

HERITAGE IMPACT ASSESSMENT

Prepared in terms of Section 38 (8) of the National Heritage Resources Act (Act 25 of 1999)

BOSCHENDAL VILLAGE NODE

Portion 7 of Farm 1674 and Portion 10 of Farm 1674, Boschendal, Stellenbosch Municipality

May 2017 (Amended 1st August 2017)



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1. EXECUTIVE SUMMARY

The HIA process is being carried out in terms of Section 38 (8) of the National Heritage Resources Act (Act 25 of 1999; NHRA).

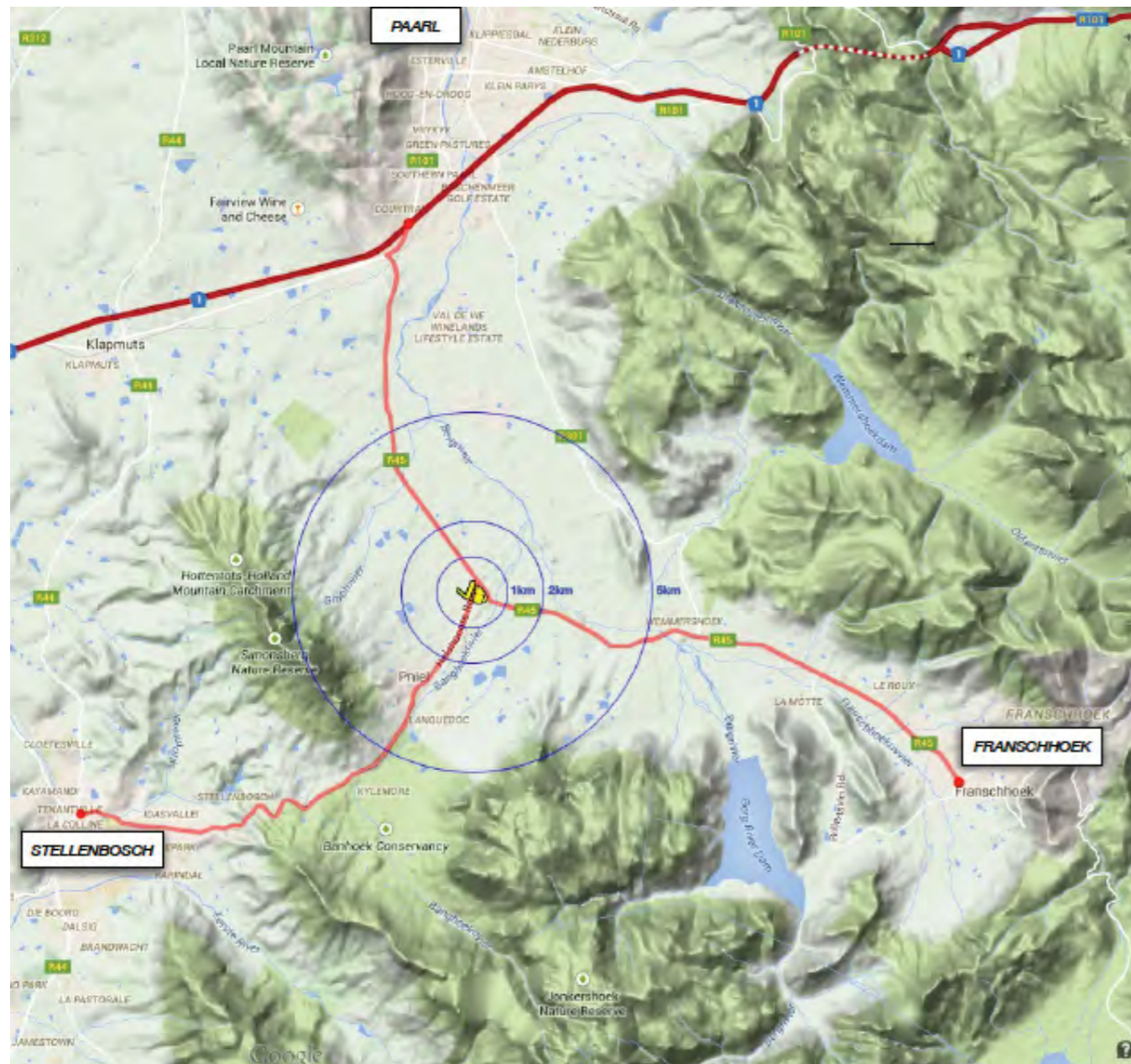
1.1 SITE NAME

Boschendal, Stellenbosch

1.2 LOCATION

Portion 7 of Farm 1674 and Portion 10 of Farm 1674, Boschendal are situated in the Dwars River Valley, near the intersection of the R45 and R310, within the Cape Winelands District and Stellenbosch municipalities. GPS co-ordinates: 33°52'26.62" S; 18°58'24.33" E.

1.3 LOCALITY PLAN



(Source: Lawson and Oberholzer 2016)

1.4 DESCRIPTION OF PROPOSED DEVELOPMENT

The preferred alternative is for the development of a village with a development footprint of 27.45ha. The main elements of the proposal are as follows:

- A 'village high street' parallel to the R310 with a farmers' market, shops and restaurants.
- A central axis off the main street which provides visual connection to the residential areas and the agricultural landscape beyond.
- Residential development of low, medium and high density with a total of 440 units and 100 rooms for hospitality.
- Retail and business development of low, medium and high density with a three storey limit.
- Existing civic activities (police station and clinic) along with other community facilities.

1.5 HERITAGE RESOURCES IDENTIFIED

The site is located within a Grade I landscape. It is located within the Dwars River Valley which is an integral component of this landscape and of outstanding heritage value. The site is situated at a gateway location at the intersection of the R45 and R310 and junction of two valley systems, namely the Dwars River and Berg River valleys. The R45 and R310 form a major part of a regional scenic and tourism route network.

The site is situated on the northern boundary of a highly significant historical precinct incorporating the farm werfs of Boschendal and Rhone and their agricultural frames, as well as the R310 scenic corridor and the Dwars River corridor. The werf is a PHS and is of outstanding heritage value. It is one of the most iconic farm werfs within the Cape Winelands with prominent views towards the homestead from the R310 and views from the Boschendal homestead looking across vineyards and the development site, towards Wemmershoek Mountains beyond.

There are no buildings situated on the site that are worthy of formal protection in terms of the NHRA. The site is not archaeologically sensitive and has been heavily transformed. There are no archaeological finds worthy of grading. No archaeological mitigation is recommended.

1.6 ANTICIPATED IMPACTS ON HERITAGE RESOURCES

A key component of the study methodology was the formulation of a comprehensive set of heritage indicators and directives which followed a rigorous process of analysis and against which the development proposals have been assessed. This method recognises that the site cannot be assessed in isolation, that indicators should relate to the region as a totality and that the assessment should occur across scales. It is foregrounded by the principle of maintaining the dominance of wilderness and rural landscapes as opposed to the increasing dominance of urban and suburban landscapes, and the principle of authenticity. It sets out criteria for where development should not occur and establishes an argument for the location of a village at the intersection of the R45 and the R310. It then provides a set of indicators for what constitutes a rural village in terms of its relationship with its setting, spatial structure, patterns of access and use. These are then developed further at the level of street, visual and architectural indicators.

The proposed development conforms to the identified heritage indicators and will improve the area. The option of no further development does not address the opportunities evident in the site's location and the derelict nature of existing site conditions. The overall heritage impact of the No-Go alternative (Alternative 1) is thus regarded as medium negative. The overall heritage impact of the preferred alternative

(Alternative 5), including the mandatory controls and guidelines specified in the Urban Design Report and recommended mitigation measures, is regarded as potentially medium-high positive. However, should these mandatory controls, guidelines and mitigation measures not be implemented, then the overall heritage impact of the proposed development is potentially medium-high negative.

1.7 OUTCOME OF PUBLIC CONSULTATION PROCESS

Heritage related comments were received from the Vernacular Architecture Society, Cape Institute of Architects, Stellenbosch Interest Group, Boschendal Treasury Trust, Heritage Western Cape (HWC) and the South African Heritage Resources Agency. These comments are addressed in Section 12 of the report.

1.8 HERITAGE IMPACTS RELATIVE TO SUSTAINABLE SOCIAL AND ECONOMIC BENEFITS

The Social Impact Assessment concludes that the social-economics benefit to be derived from the proposed development will have positive impacts including business, employment and housing opportunities, community facilities and the generation of funds for community development initiatives.

1.9 RECOMMENDATIONS

It is recommended that HWC endorses the HIA report as having satisfied the requirements of Section 38 (3) of the NHRA and HWC's requirements for archaeological, visual and built environment studies. It recommends that HWC endorse Alternative 5 subject to the following:

- The design development must proceed in accordance with the Urban Design Framework dated November 2015 (Annexure E) and the Heritage Indicators in Section 8 (pages 14-22) of the HIA report.
- The proposed residential erven in Precinct F2 must be reduced in extent to exclude the existing orchard from the proposed development, as currently shown in Alternative 5c.
- More defined articulation of building elevations and roofscapes in Precincts E1 and E2 must be undertaken at the precinct plan level.
- The Landscape Framework Plan prepared by CNdV Landscape Architects should be implemented. Refer to Figure 25.
- An Integrated Environmental Management Plan must be formulated to address mandatory controls and guidelines related to lighting, signage and architectural and landscaping treatment included in Section 8.7, 8.8 and 8.9 above and formulated in Section 5 of the Urban Design Framework.
- The five focus or action areas identified in Figure 24 of the document entitled 'Boschendal Village Project: Urban Design Framework with Precinct Plans, Controls and Guidelines' prepared by Philip Briel and Wilko Le Roux of Philip Briel Architecture and Urban Design, dated November 2015 relate to the more public parts of the scheme. In accordance with the 'package of plans' approach these focus areas must be subject to detailed precinct plans, which include detailed site and transport planning, design and landscaping. Precinct plans for these areas must return to HWC for approval and be subject to precinct level heritage assessment.
- The conclusions and recommendations of the Traffic Impact Assessment including the proposed geometries must be subject to detailed design particularly with respect to place-making qualities, pedestrian access, non-motorised transport and public transport, and be incorporated into precinct level plans and heritage assessment referred to above.
- A Phasing Plan must be prepared to ensure an integrated form of development that is tied in with landscape mitigation. Each phase should be implemented as a completed development as far as possible, including all landscaping. As a first step, planting and other elements of edge-making to define the overall site, should be undertaken as soon as possible.

