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VISUAL IMPACT ASSESSMENT
REF. 23/035

Lot 266 & A Portion of Remainder of Lot 21, Riversdale Settlement, Hessequa Municipality.

DISCIPLINES: ARCHITECTURE | LANDSCAPE ARCHITECTURE

DATE: **JULY 2024** | STATUS: **FINAL**

PREPARED BY: **FC HOLM CC & PROFESSIONAL TEAM**

PROJECT NAME Visual Impact Assessment: Erf 266 and PTN/ RE 21, Riversdale
PROJECT NUMBER 23/035

Signature of consultant Date

Signature of client representative Date

This report has been compiled by:
FC HOLM CC Cara Holm

Revision	Date	Name	Checked	Description
001	2024/07/16	Cara Holm	FCH	Assessment of revised proposed site development layout.

TABLE OF CONTENTS

1. INTRODUCTION

1.1. Background to the report

FC Holm CC has been appointed to undertake a visual impact assessment for the proposed rezoning and development of Lot 266 & a Portion of Remainder of Lot 21, Riversdale Settlement, Hessequa Municipality. The proponent wishes to subdivide and develop Lot 266 & a Portion of Remainder of Lot 21, Riversdale Settlement, Hessequa Municipality (hereafter referred to as the site).

A development comprising mixed-use residential units is envisaged for the site, following a rezoning application process to rezone and subdivide the intended development sites from Agricultural Zone I to the following categories:

- Agricultural Zone II
- General Residential Zone II
- Single Residential zone I
- Business Zone III
- Open Space Zone I
- Transport Zone II
- Transport Zone III
- Utility Zone

In response to the notification of intent to develop the site, Heritage Western Cape has requested that a visual impact assessment be undertaken to review the effect of potential visual impacts on the receiving environment.

1.2. Declaration of independence by the consultant

FC Holm CC is an independent consulting firm and other than fair remuneration for work performed to prepare this report have no business-, financial- or personal interest in the proposed developments. There are no other circumstances present that may compromise our objectivity, and all material information that could affect decision-making that has come to light during this study has been declared.

FC Holm CC is an established firm of professional architects and landscape architects based in the Southern Cape with more than 20 years' experience and 12 years' experience preparing visual impact assessments for various projects. We hold current professional registration with the SA Council for the Landscape Architecture Profession (SACLAP) and the SA Council for the Architectural Profession (SACAP).

1.3. Terms of reference

The visual impact assessment is prepared in accordance with the Western Cape Government, Department of Environmental Affairs and Development Planning Guideline - Involving Visual and Aesthetics in an Environmental Impact Assessment Process (2005).

The following characteristics of the site and the proposed developments are listed as 'triggers,' in terms of the above guideline, that suggest visibility and aesthetics are likely to be key issues and may require specialist input:

The nature of the receiving environment:

- Areas with important vistas or scenic corridors.
- Areas with intact or outstanding rural or townscape qualities.
- Areas of important tourism or recreational value.

The nature of the project:

- A change in land use from the prevailing use.
- A significant change to the fabric and character of the area.
- Possible visual intrusion in the landscape.
- Obstruction of views of others in the area.
- A significant change to the townscape or streetscape.

The site that has been earmarked for development is situated within view of the N2. The N2 has been identified as an important tourist scenic route and view corridor all along the Garden Route. Tourism is an important economic driving force in the area.

The site has previously been farmed and no areas of pristine, undisturbed vegetation remain. Two small portions of mostly indigenous vegetation are to be found in the southwestern and eastern corners of the site, but these too have been transformed. The site has been cleared in the past and cultivated as croplands. There are no

existing buildings on site or any other elements or landmarks of historical value in the immediate surroundings of the site that have been identified.

The type of environment can be described as “Areas or routes of high scenic, cultural, historical significance”. The type of development falls within 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. When the type of environment is correlated with the development Category 4, indication is that high visual impact can be expected.

The category of issues where high visual impact is expected includes:

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

Table1: Categorisation of issues to be addressed by the visual assessment

Type of environment	Type of development (see Box 2) Low to high intensity				
	Category 1 development	**Category 2 development**	**Category 3 development**	**Category 4 development**	**Category 5 development**
Protected/wild areas of international, national, or regional significance	Moderate visual impact expected	High visual impact expected	High visual impact expected	Very high visual impact expected	Very high visual impact expected
Areas or routes of high scenic, cultural, historical significance	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	High visual impact expected	Very high visual impact expected
Areas or routes of medium scenic, cultural or historical significance	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	High visual impact expected
Areas or routes of low scenic, cultural, historical significance / disturbed	Little or no visual impact expected. Possible benefits	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected
Disturbed or degraded sites / run-down urban areas / wasteland	Little or no visual impact expected. Possible benefits	Little or no visual impact expected. Possible benefits	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected

The recommended level of visual input required is consistent with a level 4 visual assessment.

Table 2: Categorisation of approaches and methods used for visual assessment

Approach and Method	Type of issue (see Box 3)				
	Little or no visual impact expected	**Minimal visual impact expected**	**Moderate visual impact expected**	**High visual impact expected**	**Very high visual impact expected**
Level of visual assessment recommended	**Level 1** visual assessment	**Level 2** visual assessment	**Level 3** visual assessment	**Level 4** visual assessment	

Specific concepts that should be considered when providing visual inputs into the environmental authorisation process include the following (p.2, Oberholzer, B. 2005.):

- An awareness that ‘visual’ implies the full range of visual, aesthetic, cultural, and spiritual aspects of the environment that contribute to the area’s sense of place.
- The consideration of both the natural and the cultural landscape and their inter-relatedness.
- The identification of all scenic resources, protected areas, and sites of special interest, together with their relative importance in the region.

- An understanding of the landscape processes, including geological, vegetation, and settlement patterns, which give the landscape its particular character or scenic attributes.
- The need to include both quantitative criteria such as 'visibility' and qualitative criteria, such as aesthetic value or sense of place.
- The need to include visual input as an integral part of the project planning and design process, so that the findings and recommended mitigation measures can inform the final design.
- The need to determine the value of visual/aesthetic resources through public involvement.

The objectives of this report are as follows:

- Describe the proposed development.
- Describe the receiving environment.
- Establish the visual envelope and receptors, including view catchment area, view corridors, and viewpoints.
- Establish the visual absorption capacity of the landscape influenced by topography, vegetation cover, urban developments, and settlement patterns.
- Determine the visibility of the proposed development and its relative compatibility or conflict with the receiving environment.
- Identify potential visual impacts.
- Provide mitigation measures.

1.4. Methodology

The following steps were taken to complete the visual impact assessment:

- The existing characteristics of the site and its environs were described by means of a review of existing information, site visits, and photographic survey.
- A desk top study was conducted to determine and describe scenic character, and sense of place, visibility, visual exposure and visual sensitivity of the site and a review of other existing information.
- Significant viewpoints and areas where views of the site and proposed developments will be possible were determined.
- The potential visual impacts of the proposed project on the receiving environment were assessed.
- Measures that will mitigate the potential visual impacts were reviewed.

1.5. Assumptions and limitations

This report was prepared during the planning stages of the project and assumes that the base information provided by others is correct.

A combination of 1: 50 000 topo-cadastral maps, site photographs, open-source satellite imagery, and GIS mapping techniques were used to prepare this report. The digital generation of viewsheds is based on topographical landform information and does not take into account the screening effect of vegetation and buildings. Although every effort to maintain accuracy was undertaken, the use of satellite imagery and not measured survey information may not represent an exact visibility of the site or proposed developments.

The visual study was based on the development proposal provided by the proponent and does not review alternative design layouts.

2. THE AFFECTED ENVIRONMENT

2.1. Site location and description

The site on which the proposed development is planned is Lot 266 & a Portion of Remainder of Lot 21, Riversdale Settlement, Hessequa Municipality situated along the N2. The site lies at the urban edge of Riversdale, a small agricultural-oriented town forming part of the Hessequa Municipality, Western Cape. The surrounding area in which the site is located is mainly characterized by agricultural farming lands to the north, west, and south of the site, and residential developments to the east.

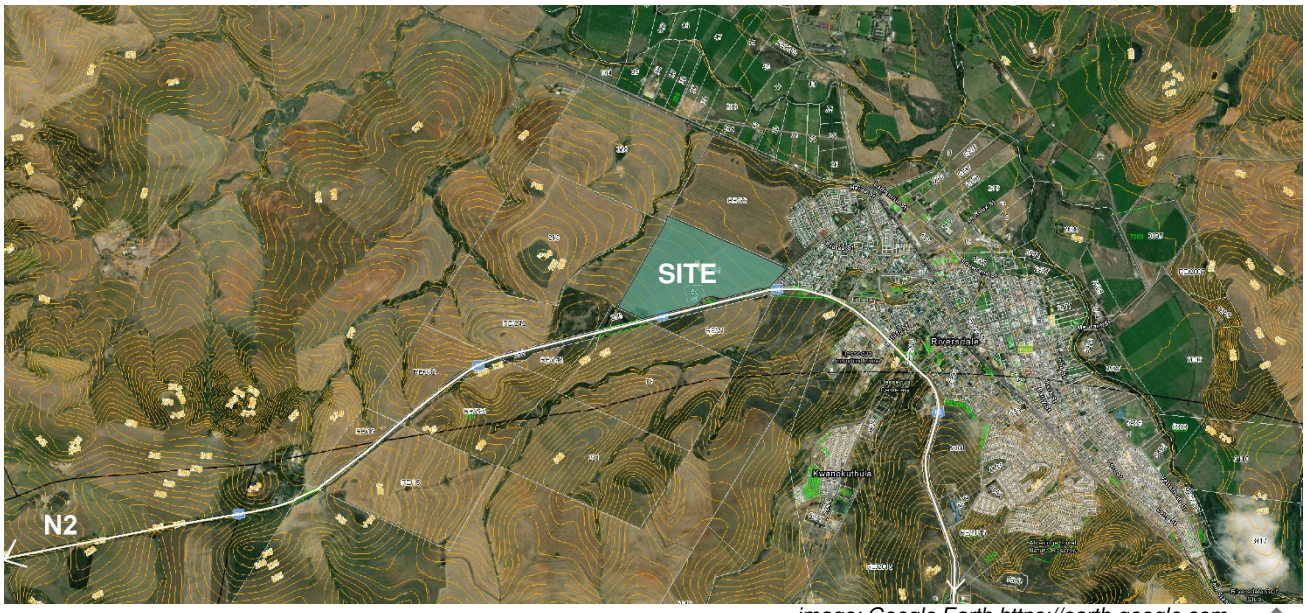

image: Google Earth https://earth.google.com

NORTH

Figure 1: Development site (not to scale).

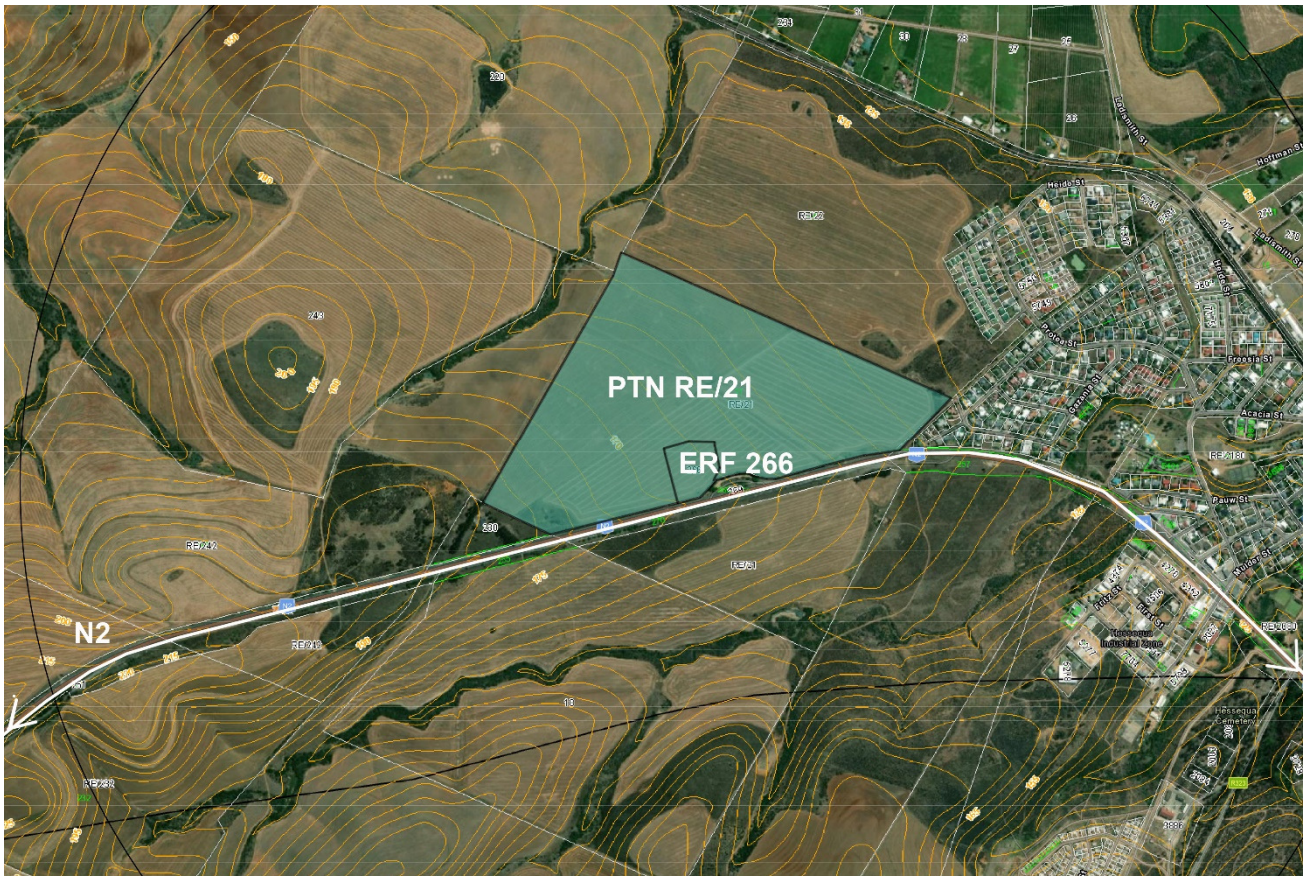

image: Cape Farm Mapper https://gis.elsenburg.com/apps/cfm/

NORTH

Figure 2: Site local context (not to scale).

The site is approximately 56,4 hectares in extent and is situated along the N2 that intersects the town. The developer, Belladonna Pty (Ltd) further referred to as the developer, intends to develop the property to accommodate a variety of new residential opportunities in Riversdale.

2.2. Description of the proposed development

The proposed development will comprise a series of mixed-use residential developments concentrated within the site. The development concept includes the following:

- Smallholdings / 1ha lifestyle erven forming a gated community with restricted agricultural land uses such as equestrian use – Proposed zoning Agricultural Zone II
- Low density single residential erven – Proposed zoning Residential Zone II
- Medium density general residential erven – Proposed zoning General Residential Zone II
- Retirement village / frail care unit – Proposed zoning General Residential Zone II

The main access to the site will be from an access point at the northern boundary of the site, along a future extension of Erica Street. Another entrance is placed at the corner of Lanoria Street and a future extension of Lobelia Street. According to the layout plans of the proposed development, Lobelia Street will be extended towards the north-eastern corner of the site.

The design parameters of each of the different phases of the development will be determined by specific zoning by-laws as set out in the Hessequa Zoning Scheme By-Law (2018). In terms of the zoning regulations, the proposed development will comprise of the following:

• 1 Ha lifestyle erven

For an Agricultural Zone II property categorised as a smallholding, the development will comprise an extensive landholding, including a dwelling unit that is primarily a place of residence on which small-scale agricultural activities may take place. Development parameters include a 5 m building line from any boundary and a height restriction of 8,5 m for dwellings and 15 m for agricultural buildings.

• Low density single residential erven

For a Single Residential Zone I property categorised as a dwelling unit, the development will comprise a building containing only one dwelling unit, together with outbuildings. A maximum height of 8,5 m applies. Building lines are at least the distance indicated in the table below, provided by the Hessequa Zoning Scheme By-Law (2018).

Coverage and building lines

Erf size	Coverage	Building lines		
		Street	Side	Rear
Less than or equal to 250 m²	80%	2 metre	0 metre on one side 1 metre on all other sides	1 metres
Greater than 250 m², but not exceeding 500 m²	200m² or 65% whichever is greater	3 metres	0 metre on one side 1,5 metres on all other sides	1,5 metres
Greater than 500 m², but not exceeding 1 000 m²	325m² or 50% whichever is greater	4 metres	2 metres	2 metres
Greater than 1 000 m²	500 m² or 40%, whichever is greater	5 metres	3 metres	3 metres

Figure 3: Excerpt from the Hessequa Zoning Scheme By-Law (2018).

• Medium density general residential erven

For a General Residential Zone II property, categorised as group housing, the development consists of a group of separate or linked dwelling units where every dwelling unit has a ground floor, which units may be cadastrally subdivided but are planned, designed and built as a harmonious architectural entity in an ordered way and integrated with communal private open spaces, private roads, and parking. Development parameters include the following:

- A maximum height of 8,5 m.
- The maximum coverage of any individual cadastral group housing site shall be 60%.
- The maximum gross density on a group housing site is 35 dwelling units per hectare.

- The maximum gross density on a group housing site is 35 dwelling units per hectare.
- The minimum erf size of a group housing site shall be 3000 m².
- A minimum of 50 m² private or communal open space per dwelling.
- An external street boundary building line of 5 m, and side and rear boundary building lines of 3 m when building along the perimeter of a group housing site.
- An internal street building line of 0m (provided that any garage door facing the road must be set back at least 5 m from the kerb of such internal road); and a side and rear boundary building line of 0 m when building within a group housing site.

• **Retirement village / frail care unit**
The retirement village also falls under a General Residential Zone ll property, and can be categorised as estate housing, flats, group housing, or town housing that conforms to the following additional conditions:
(a) each dwelling unit must be occupied by a retiree or pensioner or by a family of which at least one member is a retiree or pensioner; and
(b) a full spectrum of frail care and other facilities reasonably associated with a retirement resort may be provided at such a retirement resort.

See Appendix A for the proposed site layout.

3. Legal framework

As part of the visual impact assessment, it is necessary to relate the proposed landscape modification in terms of international and national best practice principles in understanding landscapes and landscape processes. The proposed development also needs to be evaluated in terms of national and regional policy and planning structures for the area to ensure that the scale, density, and nature of activities or developments are harmonious and in keeping with the planned sense of place and character of the area.

3.1 Local government legislation and planning

To comply with the visual resource management requirements, it is necessary to clarify which national and regional planning policies govern the proposed development area to ensure that the proposed development is in line with spatial development frameworks and planning strategies of the area.

The 2021 Riversdale Local Spatial Development Framework (Riversdale LSDF) was compiled for the Hessequa municipality and should be regarded as an integral part of the overall Hessequa spatial development framework. According to the Riversdale LSDF, Erf 266 is currently included in the Riversdale urban edge and has been zoned for business purposes, as shown in figure 4. Erf 266 was earmarked for the development of a filling station but due to difficulty with access approvals from SANRAL, this proposal has since been withdrawn and Erf 266 has been included in the proposed development site addressed as part of this assessment.

In terms of the Riversdale LSDF, a decision was made to include Erf 266 and a portion of the remainder of Lot 21 (subsequently referred to as the proposed development site) in the urban edge after a request and proposal were submitted to the Municipality by Planserv, on behalf of the developer of Lot 21 and Erf 266, Riversdale, Belladonna Pty (Ltd).

The Riversdale LSDF further provides a framework for future development and expansion in the town and describes the need for new business nodes. It is proposed that the central business district (CBD) be expanded along Heidelberg Road to the N2, thus creating an activity street connecting the CBD with the N2. The Riversdale LSDF further describes that the area north of the CBD can be developed with a concentration of tourist attractions. The importance and potential of the N2 is highlighted, stating that the area along the N2 constitutes an important access point to the town, and customs such as restaurants, an information office, and souvenir shops should be encouraged here. The Riversdale LSDF prominently states the need to separate the business district from residential areas and explains that new business practices should preferably be concentrated in this area to achieve greater economies of scale and limit business penetration in residential areas. However, new residential, business, and community nodes can be developed as integration points for communities. Integration of neighbourhoods can be partly implemented through integration into areas where people work and relax, such as the business district, close to community facilities and sports fields. The location of these types of land uses is therefore critical to make for an enjoyable urban experience.

