D modelling, fieldwork and LoS testing, the following conclusions can be drawn from the Visual Analysis.

5.5.1 The Zone of Potential Visual Influence

The Zone of Potential Visual Influence (ZoVI) is the radius around an object beyond which the visual impact of its most visible features will be insignificant primarily due to distance. Determining the ZoVI enables the specialist to confirm the extent of visibility and views which could be affected by the proposed development before screening elements are taken into consideration.

i. *For this scale of development within the visual and topographical context of the RE, the ZoVI of the proposed development is **approximately 1km** (i.e.: limited to the Immediate Foreground and Foreground Distance zones, and only the first 200m of the Middle ground distance zone).*
ii. *Views of the proposed development's most visible features (building roof areas, structures taller than 1 floor, exterior lighting etc.) viewed from further than 500m away begin to lose significance in the visual field, and at 1km away or further, they become insignificant in the landscape.*
iii. *Views from which the proposed development would demonstrate dominance in the visual field are limited to those within the Immediate Foreground (**within +- 100m** of the subject site). This is a generally acceptable range, within which the viewer expects a development of this nature to be more visible.*

In conclusion, the area around the subject site that will potentially be affected is limited, and reduces the viewshed's range of visibility notably. Therefore, the focus of the recommendations of this report and visual impact assessment will focus predominantly on areas within the Immediate Foreground (1 – 100m) and Foreground (100m – 800m) distance zones.

5.5.2 Landscape Character & Visual Resource Sensitivity

Sensitive landscapes are natural or cultural landscapes that are recognized for their beauty and value to viewers (which is expressed as the quality of the visual resource). The quality of the landscape (visual resource) is correlated with its sensitivity. The sensitivity of a landscape or visual resource is the degree to which a particular landscape type or area can respond to and where appropriate, accommodate change[16] arising from a particular development without detrimental effects on its character.

[16] According to the DEA&DP Guideline for involving visual & aesthetic specialists in EIA processes (Oberholzer, 2005), the following terms are used to describe the effects of visual impact:

- Fundamental change: dominates the view frame & experience of the receptor;
- Noticeable change: clearly visible within the view frame & experience of the receptor;
- Some change: recognizable feature within the view frame & experience of the receptor;

Key elements of the Landscape Character can usually not be replaced or substituted (Young, 2014, p. 7) once negatively affected by inappropriate development. However, aspects such as disturbance to vegetation or the visibility of buildings can be mitigated over time, to replace or substitute the effect of the original vegetation on visual continuity, scenic value and the landscape as a setting and container.

Table 8: Landscape Character Sensitivity

Landscape Character Area	Sensitivity
Landscape Character Area 1	*Low to Moderate*
Landscape Character Area 2	*High*

5.5.3 Factors determining Magnitude of visual impact

The magnitude of visual impact is assessed through a synthesis of four main factors, namely: visual intrusion, visibility, visual exposure and viewer sensitivity. These factors are considered alongside the relative compatibility of the proposal. As per the NEMA Regulations (The Department of Environmental Affairs , 2010) the nature, extent, duration, intensity and probability criteria are then applied in order to determine the significance of the visual impact.

a. Visual Intrusion

Visual intrusion describes the level of compatibility or congruence of the project with the particular qualities of the area, landscape and surrounding land uses, or its 'sense of place', measured against the degree to which it is in discord, or contrasts with these. Because these qualities vary throughout the receiving environment, the Landscape Character areas are evaluated in order to fully understand the potential visual intrusion for the proposed project. If the visual analysis is conducted in an “overview” manner in a receiving environment that is not uniform in sense of place and landscape character, key aspects of visual impact assessment are balanced out by the overall development instead of brought to light as individual impacts.

Visual Intrusion is related to maintaining the integrity of the landscape or townscape in context. Visual intrusion diminishes within landscapes of higher complexity and as distance increases (i.e., the object becomes less of a focal point and more of a visual distraction). The following criteria are used to assess the extent to which the proposed project component fits or contrasts with the landscape setting:

a) Does the proposed physical development have a negative, positive or neutral effect on the quality of the landscape?
b) Does the proposed development enhance or contrast with the patterns or elements that define the structure of the landscape?
c) Does the design of the proposed project enhance and promote cultural and scenic continuity, or does it disrupt it?

- Limited change: not particularly noticeable within the view frame & experience of the receptor;
- Generally compatible: practically not visible or blends in with the surroundings.

Table 9: Visual Intrusion

High	Moderate	Low	Positive
If the project:	*If the project:*	*If the project:*	*If the project:*
Has a substantial negative effect on the visual quality of the landscape; Contrasts dramatically with the patterns or elements that define the structure of the landscape; Contrasts dramatically with land use, settlement or enclosure patterns; Is unable to be 'absorbed' into the landscape.	Has a moderate negative effect on the visual quality of the landscape; Contrasts moderately with the patterns or elements that define the structure of the landscape; Is partially compatible with land use, settlement or enclosure patterns. Is partially 'absorbed' into the landscape.	Has a neutral and minimal effect on the visual quality of the landscape; Contrasts minimally with the patterns or elements that define the structure of the landscape; Is mostly compatible with land use, settlement or enclosure patterns. Is 'absorbed' into the landscape.	Has a beneficial effect on the visual quality of the landscape; Enhances the patterns or elements that define the structure of the landscape; Is compatible with land use, settlement or enclosure patterns.
Result:	*Result:*	*Result:*	*Result:*
***Notable change** in landscape characteristics over an extensive area and/or intensive change over a localized area resulting in major changes in key views.*	***Moderate change** in landscape characteristics over localized area resulting in a moderate change to key views.*	***Imperceptible change** resulting in a minor change to key views.*	***Positive change** in key views.*

*The overall project will result in **Low to Moderate** visual intrusion, and a distinction is made here between the residential and the mixed use components:*

i. *The residential component is expected to result in Low visual intrusion (limited/imperceptible change resulting in a minor change to key views) because it will have a minimal effect on the visual quality of the landscape; is mostly compatible (contrasts minimally) with land use, settlement or enclosure patterns, and will mostly be 'absorbed' into the landscape.*

ii. *The Mixed-Use component is expected to result in Moderate visual intrusion (moderate change in landscape characteristics over localized area resulting in a moderate change to key views). It is expected to have a moderate negative effect on the visual quality of the landscape; is only partially compatible (contrasts moderately) with land use, settlement or enclosure patterns, and will only be partially 'absorbed' into the landscape.*

   a. *Option B will result in lower visual Intrusion than Option A, but will still fall within the "Moderate" category in Table 9.*

b. Visibility

Visibility is the area from which proposed project components would potentially be visible. Visibility depends on the topography, tree cover or the presence of other visual obstructions in the natural or built environment; as well as elevation and distance. Weather and season conditions also affect visibility, but do not have a significant influence in this context and are not central to the analysis.

Visibility can be defined simply as the measure of the area from which proposed project components would potentially be visible within the ZoVI. Once the proposed building or infrastructure envelope has been determined, visibility depends on the topography of the RE, slope aspect, tree cover or other visual obstructions in the natural or built environment; as well as elevation and distance. Please note that a high visibility rating does not necessarily signify a high visual impact.

Table 10: Visibility

High	Moderate	Low
If the development is visible from over half the ZoVI, and/or views are mostly unobstructed and/or the majority of viewers are affected.	If the development is visible from less than half the ZoVI, and/or views are partially obstructed and/or many viewers are affected.	If the development is visible from less than a quarter of the ZoVI, and/or views are mostly obstructed and/or few viewers are affected.

*The proposed development will result in **Moderate** visibility overall. Although the overall development will be visible from more than half of the ZoVI, the ZoVI itself is very limited.*

iii. *Visibility of the residential component will be Moderate to Low (views will mostly be screened, and few viewers will be affected);*
iv. *Visibility of the Mixed-Use component will be Moderate to High (views are mostly unobstructed, and many viewers will be affected).*
    a. *It should be noted that Alternative 1 Option B will result in lower overall visibility than Option A because of the increased set back from the R301. It will reduce the visibility rating for the Mixed-use component from Moderate to High, to Moderate.*

c. Visual Exposure

It is well established that distance is a key variable that determines the magnitude of potential visual impacts from a proposed development (Sullivan, Abplanalp, Lahti, & Beckman, 2014). Distance from a viewer to a viewed object or area of the landscape influences how visual changes are perceived in the landscape. Generally speaking, the assumption is that colour, form, texture and detail become less perceptible with increased distance from the viewed object (Young, 2014, p. 46). Additionally, the impact of an object diminishes at an exponential rate as the distance between the observer and the object increases. To illustrate, the visual impact at 1km would be 25% of the impact as viewed from 0,5km. At 2km it would be 10% of the impact at 0,5km (Hull & Bishop, 1988).

Distance zones are based on three categories of distance: fore-, mid- and background (Landscape Aesthetics: A Handbook for Scenery Management, 1995). The Background category can be

considered the threshold after which distance measurement becomes impossible to the viewer in the absence of known landmarks (Felleman 1979, 8).

These zones can reasonably be understood as ideas that are responsive to context – their approximate parameters are shown below:

Table 11: Distance Zones for Visual Exposure

Distance Zone	Distance	Description
Immediate Foreground	0 to 100m	Most detailed aspects of objects are discernible, including materials and textures. Considered to be the **most sensitive** due to the proximity to the viewer and the ability to perceive detail.
Foreground	Up to 800m	The foliage of trees and finer textural details of vegetation are normally perceptible within this zone. After 500m, perception of detail and textures decreases, but overall form, shape colour and edges of objects are still discernable. Considered to be **sensitive** due to the proximity to the viewer and the ability to perceive detail.
Middle ground	800m to 6km	After 800m, vegetation appears as outlines or patterns. Only large or bright/contrasting objects with simple outlines are easily identified and differentiated from the general view. Depending on topography, vegetation and built form, the middle ground zone is sometimes considered to be up to 8km. In the middle ground, one can perceive individual landscape features under clear conditions but not in great detail. In urban and suburban areas, middle ground views are mostly obscured by built form and vegetation, except at a higher elevation than the surroundings, or within large open or public spaces. **Not considered to be sensitive** except in areas with exceptionally low VAC.
Background	Beyond 6km (up to 10km)	From 6km onward, individual landscape elements blend into the view and are generally absorbed partly or fully by the receiving environment. Only broad landforms are discernible and atmospheric conditions alter the perception and clarity of objects. Landforms and local or regional landscape patterns become discernable and dominate the views at these distances. Typically, **not sensitive**.

Visual Exposure accounts for the limiting effect that increased distance has on visual impact, as well as factors that are influenced by weather, screening factors and diurnal light conditions. Visual exposure is rated using four increments of severity, each with their respective qualification and contribution to visual impact.