1.10 LIST OF AUTHORS

Heritage Impact Assessment Report dated March 2016 prepared by Nicolas Baumann, Sarah Winter, Dave Dewar and Piet Louw

Archaeological Assessment dated March 2015 prepared by Natalie Hendrick and Tim Hart (ACO)

Visual Impact Assessment dated March 2016 prepared by Quinton Lawson (MLA) and Bernard Oberholzer (BOLA)

2. NAME, EXPERTISE AND DECLARATION OF INDEPENDENCE

Name	Qualification	Professional Registration	Years of Experience
Nicolas Baumann	BA (UCT) 1989 Master of City and Regional Planning (UCT) 1977 MSc (Ox Brookes) 1982 DPhil (Conservation studies; York) 1997	APHP accredited member	Heritage consultant 25 years
Sarah Winter	BA UCT 1989 Master of City and Regional Planning (UCT) 1995	APHP accredited member	Heritage consultant 16 years
Dave Dewar	Bachelor of Arts (UCT) 1965 Bachelor of Arts (Honours) (UCT) 1966 Master of City and Regional Planning (UCT) 1969 Doctor of Philosophy (UCT) 1981	South African Council of Planners South African Planning Institute Urban Design Institute of South Africa (Honorary Member) Member of the Academy of Science of South Africa Research Fellow, UCT	City and Regional Planner 45 years
Piet Louw	Bachelor of Architecture (UCT) 1977 Master of City Planning & Urban Design (UCT) 1985	SA Institute of Architects M.IArch (SA) (Cape) No 4098 SA Council of Architects Pr Arch Registration No 2950 Urban Design Institute of South Africa Professional Urban Designer L006	Architect 37 years City planner and urban designer 29 years Heritage Consultant 7 years

Declaration of Independence:

Nicolas Baumann, Sarah Winter, Dave Dewar and Piet Louw, hereby confirm their independence as heritage consultants and declare that they do not have any interest, be it business, financial, personal or other, in any proposed activity on Portion 7 of Farm 1674 and Portion 10 of Farm 1674, other than fair remuneration for professional work performed in connection with the Heritage Impact Assessment process for this project.

• Nicolas Baumann • Sarah Winter • Dave Dewar • Piet Louw

3. INTRODUCTION

This heritage impact assessment (HIA) report has been prepared in terms of Section 38 (8) of the National Heritage Resources Act (Act 25 of 1999; NHRA) for a mixed use development node situated in the Dwars River Valley, close to the intersection of the R310 and R45 within the Stellenbosch Municipality. The site is situated within the Grade 1 Cape Winelands Cultural Landscape. It forms part of the Boschendal landholdings which measure in total some 2000 hectares. Refer to Figures 1 and 2.

The proposed development triggers Section 38(1) of the NHRA as it will change the character of the site exceeding 5000m² in extent and involves the rezoning of a site exceeding 10 000m². A Notification of Intent to Develop (NID) form was submitted to Heritage Western Cape (HWC). In response to the NID, HWC requested a HIA in terms of Section 38 (3) of the NHRA assessing impacts on cultural landscape, visual resources and archaeology, and incorporating archaeological, built environment, cultural landscape and visual impact assessment studies (Refer to Annexure A). The HIA process is being carried out in terms of Section 38 (8) of the NHRA as the development triggers an application under the National Environmental Management Act (Act 107 of 1998; NEMA) Environmental Impact Assessment Regulations.

3.1 SCOPE OF STUDY

The scope of the study has included the following:

- An overview of the historical development of the site and its broader context with emphasis on informing an assessment of heritage significance.
- An assessment of heritage significance at various scales with emphasis on cultural landscape and built environment.
- The preparation of heritage indicators at regional, sub-regional and site scales.
- An assessment of alternatives including the alternative no further development and two alternative village proposals.
- The formulation of recommendations in terms of integrated environmental and heritage decision-making processes.

A key component to this study is a comprehensive set of heritage indicators and directives which followed a rigorous process of analysis and against which the development proposals are assessed. The full analysis is attached as Annexure B and is summarized in Section 8.

A detailed historical analysis of the entire Boschendal landholdings was prepared by Sally Titlestad in association with Nicolas Baumann and Sarah Winter in 2008. This research forms the basis for the historical overview of the site and its broader context included in Section 6 of the report. An illustrated timeline of Boschendal is attached as Appendix F. A social heritage study was undertaken of Boschendal Estate by Juanita Pastor-Makhurane (Birthright) in 2005 and this and other historical research in the area has informed an understanding of social-historical linkages within the Dwars River Valley.

The findings and recommendations of archaeological assessment prepared by the Archaeological Contracts Office (ACO) and the visual impact assessment (VIA) prepared by Bernard Oberholzer and Quinton Lawson are integrated into the report. The archaeological report and VIA report are attached as Annexure C and D, respectively.

Heritage issues raised during the NEMA pre-application consultation process are addressed in Section 14 of the report.

The social impact report prepared by Tony Barbour and Schalk van der Merwe has been integrated into the report under Section 13 of the report and is attached as Annexure G

3.2 ASSUMPTIONS AND LIMITATIONS

The HIA is based on the Urban Design Framework, which included typical sections and architectural controls. The final architectural treatment is not known at this stage and no architectural elevations or 3D models were available. In addition, no hard and soft landscaping proposals were available.

3.3 GAPS IN THE KNOWLEDGE

There are no apparent gaps in the knowledge about the heritage significance of the site or potential heritage impacts of the proposed development.

3.4 DESCRIPTION OF PROPOSED DEVELOPMENT AND ALTERNATIVES

The development proposals are contained in the following reports.

- Urban Design Framework, Controls and Architectural Guidelines prepared by Philip Briel Architects dated February 2017. (Refer to Annexure E).
- Land Use Planning report for NEMA purposes prepared by @Planning dated February 2017.
- Boschendal Alternatives dated November 2016.

Various alternatives have been tested over the past few years as described below.

Alternative 1: No-Go Option

The no-development option retains the status quo of the site, which is zoned for Agriculture. Portion 7 of Farm 1674 is occupied by a number of dwellings and vacant land, while Portion 10 is occupied by a packing shed, derelict vacant cottages, school, pallet factory, clinic, underutilised land and a pear orchard.

Alternative 2: Retirement Village (DMP 2011)

An earlier proposal consisted of a retirement village. This alternative was not favoured because it represented a gated scheme with limited public access, was suburban in character and was too uniform in house types.

Alternative 3: Rural Village (Briel, Sept 2014)

This alternative involved a mixed use development which included shops, restaurants, a market, offices and other related businesses, as well as a hotel or guest accommodation of ±110 rooms, and 715 residential units at various densities from single dwellings to 3 storey apartments. The total footprint of this alternative was 34.5ha. This alternative was not favoured as the densities were considered too high for a rural village, and did not adequately take the wetlands into account.

Alternative 4: Rural Village (Abrahamse, May 2015)

This alternative is similar to Alternative 3, but has a reduced number of residential units and business floor area. It included mixed-use development, hotel or guest accommodation of 100 rooms, and 440 residential units at various densities. The footprint was reduced to 27.8ha. It was felt that this alternative was too rigid and urban in its layout and the house types too uniform.

Alternative 5: Rural Village – Preferred Option (Briel, Oct 2015)

This alternative is similar to Alternative 4, but has a looser layout, which partly breaks the rigidity of the grid. It has roughly the same business floor area, number of residential units and hotel or guest accommodation as Alternative 4, and has a development footprint of 27.45ha. There are 3 variations to this option. Alternative 5a includes a row of single residential units on the eastern edge of the proposed village, requiring filling in below the 1:100-year flood line. Alternative 5b excludes these units and retains the existing pear orchard. Alternative 5c includes a row of single residential units on the east of the proposed village but these are reduced in size to exclude the pear orchard from the proposed village. A small portion of in-fill below the 1:100 year flood line is required to implement this option.