The Riversdale LSDF further states that new service industries should as far as possible also be established in the existing industrial area and the strip south of the N2. Densification is allowed in identified areas, such as

business or filling stations, and industrial zones. The Riversdale LSDF also describes the need for housing and motivates for a possible extension of the town of Riversdale towards the west.

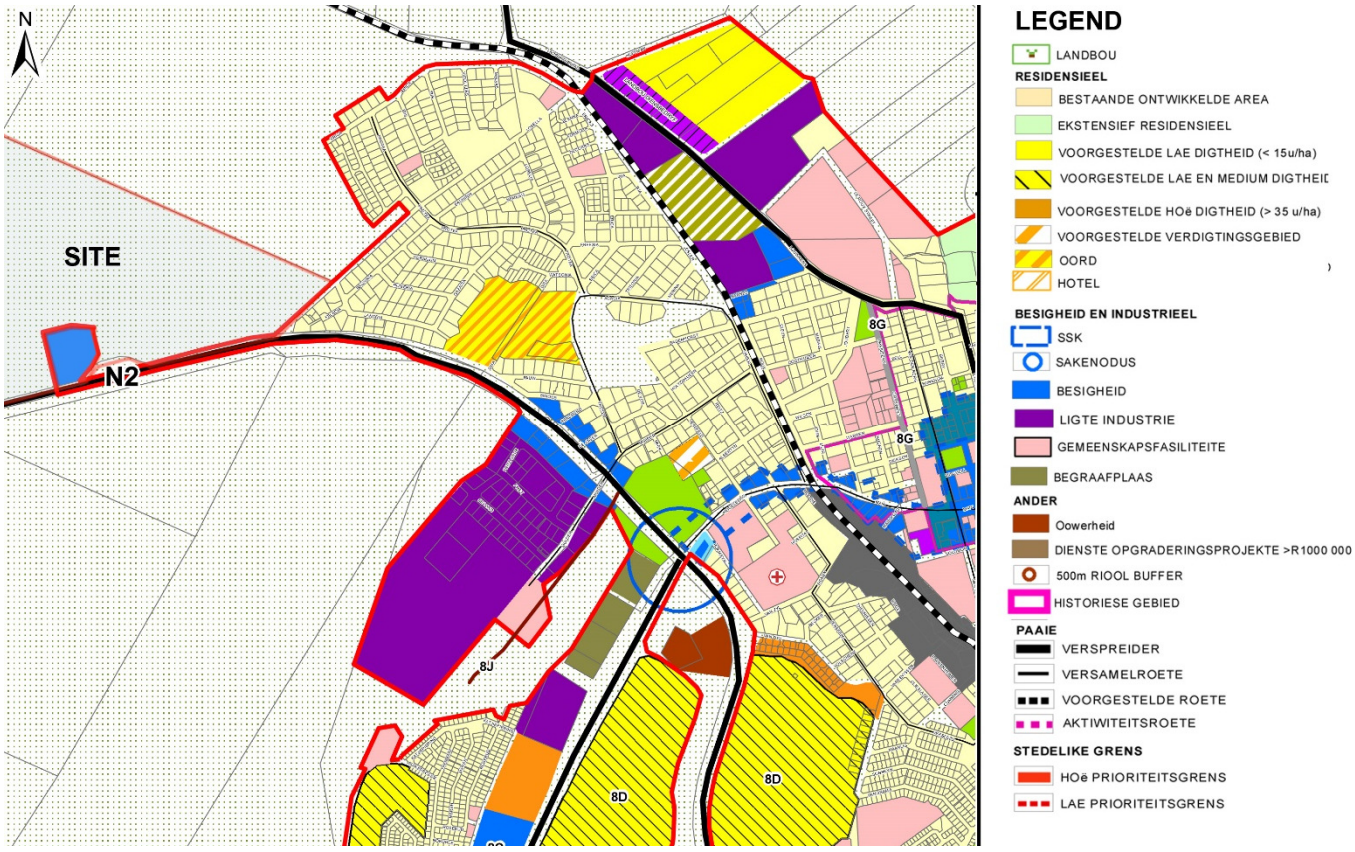

Figure 4: Excerpt from the Riversdale Local Spatial Development Framework (2021).

As stated in the Riversdale LSDF, residential land use is the primary consumer of urban land. The average density of Riversdale is currently about 11 units/ha. However, this figure cannot be significantly increased within the existing Riversdale suburbs due to the lack of infill development opportunities. The Riversdale LSDF has earmarked two possible sites for future development, namely the proposed development site, and the development of Church Square. The area marked for possible development represents a significant area of underutilised, municipal owned and private land. Both of the above-mentioned sites are strategically located along the N2 and in close proximity to the CBD with the potential to create new jobs and housing opportunities, while simultaneously improving the natural environment and enhancing the diverse cultural and built heritage. The Riversdale LSDF further states that residential, economic, recreational, industrial, business, and institutional urban activities will be activated by developing limited vacant land and connecting the much-needed development principles by (p. 11, Western Cape Government, 2021):

- “Providing more residential units,
- Creating more job opportunities,
- Celebrating complex layers of memory, cultural heritage, science and diversity,
- Enhancing the structured and open space recreational and natural network
- Supporting healing and environmental resilience and
- Promoting spatial integration & urban intensification
- Addressing rehabilitation and restoration of ecological areas and processes, and climate change resilience; within an efficient mobility and infrastructure network.”

In addition to the higher density residential development permissible within the mixed-use business area, the Riversdale LSDF further suggests that densification within the proposed residential use area be encouraged. As guidelines, the following are suggested:

- housing types: group housing, semi-detached houses, apartments, retirement village
- density: ± 20 units/ha
- height: maximum height of 3 x floors or 10 m

The following mechanisms are further suggested:

- Subdivision with minimum yard size of 300 m² (net) for single dwelling purposes
- Second dwelling units with council permission

- Consolidations and rezoning to a general residential zone

To address the estimated low- and medium-density housing needs according to the projected growth rate, the Riversdale LSDF states that 50 ha of low- and medium-density housing is needed to fulfil the town's housing needs. It is also stated that filling development and densification can also be largely implemented to meet the projected need for residential units. The proposed development consists of a 56,4 ha planned residential development and will be able to significantly contribute to meeting housing needs.

Upon review of the Riversdale LSDF and the described urban development strategies, it is found that the proposed development is in line with local legislation and planning of the municipality and that the proposed development has the potential to enhance the existing urban character of the town of Riversdale.

3.2 Guidelines for good practice

Part of the visual impact assessment is to assess the proposed landscape modification in terms of international and national best practices in understanding landscapes and landscape processes. Several publications outline best practice principles in landscape and visual impact assessment and form the foundation for the assessments of proposed developments and landscape modifications. In order to retain their relevance in the context of changing legislation, the guidelines promote the principles of environmental impact assessment (EIA) best practice without being tied to specific legislated national or provincial EIA requirements.

3.2.1 Western Cape Government, Department of Environmental Affairs and Development Planning Guideline - Involving Visual and Aesthetics in an EIA Process (2005)

The Western Cape Government, Department of Environmental Affairs and Development Planning Guideline - Involving Visual and Aesthetics in an EIA Process (2005) outlines a set of best practice objectives. The report compiled by Oberholzer states that the Best Practicable Environmental Option (BPEO) should address the following (p.23, Oberholzer, B. 2005.):

- "Ensure that the scale, density and nature of activities or developments are harmonious and in keeping with the sense of place and character of the area. The BPEO must also ensure that development must be located to prevent structures from being a visual intrusion (i.e. to retain open views and vistas).
- Long term protection of important scenic resources and heritage sites.
- Minimisation of visual intrusion in scenic areas.
- Retention of wilderness or special areas intact as far as possible.
- Responsiveness to the area's uniqueness, or sense of place."

Comment
Riversdale is situated against a picturesque backdrop of the Langeberg mountains. The town is surrounded by agricultural farmlands which contribute to its scenic value as an agricultural town. Scale and density are key factors in maintaining the local sense of place. It is important for the proposed new developments to maintain this sense of place and not detract from the quality of the scenic surroundings. It is possible for the proposed development to contribute to the sense of place by drawing inspiration from the scenic quality of the small town and its layout. New developments should not create a dominating mass of tightly clustered single residential units but rather an architectural design that draws from the special characteristics of the area.

3.2.2 Western Cape Spatial Development Framework (2014)

The Western Cape Spatial Development Framework (2014) is also an important document against which proposed developments can be measured and serves as a guideline for coordinating, integrating, and aligning the delivery of national and provincial department programs. The following extracts from the report have relevance:

"Efficiency relates to the form of settlements and use of resources - compaction as opposed to sprawl; mixed-use as opposed to mono- functional land uses; residential areas close to work opportunities as opposed to dormitory settlement, and prioritisation of public transport over private car use. When a settlement is compact higher densities provide thresholds to support viable public transport, reduce overall energy use, and lower user costs as travel distances are shorter and cheaper" (Western Cape Government, 2014).

Comment
Higher density type development aligns with local and provincial urban densification strategies. Economic benefits from the development are likely to create employment opportunities for the local community. However, due to the scenic resources of the area and the close proximity to the N2, an important scenic vista, care needs to be taken to ensure that the densification initiatives do not detract from the landscape character of the area.

"The quality of an environment directly contributes to its liveability. A quality built environment is one that is legible, diverse, varied and unique. Legible built environments are characterized by the existence of landmarks such as notable buildings and landscaping, well-defined public spaces, as well as navigable street networks.

Diverse built environments offer a variety of opportunities, experiences and choice. The more varied a place, the more it is distinguishable because of the individual qualities that make it distinctive from other places. Liveable settlements balance individual and community facilities and display a logic of order and random incident. In many cases, a town's public realm provides coherence and order while countless private ventures introduce variety and interest. One condition benefits from the other. The quality of public space can define the liveability of a place. Public spaces are the living rooms to settlements where people meet, play and relax. They need to be safe and attractive - features enabled by activity and surveillance" (Western Cape Government, 2014).

Comments

The proposed development is placed at the edge of the town and along the N2, which is in close proximity to existing urban fabric. It is important to ensure that the architectural and landscape design adds to the visual character of the landscape. The proposed development site becomes an important interface between the town and its agricultural surroundings. The town layout of Riversdale comprises several public green spaces in its urban fabric which creates a specific visual character. The proposed new development should follow a similar urban pattern and incorporate varied spaces and uses within the proposed development to create a consistent visual character. In order to break away from a rigid and formal layout, which will dominate the landscape, a series of well-defined public spaces can be introduced to the development layout to visually integrate new developments with the existing visual framework. Designing the streetscape is an important element ensuring navigable street networks. Internal roads can be lined with trees and gardens towards the street, which can enhance the overall liveability and experience within the development layout.

3.3 Policy fit

Policy fit refers to the degree to which the proposed landscape modifications align with international, national, provincial and local planning and policy. With regard to the Riversdale local municipal planning and larger Hessequa Municipality strategies, along with the Western Cape spatial development frameworks, the following comments have relevance in terms of policy fit:

Policy alignment

With regard to the Riversdale local municipal planning strategies, the Riversdale LSDF has relevance. In terms of the Riversdale LSDF, the proposed development is in line with local municipal strategies of addressing the need for low- to medium-density housing developments and would significantly contribute to addressing the town's housing needs. However, as identified in national and provincial visual, and aesthetic guidelines, care must be taken to ensure that the proposed developments enhance the current sense of place. In this regard, scale and density are key factors in maintaining the local sense of place. Riversdale is a small town, and its residential areas consist of a variety of single- to double-storey units with small gardens and ample trees along the streets, adding to the landscape character of a small agricultural town set against a picturesque rural backdrop. While the proposed development scheme allows for a similar type of residential massing, architectural and landscape design should be such that visual contrast generated by the proposed landscape modification is moderated in terms of form, line, colour, and texture to ensure that the visual resources associated with the town and its natural surroundings are enhanced. The town of Riversdale's layout and street networks follow the contours of the landscape, allowing for an organic layout. Varied public and green spaces are scattered throughout the urban fabric, providing important nodes within the town. For the proposed development to better fit in with its surroundings, it is important to introduce varied and diverse spaces to the layout to create distinguishable and liveable urban experiences. Introducing contrast and a variety of opportunities in opposition to rigid and formal planning will allow the proposed new developments to be visually integrated into the urban fabric of Riversdale.

4. VISUAL CONTEXT AND RECEIVING ENVIRONMENT

This section describes the visual environment within which the development is situated and includes landscape type, landscape character, and sense of place as determined by geology, landforms, vegetation cover, land use, and settlement patterns. This provides a baseline context for the assessment of the proposed development on the receiving environment.

The site lies west of Riversdale in an area characterised by agricultural farmlands. The site lies at the urban edge of Riversdale and is largely surrounded by existing residential and agricultural land uses, bordering residential houses to the east, and agricultural farmlands to the south, west, and north of the site. Towards the western, southern, and northern sides of the site, the landscape consists of a mosaic of agricultural lands, including croplands to the south and west, and mixed-development farms towards the north. Access to the site is from Erica Street which will be extended at a later date. A second future access point will be located along an extension of Lobelia Street, at the corner of Lanoria Street.

The site is visible from the N2, which has been identified as a scenic route, and is an important view corridor for tourists and holidaymakers visiting the area. Tourism is one of the major economic drivers in the Garden Route.

The new proposed design development will have to provide significant screening measures along the N2 to limit visual intrusion when viewed from the N2.

4.1. Landform and topography

According to the geological maps of the area, the landscape consists of moderately undulating plains and hills at the foot of the Langeberg mountain range. The site's topography slopes from west to east.

Elevation across the site varies from approximately 185.500m at the western corner to approximately 135.500m above M.S.L. at the north-eastern corner. Slopes are moderate across the site, not exceeding 1:4 (<25%). Slopes >1:4 increase visual sensitivity due to the need for cut and fill areas needed to accommodate building platforms and roadways. Slopes less than 1:4 are visually less sensitive, as cut and fill operations will be limited, as opposed to slopes greater than 1:4, that would be visually more sensitive due to visual scarring caused by cut and fill operations.

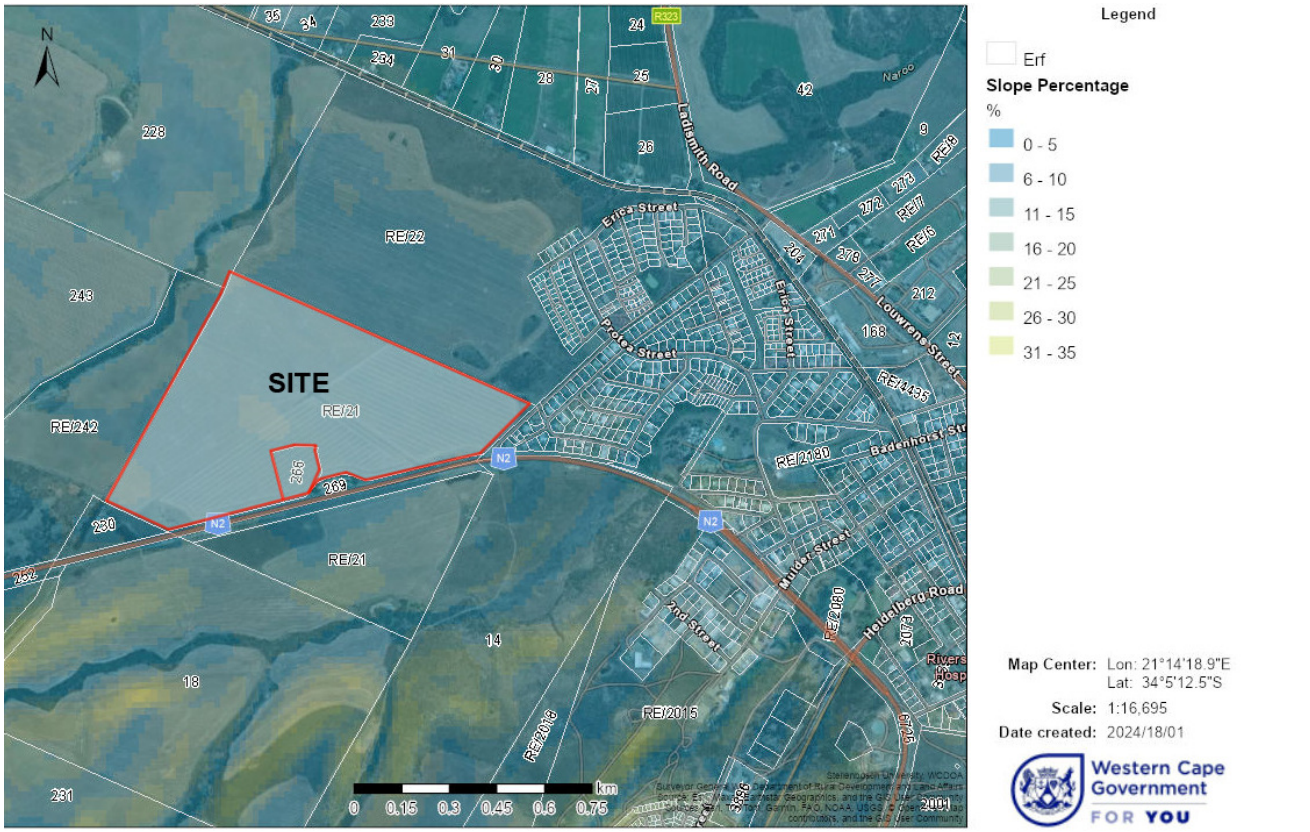

image: Cape Farm Mapper https://gis.elsenburg.com/apps/cfm/

Figure 5: Slope analysis of the area within which the site is situated.

The western corner is elevated in relation to the rest of the site and is visible from low-lying areas located towards the north of the site. The site may be visible to receptors from buildings and roads from low-lying areas located towards the north of the site, specifically farmhouses and agricultural developments along the R323 road towards Oakdale High School.

The Riversdale industrial zone is located towards the south-east of the site which is marked by light industrial development such as factories and workshops. The site may also be visible to receptors of these buildings situated at an elevated position in relation to the site and overlooking the site in a northerly direction. The residential settlement of Kwanokuthula is also situated towards the south of the site near the Riversdale industrial zone, but views towards the site in a northerly direction are screened by the undulating topography of the landscape.

The topography of the broader landscape comprises undulating hills and plains. Hillsides are typically rounded with a series of convex slopes. Due to the undulating nature of the topography, no prominent ridgelines occur on, or in the immediate vicinity of the site. Ridgelines along the hilltops further to the north, south, and west of the site limit the view catchment area to a localised extent of approximately 4.5 kilometers. Towards the west of the site, the N2 traverses through undulating plains. This results in limited visibility towards the site from the N2 as it descends towards Riversdale in an easterly direction. The site is partially screened by the surrounding topography of the area.

The topography of the larger Riversdale area comprises the Langeberg Mountain range located towards the north of the site, creating a scenic backdrop to the town. The Langeberg Mountains create a watershed divide running from east to west. The watercourses in the area flow from the Langeberg mountains, over the narrow coastal plain, towards the Indian Ocean to the south. A number of these rivers and associated wetland habitats traverse the surrounding area of Riversdale and provide the community with valuable ecosystem services such as biodiversity support, storm water management, regulating the heat island effect, nutrient and toxicant removal, flood attenuation, recreation, as well as further contributing to the aesthetic appeal of the area. The watercourses mainly provide for a fertile corridor through the Riversdale area, along which several agricultural farming lands are located. Figure 6 illustrates the main watercourses through the Riversdale surrounding area.