Table 12: Visual Exposure ratings

High Exposure	Moderate Exposure	Low Exposure	Insignificant Exposure
(Significant contribution to visual impact)	*(Moderate contribution to visual impact)*	*(Minimal contribution to visual impact)*	*(Negligible contribution to visual impact)*
0 – 100m	*100m – 800m*	*800m – 1km*	*1 km +*

d. Sensitivity of Visual Receptors

The Guideline for involving visual & aesthetic specialists in EIA processes defines receptors as individuals, groups or communities who are subject to the visual influence of a particular project (Oberholzer, 2005, p. 28). I.e.: Visual Receptors are those people who would be able to see the proposed development from a particular location. The locations of these receptors are variable but can be assumed to be those occupying local public roads, places of residence and work, and local places of recreation. The sensitivity of visual receptors on views that would include power lines is dependent upon:

i. The location and context of the viewpoint (viewers location relative to the proposed);
ii. The expectations, occupation or activity of the receptor;
iii. The importance of the view (which may be determined with respect to is popularity or numbers of people affected, its appearance in guidebooks, on tourist maps, and in the facilities provided for its enjoyment and references to it in literature or art).

The most sensitive receptors (High sensitivity) would include:

- Users of all outdoor recreational facilities including public rights of way, especially those whose intention or interest may be focused on the landscape;
- Communities where development results in changes in the landscape setting or valued views enjoyed by the community;
- Residents and residential properties with views affected by the development.
- Views from residences and tourist facilities / routes are typically more sensitive since views from these are considered to be frequent and of long duration.

Other less sensitive receptors (Moderate sensitivity) include:

- People engaged in outdoor sport or recreation (other than appreciation of the landscape, as in landscapes of acknowledged importance or value);
- People travelling through or past the affected landscape in cars, trains or other modes;
- People at their place of work.

The least sensitive receptors (Low sensitivity) are likely to be:

- People at their place of work, or engaged in similar activities, whose attention is focused on their work or activity and who therefore may be potentially less susceptible to changes in the view;
- Roads through urban and industrial areas also generally have low sensitivity.

Viewer sensitivity is different for different kinds of development and may change depending on the kind of landscape within which the viewer is located, as well as varying according to their personal associations with a landscape. Please note also that visual receptors in the receiving environment are not always static or concentrated. The study area is located within a developed area, and the mobility of potential viewers in the area distribute the locations of sensitive views widely throughout the study area, some of which are utilized throughout the day, and some of which will experience only peak viewing times. The following list of visual receptors lists only those who are affected by the proposed development:

Table 13: Sensitivity of Visual Receptors

Sensitivity of Visual Receptors	Visual Receptors
High	• *Views from local farmsteads (such as Fields of Gold farm), and other residences outside of the urban edge within the ZoVI;* • *Tourists visiting the area for the purposes of appreciating the landscape and/or the historical sense of place (i.e.; Freedom Hill Vineyards, guests at Olyfie Cottage, La Paris etc.);* • *Residents of the nearby residential areas (new Pearl Valley extensions and the Drakenstein staff housing) with views affected by the development.*
Moderate	• *People travelling on the R301 Scenic Route by car, bicycle and on foot;*
Low	• *People at their place of work within 800m of the subject site (i.e.; Vetscape Animal Hospital and Cape Fruit Processors employees).*

The sensitivity of visual receptors and views are dependent on the location and context of the viewpoint, the expectations and occupation or activity of the receptor or the importance of the view.

The sensitivity of Visual receptors in the study area varies but is generally higher for views from within LCA 2, and lower for views from within LCA 1.

e. Relative compatibility

The relative compatibility or congruence of the proposed project is measured against the qualities of the existing landscape (or the 'sense of place'), as well as the extent to which the proposed land usage is in line with the surrounding development and land usage (present and future).

Table 14: Relative Compatibility

Compatibility	Description
High:	Appropriate development will harmonize with the surrounding landscape either by strengthening or protecting the sense of place, or as a minimum not deviating from the existing land uses and overall character of the RE. In line with existing policy and future development plans.
Medium:	**Moderately appropriate development partially fits into the surroundings in terms of land use, sense of place and overall landscape character, but to a lesser degree and only with care.** Generally, the development will be noticeable. Some elements respond to context while others introduce new or different aspects. Substantively in line with exiting policy and future development plans, but may include departures, alternative rezoning or "pushing the envelope" development.
Low:	Inappropriate development is visually intrusive and/or discordant with the surrounding landscape, land use, sense of place etc. The development introduces entirely new or unprecedented elements into the landscape that do not fit in and have limited possibility for mitigation. Proposed development is at odds with exiting policy and future development plans.

- *The proposed development is generally in line with existing policy and future development plans for the area (high compatibility), being within the Urban edge, along a route earmarked for upgrade and part of an area designated as Urban infill (Aurecon, 2018, p. 111).*
- *However, in terms of the visual qualities of the receiving environment, the proposed development can only be described as "Moderately appropriate development partially fits into the surroundings in terms of land use, sense of place and overall landscape character, but to a lesser degree and only with care" (medium compatibility);*
- *Generally, the development will be noticeable because of the scale of the proposal, the visibility of the Mixed-Use component and the limited VAC of the receiving environment from parts of the scenic route within the Foreground and Immediate Foreground (medium compatibility);*
- *While some elements respond to context (e.g.; the landscape proposal and boundary treatment), other elements introduce new or different aspects (e.g.; medium density residential development within a predominantly rural agricultural landscape, Building heights of 3 storeys (max) along the R301 Scenic route the landscape proposal and boundary treatment etc.) (medium compatibility).*

*In summary, the proposed development has **medium compatibility** relative to the RE, with one aspect of **high compatibility**.*

5.5.4 Magnitude of potential Visual Impact

According to the Institute of Environmental Assessment & The Landscape Institute (1996), attempting to attach a precise numerical value to qualitative resources is rarely successful, and should not be used as a substitute for reasoned professional judgement. For this reason, a portion of the impact assessment is undertaken qualitatively, and a numerical or weighting system is avoided (Young, 2014).

The magnitude of impact is assessed through a synthesis of visual intrusion, visibility, visual exposure and viewer sensitivity criteria. The assessment of the magnitude of visual impact is undertaken on the Receiving environment as a whole, with focus on the +- 1km radius of the ZoVI.

Table 15: Magnitude of Visual Impact

High	Moderate	Low	Negligible
Total loss of or major alteration to key elements /features/characteristics of baseline.	Partial loss of or alteration to key elements/features/characteristics of the baseline.	Minor loss of or alteration to key elements/features/characteristics of the baseline.	Very minor loss or alteration to key elements/features/characteristics of the baseline.
Introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving landscape.	Introduction of elements that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape.	Introduction of elements that may not be un-characteristic when set within the attributes of the receiving landscape.	Introduction of elements that are not uncharacteristic with the surrounding landscape – approximating the 'no change' situation.
Result:	*Result:*	***Result:***	*Result:*
High scenic quality impacts would result.	Moderate scenic quality impacts would result	Low scenic quality impacts would result.	Negligible scenic quality impacts would result.

*The proposed development will result in **Moderate to Low** magnitude of visual impact overall, and a distinction is made here between the residential and the mixed use components.*

i. *The residential component will result in minor loss of or alteration to key elements/features/characteristics of the baseline and will introduce elements that may not be un-characteristic when set within the attributes of the receiving landscape (**Low magnitude of visual impact**).*

ii. *The mixed use component will result in partial loss of or alteration to key elements/features/characteristics of the baseline and will introduce elements that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape (**Moderate magnitude of visual impact**).*

5.6. Summary of Visual Analysis

The following is a summary of the findings of the Visual Analysis detailed in Section 5.3 – 5.5 of this report. The aspects of analysis, key information and the associated rating are provided here for ease of reference.

Visual Analysis results
Zone of Potential Visual Influence
The Zone of Potential Visual Influence of the proposed development is approximately **1 km** (i.e.: limited to the Immediate Foreground and Foreground Distance zones, and only the first 200m of the Middle ground distance zone).
Landscape Character & Visual Resource Sensitivity
The sensitivity of the Landscape Character is: ▪ **Low to Moderate sensitivity** for Landscape Character Area 1 ▪ **High sensitivity** for Landscape Character Area 2
Factors determining Magnitude of visual impact
Visual Intrusion
The proposed development will result in **Low to Moderate** visual intrusion overall. Specifically: ▪ The residential component is expected to result in **Low** visual intrusion individually; ▪ The Mixed-Use component is expected to result in **Moderate** visual intrusion individually.
Visibility
The overall visibility is **Moderate overall**. Specifically: ● Visibility of the residential component will be Moderate to Low; ● Visibility of the Mixed-Use component will be Moderate to High.
Visual Exposure
For this project, Visual Exposure will be: ● **High** for Immediate Foreground views only (up to 100m); ● **Moderate** Foreground views (up to 800m away); ● **Low** for views up to 1km away (the first 200m of the Middleground Distance zone) ● **Insignificant** for the remainder of the Middle ground zone and the Background zone (2km+).
Sensitivity of Visual Receptors
The sensitivity of Visual receptors in the study area varies but is generally higher for views from within LCA 2, and lower for views from within LCA 1. Refer to Table 13 for a detailed list.
Relative Compatibility
In summary, the proposed development has **Medium compatibility** relative to the RE, with one aspect of **High** compatibility. Refer to 5.5.3 e) for further detail.
Magnitude of Visual Impact
The proposed development will result in **Moderate to Low** magnitude of visual impact overall. Specifically: • The residential component is expected to result in Low magnitude of visual impact; • The mixed use component is expected to result in Moderate magnitude of visual impact.

5.7. Visual analysis and preliminary visual impact findings summary

The findings of the Visual Statement indicated that the proposed development should be expected to have a visual impact on the visual and scenic environment.