Figure 1: The Site: Location



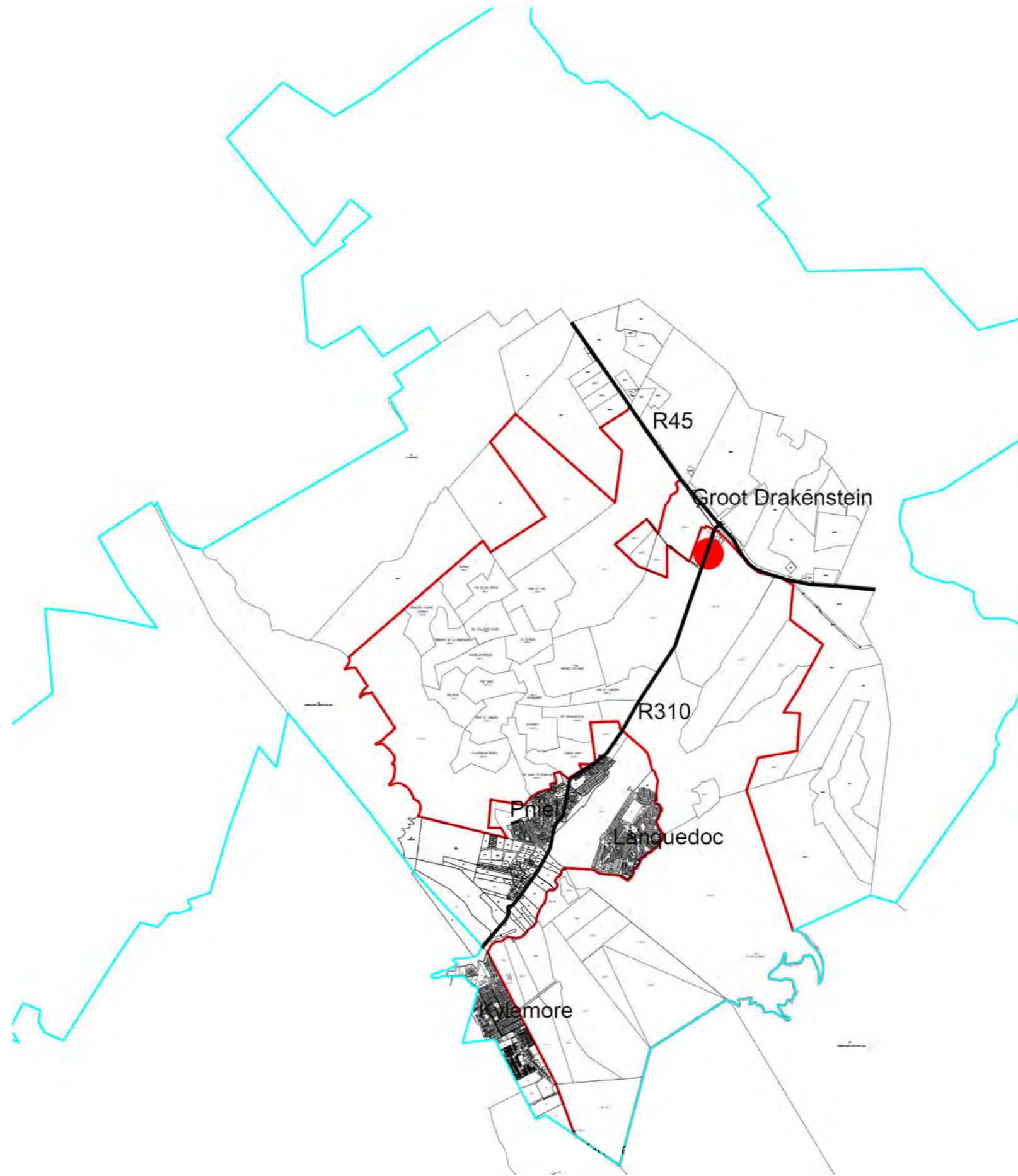


Figure 2: Site location within context of Boschendal Estate (red outline) and Grade 1 Cape Winelands Cultural Landscape (blue outline)



The alternatives used as the basis for the heritage assessment are as follows:

Alternative 1: No further development option;

Alternative 4: Rural Village (Figure 3); and

Alternative 5: Rural Village (Figures 4, 5, 6, 7, 8 and 9).

The main elements of the village are described as follows:

- A 'village high street' which is parallel to the R310 being the economic heart of the village with a farmers' market and traditional shops and restaurants with a total of 14 500m².
- A 'central avenue' axis off the village street which provides visual connection to the residential areas and the agricultural landscape beyond.
- Residential development to make provision for a mix of housing types and densities with a total of 475 units including 24 free standing free-hold single residential houses, 194 single and double storey row houses, 257 apartments. Higher densities are proposed most central to the development and will include three storey walk-up apartments and flats above retail and business. 10% of the dwelling units (maximum 47 units) will be made available to key workers¹ most probably by a rental scheme owned by Boschendal (Pty) Ltd.
- Retail and business development of low, medium and high density with a three storey limit.
- Guest accommodation including a boutique hotel of 50 bedrooms, self-catering apartments (maximum 20 bedrooms) and self-catering cottages (approximately 30 bedrooms).
- A clinic consisting of 2-3 consulting rooms is currently located to the north and immediately adjacent to the police station is to be relocated to a more central and accessible location within the village high street.
- An early development and aftercare facility for 120 children situated opposite the police station in close proximity to public transport.

The Site Development Plan indicates building footprints, street and parking layout, open space and structural planting. Architectural directives indicate development and building review/approval procedures. Broad architectural design principles and indicative building types with examples are given, along with architectural guidelines. As the buildings have not been individually designed at this stage, the visual montages shown in the VIA are only block models at this stage. Landscaping proposals are indicative only.

The planning motivation for the rural village is based on the Stellenbosch Municipal Spatial Development Framework (SDF), which promotes a series of interconnected nodes at points of highest accessibility. The Groot Drakenstein node, located at the R45/R310 intersection, has been identified as a future development node and the vast majority of the proposed development falls within the urban edge. The node occurs at a highly accessible and important cross-roads located equidistant between Stellenbosch, Franschhoek and Paarl. It is the aim of Boschendal to develop a rural 'Cape village' with

¹ The term "key worker" is typically defined as a public sector employee who provides an essential service. Boschendal will set aside ~ 50% of the 47 units to accommodate key Boschendal workers, while the remaining 50% will be made available at a subsidised rental to non-Boschendal key workers.



Figure 3: Site Development Plan: Alternative 4 (Clair Abrahamse 2015)

LAND USES:

- RESIDENTIAL: LOW DENSITY
- RESIDENTIAL: GARDENS ONLY (NO STRUCTURE)
- RESIDENTIAL: MEDIUM DENSITY
- RESIDENTIAL: HIGH DENSITY
- RESIDENTIAL (HOSPITALITY)
- COTTAGES (WITH CONSENT FOR GUEST ACCOMMODATION)
- BUSINESS: LOW DENSITY MIU - 1 STOREY
- BUSINESS: MEDIUM DENSITY MIU - 2 STOREY
- BUSINESS: HIGH DENSITY MIU - 3 STOREY
- BUSINESS: MARKET
- CIVIC BUILDINGS
- CLINIC
- UTILITY REFUSE
- OPEN SPACE
- AGRICULTURAL
- ROADS PUBLIC
- ROADS PRIVATE 1
- EXISTING FARM TRACKS INDICATED
- 50 yr FLOODLINE
- 100 yr FLOODLINE
- WETLAND + BUFFER ZONE
- RETENTION POND
- DEVELOPMENT SITE BOUNDARY



Figure 4: Land Use Concept: Alternative 5a (Phillip Briel 2015)