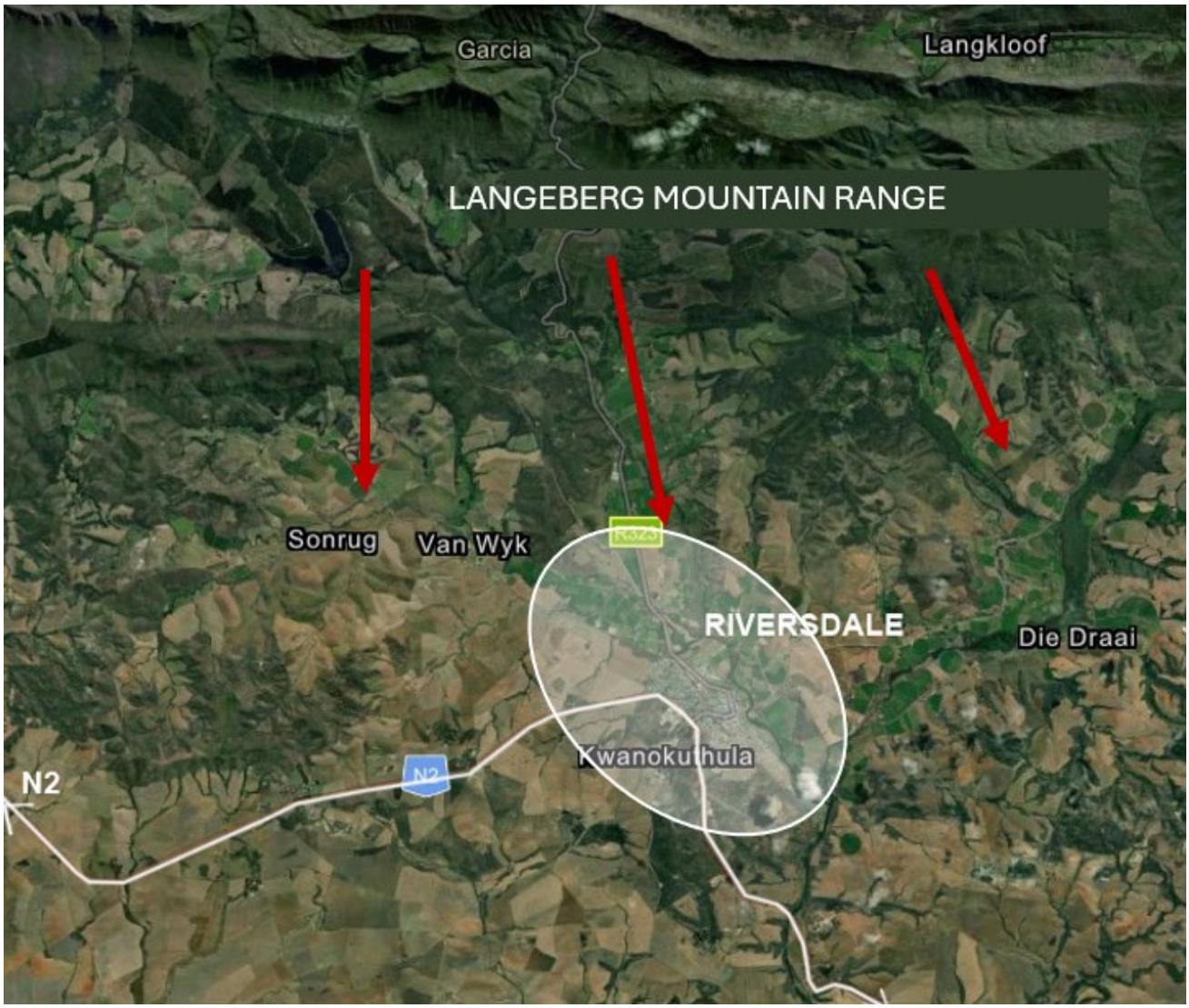

image: Cape Farm Mapper https://gis.elsenburg.com/apps/cfm/

Figure 6: Watercourses in the area flow from the Langeberg Mountain Range towards the coast and create green fingers along which agricultural activity occurs (not to scale).

According to Cape Farm Mapper, watercourses in close vicinity of the site comprise channelled valley-bottom wetlands located towards the north and south of the site, providing an important water source for agricultural croplands. There are however not any prominent drainage channels, wetlands, or protected areas indicated on the property itself. The only water source indicated on site is an earth dam that could previously have been located towards the centre of the site and which is no longer in evidence.

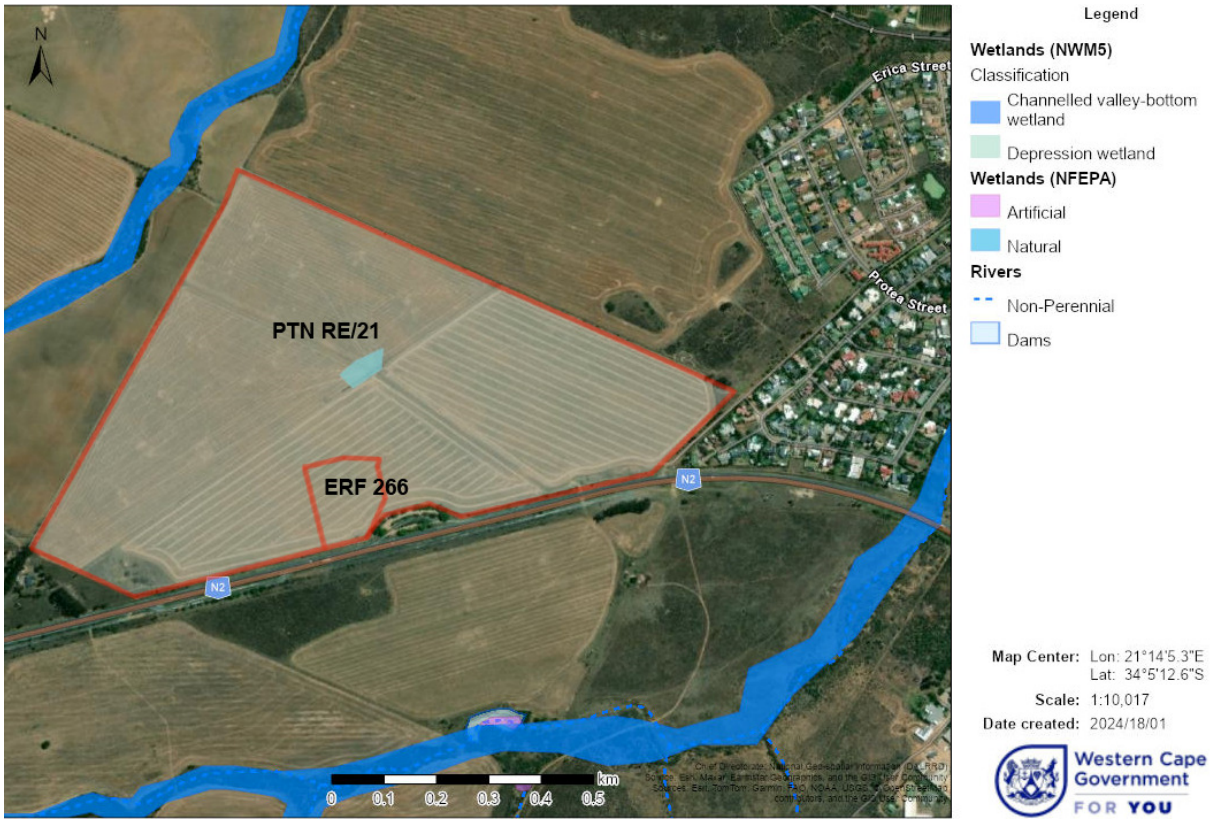

Figure 7: Watercourses in the surrounding Riversdale area, create a fertile agricultural corridor running from the north to the south-east (not to scale).

image: Cape Farm Mapper https://gis.elsenburg.com/apps/cfm/

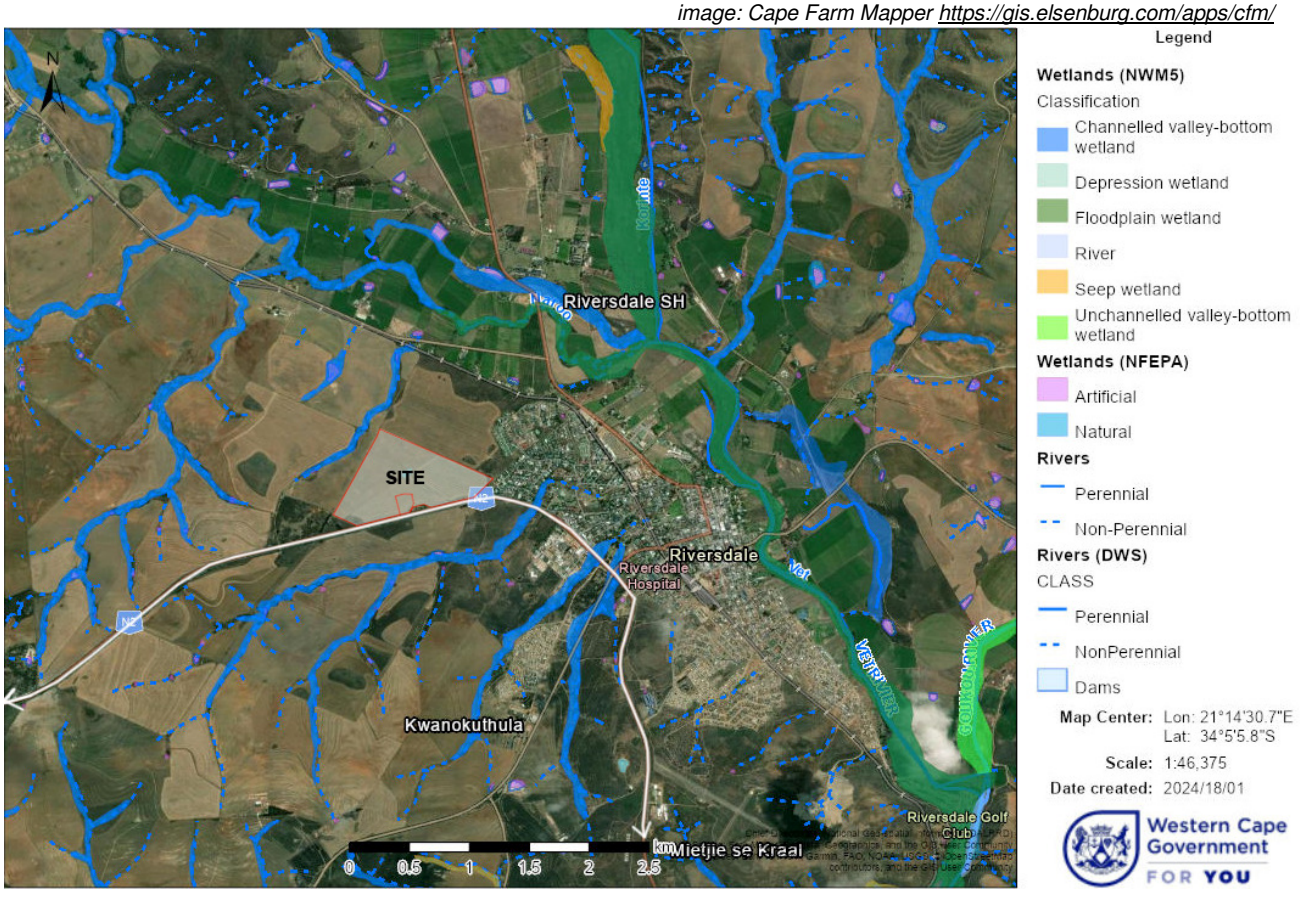

image: Cape Farm Mapper https://gis.elsenburg.com/apps/cfm/

Figure 8: Watercourses in the close vicinity of the site comprise channelled valley-bottom wetlands located towards the north and south of the site (not to scale).

4.2. Vegetation

Vegetation is a key factor in defining the landscape character and can influence the visual absorption capacity of the site. According to vegetation mapping of 2018, the vegetation type on site has been mapped as Eastern Rûens Shale Renosterveld. This vegetation type typically consists of low-growing woody and herbaceous shrubs with emergent succulent Aloe ferox.

Vegetation on site has been completely transformed by farming activities with only two small pockets containing some indigenous vegetation remaining on site in the western- and northeastern corners of the site. The largest portion of the site has been converted to cropland that has recently been harvested. For the purpose of the visual impact assessment, the screening value only of the vegetation is considered.

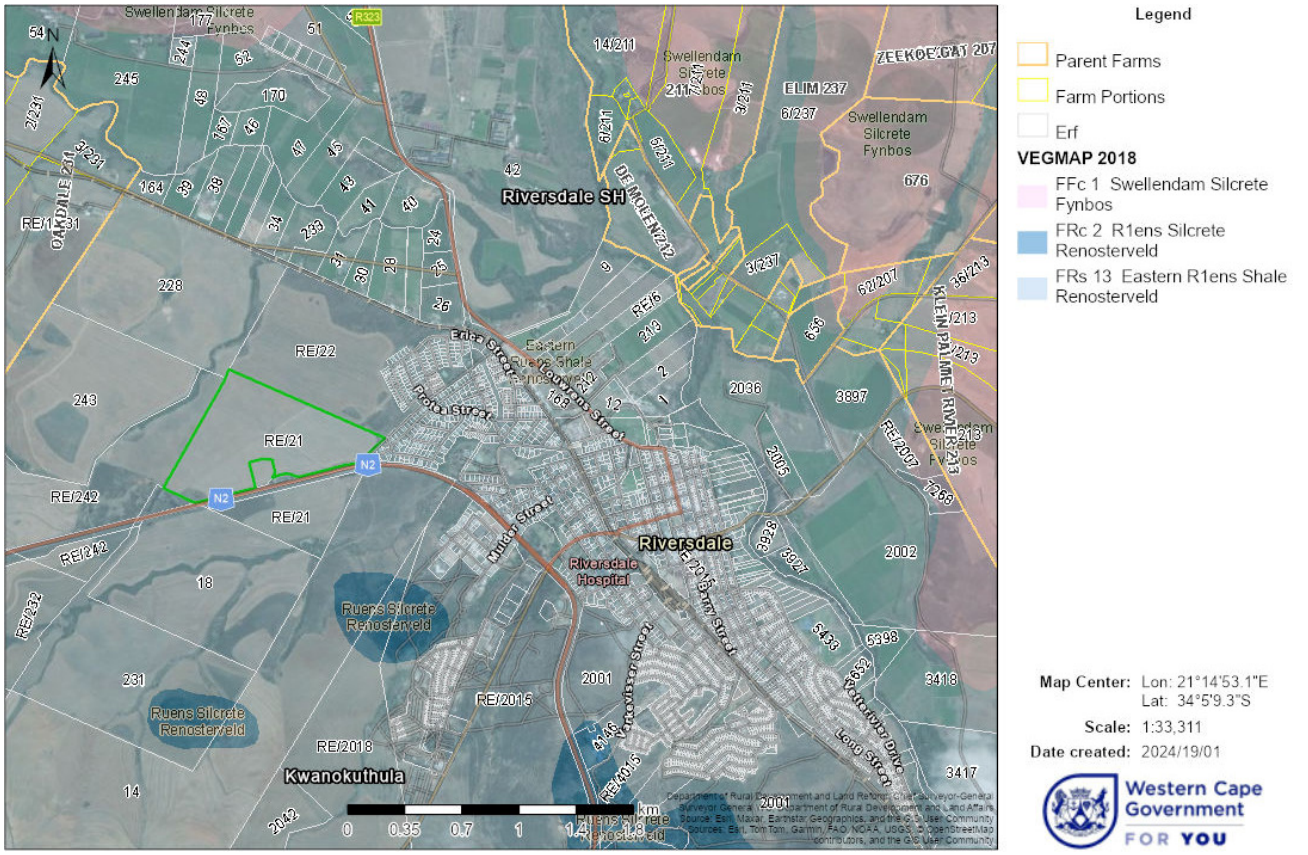

image: Cape Farm Mapper https://gis.elsenburg.com/apps/cfm/

Figure 9: Vegetation types (not to scale).

There are a few clumps of trees located on the site, specifically in the most south-western corner of the site as well as a few trees located in the most easterly corner of the site, as can be seen in figure 10. Vegetation in these specified areas consists of non-indigenous Eucalyptus trees, as well as smaller shrubs of approximately 1-2 m height. The vegetation further comprises mostly of low-growing grasses with woody and herbaceous perennials <1m in height, interspersed with aloes and occasional bush clumps of approximately 2 m in height.

A rest stop located along the southern boundary of the site is dedicated for users of the N2 highway. Planted trees along the rest stop allow for ample shade and screening towards the proposed development site. The vegetation along the N2 further comprises planted tree avenues and serves as an important screening measure towards the proposed development site.

Taller trees in the area surrounding the development site are sparse and limited to a few specimen trees planted along the roadway at rest stops and along roads and houses. Planted tree avenues surrounding farmhouses are visible in the distance, looking in a northerly direction from the site, planted along boundaries and as wind breaks.

Figure 10: Location of different vegetation types found on the proposed development site (not to scale).

Figure 11: Vegetation across the site consists mostly of transformed croplands with a few occasional bush clumps in the distance (marked A on the map).

Figure 12: Vegetation in the area marked B, comprises of a few non-indigenous Eucalyptus trees and grassy fields. Bush clumps of approximately 2-3 m height can be seen in the distance.

Figure 13: Trees planted along the south-eastern boundary of the site (marked C on the map) provide partial screening to the site when viewed from the gravel road and adjacent residential houses.

Figure 14: Vegetation in the area marked D on the map, comprises a few taller trees and shrubs of approximately 1-3m height.

Figure 15: Vegetation in the area marked D on the map further comprises occasional aloes scattered throughout grass fields.

Figure 16: A few taller trees are located along area D.

Figure 17: Vegetation on the neighbouring property, marked E on the map, comprises clumps of Eucalyptus trees that provide partial screening to the proposed development site when viewed from the N2.

Figure 18: Vegetation on the neighbouring property, marked E on the map, provides screening to the proposed site when viewed from the N2, looking in an easterly direction towards the site.

Figure 19: View of planted trees at the rest stop (marked F on the map). Vegetation consists of dense evergreen Ficus (Wild fig) trees that provide partial screening to the site when viewed from this point on the N2, and from a distance.

The site consists predominantly of transformed croplands with a few taller trees and bush clumps located in isolated patches on the site. Due to the lack of vegetation, trees, and tall bush clumps on site, the screening value of vegetation on site is rated as very low.

Due to the fact that the topography of the area slopes down towards rivers to the north of the site, the site lies exposed towards these low-lying areas, specifically areas located along the R323 such as Oakdale High School. The lack of trees or bigger bush clumps causes the screening value of existing vegetation to be described as very low.

Views to the site are mostly open and unprotected with very little screening provided by vegetation. Furthermore, it must be considered that invasive alien species are to be removed in terms of environmental legislation which could further reduce the screening effect of vegetation over time.

4.3 Land use and settlement patterns

Riversdale is an agricultural town located along the N2 highway en route from Cape Town to the Garden Route. The business centre of the town is laid out along the N2 highway. Businesses are concentrated in this area to allow for better economic opportunities and to accommodate passing tourists. According to the Riversdale LSDF, the town can be categorized as a first-order regional node in Hessequa and is considered a settlement with sustained growth opportunities and development potential, fulfilling the following functions: (p. 7, Western Cape Government, 2021):

- “Service centre for the surrounding farms and urban cores.

- Administrative headquarters for the other towns in the municipal area.
- Educational centre for the region, with various schools and tertiary training centres.
- An accessible location and adequate infrastructure create a solid platform for development".

According to the Riversdale LSDF, the business area is divided into three different zones, namely the CBD located north of the N2, the surrounding mixed-use business area, as well as the tourism use area, along the N2 that runs through the town. The N2 becomes an important activity corridor through the town, allowing for tourist activities along the route, such as restaurants, small shops and filling stations. The historical area of Riversdale is located to the north of the N2 and consists of museums, an information office, historic buildings, and souvenir shops. With the business district of Riversdale mostly limited to one area, it is the intention of the Riversdale LSDF to limit business penetration into residential areas.

Residential areas in Riversdale are situated towards the north and east of the N2. Residential settlements are located on relatively even slopes with several undulating plains and hills surrounding the town. The N2 further divides the residential settlements from the industrial zone, which is located towards the south of the N2.