The following were key findings:

i. Being highly transformed from the natural state, and containing no visual resources of significance within the boundaries of the property, the site itself has low visual significance, although the cultural landscape context within which it is located has high significance.
ii. The property has a scenically dramatic valley setting which confers a sense of containment between the encircling mountains. It is highly transformed, but within its context it contributes passively to the rural agricultural character of the local area (mostly by virtue of it being undeveloped).
iii. The proposal is within the urban edge, in line with future planning policy for the area (being earmarked for "urban infill, and part of a development corridor), as well as being consistent in nature and scale to the existing and approved developments in the surrounding area.
iv. The receiving environment is a landscape in transition from a predominantly rural and agricultural environment to a mix of residential, commercial and industrial land uses, many of which draw on the landscape character and sense of place as their raison d'etre in a conceptual and lifestyle/sense-of-place sense.
v. The site falls within the 200m "area of control" of the R301 Wemmershoek road Scenic route, the character and sense of place of which evolves along the length of the route. Land use management is aimed at retaining the sense of place of and important vistas from scenic routes, one of which has been identified for this project (see Figure 23).
vi. Two Landscape Character areas were identified during the desktop study and fieldwork (the riverine corridor and the Berg River Valley to the west of Wemmershoek road – LCA1, and the foothills of the Wemmershoek Mountains – LCA2). The site falls within Landscape Character Area 1.
    a. Within Landscape Character Area 1, the quality of Visual Resource is Moderate, and the Value of the Visual Resource is Moderate to High.
    b. Within Landscape Character Area 2, the quality of Visual Resource is High, and the Value of the Visual Resource is High.
vii. The overall Landscape Character of the Receiving Environment is that of a large but fairly enclosed rural agricultural valley that is characterised by long views over a mosaic of landscapes (typical of the Cape Winelands) and dramatic scenery of the encircling mountains, arranged along a strong north-south linear pattern of settlement (informed by the alignment of the Berg River).
viii. The sense of place of the receiving environment varies, but follows that of the Landscape Character areas, and can be described as having a strong and unique sense of place overall, with moderate to High Landscape integrity overall. Key elements include:
    a. very gently undulating topography within a rural and agricultural valley context;
    b. Long, expansive and scenic views;
    c. Moderate in distinctiveness when experienced from within, highly distinctive when viewed from a distance;
    d. Contains some discordant elements, with some areas rapidly urbanizing.
ix. In terms of Visual Absorption Capacity, LCA 1 (the LCA within which the proposal is located) has a Moderate VAC overall. There are aspects of both Low VAC (i.e.; vegetation and buildings offer little

visual screening) and High VAC (i.e.; given that topography and terrain variability play a role in absorbing visible elements, and most views tested demonstrate low visual intrusion).

x. The sensitivity of the Landscape Character areas are:
    a. Low to Moderate for LCA 1;
    b. High for LCA 2.

xi. The viewshed indicates that the overall visibility of the proposed development amounts to a +-3km radius around the site, with notable exceptions (see bullet points on page 71 for further detail). Fieldwork and LoS testing reduces the footprint of the viewshed to areas within the +-1km ZoVI (refer to Section 5.5.1).

xii. The visibility analysis indicated that:
    a. The subject site is not visually prominent, and commuters travelling along the scenic route north towards Paarl benefit from significant screening by topography as well as existing vegetation and buildings.
    b. The R301 will experience sustained views of the proposed development over the open conservation area of Farm 888 for commuters travelling south towards Franschhoek. This view and the articulation of the northern property interface must receive special attention to mitigate negative visual impacts.

xiii. The proposed development will necessarily change the landscape character in terms of the broader agricultural pattern of the winelands region by introducing new and higher intensity land uses and built form where there were none. However, there is opportunity for the nature of proposed development to achieve visual congruence within the context.

xiv. Only approximately 3km of the R301 Scenic route will be affected.
    a. The affected portion of R301 scenic route is characterised by long views over the Immediate Foreground and Foreground Distance zones, which have a predominantly agricultural character and few visual obstructions/clutter/complexities.
    b. The proposed development will bring about changes to the perception of the scenic route (especially for commuters travelling south), which must be addressed by mitigation measures along the northern and eastern interfaces. This is both in spite of and as a result of the fact that the area is earmarked for Urban infill in terms of the SDF[17].
    c. The results of the Visual Analysis are as follows:
        i. The Zone of Potential Visual Influence is approximately 1km.
            1. Views of the proposed development's most visible features (building roof areas, structures taller than 1 floor, exterior lighting etc.) viewed from further than 500m away begin to lose significance in the visual field, and at 1km away or further, they become insignificant in the landscape.
            2. Views from which the proposed development would demonstrate dominance in the visual field are limited to those within the Immediate Foreground (within +- 100m of the subject site).
            3. This is a generally acceptable range, within which the viewer expects a development of this nature to be more visible.

[17] Please note that a Scenic Route does not necessarily lose its value or "reason for being" by virtue of falling within the urban edge. Many Scenic routes (within Cape Town Metro, specifically) are found within some of the most dense and intensively developed parts of the City in terms of urbanity. The "urban infill" designation does not cancel out the Scenic route, so to speak. In fact, it is arguably *even more important* for the development to respond sensitively to the visual sensitivities of the scenic route by virtue of the fact that the area will undergo so much change in the near future, and the scenic resource should be conserved in the face of mounting development pressure.

ii. The area around the subject site that will be affected is therefore limited, and the focus of the recommendations of this report and the future visual impact assessment should be predominantly on areas within the Immediate Foreground (1 – 100m) and Foreground (100m – 800m) distance zones.

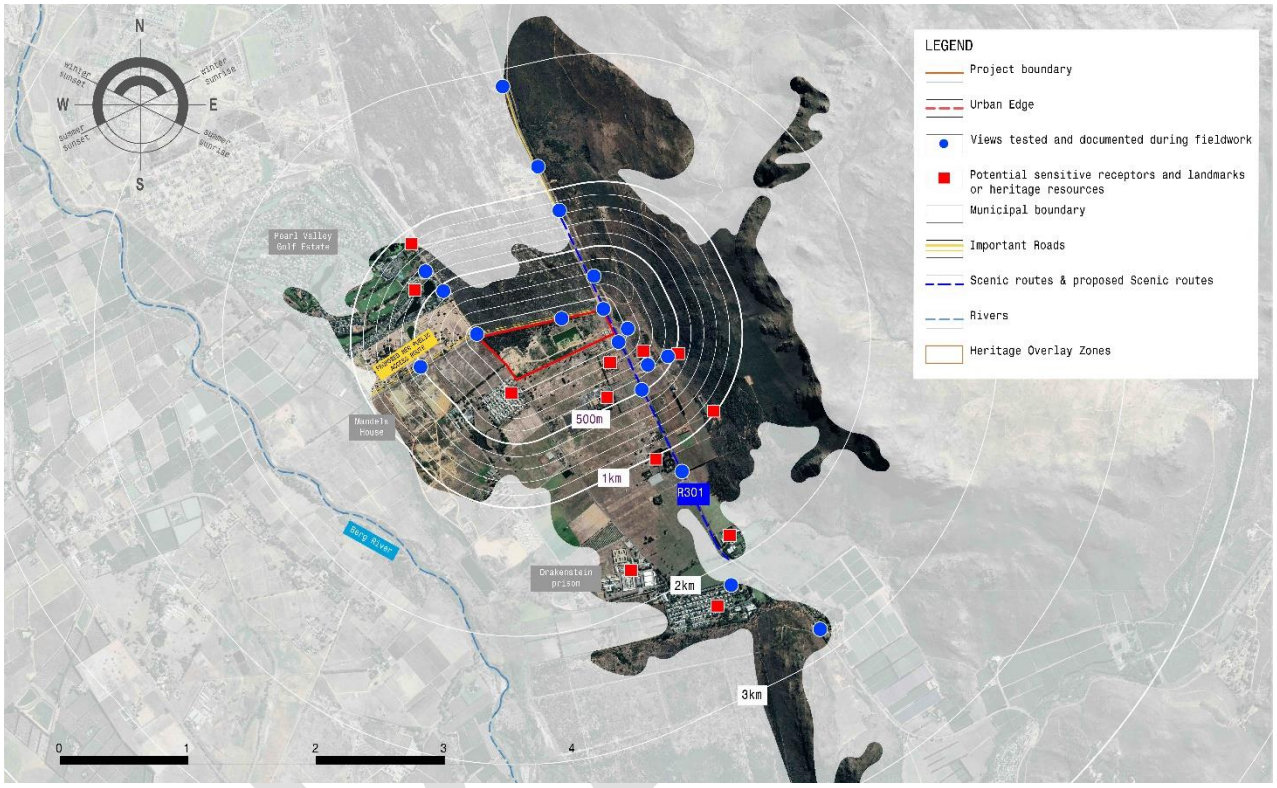

Figure 76: Graphic indicating the focus of the VIA after Viewshed analysis, to illustrate the limits of the area from which the proposed development will be visible within approximately 3km. This isolates the sensitive receptors and spatializes the extent of the receiving environment that can be reasonably expected to be affected by the development. (Smit & de Villiers, 2022)

xv. The proposed project will result in Low to Moderate visual intrusion overall, but there should be a distinction is made between the residential and the mixed use components:

a. The residential component is expected to result in Low visual intrusion (limited/imperceptible change resulting in a minor change to key views) because it will have a minimal effect on the visual quality of the landscape; is mostly compatible (contrasts minimally) with land use, settlement or enclosure patterns, and will mostly be 'absorbed' into the landscape.

b. The Mixed-Use component is expected to result in Moderate visual intrusion (moderate change in landscape characteristics over localized area resulting in a moderate change to key views). It is expected to have a moderate negative effect on the visual quality of the landscape (is only partially compatible (contrasts moderately) with land use, settlement or enclosure patterns, and will only be partially 'absorbed' into the landscape).

i. Please note that the visual intrusion finding described above (in item xv (b.)) is subject to change, depending on the final proposal at SDP level. These negative effects are mitigable, and should be addressed at SDP level. In the absence of further detail at this land use planning approval level, a conservative finding is presented in

this report. With appropriate mitigation measures in place, visual intrusion should reduce to Low.

ii. Alternative 1 Option B also reduces visual intrusion by setting the Mixed-use buildings back from the Scenic route, but will still fall within the "Moderate" rating category.

xvi. In terms of Visibility, the proposed development will result in Moderate visibility overall (please keep in mind that a high visibility rating does not necessarily signify a high visual impact).

a. Visibility of the residential component will be Moderate to Low (views will mostly be screened, and few viewers will be affected);

b. Visibility of the Mixed-Use component will be Moderate to High (views are mostly unobstructed, and many viewers will be affected).

i. Please note that this visibility rating may also diminish after SDP proposal and implementation of mitigation measures.

ii. Alternative 1 Option B will result in lower overall visibility than Option A because of the increased set back from the R301. It will reduce the visibility rating from Moderate to High, to Moderate.

xvii. The sensitivity of Visual receptors in the study area varies but is generally higher for views from within LCA 2, and lower for views from within LCA 1.

xviii. In terms of relative compatibility, the proposed development has medium compatibility relative to the RE, with one aspect of high compatibility.

a. It is a "Moderately appropriate development partially fits into the surroundings in terms of land use, sense of place and overall landscape character, but to a lesser degree and only with care".

b. Generally, the development will be noticeable because of the scale of the proposal, the visibility of the Mixed-Use component and the limited VAC of the receiving environment from parts of the scenic route (within the Foreground and Immediate Foreground).

c. While some elements respond to context (e.g.; the landscape proposal and boundary treatment), other elements introduce new or different aspects (e.g.; medium density residential development within a predominantly rural agricultural landscape, Building heights of 3 storeys (max) along the R301 Scenic route the landscape proposal and boundary treatment etc.)

xix. Finally, in terms of the expected Magnitude of Visual Impact (prior to Impact Assessment), the findings are again separated for the Mixed-use and the Residential components (with a finding of Moderate to Low magnitude of visual impact overall):

a. The residential component is expected to result in minor loss of or alteration to key elements/features/characteristics of the baseline, and will introduce elements that may not be un-characteristic when set within the attributes of the receiving landscape (Low magnitude of visual impact expected).

b. The Mixed use component will result in partial loss of or alteration to key elements/features/characteristics of the baseline and will introduce elements that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape (Moderate magnitude of visual impact expected).