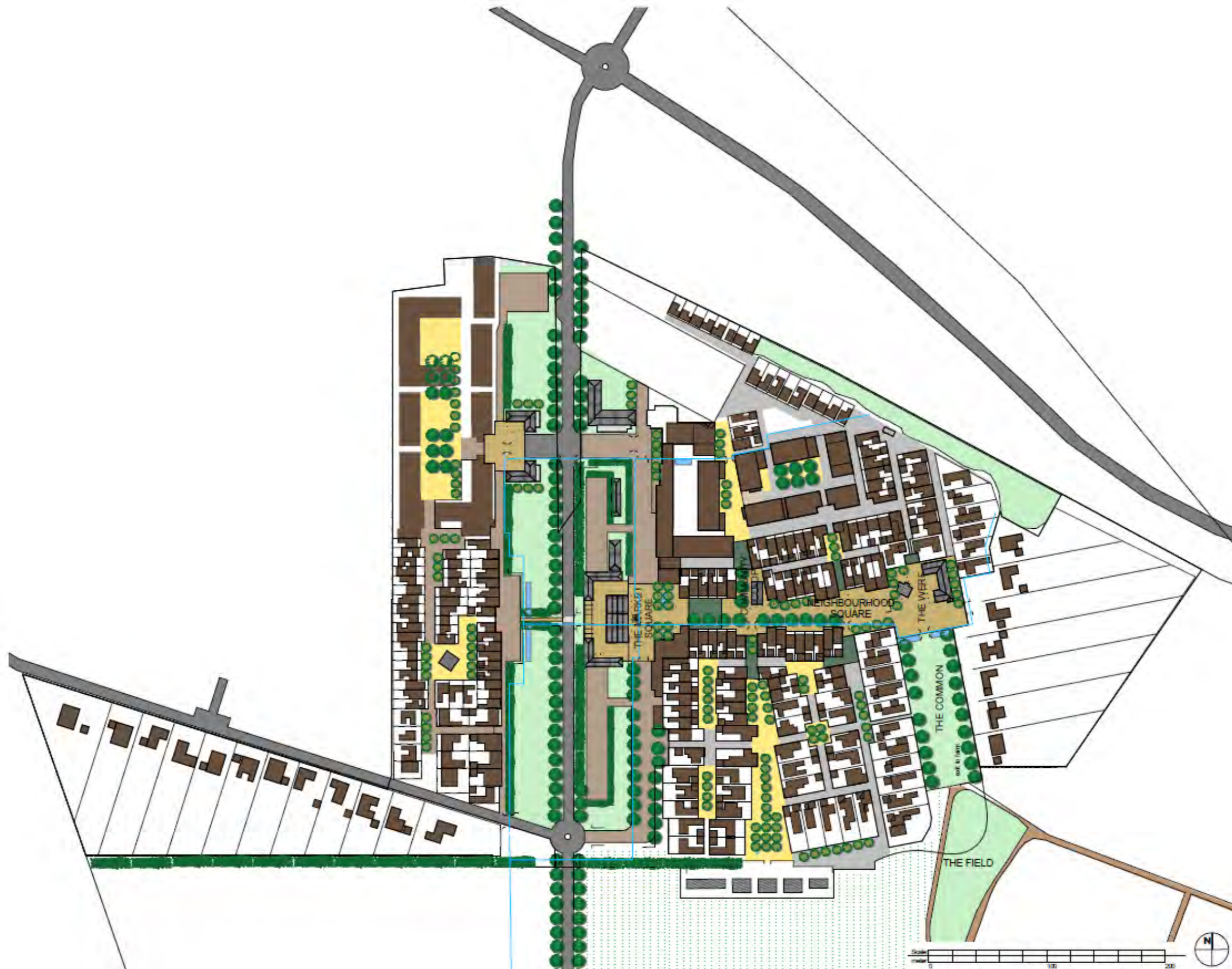


Figure 5: Site Development Plan: Alternative 5a (Phillip Briel 2015)

LAND USES:

- RESIDENTIAL: LOW DENSITY
- RESIDENTIAL: GARDENS ONLY (NO STRUCTURE)
- RESIDENTIAL: MEDIUM DENSITY
- RESIDENTIAL: HIGH DENSITY
- COTTAGES (WITH CONSENT FOR GUEST ACCOMODATION)
- BUSINESS: LOW DENSITY M/U - 1 STOREY
- BUSINESS: MEDIUM DENSITY M/U - 2 STOREY
- BUSINESS: HIGH DENSITY M/U - 3 STOREY
- BUSINESS: MARKET
- CIVIC BUILDINGS
- CLINIC
- UTILITY REFUSE
- OPEN SPACE
- AGRICULTURAL
- 50 yr FLOODLINE
- 100 yr FLOODLINE
- WETLAND + BUFFER ZONE
- RETENTION POND
- DEVELOPMENT SITE BOUNDARY



Fig. 81 Proposed land use | scale 1:3000 @ A3

Figure 6: Land Use Concept: Alternative 5b (Phillip Briel 2015)