Land use in the vicinity of the site is predominantly rural and residential with residential houses located along the south-eastern boundary of the site and the Langezicht residential complex located towards the north-east of the site.

Agricultural farmlands are located towards the north of the town and along natural watercourses. The town is surrounded by agricultural farmlands to all sides which adds to the landscape character of Riversdale. Riversdale farming sectors are located along a green corridor running through the town, making for fertile ground. Towards the north, south, and west of the site, land use can be classified as mainly rural with large-scale farming activities such as crop planting and other mixed-development farms located towards the north. Building density is low with mostly single- to double-storey free-standing dwellings and farm buildings towards the north of the site, surrounded by open fields and pastures.

Located towards the south-east of the site lies the industrial zone consisting of light industrial activities such as factories and workshops. The industrial zone is located in a slightly elevated position in relation to the site, with views onto the site. The settlement of Kwanokuthula is also located south of the N2 near the industrial zone but is screened from the site by the topography of the surrounding context, resulting in limited views onto the proposed site.

In close proximity to the proposed development property, the building typology consists mostly of single-storey residential buildings. Towards the east of the site, the urban landscape consists of larger single residential erven with single-storey residential buildings, some of them including outbuildings such as garages. Streets are lined by planted tree avenues, and vegetation and trees are further planted along the erf boundaries to provide privacy among the properties. The building typology consists of brick and plastered buildings with corrugated and tiled roofs. Boundary edges generally consist of a combination of brick boundary walls, precast walls, and occasional palisade steel fencing. Gardens and trees along road verges make for a pleasant streetscape.

Other buildings in close proximity to the site, located towards the north-east of the site, include the Wallace Anderson Home, an independent home for people with physical disabilities, the PPK Church, and security complexes such as Villa Tuscany, Uitwijk security complex and Langezicht complex. All three group housing complexes consist of medium-density residential erven with smaller single-storey units built as a harmonious architectural entity, and private roads in the complex. Villa Tuscany residential buildings consist of white-painted brick buildings with red-tiled roofs. Each house lives out to a small garden. The Uitwijk security complex, similarly, consists of plastered single-storey buildings with green corrugated roofs.

The Langezicht complex located towards the north-east of the site, consists of white plastered buildings with simple corrugated roofing. The spatial organisation of the complex is quite dense with units located in close proximity to each other. Each unit has its own garden with planted vegetation, bordered by brick boundary walls.

The map shown below also illustrates important road linkages in Riversdale. In addition to the N2 traversing through the town, the R323 also intersects with the N2 and forms an important access route to neighbouring towns and farms in the area. Towards the north of the town, the R323 also provides an access route towards surrounding farms and Oakdale High School, an agricultural training institute located towards the north-east of the site.

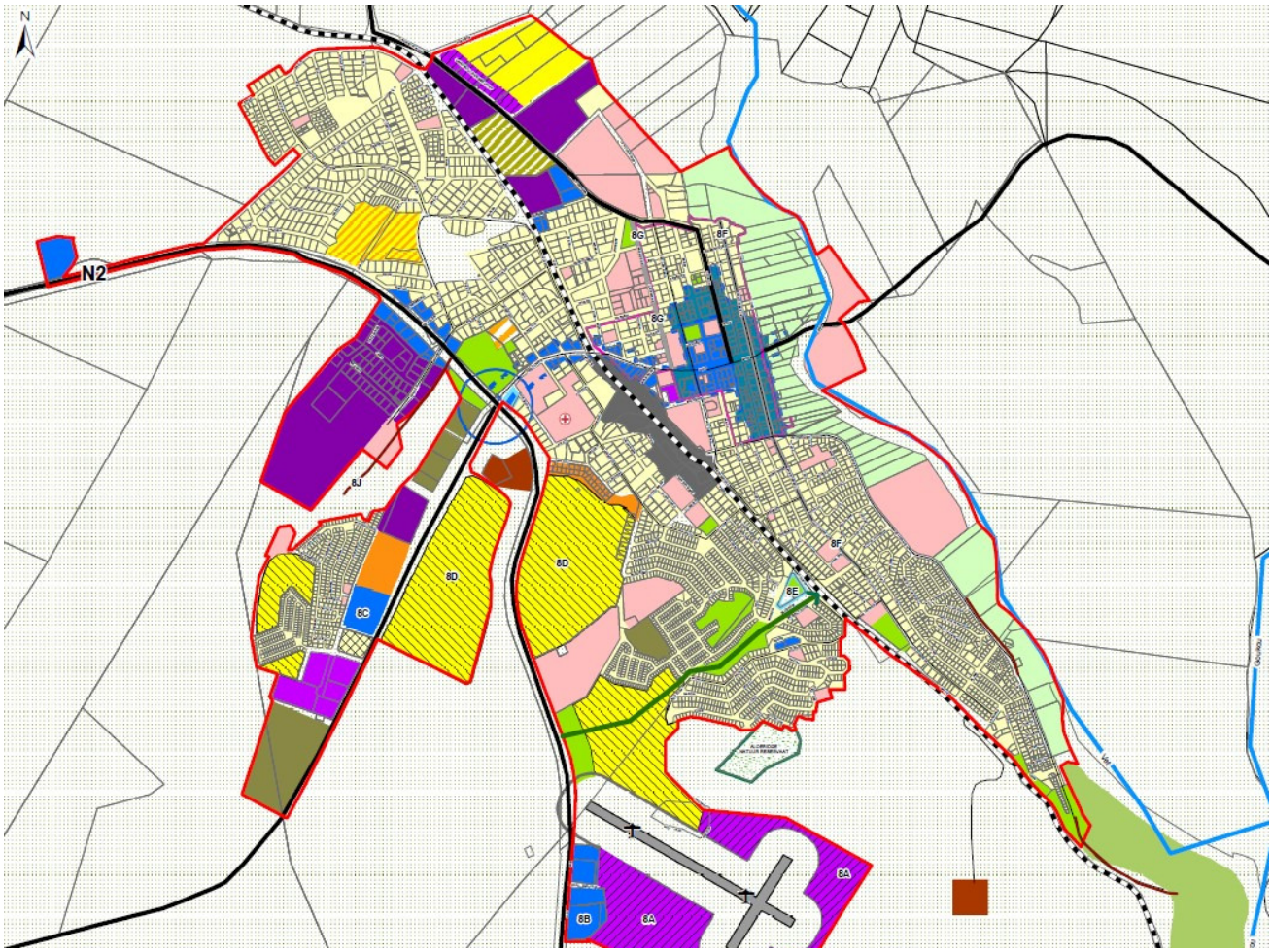

Figure 20: The Riversdale Local Spatial Development Framework (2021) shows the N2 traversing through the town. The business sector (in blue) is organised along the N2 and towards the north-east of the N2.

4.4 Landscape character and sense of place

Landscape character embodies more than just the physical characteristics of the site and includes the history, land-use, and other cultural factors that have distinguished the site over time.

These factors combine to establish a sense of place, which can broadly be defined as the unique quality or character of a place, whether natural, rural, or urban. It relates to the unique qualities, distinctiveness, or strong identity of a particular place. Sense of place is that quality that imparts identity to a particular location, the extent to which a person can recognize or recall a place as being distinct from other places – as having a vivid, unique, or particular character of its own. Intense familiarity will create a sense of place, just as will special form (Lynch, 1996. p.132).

Riversdale can be classified as an agricultural service-oriented town and forms the main business hub for shopping and other services for surrounding farming communities, smaller towns, and coastal resorts, like Witsand and Stilbaai. The town is located beneath the imposing Langeberg mountain range to the north, with the Sleeping Beauty mountain peak overlooking the town. Towards the north of the mountain range lies the Klein Karoo, linking with Riversdale through the R62 through the Garcia's Mountain Pass, which offers traditional Karoo landscapes.

The town lies along the N2 highway between Cape Town and George on the Agulhas Coastal Plain of the Western Cape. Riversdale is also the furthest west town in the Garden Route region. The N2 highway is considered an important route of travel through the Garden Route and is used by many tourists. The N2 has been identified as an important scenic route and view corridor along its entire length.

The Hessequa municipality is also known as the flower bed of the Garden Route. Riversdale, the capital town of the Hessequa municipality, is surrounded by bright yellow canola fields. The district is flanked by the lower Breede River to the west and the Gourits River to the east. The name 'Hessequa' comes from the Khoi language and translates to "people of the trees". Other prominent towns in this municipality include Heidelberg, Slangrivier, Albertinia, Gouritz, and Still Bay.

The current landscape typology of the Riversdale area is a combination of rural-, residential- and commercial/ light industrial activities. Open farmlands and disturbed landscapes predominate, interspersed with low-density rural developments, adjacent to the more densely developed townscape.

There are several watercourses running through the area. Agricultural farming lands along these water sources make for fertile grounds. Channelled valley-bottom wetlands are located towards the north and south of the site.

Figure 21: A satellite image of the town of Riversdale showing the green agricultural landscapes (not to scale).

On a larger scale, Riversdale can be characterised by its favourable combination of rural-, urban- and nature areas with the town's urban edge bordered by a rural environment providing a distinctive frame for the town. It is the combination of rural and urban landscape of Riversdale and its surroundings that contribute to the sense of place.

The landscape character of Riversdale can be described as a mosaic of agricultural landscapes as well as urban areas with light industrial activities located towards the south of the N2 highway. The landscape character further consists of open farmlands and disturbed landscape surrounding the town towards the north, south, west and east. The town development itself is typical of a small agricultural oriented town, with mixed-use residential developments organised along the central business district.

Due to the topography of the area, and the position of the site, the proposed developments will be visible from the N2 along with agricultural activities in the foreground. The site therefore becomes an important interface between the town and the surrounding agricultural landscape when viewed from the N2. It is important for the

development to add to the landscape character and not to provide a significant change to the urban fabric, thereby allowing the proposed development to fit in with its surroundings.

As described in the Riversdale LSDF, the natural resource base within Riversdale and the surrounding context is the foundation for social and economic development. The protection and sustainable exploitation of these resources is therefore a prerequisite for social and economic development. The Riversdale LSDF further states that the sense of the place of important natural, cultural, and productive landscapes, as well as artifacts and buildings must be preserved and strengthened.

The Riversdale LSDF's objective is to strive towards a central business district with its traditional character sustained, while simultaneously implementing measures to make land available for residential and business development in a manner that will maintain the sense of place of the town. It is important for the new development to add to the Riversdale LSDF's vision of maintaining the landscape character of the town and not to create developments that will be at odds with the existing layout and character of the town, causing visual intrusion. The Riversdale LSDF states the need for new developments to celebrate and add to the complex layers of memory, cultural heritage, and diversity of the town. It is important for the new development to fit into its surroundings, drawing inspiration from the existing character of the town while at the same time enhancing spatial integration and existing networks.

The site lies in an area renowned for its scenic beauty and visual diversity, from crossing the undulating plains to driving along the scenic Langeberg mountain range. The proposed development site is one of the first sites that can be seen when approaching the town along the N2 from the direction of Cape Town. The proposed developments create the opportunity to become a meaningful interface between the agricultural surroundings of Riversdale and its business centre.

4.5 Landscape features reinforcing landscape character

Although the landscape in which the site is situated is changing due to increasing development pressure, the current landscape typology is predominantly rural. Landscape features that reinforce the rural/agricultural sense of place, such as open pastures, informal farm-type fencing and farm dams are in evidence in the greater landscape surrounding the site. Building density in surrounding agricultural areas is sparse with low-rise development, and existing structures are typically set back from the road edges. The following images depict several landscape features that reinforce or contribute to the landscape character evident in the surrounding area.

Figure 22: Wire fencing and wooden posts along the south-eastern boundary of the site.

Figure 23: Gravel road turn-off towards the site, from the N2 highway.

Figure 24: Rock piles on the site, removed from cultivated fields.

Figure 25: View of farm buildings and associated infrastructure on the adjacent property.

5. VISUAL RESOURCE MANAGEMENT

5.1. Visibility of the proposed development

Visibility of the development relates to the geographic area from which the project will theoretically be visible, or the view catchment area. This also relates to the number of receptors. Visibility criteria are defined as follows (Oberholzer, B. 2005):

High visibility	Visible from a large area (e.g. several square kilometres).
Moderate visibility	Visible from an intermediate area (e.g. several hectares).
Low visibility	Visible from a small area around the project site.

The view catchment area is determined primarily by topography and is typically defined by ridgelines that limit views to and from a site.

The zone of visual influence of a project may be smaller due to the potential screening effect of trees, existing developments, and distance from proposed developments.

Due to the fact that the site is situated on an undulating plane with moderate changes in elevation over a relatively large area, ridgelines are not prominent, and the effect of the topography is to reduce the zone of visual influence that the site and the proposed project will have to a much smaller area.

5.1.1. The view catchment area

The view catchment area refers to the theoretical outer-most extent from which the site and proposed developments can be seen.

Theoretically, the area from which the site could be visible extends to the ridgelines surrounding the site as well as along the N2 view corridor approaching Riversdale from the south-east. There are several undulating plains in the surrounding area in which the site is situated that have the effect of reducing the zone of visual influence to a smaller area.

The site can also be partially seen from convex slopes to the south, from buildings located in the industrial zone of Riversdale. These buildings overlook the site from an elevated position.

Due to the topography of the landscape, part of the development site is situated on a convex slope with an elevated position in relation to its surrounding environment. Views onto this portion of the site are prominent from other low-lying areas in the surrounding context of the site, specifically towards the north and north-east of the site.

5.1.2. Zone of visual influence

The zone of visual influence is an area subject to the direct visual influence of a particular project.

The proposed development site slopes downward from the western corner to the north-eastern portion of the site, surrounded by undulating hilltops and plains. Convex slopes are more visually prominent in the landscape than concave slopes, and developments on convex slopes appear to be visually more imposing. Developments on concave slopes tend to be visually more recessive if such developments are in scale with the landscape. Ridgelines and convex slopes are more visually sensitive than valleys and concave slopes.

Due to the undulating nature of the topography, no prominent ridgelines occur on site, however, portions of the proposed developments will be situated on a convex slope, which will increase visual sensitivity. The southwestern corner of the site is situated in an elevated position relative to the surrounding landscape and will be more visible from a distance than the north-eastern portions of the site, that are situated at a lower level. Due to the topography sloping down towards rivers located towards the north of the site, the proposed development may be visible from these low-lying areas.

Due to the undulating topography of the area, there are several elevated positions in the close vicinity of the site from which the proposed development may also be visible. The landscape topography of Riversdale further consists of undulating plains, and the effect of the topography is to limit the zone of visual influence to an area of between 2 to approximately 5 km outward from the site.

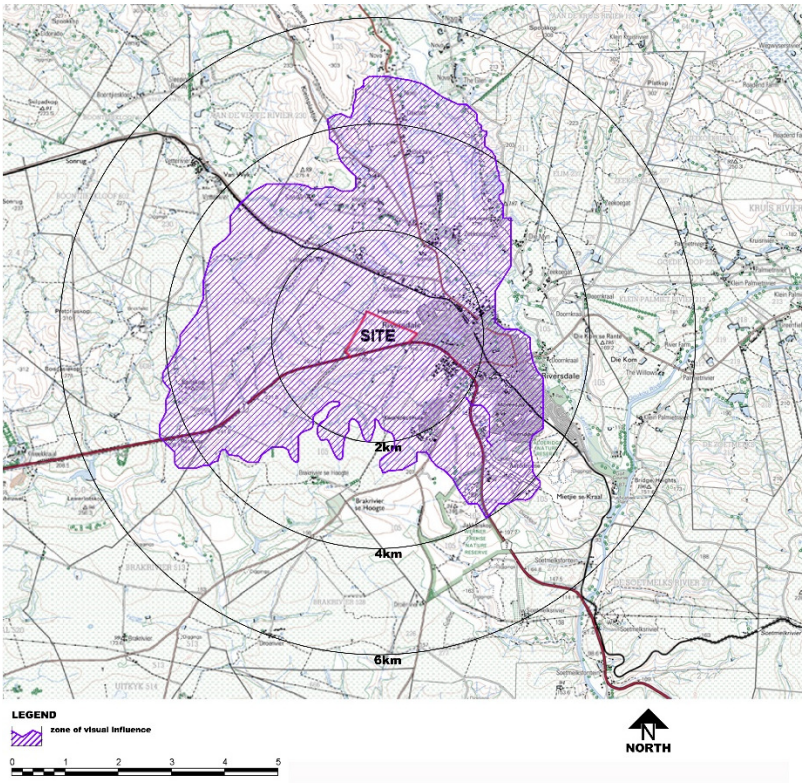

Figure 26: View catchment area and zone of visual influence for the development site.

Visibility of the site is high, being visible from a large area, e.g. several square kilometres.

5.2. Visual sensitivity of the area

The visual sensitivity of the site relates to the inherent visibility of the landscape, usually determined by a combination of topography, landform, vegetation cover, and settlement pattern. This translates into visual sensitivity.

Summary of sensitivity criteria of topographical features:

High visual sensitivity	**Topography & Landform**: ridgelines; steep slopes **Vegetation**: no or minimal screening by vegetation < 1m in height. **Landuse/ Heritage value**: special features on site; no or minimal screening by existing development.
Moderate visual sensitivity	**Topography & Landform**: convex slopes; steep slopes. **Vegetation:** partial screening by vegetation. **Landuse**: partial screening by existing development.
Low visual sensitivity	**Topography & Landform:** valleys. **Vegetation:** tall trees; dense vegetation > 5m height. **Land use & Heritage value**: no special site features; high degree of visual integration and screening by existing developments.

The following aspects were considered in terms of sensitivity rating for the site:

Areas of high visual sensitivity

- Topography and landforms – portions of the site are situated at an elevated position in relation to surrounding topography, few valleys or outcrops are present in the vicinity that could provide screening.
- Portions of the site where vegetation is <1m in height.

Areas of moderate visual sensitivity

- Topography and landforms – areas where slopes are moderate that are not located on ridgelines
- Areas where non-invasive vegetation provides partial screening.

Areas of low visual sensitivity

- Slopes < 1:4 that will require minimal grading and cut and fill operations that would cause visual scarring.

5.3. Visual sensitivity of receptors

The level of visual impact considered acceptable is dependent on the type of receptors.

High sensitivity	e.g. residential areas, nature reserves and scenic routes or trails;
Moderate sensitivity	e.g. sporting or recreational areas, or places of work;
Low sensitivity	e.g. industrial, mining or degraded areas.

The receptors in the area influenced by the proposed developments have been identified as follows:

Highly sensitive receptors:

- Residents in residential developments towards the east and north-east of the site
- The N2 scenic tourist route.

Moderately sensitive receptors:

- Places of work relating to farms, hotels, guesthouses, and other businesses in Riversdale.

Low sensitivity:

- Light industrial developments located in the industrial zone of Riversdale, towards the south of the site.

5.4. Visual absorption capacity of the landscape

Visual absorption capacity (VAC) relates to the potential of the landscape to conceal the proposed project.

High VAC	e.g. effective screening by topography and vegetation.
Moderate VAC	e.g. partial screening by topography or vegetation.
Low VAC	e.g. little screening by topography or vegetation.

Visual absorption capacity is closely linked to the concept of compatibility with the surrounding landscape, but the emphasis is on the area's ability to visually absorb the development, not the proposed development's ability to fit into the surroundings.

In terms of topography, the site is moderately exposed with the western portion of the site situated in an elevated position in relation to its surroundings. Partial screening of the site is provided by existing developments and vegetation when viewed from a distance. Considering the topography of the site based on 5 m contour intervals, the site is visible to surrounding low-lying areas in close vicinity of the site, specifically from farms, agricultural developments, and the R323 road towards the north of the site. The undulating topography of the area, however, provides partial screening to the proposed development site when viewed from these points. The development site may be partially visible from hilltops located in the vicinity of the site, specifically from the industrial area and hilltops towards the south-east of the site when entering the town from the direction of George.

The site is easily visible from the N2 highway that traverses through the town. There are, however, several undulating hills along the N2 and in the area surrounding the site that provide partial screening from a distance.