Although the findings of the study would most likely return results of at least slightly lower measures of impact in the context of future planning for the area (especially for the Mixed-use component), Visual Impact Assessment can only technically be measured against the existing baseline receiving environment. Visual Impact Assessment measured against anything other than the extant status quo is based on reasoned opinion, but would be speculative at best.

This approach is informed by the pre-cautionary approach prescribed by the Heritage and Scenic Resource Inventory and Policy Framework for the Western Cape for development application that are located within "rural landscapes of scenic and cultural significance situated on the major urban edges and under increasing development pressure, e.g., Cape Winelands" (Western Cape Government, 2013, p. 57). Nevertheless, all of the findings above were put forward keeping in mind that the proposed development is located within an area that is a.) within the urban edge and b.) earmarked for Urban infill according to the municipal SDF.

6. VISUAL IMPACT ASSESSMENT

For the **High** visual impact predicted at the outset of the study, the issues that were *expected* included:

- Potential intrusion on protected landscapes or scenic resources;
- Noticeable change in visual character of the area;
- Establishes a new precedent for development in the area.

Key visual concerns were:

- Effect on **Cultural landscapes and scenic resources**, with specific reference to:
  - The effect on the rural sense of place of the Cape Winelands Cultural Landscape;
  - The effect on the visual amenity of the Scenic route;
  - Effect on local heritage resources and other protected resources.
- Effect on **sensitive receptors** with specific reference to:
  - Commuters on the R301 Scenic route.
  - Local sensitive receptors.

The following section assesses the significance of anticipated visual impacts of the proposed development on the receiving environment and visual receptors.

6.1. Impact Assessment Methodology

Visual Impact is described and assessed for significance according to the criteria outlined by the DEA&DP Guideline (Guideline for involving visual & aesthetic specialists in EIA processes, 2005, p. 28). The following list indicates the numerical scoring system that is used to determine impact:

Extent	Description	Score
Site-Specific	Extending only as far as the activity/ limited to the site	1
Local	Limited to the site and the immediate surrounding area i.e.: extending only as far as the local community or urban area (1-10km)	2
Regional	Affecting a larger metropolitan, Municipality or regional area; or covering an area that includes an entire geographic region or extends beyond one region into another	3
National	Affecting large parts of the country across national boundaries and may have national implications	4
International	Affecting areas across international boundaries	5

Duration	Description (the lifespan of the impact)	Score
Immediate	Less than 1 year	1
Short-term	0 – 5 years (e.g., duration of the construction phase)	2
Medium term	5 – 15 years (e.g., duration for screening vegetation to mature)	3
Long term	15 years or more (e.g., beyond the operational phase, but not permanent, or where time will mitigate the impact partially)	4
Permanent	No mitigation measures or natural process will reduce the impact. Where mitigation either by natural processes or by human intervention will not occur in such a way or in such time span that the impact can be considered transient. (i.e., where time will not mitigate the visual impact)	5

Intensity	Description	Score
None/zero	Where the aspect will have no impact on the environment and natural and/or social functions & processes remain unaltered.	0
Minor	Where the impact affects the environment in such a way that natural, cultural and social functions & processes are not affected.	1
Low	Where the impact affects the environment in such a way that natural, cultural and social functions & processes are slightly affected or altered.	2
Moderate	Where the affected environment is altered; but natural, cultural and social functions & processes continue - albeit in a modified way.	3
High	Where natural, cultural or social functions or processes are altered to the extent that these will temporarily cease / be severely altered.	4
Very High	Where natural, cultural or social functions or processes are altered to the extent that it will permanently and irrevocably cease.	5

Probability	Description (the likelihood of the impact actually occurring)	Score
None	Impact will not occur.	0
Improbable/unlikely	The likelihood of the impact materializing is low (as a result of design, historic experience or implementation of adequate mitigation measures), but there is a possibility that the impact will occur.	1
Probable	Distinct possibility the impact will occur.	3
Highly probable	It is most likely that the impact will occur.	4
Definite / unknown	the impact will occur regardless of the implementation of any prevention or corrective actions (OR the specialist does not know what the probability will be, based on too little information available).	5

Status of the impact	Description	Score
Negative effect	Negative effect at the cost of the environment, receptors or the visual amenity.	n/a
Positive effect	Results in a net positive effect that benefits the environment, receptors or the visual amenity.	n/a
Neutral effect on the environment	Neither positive nor negative.	n/a

To determine the significance of the Impact, the extent (E), duration (D) and intensity (I) scores are added up and multiplied by the probability of the impact to produce a significance weighting (x).

$$x = (E + D + I)P$$

Significance	Description (significance weighting)	Score
Negligible	The impact has no impact, or the impact is unknown	0
Low	The impact does not have a direct influence on the decision to develop the area.	0-15
Low to Medium	The impact has an influence, but the impact can be mitigated.	16-30
Medium	The impact could influence the decision to develop in the area unless it is effectively mitigated.	31-45
Medium to High	The impact will have a direct influence on the decision to develop but there are means of mitigating the impact although these may be difficult as well as expensive.	46-60
High	where the impact must have an influence on the decision to proceed to develop in the area.	60 +

6.2. Significance of the Visual Impact

Visual Impact is described and assessed for significance according to the criteria outlined by the DEA&DP Guideline (Guideline for involving visual & aesthetic specialists in EIA processes, 2005, p. 28). The construction and operation phases are included, as no decommissioning phase is anticipated for this project.

The No-go Alternative and the Preferred Alternative will be assessed. The Preferred Alternative's visual impacts are considered separately for the Residential Component and the Mixed-use component (Option A and Option B).

Table 16: Visual Impact Assessment for Effect on Cultural landscapes and scenic resources: Cape Winelands Cultural Landscape sense of place

Nature of Impact	• The following describes Indirect effects and Additive cumulative effects. • The effect on the rural sense of place of the Cape Winelands Cultural Landscape: ○ (Visible) Interruption to continuity of settlement patterns, landscape and agricultural patterns (windbreaks, dams, etc.). ○ Transformation of Land-Use from vacant/agriculture to mixed-use and residential – clearing of vegetation to replace with development.			
Stage	**Construction phase**	**Residential component**	**Mixed use component (Alternative 1, Option A)**	**Mixed use component (Alternative 1, Option B)**
Extent	1	1	1	1
Duration	4	5	5	5
Intensity	4	4	4	4
Probability	4	2	4	3
Status of the impact	Negative	Neutral (neither net positive nor net negative)	Negative	Negative (with the possibility of Positive impacts)
Significance	36 (**Medium:** *The impact could influence the decision to develop in the area unless it is effectively mitigated.*)	20 (**Low to Medium:** *The impact has an influence, but the impact can be mitigated.)*	40 (**Medium:** *The impact could influence the decision to develop in the area unless it is effectively mitigated.)*	30 (**Low to Medium:** *The impact has an influence, but the impact can be mitigated.)*
Summary:	**Medium** (Negative) visual impact: mitigation required.	**Low to Medium** (Neutral) visual impact: will result in change that is consistent with policy-supported evolution of the area.	**Medium** (Negative) visual impact: mitigation required.	**Low to Medium** (Negative) visual impact: mitigation required; and investigation of potential positive contributions to the environment, receptors or the visual amenity.

Table 17: Visual Impact Assessment for Effect on Cultural landscapes and scenic resources: visual amenity of the R301 Scenic route

Nature of Impact	• The following describes Direct effects and Indirect effects; as well as Additive, Synergistic and Time crowding cumulative effects. The Time crowding cumulative effects are particular to the Construction phase. • The effect on the visual amenity of the Scenic route:

	○ Changes to or interruption of characteristic long views over the agricultural landscape towards the encircling mountains; ○ Introduction of new built form, associated infrastructure and landscape features into the foreground of scenic views; ○ Loss of rural / agricultural interface conditions (special mention is made here of the noise barrier proposed to mitigate noise impact associated with Alternative 1 Option A).			
Stage	**Construction phase**	**Residential component**	**Mixed use component (Alternative 1, Option A)**	**Mixed use component (Alternative 1, Option B)**
Extent	2	2	2	2
Duration	4	3	5	4
Intensity	3	2	4	2
Probability	4	2	4	3
Status of the impact	Negative	Neutral (neither net positive nor net negative)	Negative	Negative (with the possibility of Positive impacts)
Significance	36 (**Medium:** *The impact could influence the decision to develop in the area unless it is effectively mitigated.)*	14 (**Low:** *The impact does not have a direct influence on the decision to develop the area.)*	44 (**Medium:** *The impact could influence the decision to develop in the area unless it is effectively mitigated.)*	24 (**Low to Medium:** *The impact has an influence, but the impact can be mitigated.)*
Summary:	**Medium** (Negative) visual impact: mitigation required.	**Low** (Neutral) visual impact: will result in change that is consistent with policy-supported evolution of the area.	**Medium** (Negative) visual impact: mitigation required.	**Low to Medium** (Negative) visual impact: mitigation required; and investigation of potential positive contributions to the environment, receptors or the visual amenity.

Table 18: Visual Impact Assessment for Effect on Cultural landscapes and scenic resources: Local heritage and other protected resources

Nature of Impact	• The following describes Direct effects and Indirect effects on the visual amenity of specific resources. • Effect on local heritage and other protected resources (e.g.; the Taal Monument, Mandela house, Hawequa Nature Reserve, Wemmershoek HOZ etc).			
Stage	**Construction phase**	**Residential component**	**Mixed use component (Alternative 1, Option A)**	**Mixed use component (Alternative 1, Option B)**
Extent	1	1	1	1
Duration	4	4	4	4
Intensity	1	1	1	1
Probability	1	1	1	1
Status of the impact	Negative	Negative	Negative	Negative
Significance	6 (**Low:** *The impact does not have a direct influence on the*	6 (**Low:** *The impact does not have a direct*	6 (**Low:** *The impact does not have a direct*	6 (**Low:** *The impact does not have a direct*

	decision to develop the area.)	*influence on the decision to develop the area.*)	*influence on the decision to develop the area.*)	*influence on the decision to develop the area.*)
Summary:	**Low** (Negative) visual impact: no mitigation required.	**Low** (Negative) visual impact: no mitigation required.	**Low** (Negative) visual impact: no mitigation required.	**Low** (Negative) visual impact: no mitigation required.