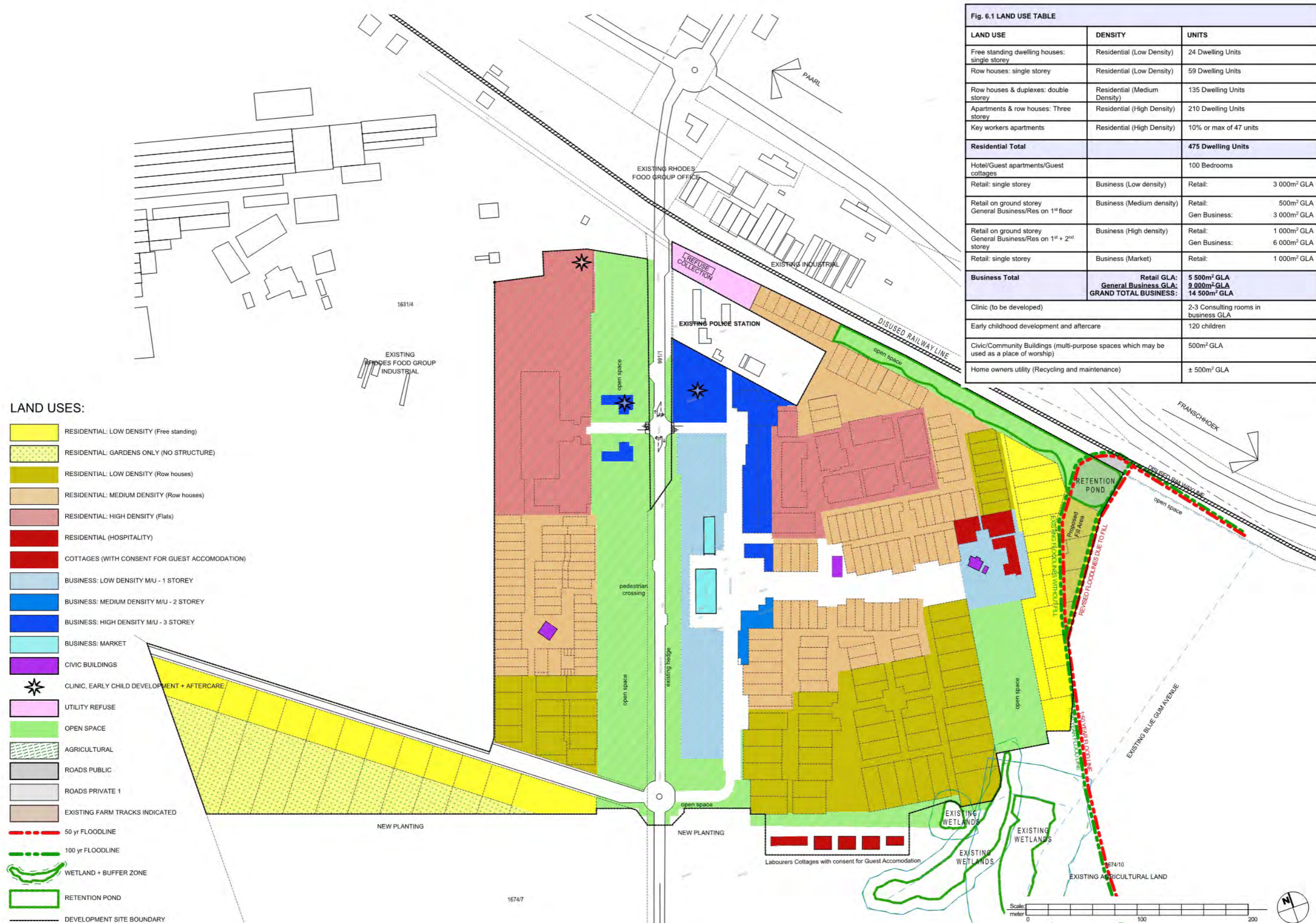
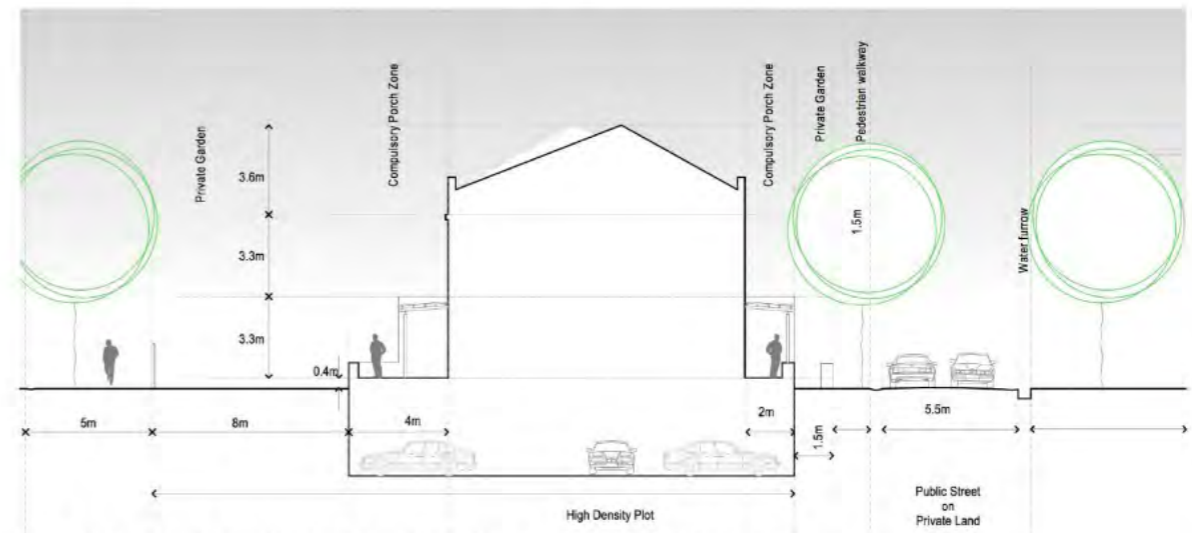
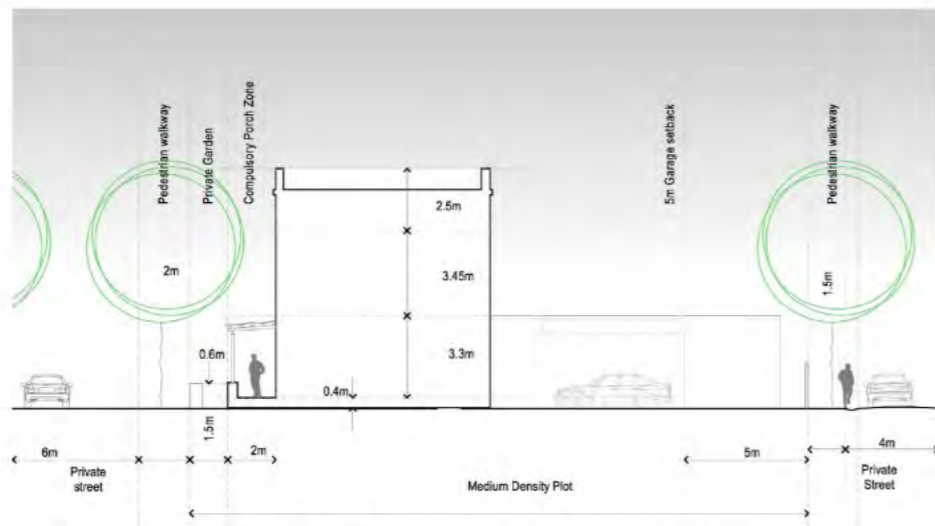
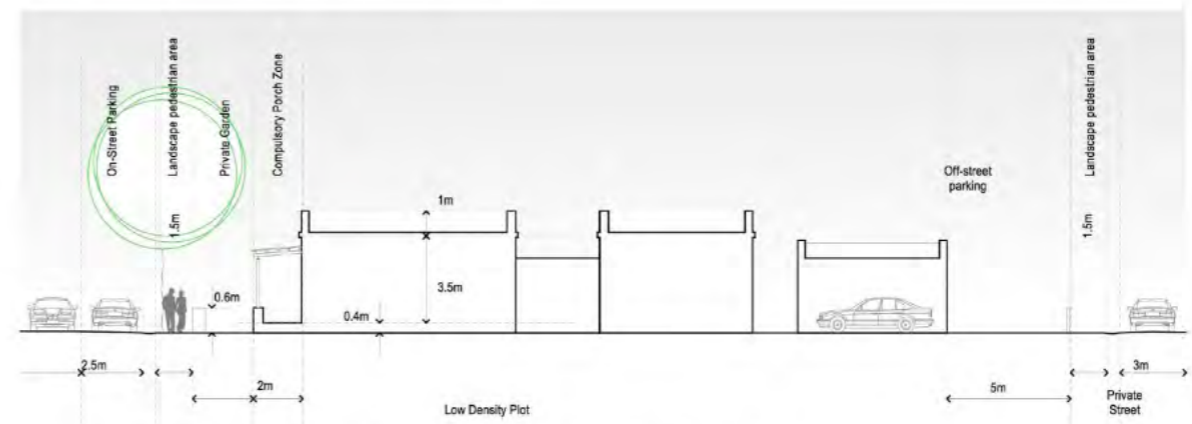
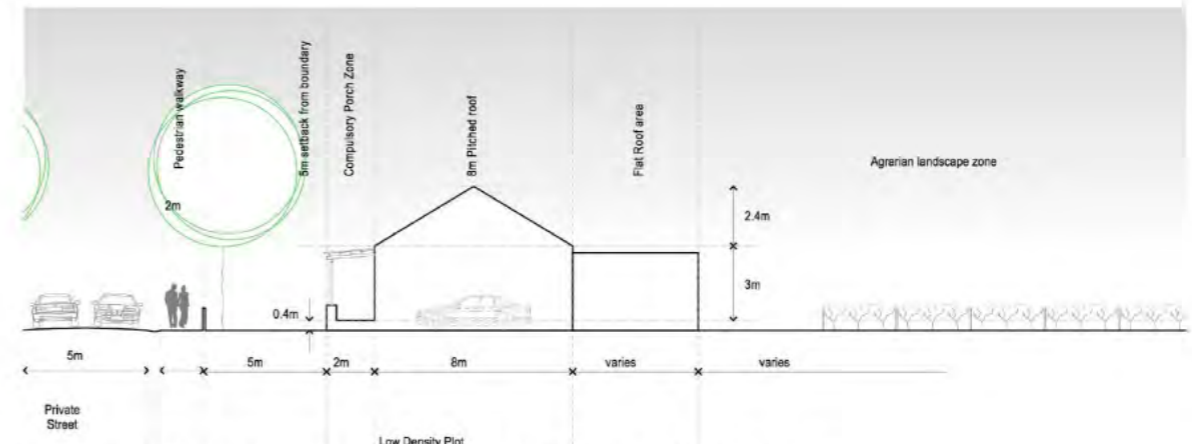
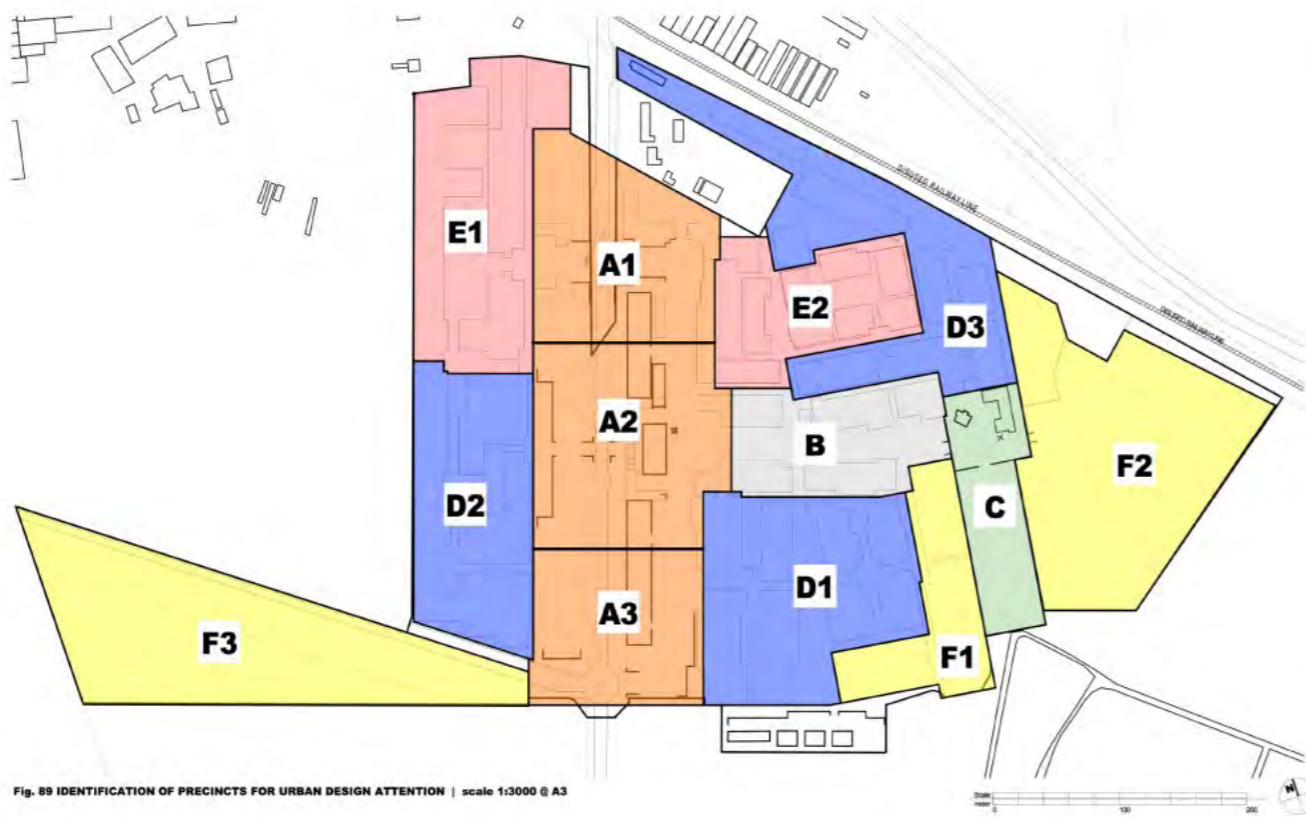


Fig. 6.1 LAND USE TABLE

LAND USE	DENSITY	UNITS
Free standing dwelling houses: single storey	Residential (Low Density)	24 Dwelling Units
Row houses: single storey	Residential (Low Density)	59 Dwelling Units
Row houses & duplexes: double storey	Residential (Medium Density)	135 Dwelling Units
Apartments & row houses: Three storey	Residential (High Density)	210 Dwelling Units
Key workers apartments	Residential (High Density)	10% or max of 47 units
Residential Total		475 Dwelling Units
Hotel/Guest apartments/Guest cottages		100 Bedrooms
Retail: single storey	Business (Low density)	Retail: 3 000m ² GLA
Retail on ground storey General Business/Res on 1 st floor	Business (Medium density)	Retail: 500m ² GLA Gen Business: 3 000m ² GLA
Retail on ground storey General Business/Res on 1 st + 2 nd storey	Business (High density)	Retail: 1 000m ² GLA Gen Business: 6 000m ² GLA
Retail: single storey	Business (Market)	Retail: 1 000m ² GLA
Business Total	Retail GLA: 5 500m² GLA General Business GLA: 9 000m² GLA GRAND TOTAL BUSINESS: 14 500m² GLA	
Clinic (to be developed)		2-3 Consulting rooms in business GLA
Early childhood development and aftercare		120 children
Civic/Community Buildings (multi-purpose spaces which may be used as a place of worship)		500m ² GLA
Home owners utility (Recycling and maintenance)		± 500m ² GLA

Figure 7: Land Use Concept: Alternative 5c (Phillip Briel 2017)



Prepared by Philip Briel and Wilko de Roux dated September 2015. © Philip Briel Architects. All rights reserved.