The site slopes down from the south-western corner of the site towards the east, where it connects to the corner of Lobelia and Lanoria Street. The site is also visible from residential developments located along these roads, as well as from the Langezicht residential complex to the north-east of the site, along Erica Street. Partial screening from these properties is provided through vegetation and tree avenues planted along residential buildings, but views onto the site remain open due to the topography of this portion of the site being relatively flat.

The visual absorption capacity of the surrounding landscape is rated as moderate to low due to partial screening from surrounding areas > 2km away to little screening by topography and vegetation from areas within a radius of < 2km from the site.

5.5. Visual intrusion

Visual intrusion relates to the level of compatibility or congruence of the project with the particular qualities of the area, or its 'sense of place'. This is related to the idea of context and maintaining the integrity of the landscape or townscape.

High visual intrusion	Results in a noticeable change or is discordant with the surroundings.
Moderate visual intrusion	Partially fits into the surroundings, but is clearly noticeable.

Low visual intrusion Minimal change or blends in well with the surroundings.

The building typologies in the surrounding area comprise residential buildings along the south-eastern edge of the site, and residential complexes, such as the Langezicht complex along the proposed extended Erica Street. Residential buildings are typically single-storey buildings with small gardens. The proposed development is of a similar nature and scale, which is comparable to similar developments in Riversdale, namely group housing complexes such as the Langezicht residential complex.

Building typologies in agricultural areas towards the north and west of the site comprise mostly single- to double-storey buildings surrounded by open fields or pastures. The buildings are typically set back from the road verges and screened from the road by planted tree avenues.

Building typologies in the surrounding area further include shops and filling stations along the N2 highway. Towards the industrial area, located south of the site, building typologies consist mostly of single-storey offices or workshops, and large corrugated shed-like structures.

The building density of the proposed development will be of a similar scale and nature as its surrounding context and will potentially fit into its surroundings as there are already residential developments located in close proximity to the site. Building density will be much higher than the present situation on the adjacent erven towards the south, west, and north of the site but will be varied across the development site. The addition of 1 ha lifestyle erven placed towards the west of the site will allow for a more gradual transition between the residential complex and the adjacent agricultural properties.

Figure 27: Residential single-storey erven located along the south-eastern boundary of the site. The site is screened from Lobelia Street by a planted avenue of trees. Most of Lobelia Street is currently a gravel road. The proposed development intends to create a future access point to the proposed site from the corner of Lobelia and Lanoria Street.

Figure 28: Single-storey residential buildings of the Langezicht residential complex located along Erica Street which is terminated at the entrance of Langezicht complex. The proposal intends to extend Erica Street towards the southwest to create an access point onto the site.

Figure 29: Residential buildings of the Langezicht complex. The site is visible from the corner of the complex and residents of the complex are classified as highly sensitive receptors.

Figure 30: Farm buildings located towards the north of the proposed site.

Figure 31: The Ou Meul restaurant located along the N2 traversing through the town overlooking the site.

Figure 32: Buildings in the industrial zone located towards the south of the proposed site.

Figure 33: Shed-like structures located in the industrial zone towards the south of the proposed site.

The proposed development is in keeping with that of similar developments in the vicinity of the site within the urban edge of Riversdale. To reduce visual intrusion, it will be important for the proposed development to blend in with the existing building typology. The proposed development will be of the same scale and nature as residential developments in close vicinity to the site. The single-residential development will be placed towards the east of the site, closer to similar existing residential developments in the area, while the 1 ha lifestyle erven are placed towards the western edge of the site, creating a gradual transition from medium-density developments towards low-density developments.

The proposed developments will result in a noticeable change in the surroundings and will be clearly visible, but will not be discordant with current developments in the area.

Visual intrusion can be expected to be moderate to high.

5.6. Visual exposure

Visual exposure is based on the distance from the project to selected viewpoints. Exposure or visual impact tends to diminish exponentially with distance.

High exposure	Dominant or clearly noticeable.
Moderate exposure	Recognisable to the viewer.
Low exposure	Not particularly noticeable to the viewer.

Critical viewpoints were established based on visual corridors and views onto the site to establish visual exposure. Viewpoints were taken where visual effects would be expected to be higher and where the highest number of sensitive receptors would be expected to be exposed to views of the site and proposed new developments.

Figure 34: Viewpoints Key map (not to scale).

Viewshed maps were taken using key viewpoints identified in the field based on 5m contours to show visibility of the site from a distance based on topography.

As a component in this contrast rating process, visual representation, such as photo montages, are vital in large-scale modifications, as this serves to inform interested and affected parties and decision-making authorities of the nature and extent of the impact associated with the proposed project/development. Visual simulation through photo montages was created to represent the effects the proposed developments would have on the surrounding context. 3D images were created of the proposed developments and superimposed on the existing viewpoints looking onto the site.

In order to create an accurate representation of the proposed development, attention was paid to the scale and density of the development. Building lines, coverage, and maximum building heights were derived from the Hessequa Municipality Zoning Scheme By-Law (2018) according to each zoning type serving as design parameters against which the developments were measured. A 3D model was compiled to showcase how the different residential developments would be spaced out across the site, according to the proposed site development plan (Appendix A), ranging from 1ha lifestyle erven, single residential erven, to medium-density group housing developments.

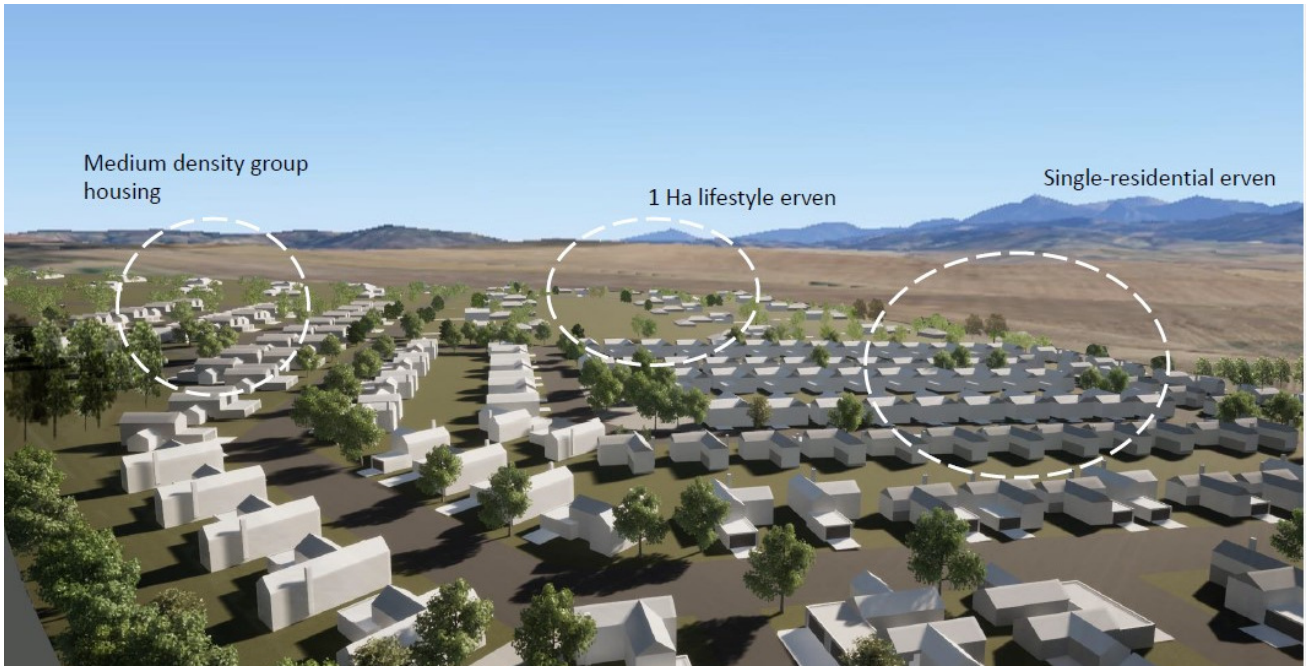

Figure 35: A 3D representation of the site layout and possible representation of buildings across the site.

The plan below depicts the building setback lines and maximum building heights for each residential type.

Figure 36: Plan showing building setback lines on site and maximum building heights for the site (not to scale).

5.6.1. Viewpoint 1

Viewpoint 1 is situated at the northwestern corner of the Langezicht residential complex located along Erica Street, at a distance of approximately 500 m from the site looking in a south-westerly direction. The coordinates for this point are 34°04'58.5"S and 21°14'24.4"E.

Figure 37: Viewpoint 1 at the northwestern corner of Langezicht complex looking southwest towards the site.

A viewshed taken from this viewpoint indicates which portions of the site may be visible.

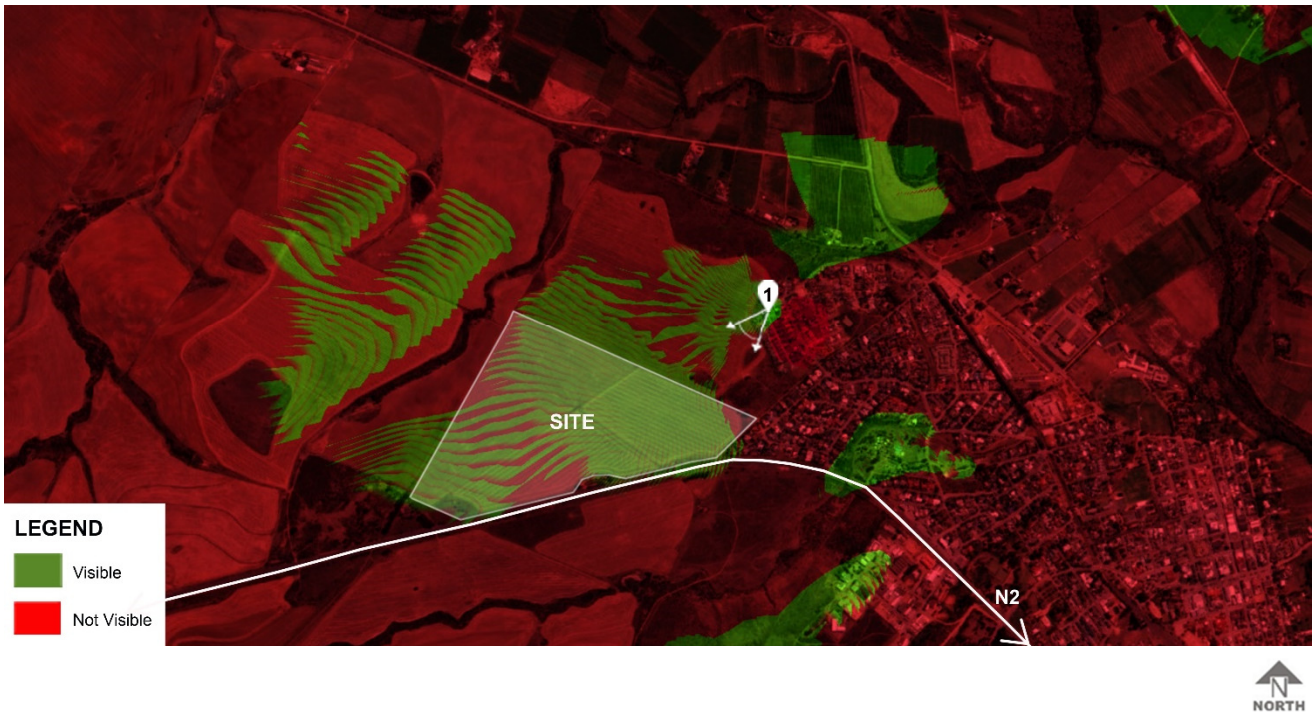

Figure 38: Viewshed of Viewpoint 1 showing portions of the site that would theoretically be visible based on topography only.

Viewpoint 1 is situated on the corner of the northwestern boundary of the Langezicht residential complex along Erica Street. Erica Street is currently terminated at the entrance gate of the above-mentioned complex. The proposed new development intends to create a new access point to the site along an extension of Erica Street. The viewpoint is therefore situated on the proposed extension of Erica Street looking in a south-westerly direction to the site.

The viewshed taken from this position indicates that the site at ground level will be visible to receptors of the Langezicht complex and other receptors on the extension of Erica Street. Screening in terms of vegetation is rated as very low with open views onto the site. Visual exposure at this point can be described as high, as receptors from residential buildings are regarded as highly sensitive, and new developments will be in close proximity to existing residential erven.

Visual exposure from Viewpoint 1 is expected to be high.

Figure 39: Photomontage of proposed developments superimposed onto the existing view.

5.6.2. Viewpoint 2

Viewpoint 2 is situated at the Oakdale High School's entrance gate on the R323, at a distance of approximately 1,8 km from the site looking in a southwesterly direction. The coordinates for this point are 34°04'09.5"S and 21°14'26.6"E.

Figure 40: Viewpoint 2 looking in a southwestern direction towards the site.

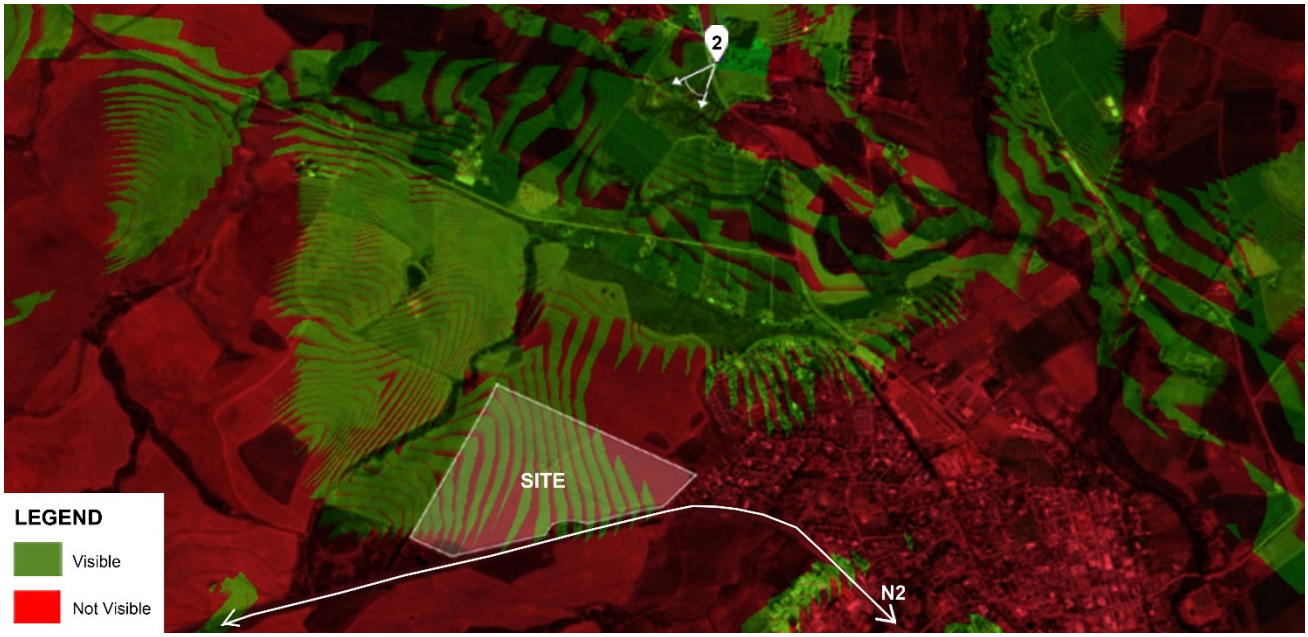

Figure 41: Viewpoint 2 viewshed.

The viewpoint was chosen based on the topography of the area sloping down from the southwest towards the north-east. The viewpoint is situated in a low-lying position in relation to the site and its surroundings. Oakdale High School is a well-known agricultural educational institution in the Western Cape and is located along the R323, with many other farming activities located in the area. The viewpoint becomes an important reference point as the high school receives many visitors from surrounding towns and provinces.

From this viewpoint, the viewshed indicates that the proposed site will be partially noticeable in the distance. Due to the topography, part of the site is in an elevated position in relation to its surroundings and will be visible from the viewpoint. The viewpoint is, however, taken at a distance of approximately 1,8 km from the site, and views to the site are partially screened by the undulating topography and vegetation in the foreground. From this viewpoint, the site would be partially noticeable with direct views of the proposed development.

Visual exposure from Viewpoint 2 is expected to be moderate.

Figure 42: Photomontage of proposed developments superimposed on existing view.

5.6.3. Viewpoint 3

Viewpoint 3 is situated on the corner of the Ou Meul Restaurant located along the N2 highway, at a distance of approximately 800 m from the site, looking in a north-westerly direction towards the site. The viewpoint is at a slightly low-lying position in relation to the site. The coordinates for this point are 34°05'23.0"S and 21°14'48.0"E.

Figure 43: Viewpoint 3 located at the corner of Ou Meul Restaurant along the N2, looking in a northwesterly direction towards the site.

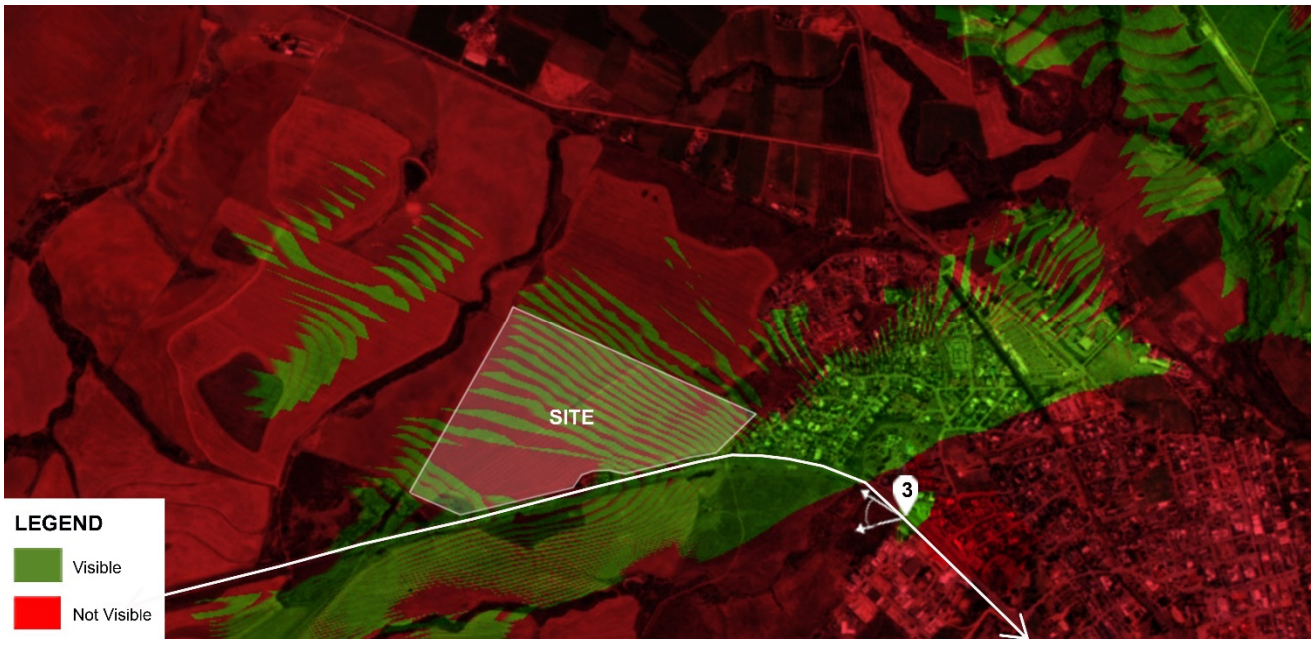

Figure 44: Viewpoint 3 viewshed indicates partial views onto the development site.

The Ou Meul restaurant is situated along the N2 highway traversing through the town and is an important stop for tourists passing by. The viewshed indicates that the site at ground level will be partially visible from this viewpoint.

Due to the topography of the landscape, the development site is situated in an elevated position in relation to the viewpoint. Although the proposed development may be partially visible, views onto the site will be partially screened by existing vegetation in the foreground and planted tree avenues along the N2. Partial screening would be provided by adjacent land use, with a number of similar residential-type buildings in the foreground.

Visual exposure from Viewpoint 3 is expected to be moderate to high.

Figure 45: Photomontage of proposed developments superimposed on existing view.