Table 19: Visual Impact Assessment for Effect on sensitive receptors: Commuters on the R301 Scenic route

Nature of Impact	• The following describes Direct effects on visual receptors. • The effect on sensitive viewers moving along the R301 Scenic route in both directions. • This includes assessment of the proposal in terms of the R301 and the Schuurmansfontein Road interfaces which are visible from the scenic route over the open fynbos landscape of Farm 888.			
Stage	**Construction phase**	**Residential component**	**Mixed use component (Alternative 1, Option A)**	**Mixed use component (Alternative 1, Option B)**
Extent	2	2	2	2
Duration	4	4	5	3
Intensity	3	2	4	2
Probability	4	3	4	4
Status of the impact	Negative	Negative (with the possibility of Positive impacts)	Negative	Negative (with the possibility of Positive impacts)
Significance	36 (**Medium:** *The impact could influence the decision to develop in the area unless it is effectively mitigated.)*	24 (**Low to Medium:** *The impact has an influence, but the impact can be mitigated.)*	44 (**Medium:** *The impact could influence the decision to develop in the area unless it is effectively mitigated.)*	28 (**Low to Medium:** *The impact has an influence, but the impact can be mitigated.)*
Summary:	**Medium** (Negative) visual impact: mitigation required.	**Low to Medium** (Negative) visual impact: mitigation required; and investigation of potential positive contributions to the environment, receptors or the visual amenity.	**Medium** (Negative) visual impact: mitigation required.	**Low to Medium** (Negative) visual impact: mitigation required; and investigation of potential positive contributions to the environment, receptors or the visual amenity.

Table 20: Visual Impact Assessment for Effect on sensitive receptors: Local sensitive receptors

Nature of Impact	• The following describes Direct effects on visual receptors; as well as Additive, Synergistic and Time crowding cumulative effects. The Time crowding cumulative effects are particular to the Construction phase. • Potential impacts for local sensitive receptors (within 800m) include: o Visual intrusion and overall visibility of development, o Increased traffic on the R301, o Reduction of rural 'sense of place' for locals and other sensitive receptors, o Lighting impacts at night, o And the appropriateness of the Schuurmansfontein road interface with the public realm and future proposed public route, as experienced by receptors.

	○ (Construction phase impacts include: the generation of dust (airborne, and as mud tracks on adjacent roads); the visibility of excavations and partially constructed buildings prior to finishing; the visibility of plant, machinery site offices and construction signage, the removal of large areas of existing vegetation etc.).			
Stage	**Construction phase**	**Residential component**	**Mixed use component (Alternative 1, Option A)**	**Mixed use component (Alternative 1, Option B)**
Extent	2	2	2	2
Duration	4	3	4	3
Intensity	3	2	3	2
Probability	5	4	4	4
Status of the impact	Negative	Negative	Negative	Negative
Significance	45 (**Medium:** *The impact could influence the decision to develop in the area unless it is effectively mitigated.)*	28 (**Low to Medium:** *The impact has an influence, but the impact can be mitigated.)*	36 (**Medium:** *The impact could influence the decision to develop in the area unless it is effectively mitigated.)*	28 (**Low to Medium:** *The impact has an influence, but the impact can be mitigated.)*
Summary:	**Medium** (Negative) visual impact: mitigation required.	**Low to Medium** (Neutral) visual impact: mitigation required.	**Medium** (Negative) visual impact: mitigation required.	**Low to Medium** (Neutral) visual impact: mitigation required.

6.2.1 Visual Impact findings for the No development option

The No-go alternative indicates the predicted visual impact of the proposed project should it not be built, and the property remain undeveloped. The following summarises the significance score for the No-development option:

Table 21: Visual Impact Assessment for the No-go alternative.

Nature of Impact	No change to status quo. Assumes no development on the site and the site remains as is. No additional effects on baseline environment resulting from development.
Stage	**Baseline/status quo maintained**
Extent	1
Duration	5
Intensity	2
Probability	1
Status of the impact	Neutral
Significance	8 (***Low:*** *The impact does not have a direct influence on the decision to develop the area).*
Summary:	**Low** (Neutral) visual impact: No development

The overall visual impact significance score for the No-development alternative is Low (8) for Neutral visual impacts expected if the proposed development does not go ahead, given that the existing disturbance to the site will either remain unaltered, or continue.

6.2.2 Cumulative visual impacts

Cumulative visual impacts are the result of compounded visual effects and changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments. These other developments can be associated with or separate to the proposed development under assessment and can also refer to actions that occurred in the past or are likely to occur in the foreseeable future.

Cumulative effects may be positive or negative, and they may influence the way that a landscape is experienced. Where they result in benefits or a series of positive impacts, they may be considered to form part of the mitigation measures.

i. Additive and Synergistic Cumulative effects. The contribution of this development to the increase in developed land and urbanity in the area is considered a cumulative impact, which is however supported by local and regional planning policy.
   a. The proposed development will result in an overall increase in developed land and urbanity in this area.
   b. From elevated views, the proposed development will add more generally to the compounded visual effect of densification and infill development in the area (albeit inside the urban edge).
   c. It will result in a more infilled and defined urban edge and a starker transition between the townscape and the rural agricultural landscape as experienced from the R301 Scenic route.

ii. The visual impact of the proposed development when considered alongside the other planned developments in the area is also considered a Time- and Space crowding cumulative effect in terms of its contribution to increased traffic volumes and light pollution within the Berg River valley at night.

iii. The construction phase visual impact will have an overall negative effect, and it is most likely to be a distributed effect over time as the different phases are built, but also constitutes a Time-crowding cumulative effect. The negative overall effect is due to the level of unmitigated change that construction phase activities will bring about, which are most often noticeable and intensive considering the scale of the proposed development, especially to local residents. The potential visual impacts of construction plant and machinery (such as cranes and large trucks) as well as construction phase activities (bulk earthworks, excavations and concrete frame constructions before façade finishes) are generally high.

iv. During the upgrade of the R301, the Avec La Terre construction phase effects described as negative visual impacts will be compounded alongside those of the road upgrade construction activities (an Additive and Synergistic effect, as well as a Time- and Space crowding cumulative effect).

6.3. Impact Assessment summary

Table 22: Comparative summary of Visual Impact Significance and actions required

Stage/Alternative	Construction phase	Residential component	Mixed use component (Alternative 1, Option A)	Mixed use component (Alternative 1, Option B)
Effect on Cultural landscapes and scenic resources: Cape Winelands Cultural Landscape sense of place				
Significance and actions required	**Medium** (36) *Negative*	**Low to Medium** (20) *Neutral*	**Medium** (40) *Negative*	**Low to Medium** (30) *Negative (with possibility of Positive)*
	- Mitigation required.	*- Will result in Proposed change is consistent with policy-supported evolution of the area.* *- The proposal should nevertheless respond to sensitivities (can be mitigated).*	*- Mitigation required;*	*- Mitigation required;* *- Investigation of potential positive contributions required.*
Effect on Cultural landscapes and scenic resources: Visual amenity of the R301 Scenic route				
Significance and actions required	**Medium** (36) *Negative*	**Low** (14) *Neutral*	**Medium** (44) *Negative*	**Low to Medium** (24) *Negative (with possibility of Positive)*
	- Mitigation required.	*(As above)*	*- Mitigation required;*	*- Mitigation required;* *- Investigation of potential positive contributions required.*
Effect on Cultural landscapes and scenic resources: Local heritage and other protected resources				
Significance and actions required	**Low** (6) *Negative*	**Low** (6) *Negative*	**Low** (6) *Negative*	**Low** (6) *Negative*
	- No mitigation required.	*- No mitigation required.*	*- No mitigation required.*	*- No mitigation required.*
Effect on sensitive receptors: Commuters on the R301 Scenic route				
Significance and actions required	**Medium** (36) *Negative*	**Low to Medium** (24) *Negative (with possibility of Positive)*	**Medium** (44) *Negative*	**Low to Medium** (28) *Negative (with possibility of Positive)*
	- Mitigation required.	*- Mitigation required;* *- Investigation of potential positive contributions required.*	*- Mitigation required;*	*- Mitigation required;* *- Investigation of potential positive contributions required.*
Effect on sensitive receptors: Local sensitive receptors				
Significance and actions required	**Medium** (45) *Negative*	**Low to Medium** (28) *Negative*	**Medium** (36) *Negative*	**Low to Medium** (28) *Negative*
	- Mitigation required.	*- Mitigation required.*	*- Mitigation required.*	*- Mitigation required.*

7. RECOMMENDATIONS AND MITIGATION MEASURES

7.1. Parameters and Principles for Mitigation

In the recommendation of mitigation measure, Filia Visual applies three[18] key parameters:

- Feasibility: Mitigation measures should be economically feasible within the scope and nature of the proposed project;
- Effectiveness: How long will it take to implement and what provision is made for ongoing management and maintenance;
- Acceptability: Is the recommendation an appropriate fit within the framework of the existing landscape and land use policies.

In response to the parameters above, mitigation measures should – in principle – take a site-specific approach and be designed to suit the existing landscape character and needs of the locality and/or proposed project. They should respect and build upon landscape/townscape distinctiveness.

Additionally, it must be noted that some mitigation measures such as rehabilitation and screen planting are not immediately effective and take time to have an effect. It should however be kept in mind that even if the proposed development includes visual screening & offsets designed to reduce visual impact, the structures will always remain at least partly visible from some views. The significance ratings only deal with extent, duration, intensity and probability, and therefore the impact after mitigation may not always be significantly less than before mitigation according to the $x=(E+D+I)\ P$ calculation, despite the visual impact having been in fact addressed and reduced.

For this reason, the recommendations and mitigation measures must be consulted and applied whether or not they are shown to reduce the significance scores calculated during visual impact assessment. All necessary mitigation measures must be included in the Final Environmental Management Programme and any further planning and design documentation that follows this phase of approvals (e.g.: SDP and Building Plan).

7.2. Preliminary input provided during the Pre-application planning stage

Please refer to Annexure C for a summary of the preliminary input that was provided during the Pre-application planning stage, in September 2022. This input was provided in order to fulfil the requirements of specialist involvement at the Pre-application planning stage.

The professional design/planning team's response to these specialist inputs should be counted as mitigation measures if successfully implemented during the Pre-application planning stage. In summary, these included:

i. Cognizance of key issues that the VIA would focus on during impact assessment;
ii. The consideration of focused responses to visual sensitivity in terms of the following aspects of the proposed development:
    a. Contextual fit (i.e.; boundary treatment on the R301 and Schuurmansfontein Road verges; the preservation of open westward views over the agricultural landscape from the R301, the character of the commercial component).

[18] Adapted from Young (Draft Visual Impact Assessment Report, 2014, p. 33)

b. Increaed embeddedness (i.e.; increasing Visual Absorption Capacity and addressing visual intrusion through appropriate landscape design and architectural guidelines).
c. The possibility of contributing positively to the identified urban development corridor (with regards to: appropriate boundary treatment and landscaping, approach to lighting design at night, limitations on and design of signage, sense of fit in terms of architectural style etc.).
d. The management of Construction phase impacts through the Architectural and/or Development guidelines and EMPr.
e. The timing, specification and implementation of landscaping and irrigation, which will play a key role in mitigation.