PG.62

source : Philip Briel Architecture • Urban Design 2016

Figure 8: Proposed Development Controls



source : 3D Model by MLB/BOLA 2016

Figure 9: 3D Model of Alternative 5a

4. METHODOLOGY

Following a rigorous process of analysis of the site a comprehensive set of heritage indicators and directives were formulated and against which the development proposals have been assessed. The method of analysis recognises that the site cannot be assessed in isolation, indicators should relate to the region as a totality and that the assessment should occur across scales. It is foregrounded by the principles of maintaining the dominance of wilderness and rural landscapes (as opposed to the increasing dominance of urban and suburban landscapes), and the need of authenticity. It sets out criteria for where development should not occur and establishes an argument for the location of a village at the intersection of the R45 and the R310. It then provides a set of indicators for what constitutes a rural village in terms of its relationship with its setting, spatial structure, patterns of access and use. These are then developed further at the level of street, visual and architectural indicators. Refer to Section 9 of the report.

5. DESCRIPTION OF THE SITE

The site lies close to the intersection between the R45, which links Paarl and Franschoek, and the R310, which follows the Dwars River Valley connecting Groot Drakenstein to Stellenbosch via the Helshoogte Pass. The R310 would provide access to the proposed village development. The site is partly surrounded to the south by the remainder of the Boschendal farm, including the Boschendal homestead, werf and associated vineyards. Boschendal homestead is a provincial heritage site (former national monument) and is situated within a Grade I landscape. The Rhodes Food Group Head Office, associated factory buildings and police station are located to the north of the site. A disused railway track runs parallel to the R45 to the north of the site.

The existing zoning of the site is Agriculture Zone. It involves Farms 1674/7 and 1674/10, Boschendal, measuring 106.667 hectares and 106.6539 hectares respectively. On Portion 7 of Farm 1674 the area of land which forms part of the application area is occupied by residential buildings and underutilised land. On Portion 10 of Farm 1674 the area of land which forms part of the application area is occupied by a packing shed, vacant cottages and school, a pallet factory, clinic, uncultivated land and a small portion of a pear orchard. The pallet factory has been approved as a consent use (service trade) and the clinic and a school have also been approved as consent uses on this land.

The site forms part of an existing agro-industrial node which has its origins as an emerging centre of the export fruit industry in the early to mid-20th century. This node forms part of a pattern of intensification of settlement that emerged in relation to sub-regional movement routes during the 19th and 20th centuries. This pattern includes the settlements of Pniel, Johannesdal Lanquedoc, Kylemore, Groot Drakenstein and Simondium. Until recently they remained distinct compact settlements embedded within zones of agricultural dominance but are now threatened by patterns of suburbanisation and the blurring of settlement edges.



Figure 10: Site photographs



Photo 1: View from Boschendal werf looking north towards Uilkraal cottages and school. Built between 1953 and 1966 for black employees. Vacant since circa 2003.



Photo 2: View from the site looking south-west towards Uilkraal cottages and school (far right) with Simonsberg backdrop



Photo 3: View from the site looking south-east towards Uilkraal cottages with Drakenstein mountain backdrop

Figure10.1: Site photographs - Uilkraal cottages and school



Photos 4-6: Pallet factory building constructed between 1953 and 1966. Associated with saw-milling activities and the diversification of the fruit industry on Rhodes Fruit Farms during the mid 20th century.

Figure10.2: Site photographs - Sawmill



Photos 7-8: Pack shed constructed between 1953 and 1966. Associated with the diversification of the fruit industry on Rhodes Fruit Farms during the mid 20th century.

Figure10.3: Site photographs - Diary Buildings

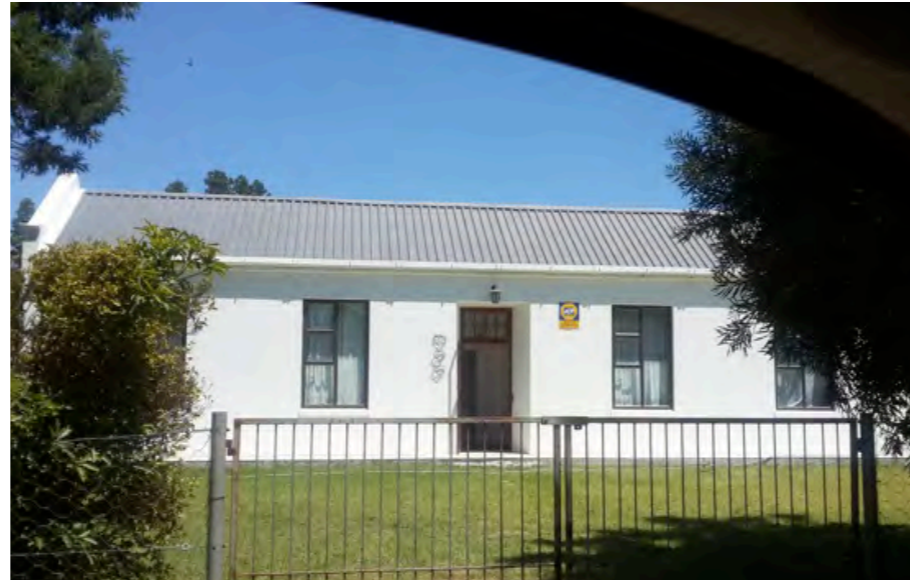


Photos 9-11: A row of cottages situated parallel to the railway line. The left and middle cottages appear to have been constructed in the mid 20th century to accommodate factory workers. The cottage on the far right appears to be older



Photos 12-13: Various cottages situated in proximity to the cannery constructed between 1953 and 1966.

Figure10.4: Site photographs - Factory Cottages



Photos 14-16: Examples of houses situated in Cannery Row, a double row of houses parallel to the R310. The earlier houses were constructed in the 1950s and 1960s to accommodate factory workers at the cannery on Rhodes Fruit Farms, later Amfarms. Later cottages date to the 1970s and 1980s.

Figure10.5: Site photographs - Cannery Row



Photos 17-18: Views along the R310 including views towards Boschendal homestead

Figure10.6: Site photographs - R310 Scenic Route Conditions

6. HISTORICAL OVERVIEW

The purpose of this section of the report is to provide an overview of the evolution of the place in order to establish the chronological context of the site and its heritage significance. Annotated historical maps and illustrative diagrams relating to the main historical phases of development are included as Figures 11-15. An illustrated timeline is attached as Appendix F.

The farm Boschendal was first granted to Jean le Long in 1685. Title deeds issued a few years later indicate 'Boschendal A' being issued to Nicolaas de Lanoy in 1690 and 'Boschendal B' being issued to Jean Le Long in 1713. These two farms joined circa 1710 when they were both acquired by Abraham de Villiers. Boschendal remained in the ownership of the de Villiers family until 1879 (Titlestad et al 2008).

In 1717 Abraham de Villiers sold Boschendal to his brother Jacob, who subsequently sold it to his son Jan in 1738. It was during 1717 and 1738 that the first buildings were probably erected on Boschendal. Jan's widow sold the property to their son Paul in 1807. Extensive improvements were made to the werf between 1738 and 1807. The early 19th century was associated with a period of agricultural prosperity in the wine industry at the Cape. It was during this period that many of the architectural set pieces of the Valley were established including Boschendal. The present homestead was constructed in circa 1818 incorporating the foundations of an earlier dwelling. Paul de Villiers owned the property until 1840, when the property was transferred to his sons Jan Jacobus and Hendrik Francois (Baumann & Winter 2006; Titlestad 2008).

In 1886 the outbreak of phylloxera virtually destroyed all the Cape vineyards, leaving many farmers bankrupt and the Cape economy in ruin. Boschendal was one of twenty-six farms in the Drakenstein Valley to be acquired by Cecil John Rhodes from 1897 and consolidated into an innovative agricultural scheme, the Rhodes Fruit Farms (RFF). Rhodes instructed his agents to give preference to those farms with examples of Cape Dutch homesteads and set aside substantial sums for their maintenance. The historic homesteads such as Boschendal, Good Hope and Rhone became RFF managerial residences. RFF was initially established as an experimental and training centre for the development of the Cape fruit industry and was soon to become the centre of a thriving industry. HEV Pickstone was the originator of the scheme. He managed the consolidated agricultural group until 1905 and was regarded as one of the pioneers of the export fruit and dried fruit industries (Titlestad et al 2008).

The early 20th century valley landscape was characterized by a dramatic shift from wine farming to fruit farming with extensive orchards and windbreaks being planted. It was also associated with the introduction of corporate farming methods and new employment opportunities resulting from the growth and diversification of the fruit industries. This necessitated the construction of new farm managers' and workers' houses. It was during this period that the intersection of the R45 and R310 started developing into an agro-industrial node facilitated by the construction of the railway line between Paarl and Franschhoek in 1904 and the establishment of a railway station at Groot Drakenstein. A cannery was built in 1903 and a jam factory in 1906. The offices of RFF were also established here. None of these earlier factory buildings remain (Titlestad et al 2008).

De Beers took over RFF in 1925. In 1937 De Beers sold RFF to Abe Bailey and, after his death in 1940, a syndicate of business interests acquired RFF and they owned and developed it for the next 28 years. Jack Manning was appointed Managing Director in 1949. It was under his management during the 1950s and 1960s that massive expansions and improvements were undertaken – new dams and irrigation doubled the productive agricultural area, the factory precinct was enlarged including the construction of a saw-mill and a new cannery to the west of the R310, new workers' housing was built, transport was mechanized and refrigeration technology was improved. The export markets boomed and by 1968 RFF employed hundreds of people and produced and packaged large scale export crops (Titlestad et al 2008).