5.6.4. Viewpoint 4

Viewpoint 4 is situated on the N2 highway leading to George, looking in an easterly direction towards the site. The viewpoint is situated at a distance of approximately 50m from the site. The coordinates for this point are 34°05'25.1"S and 21°13'39.7"E.

Figure 46: Viewpoint 4 situated on the N2 looking in an easterly direction towards the site.

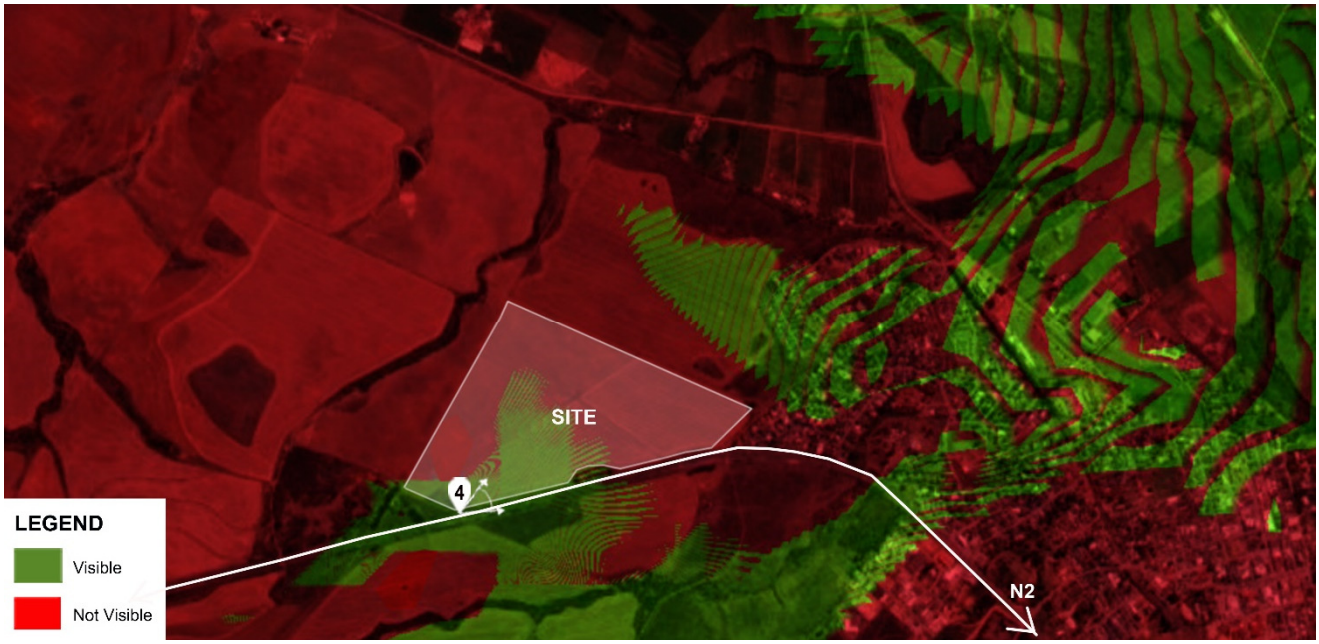

Figure 47: Viewpoint 4 Viewshed.

The viewpoint is situated along the N2, near the southwestern most corner of the site. Although the viewpoint is located only 50 m from the development site, views onto the site are limited.

The viewshed taken from this point indicates that the site will be partially visible to receptors. The topography of the area along with the earthworks along the N2 shields the site from this viewpoint, allowing only a limited portion of the site, along the southern boundary and central areas of the site, to be seen.

From this viewpoint, the proposed development will consist of 1ha lifestyle erven along the western edge and corner of the site, with medium-density residential erven placed towards the central areas of the site. Single-residential erven towards the eastern edge of the site will tend to merge with existing land use in Riversdale, where residential buildings of similar type and scale are visible from this viewpoint.

Views onto the site will further be screened by existing planted tree avenues along the N2, specifically at the rest stop located along the southern boundary of the site.

Visual exposure from Viewpoint 4 is expected to be moderate.

Figure 48: Photomontage of proposed developments superimposed on existing viewpoint.

5.6.5. Viewpoint 5

Viewpoint 5 is situated in the industrial area along Fritz Grub Crescent, at a distance of approximately 1 km looking in a north-westerly direction towards the site. The coordinates for this point are 34°05'33.4"S and 21°14'38.5"E.

Figure 49: Viewpoint 5 situated along Fritz Grub Crescent in the industrial zone of Riversdale, looking northwest towards the site.

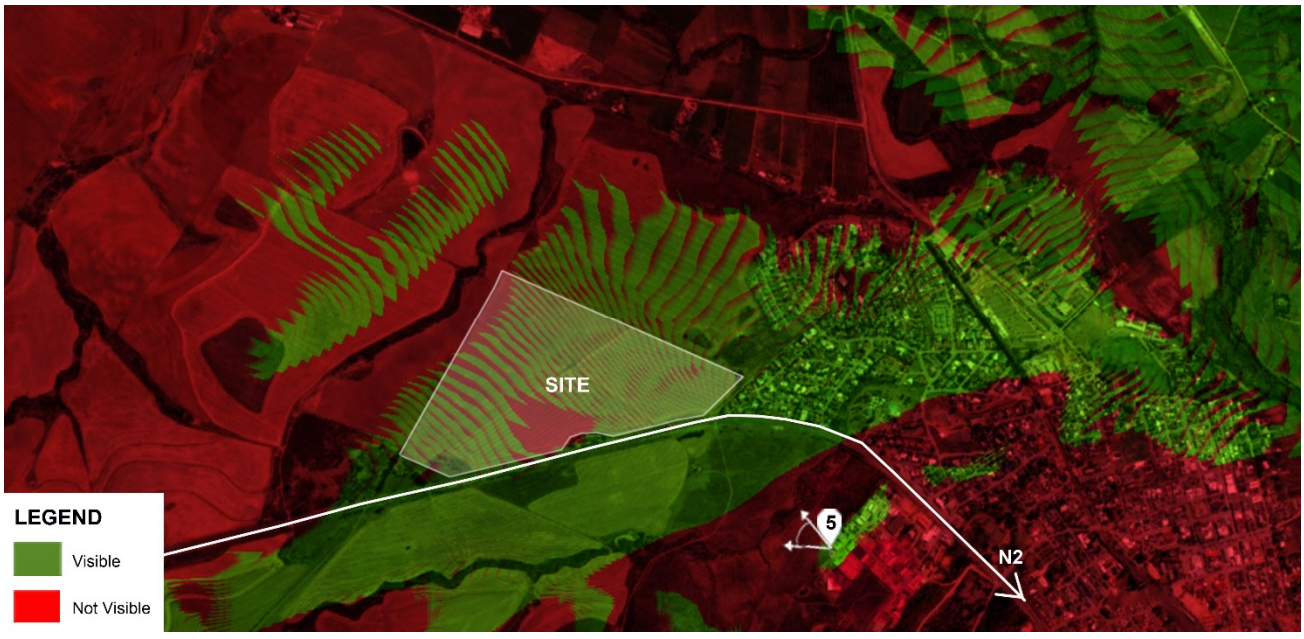

Figure 50: Viewpoint 5 Viewshed.

The viewpoint was chosen based on its topographical position. The viewpoint is situated on an elevated plane overlooking the site and a section of the town of Riversdale in a north-easterly direction.

The viewshed taken from this point indicates that the site at ground level will be visible to receptors. The proposed development will partially be screened by vegetation and planted tree avenues along the N2. Although the site and the proposed development may be easily visible from this viewpoint, existing land use towards the east of the site is of a similar type and scale as the proposed development and will merge into the skyline. Because the viewpoint is located in an industrial zone, receptors are considered as moderately to low sensitive receptors.

Visual exposure from Viewpoint 5 is expected to be moderate to high.

Figure 51: Viewpoint 5 situated along Fritz Grub Crescent in the industrial zone of Riversdale, looking northwest towards the site.

5.6.6. Viewpoint 6

Viewpoint 6 is situated on the N2 on an elevated position looking in a northerly direction towards the site at a distance of approximately 2,5 km from the site. The coordinates of this viewpoint are 34°06'17.2"S and 21°15'12.9"E.

Figure 52: Viewpoint 6 on the N2 just past the slipway travelling northeast towards George.

Figure 53: Viewpoint 6 Viewshed.

Viewpoint 6 was chosen based on its topographical position in relation to the site. Viewpoint 6 is situated on an elevated position along the N2 when approaching the town from the south-east. The Gerrit du Plessis Secondary School is located towards the east of this viewpoint and overlooks the town of Riversdale.

From this viewpoint the site is easily visible and is one of the first sights you see when approaching the town, driving in the direction of Cape Town. Views onto the site are partially screened by vegetation and earthworks in the foreground, as well as planted trees along the rest stop and the southern boundary of the site.

Although the proposed development may be visible from this viewpoint, existing buildings in the foreground would allow the new proposed development to merge into the skyline. The distance from the viewer is such that even if new developments were to be easily visible from this viewpoint at roof height, they would not cause a significant change in landscape character due to similar developments in the foreground.

Visual exposure from Viewpoint 6 is expected to be moderate.

Figure 54: Viewpoint 5 situated along Fritz Grub Crescent in the industrial zone of Riversdale, looking northwest towards the site.

6. VISUAL IMPACT ASSESSMENT

Potential visual impacts will be defined and assessed based on a synthesis of criteria as follows (Oberholzer, 2005.):

Criteria used for the assessments of impacts		
Nature of the impact	An appraisal of the visual effect the activity would have on the receiving environment. This description should include visual and scenic resources that are affected and the manner in which they are affected (both positive and negative effects).	
Extent	The spatial or geographic area of influence of the visual impact.	
	Site-related:	Extending only as far as the activity.
	Local:	Limited to the immediate surroundings.
	Regional:	Affecting a larger metropolitan or regional area.
	National:	Affecting large parts of the country.
	International:	Affecting areas across international boundaries.
Duration	The predicted lifespan of the visual impact.	
	Short term:	e.g., duration of the construction phase.
	Medium term:	e.g., duration for screening vegetation to mature.
	Long term:	e.g., lifespan of the project.
	Permanent:	Where time will not mitigate the visual impact.
Intensity	The magnitude of the impact on views, scenic or cultural resources.	
	Low:	Where visual and scenic resources are not affected.
	Medium:	Where visual and scenic resources are affected to a limited extent.
	High:	Where scenic and cultural resources are significantly affected.
Probability	The degree of possibility of the impact occurring.	
	Improbable:	Where the possibility of the impact occurring is very low.
	Probable:	Where there is a distinct possibility that the impact will occur.
	Highly probable:	Where it is most likely that the impact will occur
	Definite:	Where the impact will occur regardless of any prevention measures
Significance	The significance of impacts can be determined through a synthesis of the aspects produced in terms of their nature, duration, intensity, extent and probability, and be described as follows:	
	Low:	Where it will not have an influence on the decision.
	Medium:	Where it should have an influence on the decision unless it is mitigated.
	High:	Where it would influence the decision regardless of any possible mitigation.

Potential visual impacts were considered during the construction phase as well as the operational phase. The following potential visual impacts were assessed for the proposed developments as per the site development plan provided:

Construction phase

- Visibility of construction vehicles, temporary structures, scaffolding, site storage of materials during construction.
- Visual scarring as a result of cut and fill operations to accommodate roadways and building platforms.
- Wind-blown dust during construction

Operational phase

- Change in the visual character of the area from a peaceful, partly developed rural environment to a more densely developed residential site.
- Change in visual character of a scenic tourist route (N2).
- Visual intrusion of lighting at night.

6.1. Construction phase

During the construction phase, the visual character of the site will change from agricultural farming lands, cultivated for crop planting to a more lively construction site, with visual changes brought about by the removal of vegetation, earthworks, roadworks, and subsequent construction activities. Although the construction will take place in a residential environment and may cause visual intrusion to residents, these impacts will be of a temporary nature and can be mitigated to reduce significance. The site, is, however located along the N2, with direct views onto the site, and careful attention needs to be paid to mitigate the visual intrusion to motorists and road users travelling on the N2.

A degree of visual scarring can be expected during the construction phase due to the visual exposure of the site from surrounding viewpoints and the construction of a new road on the site. Due to the moderate to minimal slopes on site, cut and fill operations can be expected to be moderate and should not significantly contribute to visual scarring in the landscape, provided suitable mitigation is implemented. Due to the removal of vegetation cover and construction works, wind-blown dust during the construction time will also be significant as the proposed site has been transformed in its entirety.

The significance of visual impacts during the construction phase is rated as moderate, and with mitigation, it can be moderate to low.

Recommended mitigation measures are discussed in more detail in Section 6.3. Effective mitigation measures to be implemented during the construction phase include:

- Screening the construction site with visually appropriate site hoarding.
- Rehabilitate and revegetate disturbed areas on site immediately following construction.
- Limit disturbance to the least possible area needed for construction.
- Developing the proposed developments in phases to reduce the overall construction effect to a smaller portion of the site.

6.1.1 Visibility of construction vehicles and activities

Key visual impacts	Visibility of construction vehicles, temporary structures, scaffolding, site storage of materials during construction.	
Extent	No mitigation	Local
	With mitigation	Local
Duration	No mitigation	Short-term
	With mitigation	Short-term
Intensity	No mitigation	Medium to high
	With mitigation	Medium
Probability	No mitigation	Highly probable
	With mitigation	Probable
Significance	No mitigation	Medium
	With mitigation	Medium to low

6.1.2 Visual scarring

Key visual impacts	Visual scarring due to cut and fill operations to accommodate roadways and building platforms.	
Extent	No mitigation	Local
	With mitigation	Local
Duration	No mitigation	Short-term
	With mitigation	Short-term

Intensity	**No mitigation**	**Medium to high**
	With mitigation	**Medium**
Probability	**No mitigation**	**Highly probable**
	With mitigation	**Probable**
Significance	**No mitigation**	**Medium**
	With mitigation	**Medium to low**

6.1.3 Wind-blown dust during construction

Key visual impacts	**Wind-blown dust during construction**	
Extent	**No mitigation**	**Local**
	With mitigation	**Local**
Duration	**No mitigation**	**Short-term**
	With mitigation	**Short-term**
Intensity	**No mitigation**	**Medium to high**
	With mitigation	**Medium**
Probability	**No mitigation**	**Highly probable**
	With mitigation	**Probable**
Significance	**No mitigation**	**Medium**
	With mitigation	**Low**

6.2. Operational phase

If the proposed development were to go ahead, the character of the site would change and it would permanently affect the landscape character of the area. The changes proposed are in keeping with existing developments in the vicinity and Riversdale municipality's vision for future development and need not necessarily be viewed as negative. With the implementation of appropriate mitigation measures, the proposed development can contribute in a positive manner to the sense of place and landscape character of the area.

To mitigate the impact of the development, the scale and nature of the proposed developments should be kept at a scale that is comparable with similar developments in the area, specifically the residential developments located along the south-eastern boundary and residential complexes such as the Langezicht complex in Erica Street. Because the Riversdale LSDF also draws attention to the importance of maintaining the rural and traditional character of Riversdale and its surroundings, the design of buildings and site layout should endeavour to maintain the rural sense of place that makes the area unique.

Although the proposed developments would potentially be visible from the scenic N2 view corridor, the proposed development is set back from the road by a 10 m building line, and appropriate mitigation such as a planted buffer along the road verge could screen views onto the site and reduce visual impact.

Views onto the development site from residential areas are considered highly sensitive, as there are direct views onto the site from neighbouring residential developments. Careful attention needs to be paid to the design of developments and roads along these borders so as not to block natural light to and views from the existing residential developments. During the operational phase, the new proposed developments would cause a significant to noticeable change in landscape character but would be in keeping with existing land use, scale, and nature of neighbouring residential properties. Visual intrusion can be reduced through vegetated buffers and appropriate building setback lines.

The proposed developments will increase lighting on the site at night and bring about changes to the rural night sky currently experienced. The existing residential buildings on adjacent properties and residential developments in close vicinity to the site already contribute to the lighting at night and the night sky experienced in the area. Visual intrusion of lighting at night can be mitigated by effective design and management of exterior outdoor lighting.

The significance of visual impacts during the operational phase is rated as moderate to high, and with mitigation can be reduced to moderate to low.

Mitigation measures are discussed in more detail in section 6.3. Mitigation measures would include:

- Design of buildings and landscape to complement the existing landscape character and sense of place.
- The design of the proposed development layout to better fit into the existing urban fabric of Riversdale by allowing internal roads and residential buildings to follow the contours of the landscape rather than imposing a rigid grid pattern onto the site.
- Use of materials and finishes that will allow new developments to blend in with their visual surroundings and reduce visual intrusion.
- Appropriate screening by new planting.
- Management of outdoor lighting to reduce visual intrusion and avoid light pollution.

6.2.1 Change in visual character of the area

Key visual impacts	Change in the visual character of the area from an agricultural rural setting to a more lively residential setting.	
Extent	No mitigation	Local
	With mitigation	Local
Duration	No mitigation	Long-term
	With mitigation	Long-term
Intensity	No mitigation	Medium to high
	With mitigation	Medium
Probability	No mitigation	Highly probable
	With mitigation	Highly probable
Significance	No mitigation	Medium to high
	With mitigation	Medium to low

6.2.2 Change in visual character of scenic tourist route

The site is potentially visible from viewpoints along the N2. It is also situated in an area frequented by sensitive receptors relating to the tourist industry.

Key visual impacts	Potential visual intrusion along a scenic view corridor frequented by tourists and holiday makers.	
Extent	No mitigation	Local
	With mitigation	Local
Duration	No mitigation	Long-term
	With mitigation	Long-term
Intensity	No mitigation	Medium to high
	With mitigation	Medium to low
Probability	No mitigation	Highly probable
	With mitigation	Highly probable
Significance	No mitigation	Medium to low
	With mitigation	Medium to low

Although the proposed developments would be noticeable and could cause visual intrusion along the scenic N2 route, the undulating topography of the broader Riversdale landscape and planted vegetation along the N2 partially screen views onto the site when approaching the town from the west. The site only becomes visible when driving directly past the south-western corner of the site and is not visible from a distance when driving from a westerly direction towards the town.

The site is, however, visible from the N2 directly passing the site, but part of the site is currently partially screened by vegetation along the rest stop and trees along the N2. Views onto the site can further be screened through a planted buffer along the southern boundary of the site, limiting views from the N2.

The site can be seen from an elevated position on the N2 when approaching the town from the south-east. Although the proposed development would be noticeable from this viewpoint, it is at a distance of approximately 1,8 km from the site and would not cause visual intrusion as proposed new developments would tend to be visually integrated with the existing townscape.

6.2.3 Visual intrusion of lighting at night

The proposed developments will increase lighting on the site at night and bring about changes from the rural night sky currently experienced in Riversdale.

Key visual impacts	Visual intrusion of lighting at night.	
Extent	No mitigation	Local
	With mitigation	Local
Duration	No mitigation	Long-term
	With mitigation	Long-term
Intensity	No mitigation	Medium to high
	With mitigation	Medium to low
Probability	No mitigation	Highly probable
	With mitigation	Probable
Significance	No mitigation	Medium
	With mitigation	Medium to low

Visual intrusion of lighting at night can be mitigated by effective design and management of exterior outdoor lighting. Mitigation measures will include:

- Minimize exterior lighting.
- Avoid light spillage with the use of appropriate lighting fixtures.
- Avoid spotlighting or floodlighting for security purposes and use alternative measures for security.

6.3. Mitigation measures

The proposed development will be noticeable to tourists and residents of Riversdale, and will be partially visible from the N2 highway traversing through the town and residential developments located in close vicinity to the site. The visibility and potential visual impacts of the proposed developments need not necessarily be negative but could be positive through the implementation of appropriate mitigation measures that support and enhance the scenic resources of the area.