7.3. Statement of Limitation for Impact Assessment within this report

This VIA is only able to anticipate potential visual impact at the level of the Rezoning approval, using the information at hand (i.e.; the details contained in the Guidelines and their supporting plans and documentation). This section aims to ensure that a positive and constructive response to visual sensitivities is maintained throughout the design and planning process – now, and at the level of Site Development Plan approvals further along the line.

One of the key aims of this report is therefore to determine whether the development application may be supported at the level of Land Use Planning (rezoning and subdivision), from a visual impact point of view. Another is to determine what mitigation measures may be deferred to the SDP approval stage.

The following recommendations and mitigation measures must be incorporated into the current proposal by the professional design/planning team, and/or included in the Conditions of Approval for Rezoning and Subdivision, depending on the item, at the discretion of the relevant Drakenstein Municipality officials. The application of (and the monitoring of compliance with) mitigation measures specific to future phases of the statutory application processes[19].

7.3.1 Additional note on risk in terms of the approvals process

The reader should also note that this VIA has been concluded in advance of receiving comment from the Drakenstein Municipality on the findings of the Visual Statement (which was submitted along with the Land Use application for Rezoning and subdivision). It should be noted that the mitigation measures that arise from the findings of the VIA during the EIA process may still be required and enforceable.

This is somewhat of a risk to the approvals process for the Avec La Terre project, given that the proposal at rezoning approval stage has not yet been subject to scrutiny and revision as part of the public participation process associated with the EIA.

7.4. Management actions and Mitigation measures

In addition to being included in the Final Environmental Management Programme, and future SDP submissions (where relevant), the Competent Authority (CA) is advised to include the following mitigation measures as they deem fit into the conditions of approval.

[19] For instance, very little information about the Construction phase is available at the time of the writing of this VIA. General mitigation will be recommended, but ensuring that the mitigation measures and management actions are implemented will necessarily be deferred to future statutory processes.

The client and professional design/planning team are responsible for incorporating mitigation measures into the technical documentation for construction and all further planning approval purposes. The client is required to demonstrate that all mitigation measures have been considered and either included or omitted (accompanied by a motivation as to why the omission is acceptable) in the further design, construction phase and operational documentation, including all future applications.

Please note that the following section is divided into three parts: Mitigation measures relevant to the overall proposal, mitigation measures specific to the Residential component, and those specific to the Mixed-use component. Each part differentiates between management actions and mitigation measures that must be addressed in future statutory processes (i.e.; at site development plan (SDP) Planning approval level), and those to be incorporated into the Development Guidelines at this planning approvals level.

7.4.1 Mitigation Measures for the overall proposal

The CA is advised to adopt the following as conditions of approval at the rezoning approval stage.

a) The need for Development Guidelines for the overall development

The Draft Architectural Design Guidelines focus on the Design Principles and Planning Rules of the estate only as these apply to individual erven and homeowners. There are currently no guidelines that address the responsibility of the developer within the communal areas of both the Residential and the Mixed-use portions. The current project documentation does not assign deliverables and measurable timeframes to the implementation of aspects such as the soft and hard landscaping or particulars regarding the planting of trees (which play a significant role in visual impact mitigation).

The content of Section 7.4.2 (a-e)[20] must therefore either be included in the Architectural Guidelines, or issued as separate Development Guidelines for the overall development (including both the Residential and Mixed-use components). This information must be included in the HOA's suite of documents that govern the development of the overall estate, before rezoning approval should be granted.

The CA is therefore advised to request this documentation as a condition of approval at the rezoning approval stage.

7.4.2 Mitigation Measures specific to the Residential component

After rezoning approval is obtained for the Residential portion of the development, it will not be subject to further SDP approval. Individual homeowners will submit their Building Plans to the Avec La Terre Home Owner's Association (HOA) to be reviewed by the Avec la Terre Design Review Committee (DRC).

i. The inclusion of a controlling Professional Landscape Architect on the DRC is strongly supported, and would have been a recommended condition of approval, should this not have been the case.

The CA is advised to adopt the following as conditions of approval at the rezoning approval stage.

[20] As a minimum requirement, but should obviously also include other typical contents and framework of Development Guidelines.

a) Guidelines addressing General and outdoor lighting within and around the Residential estate

Light pollution should be kept to an absolute minimum throughout the development, and exterior lighting must be limited to areas where this is necessary for utility, safety and security. The goal is to keep the ambient light levels within the immediate receiving environment low. Exterior lighting (and therefore any visible light sources) must be carefully directed away from sensitive receptors identified in this report (Refer to section 5.4.3 d.).

In principle, lighting in the development should:

- ✓ *Only be on when needed for active use (barring the necessary safety and security lighting);*
- ✓ *Only light the area that needs it;*
- ✓ *Be no brighter than necessary;*
- ✓ *Minimize blue light emissions;*
- ✓ *Be fully shielded (pointing downward).*

The negative impacts of night lighting should be mitigated in the following ways:

i. *Install light fixtures that provide precisely directed illumination to reduce light "spillage" beyond the immediate surrounds of the light source, including interior or undercover lighting sources;*
ii. *Façade lighting to be limited to accents and features, avoiding large parts of the exterior of buildings to be lit from any side. This is especially important to control illumination of any facades visible from the scenic route.*
iii. *Pedestrian pathways, parking areas and vehicular roads should be lit with low level 'bollard' type lights or post lights (maximum 3m tall) that are fully shielded (pointing downward). Fully shielded fixtures minimize skyglow, glare and light trespass.*
iv. *No "always-on" security flood lights, peripheral/boundary lighting or uncovered luminaires of any kind should be visible from public roads, the surrounding residential areas or the Scenic route. Security lighting should be activated on movement as far as possible.*
v. *Light emitting diodes ("LEDs") are appropriate for outdoor lighting. If it is necessary to use white light, low-color-temperature LED lighting should be used on the condition that the brightness can be dimmed when they aren't needed for active use (for example: to light empty parking lots etc.)*
vi. *Because blue light brightens the night sky more than any other color of light* (International Dark Sky Association, 2021)*, it's important to minimize the amount emitted. The proposed development should use warm light sources (lower color temperatures) for outdoor lighting: a maximum of 3000 Kelvins is recommended.*

b) Guidelines addressing Fencing and Boundary wall treatment for the Residential estate

The fencing guidelines specified in the Landscape Guideline document is acceptable for the development, but these guidelines do not translate to an overall (and enforceable) Development Guideline document, and it is not clear if the entirety of the development will be fenced in this manner, of if there are portions which will receive different treatment.

i. *A fencing and boundary treatment plan must be provided as key additional information to be included in the suite of official project documentation.*

The Development Guidelines must expand on their existing fencing guidelines, including more explicit inclusions and exclusions in terms of appropriate fencing, for instance:

i. *Boundary walls, fencing and gateways should be in keeping generally with a visually neutral architectural character, designed simply, and remain visually permeable as far as possible.*
ii. *High, solid or palisade-type walling, and any form of precast panel type fencing is inappropriate and must not be allowed.*
iii. *Low walling where used should be in line with the general materials and finishes recommendations of the estate.*
iv. *Where security fencing is required, it should be screened with trees or hedging.*
v. *Screening vegetation along boundaries must be maintained and replaced, so as not to become the source of visual impact, or undermine the efficacy of the recommended mitigation measures.*

c) Tree specification and irrigation design within the Residential estate

The key to the successfully establishment of trees for screening (at least in the Western Cape) is not their size or maturity at installation, rather it is the provision of ideal growing conditions from the point of installation onward – with specific reference to soil conditioning and irrigation supply.

i. *The project team must demonstrate that the irrigation of the proposed trees (their irrigation source, storage and irrigation system design), especially those for screening along the Schuurmansfontein road, is sufficient during and after the establishment period to ensure their successful establishment and survival.*
ii. *The development guidelines must provide a clause that makes provision for the conditions under which a tree that performs a screening role will be replaced.*
iii. *The Development Guidelines must clarify that it is the responsibility of the overall developer to plant the trees in the common areas, and the following details are recommended (to be included in the Landscape Architect's submission:*
    - *Soil moisture content in the root ball must be consistent, i.e.; trees may not be allowed to dry out during the Western Cape summer months or become waterlogged during the wet winter months.*
    - *Irrigation design must provide dedicated lines for the irrigation of trees.*
    - *Dedicated lines must be programmed to supply water to trees on their own regime.*
    - *Slower, soaking watering regimes should be preference over large quantities over short periods of time.*
    - *The recommended guideline for watering trees is a minimum of 40 – 50L per week.*
    - *The most important aspect of the watering regime is consistency. Once planted, the irrigation of the trees cannot be allowed to skip a +- 7-day cycle.*
    - *The design team (Landscape architect and/or engineer) must provide the CA with sufficient detail to demonstrate that the irrigation requirements for trees will be met through rainwater harvesting, borehole supply or similar; and storage capacity must be indicated on the plans.*

- *Soil samples must be taken prior to the specification and design of the final irrigation system and the tree holes to ensure that soil conditioning is responsive to site-specific conditions.*
- *If the soil is at all sandy, it is strongly recommended that Zeoplant moisture retention granules or a similar product is specified to reduce fluctuations in the soil moisture content of the root balls of trees.*
- *The root balls of trees must also receive adequate aeration, and compaction of root zones to be avoided wherever possible.*

These recommendations are themselves mitigation measures given the crucial role that provision of water plays in the successful establishment and ongoing maintenance of trees and screening planting.

d) Timing of landscaping installation for the Residential estate

It should be noted that some mitigation measures (such as screen planting) are not immediately functional, and take time to have an effect. The following guidelines must be incorporated into the Landscape and Development Guidelines to ensure that the installation of trees is undertaken at the earliest possible opportunity, allowing as much time as possible to grow to maturity and begin fulfilling their screening and visual absorption capacity functions within the proposed development.

i. *All soft landscaping along all public road verges must be implemented along with the first phase of the development.*
ii. *All trees within the residential component that fulfil a screening function along the entire length of Schuurmansfontein road (as well as the associated landscaping and fencing) must be planted and irrigated as part of Phase 1, and as early in the construction process as possible.*
iii. *All trees within the common areas (indicated on the Landscape Plan as "Large Open Space trees", "Street and Commercial area trees", "Boulevard street trees" and "Small evergreen trees") must be planted and irrigated along with (or shortly after) the construction of the roads within their associated phases, and as early in the construction process as possible.*

The implication of the above recommendations is that the irrigation design, supply and storage must be developed and functional to the point that it will be able to supply sufficient irrigation water to the newly installed trees at the time of their installation during, and according to the guidelines outlined in item c) *Tree specification and irrigation* design above.

e) Construction phase(s) of the Residential estate

Limited information detailing the specifics of the construction phase for the proposed residential development is available. The applicant/developer/landowner must put formal and enforceable measures in place to ensure that the visual impact of construction activities is limited and reduced wherever possible. Ideally, this would form part of the Environmental Management Plan/Programme (EMP), but the following guidelines should also feature in the Development Guidelines. The following recommendations are made to guide the drafting of these guidelines in terms of managing visual impact during the construction phase.