It was during this mid-20th century period that the cottages parallel to the railway line, the packshed and pallet factory building were built and the Uilkraal cottages and school were built for black employees. It was also during this period that the first suburban houses at "Cannery Row" were constructed to accommodate white employees.

In 1969 Anglo American and de Beers purchased RFF to become Amfarms for the next 31 years. In 1976 the Boschendal homestead, outbuildings and gardens were restored/renovated to their 19th century appearance by Gabriel and Gwen Fagan. The northern entrance to the front of Boschendal homestead was made redundant by the reinstatement/reinforcement of the southern access situated on axis with the homestead. The Boschendal werf was declared a national monument in 1979 (now a provincial heritage site). In the late 1970s it was established as a museum/tourism/restaurant facility, one of the first establishments of its kind within the context of the Cape Winelands (Titlestad et al 2008).

In 1998 Amfarms decided to dispose of its landholdings in the Dwars River Valley. In 2003 a consortium of investors (Boschendal Ltd) purchased 2242 hectares of these landholdings. A large portion of the factory precinct including the cannery to the west of the R310 and the factory buildings to the north of the site between the R45 and the railway line were acquired by the Rhodes Food Group. By the time that Boschendal landholdings were sold, black and coloured employees of Amfarms who had been living on Boschendal landholdings had been relocated to Lanquedoc and numerous workers' cottages including the Uilkraal cottages have been unoccupied since.

Significant shifts in landscape and settlement patterns within the Valley over time have included the following:

1. A pre-colonial landscape with archaeological remains dating to the Earlier, Middle and Later Stone Ages having been recorded in the Cape Winelands, and after 2000 years ago part of the transhumance pattern of Khoekoen pastoralists. Archaeological evidence in the form of stone tools and the remains of circular structures dating to about 2000 years ago have been located in close proximity to the Solms Delta homestead;
2. An early colonial landscape associated with first permanent colonial settlement during the late 17th century when land in Drakenstein was granted to French protestant refugees alongside Dutch and German settlers, and Free Blacks during the late 17th century with the primary purpose of supplying agricultural produce for the VOC refreshment station in Table Bay. A mixed use of agriculture was established and this endured with production emphasis becoming wine based during the 18th and 19th centuries, fruit based during the early 20th century and wine based during the later 20th century onwards. Despite resistance from the Khoekoen, by the early 18th century colonial settlement had destroyed traditional mobility of the Khoekoen population and their decimation was hastened by the indentured labour system and disease;
3. The 18th and early 19th century colonial landscape associated with the emerging rural gentry, the building and expansion of farmsteads (e.g. Boschendal, Rhone and Good Hope) and the central role of slavery and indigenous labour in farm production. Also associated with emerging Cape vernacular and later classic Cape Dutch makeovers in the 1780s to 1820s which extended into the British period.
4. The 19th century (first half) landscape characterized by a rural gentry and syncretic Dutch Cape and British trade and farming practices, slave emancipation, segregation and labour management. The introduction of the quitrent land grant system resulting in substantially enlarged landholdings and effectively removing common arable and grazing land between them. It was during this period that the mission settlement of Pniel was established in 1843 mainly to accommodate freed slaves;
5. The 19th century (second half) landscape characterized by mineral exploitation in the interior and the consolidation of British colonial interests at the Cape including the development of the harbor and railway line, and the decline in the wine industry and agricultural economy. It was associated with the devastating impact of phylloxera on the agricultural economy of the region when many of the farmsteads fell into serious disrepair. It was during late 19th century that 26 farms in the Valley were consolidated into Rhodes Fruit Farms.
6. The 20th century (first half) landscape characterized by the Union of South Africa, Cape Revival movement and a rising corporatism. It was associated with the development of the fruit industry in the Valley, new workers' housing, railway infrastructure and improvements to the road network. It was during the late 19th and early 20th century that the settlements of Johannesdal and Kylemore were established and the Baker designed Lanquedoc village was built to accommodate RFF employees. It was during this period that agro-processing facilities were constructed at the intersection of the R310 and R45, significantly expanded in the mid-20th century;
7. The 20th century (second half) landscape characterized by apartheid, the migrant labour system and massive expansions and improvements in infrastructure. It was during this period that Pniel, Lanquedoc, Kylemore and Johannesdal were declared "coloured areas", various clusters of farm workers' cottages were built and Thembaletu Hostel was built to the east of the Dwars River to accommodate black migrant workers employed on Amfarms. These settlements emerged with different origins and largely distinctive communities and have strong historical ties with the old Rhodes Fruit Farms/ Amfarms Boschendal farms;
8. The 21st century landscape characterized by increasing corporate branding, tourism, a shift to democracy, and change in institutional ownership. Between 2003 and 2005 about 3000 employees and their families living on Boschendal landholdings were relocated to a large new extension of Lanquedoc called "New Lanquedoc".

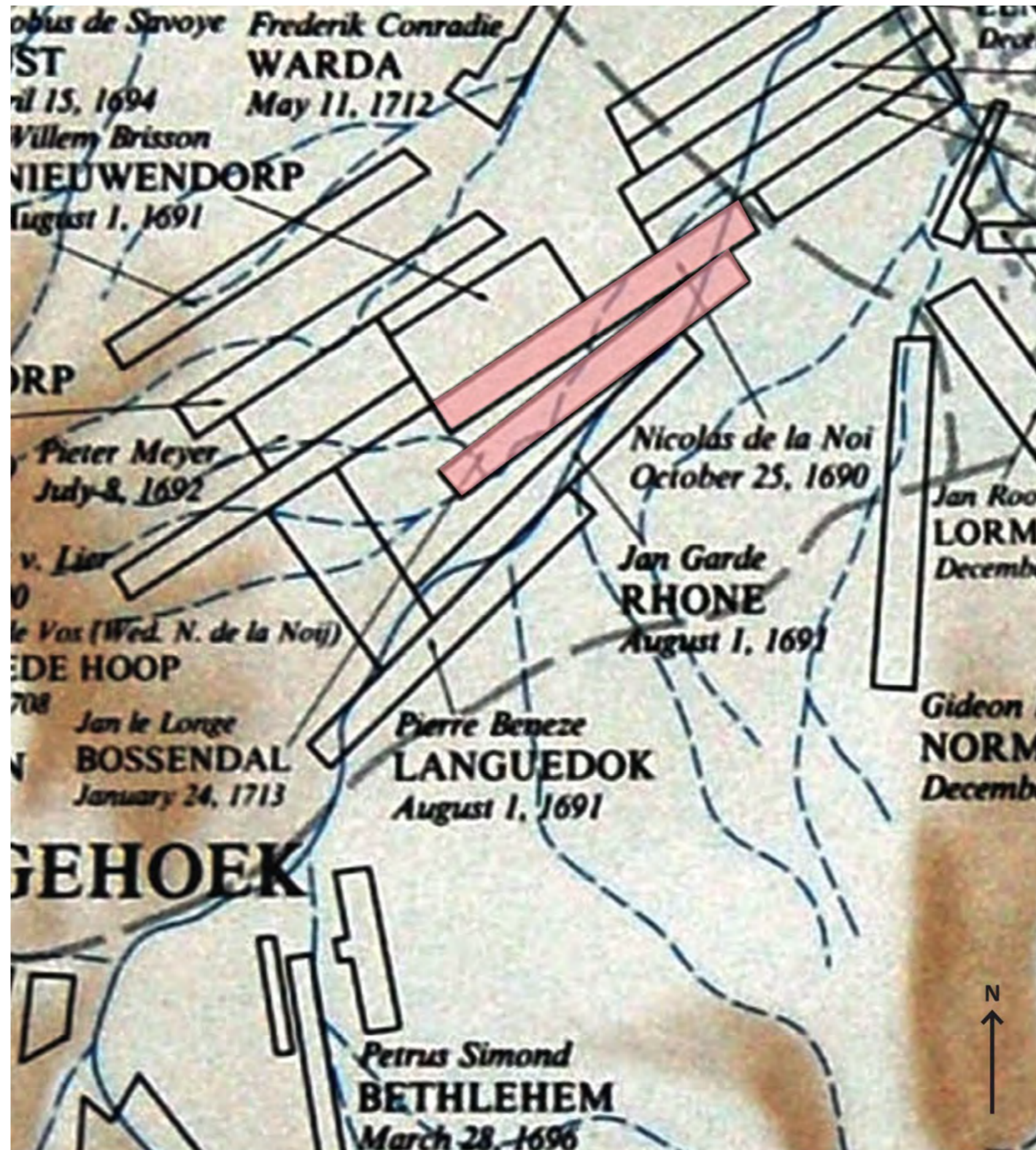


Figure 11: Extract from composite map showing 17th and 18th century grants in the Drakenstein Valley. (Source: Leonard Guelke Cape Colony 1657-1750, Department of Geographical Publication Series, University of Waterloo, 1987). Early Boschendal grants are highlighted in red. The development site is immediately to the north of these grants.



Figure 12: Compilation of land grants in the Drakenstein Valley 1650-1795 (Source: Titlesatd 2008). Showing dominant patterns of ownership. The development site is indicated (red circle).