The type of mitigation measures that should be considered are centred around the following:

- Siting proposed buildings to avoid areas of inherent site sensitivity, such as elevated or sloped positions, as far as possible.
- Organising internal roads and proposed buildings along the contours of the landscape to allow for a more organic layout and to better fit in with the existing urban fabric of Riversdale.
- Allowing for varied and well-defined public spaces within the proposed layout to create enjoyable urban experiences and improving the overall liveability of the space.
- Siting buildings to be congruent with existing building typologies in the vicinity of the site, i.e. buildings set back from road edges along sensitive visual corridors.
- Providing architectural and landscape development guidelines to guide the visual characteristics of proposed developments. Colours and finishes must complement the existing landscape character of Riversdale and allow the proposed new developments to blend in with its surroundings. Material selection must be considered as part of the design in order to ensure that proposed building structures are in harmony with the surrounding landscape as far as possible.
- Screening new developments from neighbouring properties and roadways using a combination of earthworks and screening vegetation must be prioritised.
- Height and scale of buildings must be minimised where possible. Appropriate building height as identified by the Hessequa Municipality Zoning Scheme By-Law (2018) must be adhered to. Building form should be fragmented to reduce visual scale in the landscape and allow for landscaped areas between buildings to effectively screen new developments.

- Extensive landscaping in private open areas and streetscapes to visually integrate new developments with the greater landscape must be undertaken immediately following the completion of building works.
- Existing planted tree avenues and earthworks along the N2 area set a precedent for landscape development and can be used to effectively screen new developments from surrounding areas.

Mitigation measures are divided into those that apply during the construction phase and those that apply to the operational phase.

6.3.1 Construction phase mitigation measures

- Locate site camp and temporary structures within an appropriate area that is not visible from the most prominent views from neighbouring properties and prominent tourist routes.
- Signage must be managed not to be excessive and must be maintained in a neat and tidy condition throughout the construction period.
- Building works on site must be screened with site hoarding constructed to a minimum height of 1800mm comprising a double layer of 80% shade netting, securely fixed to three horizontal 114 x 38mm treated timber members top, middle and bottom fixed to 114 x 114mm treated timber posts or poles at 3m centres set securely into ground to a minimum depth of 700mm and including all necessary corner posts, stays, etc. The contractor is to maintain all hoardings and keep clean and finally remove and make good on completion of the contract.
- Disturbance area and hoarding must be limited to the smallest area possible needed for construction.
- Erosion control measures must be put in place as required to reduce visual scarring during extreme rainfall events.
- The site is exposed to the predominantly south-easterly and south-westerly breezes during summer months and dust control measures must be implemented during the construction phase.
- Temporary site lighting, if required, must be kept to a minimum and must not be flood lighting.
- The construction site must be kept clean and in a neat condition at all times during the construction period.
- Make good and rehabilitate all areas disturbed during the construction period within 3 months after completion of the building works.
- Re-vegetation on site must be undertaken as soon as possible after completion of civil engineering- and building works to provide dust control and visually integrate new developments with the greater landscape. All new landscaping must be maintained until it is fully established.

6.3.2 Design and operational phase mitigation measures

The proposed development consists of a variety of different zoning types and massing. In order to mitigate the overall undertaking in terms of design and operation phase, careful attention needs to be paid to the massing of the development and the way different units are placed on the site. Design parameters set out in the Hessequa Municipality's Zoning Scheme By-Law (2018) must be followed, in terms of coverage, building setback lines and maximum building heights. Building lines between residential buildings and along the borders of the property can provide an opportunity for the planting of vegetated buffers to reduce the overall impact of the development, as well as the visual intrusion thereof.

Buildings should be sited in visually less sensitive portions of the site, where possible. Height and size of buildings should be restricted to blend in with existing typology to support landscape character and preserve special features on site and in surrounding areas. Buildings must be of a scale in keeping with what the site topography will allow so as to reduce visual impact. To mitigate the overall visual impact of the development when viewed from afar, buildings must be of a similar nature and scale as neighbouring properties. Building platforms should be sited along contours as much as possible and not at right angles to the direction of the slope to minimise cut and fill operations, that could cause visual scarring, to a minimum.

Looking at the larger scale of Riversdale, the existing urban fabric consists of an organic town layout with roads and residential developments following the contours of the landscape. Green open spaces are interspersed with residential erven within the urban fabric. In close vicinity to the site, developments towards the north-east of the site are organised along roads following the natural topography of the landscape, with green spaces located along Lobelia Street, adding to the landscape character of the town. Edges of the developments bordering agricultural and natural surroundings towards the north and west are broken up to allow for a softer divide

between residential developments and the natural surroundings. The spatial integration further allows for a more gradual transition and do not include strong and rigid divides.

Towards the east of the site, the urban fabric is laid out more organically with roads meandering through the town and residential developments following this organisation. The Dibiki Holdiday Resort located along Truter Street allow for green spaces within the urban fabric. Residential developments are organised around this green belt, allowing for views onto the park, and an overall more enjoyable experience within the town. Views from the N2 onto the park are also evident. Other green areas within the town that adds to the existing landscape character of Riversdale, include the Riversdale bowling club along the N2, Takkieskloof Camping and Accommodation, and extensive gardens around the church located along Heidelberg Road.

In order for new developments to be visually integrated into the urban fabric of Riversdale, it is important for the proposed development to add to the existing town character. A more organic layout is suggested that follows the contours of the landscape. It is suggested for roads to follow the contours of the landscape to allow for a more natural layout and to break away from rigid grid patterns imposed onto the site that may be visually dominating. Open green spaces along the proposed access road and within the proposed development layout will add to the visual character of Riversdale.

Careful attention must be paid to the interface between the proposed development and the surrounding landscape. Creating open green spaces at intervals along the boundary, to allow for a more gradual transition in massing towards the agricultural surroundings to the north, west, and east of the site will enhance visual integration. To further relate to the existing natural character of Riversdale, attention must be paid to the streetscape within the proposed development. Planting tree avenues and greening the streetscape along internal roads within the proposed development will enhance visual integration and add to the landscape character of the rural town.

Development and building guidelines should address planning, aesthetic and procedural considerations to safeguard the visual environment and scenic resources. Architectural guidelines should promote overall design sensitivity rather than be a set of restrictive conditions.

Reduce the massing of built form by making use of setbacks from the boundary along the N2 and side boundaries. Setback area will provide space for vegetated buffers to reduce visual intrusion from prominent view corridors, such as the N2 and other roads such as Erica Street and Lobelia Street. Step building mass down towards the west and south so that the highest density units are located furthest away from the N2.

Landscaping with indigenous trees and tree buffers within the development and in between residential buildings can in time provide screening and visually integrate new developments with the greater landscape. Regulations regarding open spaces in a group housing complex, as set out in the Hessequa Municipality's Zoning Scheme By-Law (2018), must be followed and can provide meaningful and enjoyable spaces within the development. These spaces can be designed in a way to add to the existing rural and natural sense of place of Riversdale. The overall residential development can be designed in a way to add to the complex layers of diversity of the town, while promoting spatial integration & urban intensification.

Visual impact of light pollution can be effectively mitigated by using measures to prevent or limit light spillage. As a general rule the minimum levels of lighting required to provide safe access should be adhered to and lighting fixtures must be positioned for maximum efficiency so as to direct light only where it is needed. To achieve this, guidelines should be drawn up by a suitably qualified electrical- or lighting specialist. Outdoor lighting to buildings or landscape areas should be restricted and directed as per architectural guidelines. Low level bollard-type lighting is recommended as opposed to overhead post top lighting to reduce visual intrusion of lighting at night.

Further general mitigation measures include the following:

- Use visually permeable fencing rather than boundary walls, to visually integrate new developments with the existing rural landscape.
- Maintain new tree and shrub planting until it is self-sufficient.
- Buildings and roadways must be positioned along contours to limit cut and fill operations wherever possible.
- Use finishes and colours on external building envelope that will fit in with surrounding buildings.
- Reflective surfaces must be kept to a minimum and shaded with roof overhangs and / or screens to limit glare. Use mat finish paint on external surfaces.

6.4. Photomontage images

6.4.1 Viewpoint 1: Erica Street

Receptors at this point consist mainly of residents from the residential developments towards the north-east of the site, and from the Langezicht residential complex along Erica Street. Receptors are classified as highly

sensitive. Views from this point consist of direct open views onto the site with minimal screening. Visual exposure towards the new proposed residential buildings is therefore rated as high.

Urban design measures
Appropriate building lines and height restrictions will ensure that valuable visual resources can be preserved should development take place. Developments are kept to a maximum height of 8,5 m. Appropriate 5 m setbacks from the new internal roads reduce visual intrusion. Refer to Figure 42 for plan showing setback lines to ensure negative visual impacts are kept to a minimum, to preserve valuable visual resources.

Landscaping measures
Mitigation illustrated in figure 55 shows a planted vegetation buffer along the northern boundary of the site and new internal roads, screening views towards the residential developments.

Figure 55: Viewpoint 1: photomontage of proposed developments with mitigation showing planted lines of trees along the northern boundary of the site and along the newly extended Erica Street.

6.4.2 Viewpoint 2: Oakdale High School

Viewpoint 2 is situated at a distance of approximately 1,8 km from the development site and is situated at a low-lying elevation in relation to the site.

Urban design measures

A portion of the site can be seen from this point, specifically the westernmost corner of the site situated on a convex slope. In terms of the SDF, agricultural 1ha lifestyle erven are placed at this point which consists of single residential dwellings surrounded by open pastures, with limited agricultural activity. By placing the lowest density developments on the elevated portions of the site, visual intrusion is significantly reduced when viewed from low-lying areas at a distance.

Figure 56: Viewpoint 2: photomontage of proposed developments with lines of trees planted towards the northern and western boundary of the site, allowing for a gradual transition to neighbouring agricultural lands.

6.4.3 Viewpoint 3: Ou Meul Restaurant

A portion of the site can be seen from this point but the site is partially screened by existing trees along the N2 as well as vegetation in the foreground. From this viewpoint, the proposed development buildings are visible. Urban design measures implemented include a 10 m building setback line from the N2. To further reduce the

overall visual intrusion, medium-density developments must be placed towards the east of the development site, with low-density developments situated towards the western boundaries, creating a gradual transition in massing from the town towards neighbouring agricultural lands.

Landscaping measures

Mitigation illustrated in figure 57 shows a planted vegetation buffer along the southern boundary of the development site and the N2, largely screening views towards the site from the N2 and this viewpoint.

Figure 57: Viewpoint 3: photomontage of proposed developments with lines of trees planted along the N2.

6.4.4 Viewpoint 4: N2

Viewpoint 4 is located along the N2 when approaching the site from a westerly direction. A small portion of the proposed buildings can be seen from this point. Earthworks along the N2 provides partial screening along with existing planted trees, limiting views towards the proposed new developments.

From this viewpoint, the agricultural lifestyle erven are in the foreground, consisting of low-density developments. Visual intrusion is reduced while providing for a more gradual transition from neighbouring farmlands towards the more dense residential developments to the northern and eastern portions of the site.

Landscaping measures

In closer proximity to the site, travelling along the N2, the residential developments will however become more visible. To reduce the overall visual intrusion, earthworks and tree planting along the 10 m building line setback from the N2, significantly screen views onto the site.

Figure 58: Viewpoint 4: photomontage of proposed developments with mitigation 8.5 m maximum building height and planted lines of trees along the southern boundary of the site.

6.4.5 Viewpoint 5: Industrial zone

Viewpoint 5 indicates views from the industrial zone overlooking the site in a northern direction. From this point a large portion of the site can be seen due to its elevated position in relation to the site. Visual exposure is therefore considered as high, but because it is an industrial zone and mainly classified as a place of work, receptors from this point are not regarded as highly sensitive.

Landscaping measures

From this viewpoint communal open spaces and ample trees among the residential buildings can be seen, creating pockets of green spaces which can become enjoyable spaces, while also adding to the natural and rural character of Riversdale. Ample trees among the southern boundary of the site provide screening towards the proposed development.

Figure 59: Viewpoint 5: photomontage of proposed developments with mitigation 8.5m maximum building height and 10 m setback line which creates a planted buffer along the N2 highway.

6.4.6 Viewpoint 6: Gerrit du Plessis Secondary School along the N2

Viewpoint 6 is taken from an elevated position on the N2 which overlooks the site. A large portion of the proposed developments can be seen from this point.

Landscaping measures

Mitigation in terms of landscaping could consist of a planted buffer on the 10 m building line. The town of Riversdale possess a unique landscape character with residential developments and roads lined with ample trees. Part of the town can also be seen from this point. The proposed development site is currently exposed. The proposed developments can be integrated with the existing patterns of the settlement of Riversdale by lining internal roads and property boundaries with trees and vegetation. The proposed development site will then become a mosaic of residential buildings, planted lines of trees, and green open spaces that complement the existing development pattern of Riversdale.

Figure 60: Viewpoint 6: photomontage of proposed developments with a 10m planted buffer along the N2, and trees among the residential developments and internal roads.

7. CONCLUSION AND RECOMMENDATIONS

After review of local legislation and planning strategies, the study finds that the proposed developments are in line with future planning for Riversdale, specifically in terms of the 2021 Riversdale Local Spatial Development Framework. The framework identifies the shortfall and need for housing units in Riversdale. The proposed development site currently does not fall within the urban edge, but a decision was made by the Hessequa Municipality to include Lot 266 & a Portion of Remainder of Lot 21, Riversdale Settlement, Hessequa Municipality, in the urban edge of Riversdale, after a request was submitted to the municipality by Planserv, on behalf of the developer, Belladonna Pty (Ltd), to include and consolidate both erven.

The visual framework of the area presents a mix of residential, commercial and light industrial areas associated with the town of Riversdale, along with agricultural croplands and grazing fields in close vicinity to the site. Although the areas towards the north, west and south of the site consists mainly of farmlands, specifically crop planting, and possess a natural character it does not present a distinctive scenic or cultural sense of place that must be protected. The visual framework further includes existing residential developments along the south-eastern boundary of the site, and a residential complex, Langezicht complex, situated along Erica Street northwest of the site, which will later be extended onto the site. Residential developments mainly comprise of single-storey buildings with enclosed gardens.

Although the proposed development will result in a visual change to the landscape character, the new development is of similar scale and nature as other developments in close vicinity to the site. The proposed development comprises mostly of single- and double-storey residential buildings and will therefore tend to merge into the skyline along with adjacent land use.

The proposed development site is situated along the N2, an important scenic route connecting Cape Town to George which is used by many tourists visiting the Western Cape and Garden Route. Residents and receptors related to the holiday and tourist industry are rated as highly sensitive and tourism is one of the major economic drivers of the Southern Cape. The N2 highway can be considered as a major economic driver in the town of Riversdale as it provides an important activity route through the town, with shops, restaurants and filling stations situated along the route, catering for tourists travelling through the town. Although there are direct views onto the site from the N2, existing residential land use on adjacent properties and in close vicinity to the site allows the proposed developments to merge into the existing townscape when viewed from afar. Vegetation and trees planted along the N2 also provides an important buffer, limiting views onto the site from the N2 at certain viewpoints.

Although the visual absorption capacity of the development site itself is low due to lack of screening vegetation and exposed views onto the site, the site slopes from the west to the north-east and is surrounded by undulating plains which partially screen the site from surrounding areas. Residential developments on site are organised in such a way that visual intrusion is further minimised, by placing the 1 ha agricultural lifestyle erven towards the west of the site, comprising of lower density units. Medium-density group housing and single residential units are organised towards the east of the site. It is the intention to allow the agricultural erven situated along the western and part of the southern boundary to speak the same language as adjacent agricultural lands. In doing so, a more gradual transition between neighbouring farmlands and the proposed new residential complex is created. A 10m building line along the road edge provides space for vegetated buffers to reduce visual intrusion from the N2.

For the proposed development to better fit into its surroundings, it is suggested that a more organic layout is followed where internal roads and residential erven follow the contours of the landscape, and to break away from rigid grid patterns imposed onto the site that may be visually intrusive. To better fit in with the existing visual character of Riversdale, communal green spaces can be introduced along the proposed access road and within the proposed development layout.

It is clear from the viewsheds and photomontages that the site will be clearly noticeable from several viewpoints in the surrounding area. Changes will be brought about to the existing visual environment should the proposed development go ahead, but such changes could be absorbed within the existing visual character of the area. Where potential visual impacts can be rated as moderate to high without mitigation, the significance of these impacts can be reduced to moderate to low if appropriate mitigation measures are put in place. In light of the above it is recommended that the proposed development be approved subject to the implementation of mitigation measures to soften the potential visual impacts and to integrate the new developments with the existing character of Riversdale.

In response to the conditions and mitigation measures set out in this visual impact assessment, previous concerns have been addressed, and the proposed site development plan has been revised. The revised layout takes the form of the existing and proposed development on adjacent properties such as RE/22, as well as the boundary lines of the property into consideration. See Appendix E for the revised proposed site layout.

Upon review of the revised proposed site development plan, it is found that the general grading of the different densities on site is an improvement to the previous layout. The revised layout shows the downscaling of densities along the N2 from east to west, from medium density residential, low density residential, smallholdings, to agricultural lands. This is in alignment with the mitigation measures set out in this assessment, namely the stepping down of buildings and roadways towards the west and south of the site so that the highest density units are located the furthest away from the N2 and agricultural surroundings.

In response to the mitigation measures addressed in this assessment one of the group housing sites, Erf 29 was moved towards the centre of the site further away from the N2. This group consists of medium density group housing units as a proposed retirement resort. Due to the location and scale of the group housing site, it is encouraged that the buildings and internal roads within this group housing site be organised along the contours of the landscape. As per the development parameters set out in the Hessequa Municipality's Zoning Scheme By-Law (2018), communal and private open spaces must be provided within the group housing site, and landscaping with evergreen trees and shrubs, suited to the climate of Riversdal, should be undertaken to mitigate potential visual impact.

The revised layout shows a more gradual transition of densities with medium density group housing sites sited towards the east and existing residential developments within the urban fabric, and single residential erven placed along the northern and southern boundaries of the site. With the medium density group housing site located between two single residential areas of lower density this will allow for a more gradual transition from medium density areas to the low-density agricultural erven to the west.

Changes to the layout further include internal roads towards the N2 that have been adjusted to follow the contours of the landscape. The transition between the 1 ha lifestyle erven and the other group housing sites is organised more organically, creating a softer divide. The road layout responds to the existing urban fabric and topography of Riversdale, which is organised more organically along open green spaces and the contours of the landscape The changes to the spatial integration of the proposed site development plan, allowing for a more gradual transition, is an improvement to the strong grid lines and rigid divides of the previous layout and will serve to reduce potential visual impact.

The addition of a green belt along the N2 is an improvement to the previous layout as it provides opportunity for earthworks and landscaping along the southern border of the proposed site, creating a barrier between the proposed development and the N2, and thus shielding the development from the N2.

The revised layout further responds to the mitigation measures by siting proposed areas of lesser density in visually sensitive areas, such as elevated and sloped positions. By siting the 1 ha lifestyle erven towards the western and more elevated areas of the proposed site, the visual impact of the proposed development is reduced. As per the revised layout, the area towards the west of the site will mainly consist of 1 ha lifestyle erven that will form part of an agricultural estate. Due to the limitation on development within the estate of one dwelling unit per erf as set out in the Hessequa Zoning Scheme By-Law (2018), the 1 Ha erven will have very low density and will include large areas of undeveloped land utilised for grazing areas for animals. Screen planting using rows of trees and tall growing shrubs and feature trees around new buildings must be undertaken to further reduce potential visual impacts of new developments from the N2 and surrounding areas in Riversdal.

The revised layout shows two public parks, one adjacent to the business site, and one across the road from the main entrance to the agricultural estate. Green areas within the development will contribute to visual integration of new developments with the greater Riversdal townscape and will reduce potential visual impacts.

The visual impact assessment has reviewed the potential impacts of the proposed development. Upon assessment of the revised site development plan, the assessment finds that the revised layout is an improvement and is recommended for approval, subject to the implementation of mitigation measures to reduce the significance of potential visual impacts.

Mitigation measures that will further help promote spatial integration and which must be prioritised, is the siting of building platforms along contours as much as possible to minimise cut and fill operations. The screening of new developments from neighbouring properties and roadways using a combination of earthworks and screening vegetation must be prioritised. Extensive landscaping along the borders of the proposed site is critical in ensuring a more gradual transition to its surroundings. Attention must be given to the extensive landscaping of streetscapes to visually integrate new developments with the greater urban fabric. Architectural guidelines should further help and place emphasis on the visual integration of the development with its surroundings through the appropriate mitigation measures set in place.