The following mitigation measures are recommended:

i. *Dust management, waste management, the placement of screens and hoarding, as well as the location and management of access points to the site must be proactively managed to reduce visual clutter and limit visual impacts associated with construction activity before, during and after each phase of the construction process (demolition, excavation, project execution, close-out etc., establishment, etc.)*
ii. *All site operatives to receive training in awareness of the issues of fires, litter, and contaminants. No fires are to be allowed on site; no litter and no contaminants to be allowed to enter the surrounding environment by any means. These substances may include amongst other things, diesel, curing compounds, shutter oil and cement. Utilization of such substances should be controlled on site, and guidelines should be included in the Environmental Management Plan.*
iii. *For the duration of the civils contracts, the contract time should be kept to the minimum, road junctions should have good sightlines, traffic control measures, signage, and dust control measures in place. This is especially important at the access points to the development along Schuurmansfontein road, where poor management of dust and mud will have a negative impact on the visual amenity of the scenic route, and the future pedestrian connection (which may come online during the construction of any one of the phases).*
iv. *Fencing/hoarding and signage must adhere to local policy relating to signage and ensure that no views from scenic routes are negatively impacted by large or numerous construction signage.*
v. *Dust and debris control must be implemented to minimize the impacts on the local roads, residents and neighbouring properties. Where necessary, access routes and the site itself should have an effective dust suppression management programme applied, such as the use of non-polluting chemicals that will retain moisture in the exposed site surfaces.*
vi. *Site offices, storage and lay down areas, loading areas and similar temporary infrastructure should be situated centrally, and avoid any areas visible from the Scenic route or within 100m of the existing public roads or neighbouring properties. Appropriate fencing must be erected along the Scenic route and Schuurmansfontein road to screen the construction site from commuters on the R301. The visual screens must be maintained so that they do not become the source of the visual impact.*

All Construction phase impacts must be managed in accordance with an approved Environmental Management Plan.

7.4.3 Mitigation Measures specific to the Mixed-use component

After rezoning approval is obtained for the Mixed-use portion of the development, it will be subject to further SDP approval. An SDP application will therefore be submitted to the Drakenstein Municipality prior to the submission of building plans.

i. The proposed project documentation does not at present include Architectural Design Guidelines specific to the Mixed-use component; nor are there overall Development Guidelines that speak to the responsibility of the developer within the communal areas of the Mixed-use component.

ii. Additionally, it should be noted that it is not possible for the visual impact of the Mixed-Use component to be assessed with complete confidence and accuracy at this time, given that the final SDP proposal has not yet been developed or tabled for assessment. Sufficient information has however been submitted to enable the VIA to assess anticipated visual impacts in principle. Please refer to Section 7.4.3 a.) for mitigation measures addressing this issue.

The CA is therefore advised to adopt the following as conditions of approval at the rezoning approval stage.

a) Further visual specialist input required at SDP stage

The Municipality is advised to adopt the following as conditions of approval at this rezoning approval stage:

i. The SDP application for the Mixed-use component must be accompanied by a Visual Statement to be prepared by an independent visual specialist.

ii. The Visual Statement must comment specifically on the appropriateness and completeness of the Architectural Guidelines to be submitted at SDP stage (see Section 7.4.3.b.) below).

iii. The Visual Statement must include:

- *A reasoned opinion as to whether the final SDP development proposal for the Mixed-use component would result in the same visual impact results determined during this VIA process, or not.*
- *It must provide a statement as to the acceptability of the newly determined visual impacts, in reference to the findings of this VIA process (i.e. the effects on visual resources and sensitive receptors identified therein).*
- *It must include updated simulations to match those prepared for this VIA, providing comparative visualizations of the proposed development.*

b) Architectural Guidelines to be submitted at SDP stage

The Municipality is advised to adopt the following as conditions of approval at this rezoning approval stage for the Mixed-use component.

iv. The SDP application must be accompanied by Development/Architectural Guidelines[21] that address the management of visual impact associated with the Mixed-use component specifically, according to the key findings and concerns of this VIA.

v. These include guidelines for:

- ***General and outdoor lighting within and around the Mixed-use component** (see detailed notes in Section 7.4.2 a.) above);*
- ***Fencing and Boundary wall treatment for the Mixed-use component** (see detailed notes in Section 7.4.1 b.) above);*
- ***Tree specification and irrigation design within the Mixed-use component** (see detailed notes in Section 7.4.1 c.) above);*

[21] These may of course also take the form of standard Architectural Design Guidelines, as long as they are specific to the Mixed-Use component.

- ***Timing of landscaping installation within and around the Mixed-use component*** *that ensures the earliest establishment of trees (and their associated irrigation source and systems) possible (see detailed notes in Section 7.4.1 d.) above);;*
- ***Construction phase*** *(see detailed notes in Section 7.4.1 e.) above);*

vi. *Additional guidelines must be provided in the Mixed-use component's Development/Architectural Guidelines for the following:*

- ***Parking lots:*** *the Mixed-use component's SDP Development/Architectural Guidelines must include guidelines on how to manage the visual impact of parking lots.*
  - *The final SDP Landscape Plan must show appropriate use of screening trees and planting on the verges alongside parking lots.*
  - *Numerous shade trees must be specified to avoid large, unshaded expanses of parking areas.*
  - *The use of tar should be avoided in favour of pavers, and be aligned with the overall materiality guidelines of the development.*
  - *The headlights of parked and moving cars should be screened from the Scenic route either by layout design or by means of low retaining walls and hedges/landscaping.*
  - *The SDP must demonstrate that the boundary treatment of parking lots is responsive to context.*
  - *Trees in the parking lots will experience far more extreme growing conditions than those on the road verges and cannot be expected to offer significant screening functionality. Nevertheless, they must receive the same treatment as that of the trees on road verges and within the development, and the Landscape Architect must ensure that trees in parking lots are given adequate space, irrigation, aeration and soil conditioning to ensure their survival and successful establishment.*
- ***Outdoor signage:*** *the Mixed-use component's SDP Development/Architectural Guidelines must include guidelines on how to manage the visual impact of proposed signage within and around the Mixed-use component.*
  - *In general, the proposed development must comply with the Drakenstein Advertising and Signage Policy in all respects. Enforcement of the local Policy guidelines are especially important to reduce the impact of possibly inappropriate signage along the Scenic drive.*
  - *Outdoor advertising signs and other signage must not impact negatively on visual corridors and the scenic route. The design team must demonstrate at the earliest opportunity that the signage for the mixed-use component has been designed in such a way that the sensitivities of the receiving environment have (a) been taken into consideration, and (b) that design responses have been included in the design proposal in a positive way.*
    - *The SDP application should therefore not be approved without input from the appropriate CA that the signage proposal is acceptable in terms of the policy.*
  - *No signs may be installed higher than the average building height, or the overall height restriction for the development, whichever is the lesser.*

- *No outdoor advertising and (specifically) illuminated signage may be installed on building facades or as freestanding signage perpendicular to the Scenic route.*
- *Locality-based signage on building facades along (and visible from) the R301 should be allowed but must be sensitively placed and sized, and compliant with the By-Law in every respect.*

8. CONCLUSION AND VISUAL IMPACT STATEMENT

This VIA is drafted to ensure that the visual & aesthetic consequences of the proposed project are understood and adequately considered in the environmental and land use planning process.

8.1. Visual Impact statement and Recommendation

At the outset of this study, the DEA&DP Guidelines were used to predict High visual impact based on the classification of a Category 4 development within an area (or route) of Medium to High scenic, cultural, historical significance.

The subsequent findings of this study have determined that the visual impact anticipated overall should be **Moderate** overall (**Medium** significance) for the proposed Avec La Terre development, without mitigation.

The table below provides a comparison between the categories listed as expected issues at the *outset* of the study and the subsequent findings based on this VIA.

Table 23: Comparison between expected visual impact and VIA outcome (overall)

Categories of Issues		
High Visual impact	**Moderate Visual impact**	**Minimal (Low) Visual impact**
This is the visual impact that was expected at the *outset* of the study.	This is the visual impact that the findings of the VIA indicate should be expected.	
• Potential intrusion on protected landscapes or scenic resources; • Noticeable change in visual character of the area; • Establishes a new precedent for development in the area.	• **Potentially some effect on protected landscapes or scenic resources;** • **Some change in the visual character of the area;** • **Introduces new development or adds to existing development in the area.**	• Potentially low level of intrusion on landscapes or scenic resources; • Limited change in the visual character of the area; • Low-key development, similar in nature to existing development.

No visual impacts were found to be in the Medium to High or High category of significance.

i. **Construction Phase** impacts were found to be Medium (*Negative*) generally[22], and will require mitigation (see Sections 7.4.2 e.) and 7.4.3 b.)). It is accepted that Construction Phase impacts are by nature negative, but limited in duration.

ii. The anticipated visual impacts of the **Residential component** are Low to Medium and Low, with a combination of statuses (*Neutral*, *Negative* and *Negative with the possibility of Positive impacts*). The residential component proposal was generally unproblematic, and mitigation measures focus on the completeness of the Development Guideline documentation with regards to aspects that influence responsiveness to visual sensitivities.

   a. Mitigation is required, but the author finds that the proposal for the Residential component can be endorsed from a visual impact perspective:

[22] Only the anticipated visual impacts on "Local heritage and other protected resources" were found to be Low for the Construction phase.

i. at the level of rezoning approval (of the SDP for the Residential component);
ii. and subject to the adherence to/successful implementation of the conditions of approval and mitigation measures specified in Section 7.4.

iii. The anticipated visual impacts of the **Mixed-use component (Alternative 1, Option A)** are the highest in significance, returning results of Medium (*Negative*) significance, with numerical ratings of between 36 and 44.
   a. It is not expected that any mitigation measures will be able to reduce the negative visual impact of the noise barrier recommended by the NIA, given that the only feasible design response would be a visually impermeable wall 3m in height.
   b. From a visual impact point of view, Alternative 1 (Option A) should not be supported.

iv. The anticipated visual impacts of the **Mixed-use component (Alternative 1, Option B)** are generally Low to Medium with either a *Negative* status, or *Negative with the possibility of Positive impacts*.
   a. Mitigation is required, but the author finds that the proposal for the Mixed-use component (Alternative 1, Option B) can be endorsed from a visual impact perspective:
      i. at the level of rezoning approval (SDP to follow),
      ii. and subject to the adherence to/successful implementation of the conditions of approval and mitigation measures specified in Section 7.4.