8. REFERENCES

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Oberholzer, B. 2005. *Guideline for involving visual & aesthetic specialists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 F. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

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Appendix A
Proposed site development plan

LAYOUT PLAN

PROPOSED DEVELOPMENT ON
LOT 266 & A PORTION OF
REMAINDER OF LOT 21,
RIVERSDALE SETTLEMENT,
HESSEQUA MUNICIPALITY,
WESTERN CAPE PROVINCE

LEGEND

ZONING	NO. OF STANDS	ERF NO.	AREA (ha)	% OF AREA
Agricultural Zone II	27	1-27	28.5	50.5
Single Residential Zone I	155	32-186	10.5	18.6
General Residential Zone II	3	29-31	11.2	19.9
Business Zone III	1	188	0.5	0.9
Open Space Zone I	1	187	0.2	0.3
Transport Zone II	5	190-194	3.2	5.7
Transport Zone III	1	189	2.1	3.7
Utility Zone	1	28	0.2	0.4
TOTAL	194		56.4	100

PROFESSIONAL TEAM

CONSULTANT	NAME	COMPANY	CONTACT
Civil Engineer	G. Pepler	Hessequa Consulting Engineers	083 447 9297
Electrical Engineer	J. de Villiers	CMB	082 331 4740
Survey Technician	A. la Cock	La Cock Surveying	083 656 5464
Land Surveyor	C. de Jager	CDJ Land Surveyors	076 735 4613
Geotechnical Engineer	E. van der Walt	Terra Geotechnical	082 073 8566
Environmental Consultant	R. Kapp	Kapp Environmental Consultants	082 675 5233
Traffic Engineer	F. van Aardt	Urban Engineering	082 923 6171
Town Planner	M. Coetzee	PLANSERV	082 923 6171

N

SCALE LINE

0m 100m 200m 300m 400m

GENERAL NOTES

1. All dimensions and areas are approximate and subject to final survey by a Professional Land Surveyor.
2. All cadastral dimensions to be confirmed by a Professional Land Surveyor prior to any detail designs being constructed.
3. Detail contour survey to be done prior to Engineering design and implimentation.
4. All calculations are to be confirmed.
5. All contours are based on 0.5 metre intervals. Contours were surveyed by A. la Cock in December 2021.
6. The average size of the Single Residential Zone I erven is between 600 m² to 850 m².

CLIENT

BELLADONNA (PTY) LTD
[REG. NO. 1965/003575/07]

PROJECT NO.: 217	PLAN NO.: 217/LP1
SCALE: 1 : 5 000	DATE: 02/03/2022

PLANSERV (PTY) LTD
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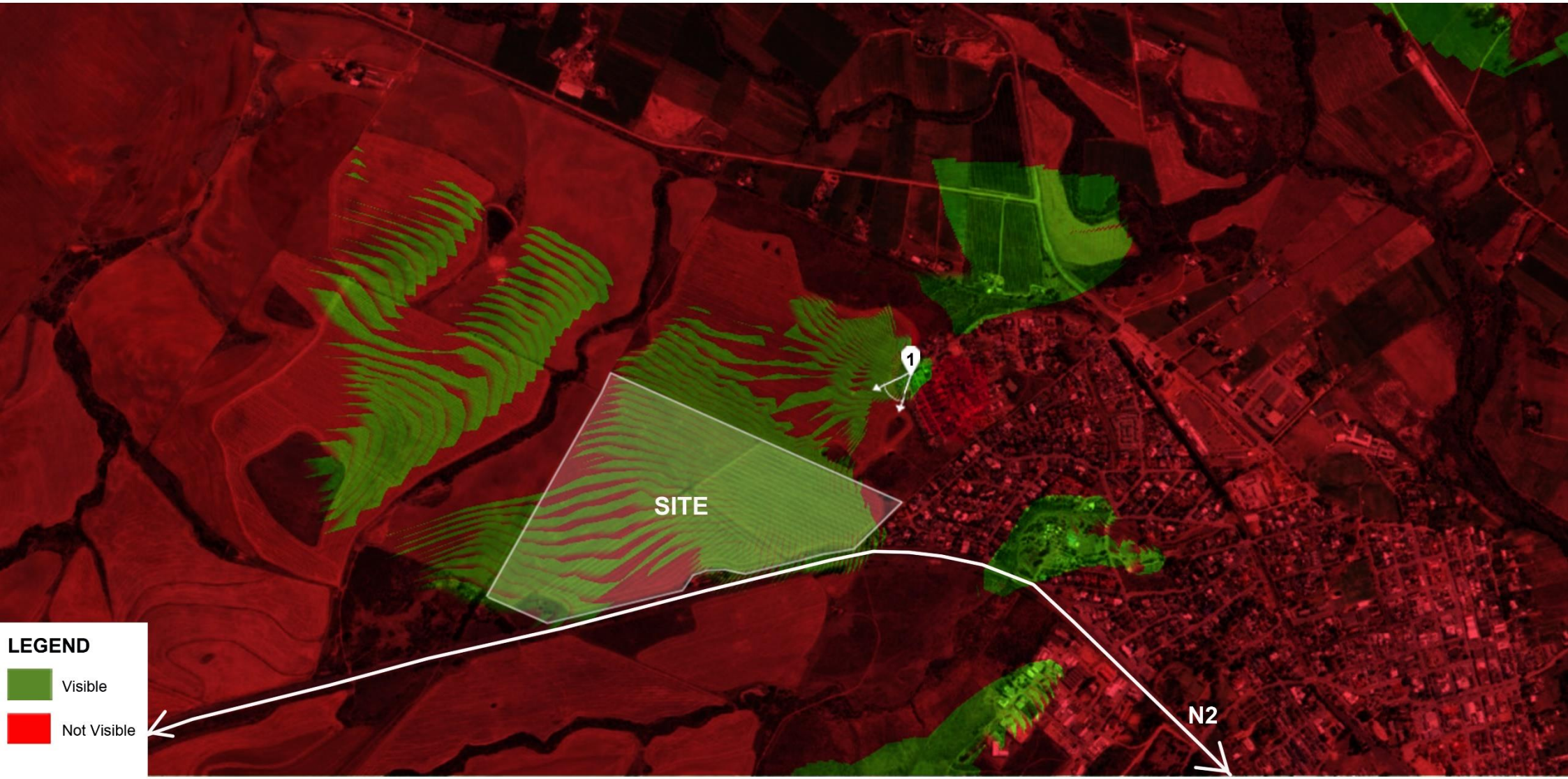
Appendix B
Viewsheds



VIEWSHED 1

NORTH

ARCHITECTS | LANDSCAPE ARCHITECTS

FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Viewsheds
January 2024

VIEWSHED 2

NORTH

ARCHITECTS | LANDSCAPE ARCHITECTS

FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Viewsheds

January 2024

VIEWSHED 3

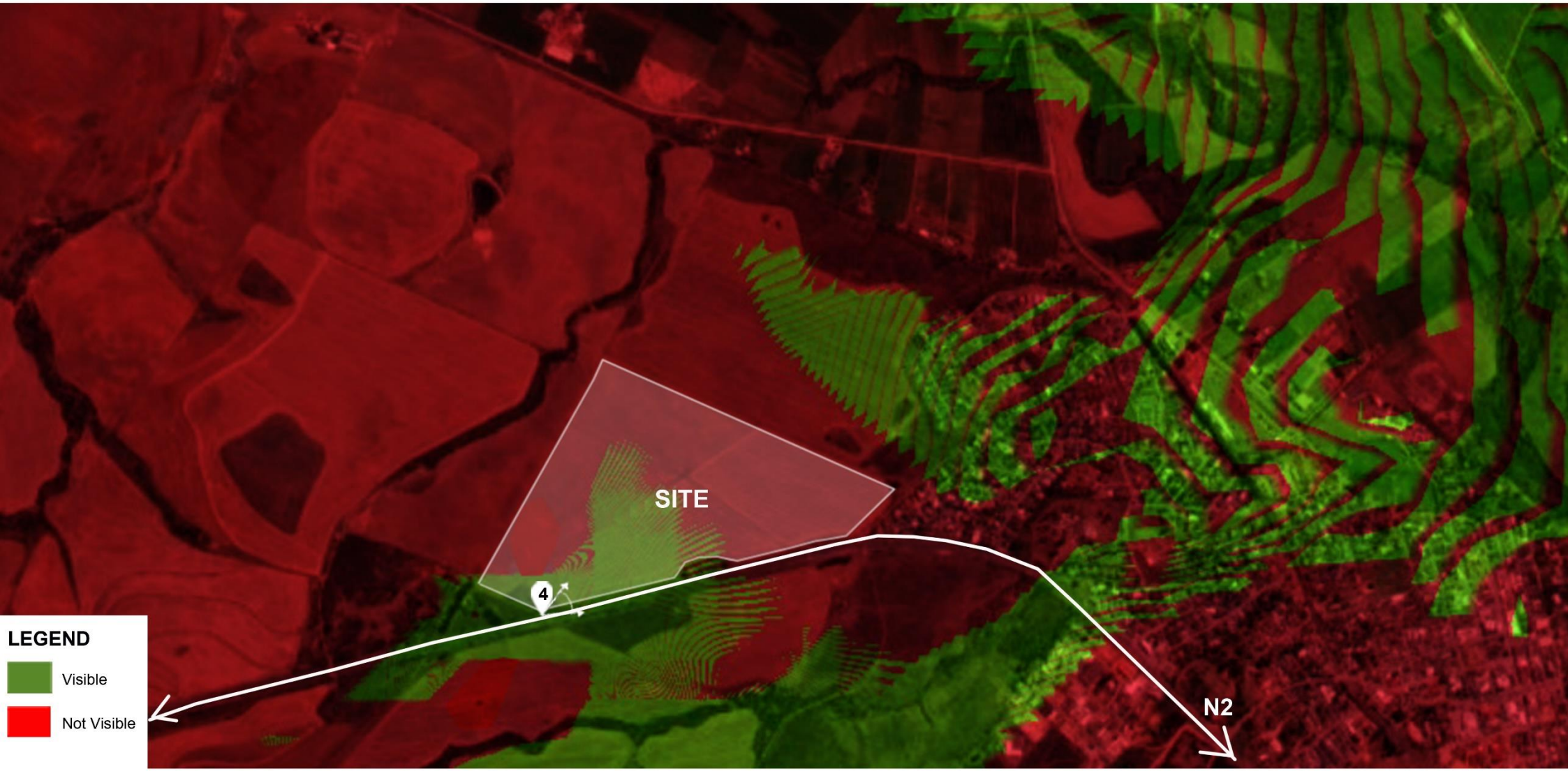
NORTH

ARCHITECTS | LANDSCAPE ARCHITECTS

FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Viewsheds
January 2024



VIEWSHED 4

NORTH

ARCHITECTS | LANDSCAPE ARCHITECTS

FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Viewsheds
January 2024

VIEWSHED 5

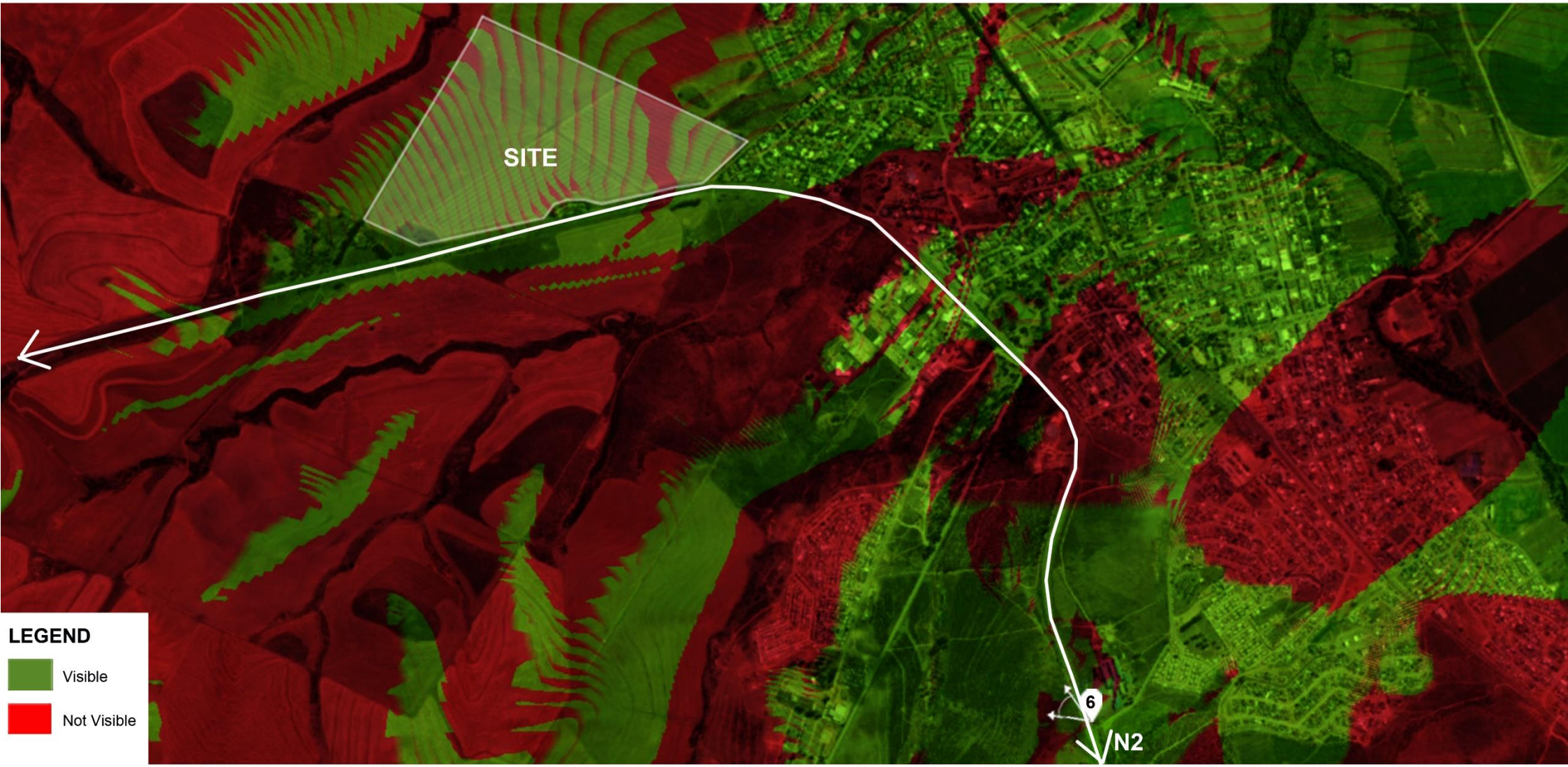
NORTH

ARCHITECTS | LANDSCAPE ARCHITECTS

FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Viewsheds
January 2024



VIEWSHED 6

NORTH

ARCHITECTS | LANDSCAPE ARCHITECTS

FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Viewsheds
January 2024

Appendix C
Photomontages

VIEWPOINT 1: ERICA STREET

VIEWPOINT 1: ERICA STREET PHOTOMONTAGE OF PROPOSED DEVELOPMENTS ON THE LANDSCAPE

ARCHITECTS | LANDSCAPE ARCHITECTS

FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024

VIEWPOINT 2: OAKDALE HIGH SCHOOL

VIEWPOINT 2: OAKDALE HIGH SCHOOL PHOTOMONTAGE OF PROPOSED DEVELOPMENTS ON THE LANDSCAPE

ARCHITECTS | LANDSCAPE ARCHITECTS
FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024

VIEWPOINT 3: OU MEUL RESTAURANT

VIEWPOINT 3: OU MEUL RESTAURANT PHOTOMONTAGE OF PROPOSED DEVELOPMENTS ON THE LANDSCAPE

ARCHITECTS | LANDSCAPE ARCHITECTS

FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024

VIEWPOINT 4: N2

VIEWPOINT 4: N2 PHOTOMONTAGE OF PROPOSED DEVELOPMENTS ON THE LANDSCAPE

ARCHITECTS | LANDSCAPE ARCHITECTS
FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024

VIEWPOINT 5: INDUSTRIAL ZONE

VIEWPOINT 5: INDUSTRIAL ZONE PHOTOMONTAGE OF PROPOSED DEVELOPMENTS ON THE LANDSCAPE

ARCHITECTS | LANDSCAPE ARCHITECTS
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ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024

VIEWPOINT 6: GERRIT DU PLESSIS SECONDARY SCHOOL ALONG THE N2

VIEWPOINT 6: GERRIT DU PLESSIS SECONDARY SCHOOL, PHOTOMONTAGE OF PROPOSED DEVELOPMENTS ON THE LANDSCAPE

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FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024

Appendix D
Mitigation images and setback plan

VIEWPOINT 1: Erica Street, photomontage with mitigation showing planted tree avenue along the northern boundary of the site.

VIEWPOINT 2: Oakdale High School, photomontage with mitigation showing planted tree avenue along the northern and western boundary of the site.

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ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024

VIEWPOINT 3: Ou Meul restaurant, photomontage with mitigation showing planted tree avenue along the N2.

VIEWPOINT 4: N2, photomontage with mitigation showing planted tree avenue along the N2.

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ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024

VIEWPOINT 5: Industrial zone, photomontage with mitigation showing planted tree avenue along the N2.

VIEWPOINT 6: Gerrit du Plessis Secondary School, photomontage with mitigation showing planted tree avenue along the N2.

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FC HOLM

ERF 266 & PTN RE/21, RIVERSDALE

Visual Impact Assessment_ Photomontage Images
January 2024


8,5 m HEIGHT RESTRICTION
FUTURE ACCESS
8,5 m HEIGHT RESTRICTION
FUTURE ACCESS
8,5 m HEIGHT RESTRICTION
1 Ha lifestyle erven
(28,5 ha)
Single residential
erven
(10,5 ha)
Medium density
group housing
(1,9 ha)
Medium density
group housing
(2 ha)
Medium density group housing
(7,2 ha)
10 m BUILDING LINE SETBACK
8,5 m HEIGHT RESTRICTION
10 m BUILDING LINE SETBACK
8,5 m HEIGHT RESTRICTION
N2
N2
N
LEGEND
Medium density group housing: 8,5m height restriction;
0m internal street boundary line;garage door must be 5m from internal road
1 Ha lifestyle erven: 8,5m height restriction for dwellings;
15m height restriction for agricultural buildings; 5m building line from any boundary
Single residential erven 8,5m height restriction;
2m side and rear building line; 4m street boundary line
10m building line setback

Appendix E
Revised proposed site development plan

LAYOUT PLAN

PROPOSED DEVELOPMENT ON
LOT 266 & A PORTION OF
REMAINDER OF LOT 21,
RIVERSDALE SETTLEMENT,
HESSEQUA MUNICIPALITY,
WESTERN CAPE PROVINCE

LEGEND

ZONING	NO. OF STANDS	ERF NO.	AREA (ha)	% OF AREA
Agricultural Zone II	27	1-27	27.5	48.8
Single Residential Zone I	159	32-190	10.4	18.4
General Residential Zone II	3	29-31	10.4	18.4
Business Zone II	1	191	0.7	1.2
Transport Zone II	7	196-202	3.8	6.7
Transport Zone III	1	195	1.9	3.4
Utility Zone	1	28	0.2	0.4
Open Space Zone I	3	192-194	1.5	2.7
TOTAL	202		56.4	100

PROFESSIONAL TEAM

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Environmental Consultant	R Kapp	Kapp Environmental Consultants	082 675 5233
VIA Consultant	FC Holm	FC Holm Architects	044 874 1606
HIA Consultant	J Orton	ASHA Consulting	083 272 3225
Traffic Engineer	F van Aardt	Urban Engineering	082 923 6171
Town Planner	M Coetzee	PLANSERV	082 923 6171

PROJECT NO.: 217	PLAN NO.: 217/LP11
SCALE: 1 : 5 000	DATE: 16/07/2024

SCALE LINE

0m 100m 200m 300m 400m

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CLIENT

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