Subject to the recommendations and mitigation measures outlined in Section 7, **the developer/applicant should be allowed to proceed**.

Please note that should the proposal undergo significant change during further design processes, a visual impact statement must be issued by a suitably qualified specialist to re-assess the potential visual impact and determine if the findings of this study remain unchanged.

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11. Annexure A: Curriculum Vitae and Experience of the visual specialist

EXPERIENCE OF VISUAL SPECIALIST/AUTHOR

Name:	Fioné (Fi) Smit
Qualification:	▪ Bachelor of Science in Landscape Architecture *(BSc.LArch, University of Pretoria, 2011)* ▪ Master of Landscape Architecture *(MLA, University of Cape Town, 2017)*
Professional registration:	Professional Landscape Architect - registered with the South African Council for the Landscape Architectural Profession (SACLAP #20245)
Track record:	Fi is a Western Cape based Landscape Architectural professional and Visual Impact practitioner. She has fulfilled a variety of roles during her 8 years of experience in the industry including Landscape Architectural Technologist, Candidate (and later, Professional -) Landscape Architect, Postgraduate Lecturer, and finally Director of Filia Visual (Pty) Ltd, under whose name she practices as an independent Specialist Consultant. She obtained her Bachelor of Science in Landscape Architecture from the University of Pretoria (2009 – 2011) and worked for Newtown Landscape Architects (NLA) under the mentorship of Graham Young and Johan Barnard in 2012. She obtained professional registration from SACLAP in 2014 while working under the mentorship of Francois van Rooyen of Red Landscape Architects (from 2013 to 2015). Fi graduated from the UCT Master of Landscape Architecture program in 2017. From 2018 to 2020 she was employed by Viridian Consulting Landscape Architects under the leadership and mentorship of Rene Maria Brett. In 2019, she began consulting independently in addition to her work in partnership with Viridian. Fi also presents and co-convenes post-graduate lectures at UCT for Honours and Masters Students in Landscape Architectural Professional Practice (BLA) and History & Theory of Landscape Architecture (MLA).
Experience and associations:	Fi worked under the mentorship of Graham Young, Yonanda Martin and Mitha Cilliers conducting Visual Impact Assessments for NLA from 2012 – 2013. While consulting independently as a Landscape Architectural Professional for Viridian, she again undertook Visual studies and related specialist work. Filia Visual, a company specializing in Visual Impact Assessment and Visual Studies, was registered in 2020. Filia Visual's professional associates and collaborators include: • Karen Hansen (Independent Consultant & Landscape Architect) • Liana Jansen (Landscape Architect & Heritage Practitioner, director of Cape Winelands Professional Practices in Association) • Rene Maria Brett (Landscape Architect and Urban Designer, director of Viridian Consulting Landscape Architects)

Projects	Fi has experience in authoring and co-authoring a wide range of visual & Aesthetic specialist reports. These include Visual Statements, Pre-application Visual Studies, Scoping and Screening reports and Visual Impact Assessments. Please note that some of the below listed projects are ongoing and should be treated with confidentiality (ongoing projects indicated *in italics*). **2011 – 2012: Newtown Landscape Architects** VIA work under NLA included site visits, EIA specialist meeting inputs, documentation of landscape quality, character, value and visual resource value etc. (according to NLA procedure and visual study theory developed by Graham Young); draft and final Baseline and Visual Assessment report writing, preparation and creation of Visual Impact Simulations. These VIA's were predominantly for mines, solar farms and other large-scale infrastructure in the northern parts of South Africa, including: • Congo saltwater purification plant • KiPower Independent Power Plant • Paardeplaats Coal mine • Mafikeng Cement factory • Grootvlei mine • Vlakplaats Solar park • Vosloorus residential development • Skukuza solar Park • Sintokoula Coal mine • Kinsenda Coal mine • Zandkopsdrift minerals mine • Gamsberg Mine **2018 – 2020: Viridian Consulting Landscape Architects** • Railway Mews (Visual Statement for proposed Social Housing development, Stellenbsoch, 2019) • Helderberg Integrated Waste Management Facility (Visual statement, development of mitigation measures and Simulations, City of Cape Town Solid Waste Management, 2019) • Tannery Park Visual Study (pre-application Visual study (detailed, including simulations), Rawson Property Group, 2018 – 2020) • Ronsyn Visual Study (pre-application Visual study (detailed, including simulations), FPG Property Group, 2018 – 2020) • Stellenbosch Municipality Heritage Inventory and Conservation Management Plan (Mapping and Viewshed analysis of Scenic routes commissioned by the Cape Winelands Professional Practices in Association, 2018) • UCT North Stop (3D modeling and graphic renderings/simulations of proposed new North Bus stop and Landscape Proposal, UCT, 2020)

	2020 – present: Filia Visual • Rhinos High Performance Sport Centre, Strand (VIA, Rhinos Sports Academy, 2020) • Schrywershoek, West Coast National Park (VIA, Wiehahn International Holdings (Pty) Ltd., 2021) • Proposed Diamant Development, Paarl (VIA, Lazercor Developments, 2020) • 115 Victoria Road, Camps Bay (VIA, The I-Group, 2020) • Proposed development at Keurboomstrand (VIA, Rust van der Merwe, 2020) • Eskom Kimberley Strengthening Phase 3: Transmission Corridors, Northern Cape and Northwest Province (GIS Sensitivity Mapping and Feasibility Report, Margen Industrial Services, 2021) • Proposed development at De Hoop Farm, Tulbagh (Visual Statement, Guillaume Nel Environmental Consultants, 2021) • Groot Phesantekraal Phase 5 (VIA, Abland Property, 2021) • Ronsyn Building (Simulations and graphics supporting appeal), FPG Property Group, 2021) • Sonlia Fruit Packhouse (Visual Statement, FRAME Engineers, 2021) • Hermanus Cliff Path Connection (Visual Statement, Cliff Path Action Group, 2021) • Proposed Libertas development (Visual Statement, Reset Properties, 2021) • Strawberry Lane, Schumacher development (Visual Statement, Schumacher Real Estate (Pty) Ltd, 2021) • Proposed development at Philippi (Visual Statement, Headland Town Planners, 2021) • 236 Main Road, Kalk Bay (Visual Statement, Shalev Trust, 2021) • *Proposed development Erf 878, Riebeek Kasteel (VIA, Silver Solutions 3571, 2021 – ongoing)* • *Proposed development at Farm 845 Sir Lowry's Pass (VIA, DaxCon, 2021 - ongoing)* • *Ptn 43 of Farm 159 Meerendal (Visual Statement and VIA, Canto wines, 2021 - ongoing)* • *Proposed Libertas Development (Visual Statement and ongoing Visual specialist consultation, Fleurbaai (Pty) Ltd, 2021 – ongoing)* • *Sudor Coal Mine Ext. and proposed Overlooked Colliery, Mpumalanga (VIA, NTC Group, 2020 – ongoing)* • *Stanhope BMW (Visual Study, Rawson Property Group, 2021 – ongoing)*

	• *Proposed development Erf 2111, Riebeek Kasteel (VIA, Guillaume Nel Environmental Consultants, 2021 – ongoing)* • *Proposed development at 35 & 37 Victoria Road (VIA, The Castle Group, 2021 – ongoing)* • *Farm 1252 Bo Helderberg (Screening and site sensitivity report and VIA, Arch Town Planners, 2021 – ongoing)* • *Proposed McMillan Bricks development, Paarl (VIA, Guillaume Nel Environmental Consultants, 2021 – ongoing)* • *Fijnbosch/Botmaskop Estate, Stellenbosch (Scoping Report and ongoing Visual specialist consultation, Reset Properties, 2020 - ongoing)* • *Cape Winelands Airport (Scoping report and VIA, PHS Consulting, 2021 – ongoing)* • *Alto Wine Estate (Visual Statement and VIA, Alto Wine Estate, 2022 – ongoing)* • *Heuningberg Estate (VIA, Clearlake Capital, 2022 – ongoing)*

Please do not hesitate to contact me should you have any questions or require any further information.

With Kindest Regards

Fi Smit
Director, Filia Visual (Pty) Ltd
Professional Landscape Architect (SACLAP # 20245)

12. Annexure C: Preliminary input provided during the Pre-application planning stage

In order to fulfil the requirements of specialist involvement at the Pre-application planning stage, the following preliminary input was provided to the project team in September 2022:

i. Identification of **key issues that the VIA would focus on** during impact assessment (refer to section 2.5.2 as well as the list under Section 6.2.2 below).

ii. Key areas of focus for the project team to consider in terms of early responsiveness to visual sensitivity and potential mitigation measures that would be necessary, including:

   a. **Contextual fit,** i.e., is the proposal evolving and responding to contextual heritage and visual indicators. Contextual heritage and visual indicators included:

      i. Address boundary treatment on the R301 edge and along the Schuurmansfontein road, especially in terms of visibility along the broad edge.

      ii. Preserve long, open westward views over the agricultural landscape towards the encircling mountains from the R301, which are key scenic attributes of this section of the road. The proposed development is screened from these views by existing buildings and vegetation to the south of the subject site, but commuters travelling from south to north will be more sensitive.

      iii. The character of the commercial component (expressed through building placement and massing, boundary treatment, placement of parking and landscape proposal) must not result in an urbanized interface. Inappropriate development would ignore the rural agricultural context, contrast starkly with the sense of place of the receiving environment, degrade the value of the visual resources and/or increase the number of discordant elements and visual clutter visible from the scenic route.

   b. **Increasing embeddedness** i.e.; does the proposed increase Visual Absorption Capacity and address visual intrusion?

      i. Ensure that the density and nature of the proposed tree structure inside the development plays a role in absorbing the new structures over time. While screening is key, the interior tree hierarchy is an important factor in increasing embeddedness.

      ii. The Architectural guidelines should enable the siting of buildings on individual erven to prevent overmuch uniformity in the roofscape, and control density and massing of buildings throughout the development.

      iii. The Architectural guidelines should also define parameters to control and manage the articulation of the roofscape i.t.o materials/colouring and ridgeline positioning.

   c. The proposed development should aim to **contribute positively to the identified urban development corridor**, and the Architectural and/or Development guidelines should provide guidance in terms of appropriate boundary treatment and landscaping, approach to lighting design at night, limitations on and design of signage, sense of fit in terms of architectural style etc.

   d. **Construction phase impacts** should be kept as low as possible, especially in terms of the Mixed-use component along the R301, and the construction of the development's various boundary interfaces. The Architectural and/or Development guidelines and EMPr should speak to this aspect.

e. The **timing and implementation of landscaping** will play a key role in mitigation. The Architectural and/or Development guidelines must provide guidance and parameters to control how and when the various aspects of the landscape will be implemented and sufficiently provisioned in terms of irrigation source, storage and design of irrigation system during and after establishment. This is especially important given the role that landscaping plays in visual impact mitigation.