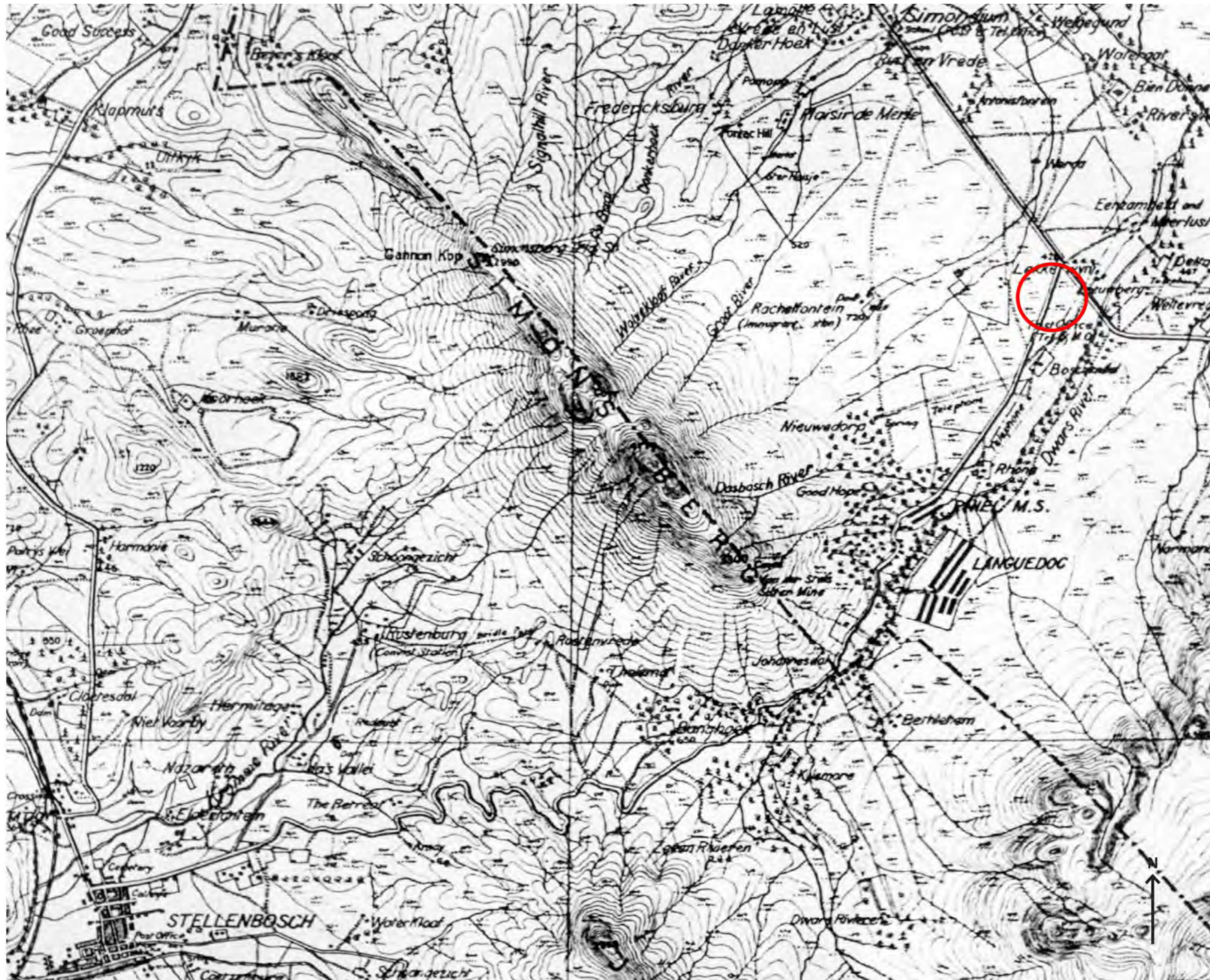


Figure 13: Extract of the 1901 Inch Series showing Paarl and Stellenbosch Districts. The development site is indicated (red circle). The factory precinct had not yet been established.



Figure 14: Extract of 1923 Topographical Plan of Rhodes Fruit Farms (Good Hope, Nieuwedorp, Rhone Boschendal (Source: Surveyor General, author unknown, Boschendal Collection). Diagrammatic representation focusing on set pieces. The early 20th century development of the factory precinct at the intersection of the R45 and the R310 is not depicted. The development site is indicated (red circle).

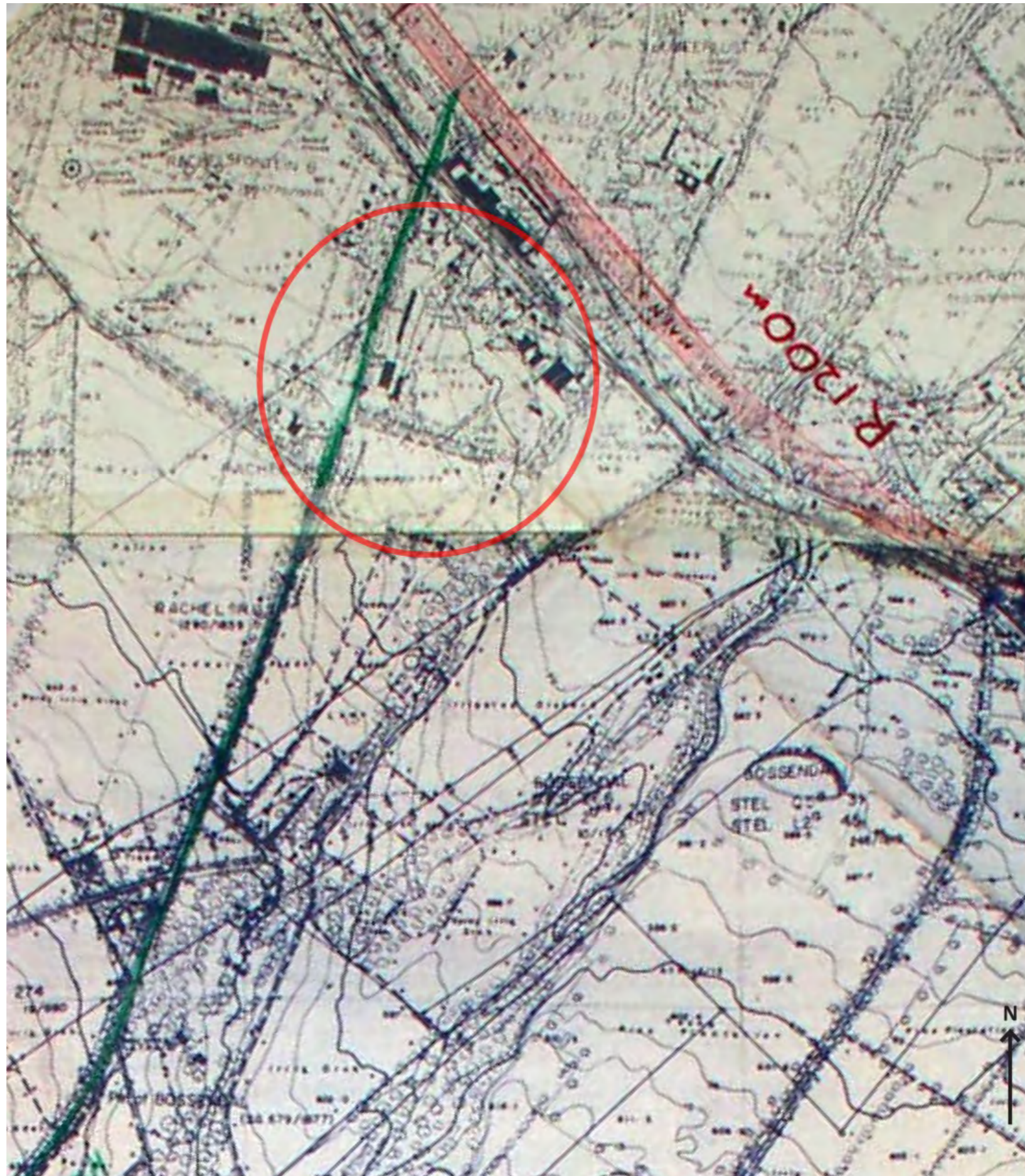


Figure 15: Extract of 1966 topographical map (Source: Boschendal Collection). Showing development of the RFF factory precinct at the intersection of the R45 and R310. The railway line and factory buildings (immediately north of the site) and later mid 20th century cannery complex (north-west) are clearly indicated as well as mid 20th century buildings still present on the site, i.e. packing shed, Uikraal cottages, factory cottages and pallet factory. The development site is indicated (red circle).

7. STATEMENT OF HERITAGE SIGNIFICANCE AND GRADING

The following statement of significance is framed at three scales, namely the overall landscape, precinct and site scales. Heritage resources are mapped in Figures 16 to 23.

7.1 BROADER LANDSCAPE ASSESSMENT

The site is located within a Grade I landscape. It is located within the Dwars River Valley which is an integral component of this landscape and is of outstanding heritage value in terms of the following (Drakenstein Landscape Group 2012):

- It is highly representative of the Cape Winelands Cultural Landscape in terms of the visual dominance of a productive agricultural landscape, dramatic mountain-valley setting, its collection of historical farm werfs, cottages and villages, and pattern of historical tree alignments.
- It reflects a pattern of early colonial settlement and expansion during the late 17th and 18th centuries with an emphasis on agricultural production concentrated in the well watered fertile valleys.
- It has played a key role in the history of the fruit industry with the establishment of Rhodes Fruit Farms and its association with important figures in the development of the export fruit industry at the turn of the 20th century.
- It has the strong presence of a major corporate institution (Rhodes Fruit Farms-Amfarms) spanning more than a century and its associated impacts on the landscape in terms of farming methods, infrastructure, built form, patterns of labour and institutional memory.
- It has a concentration of highly important heritage places with Boschendal and Rhone and their landscape settings providing a pivotal set piece within the valley system. Its rich architectural and settlement history reflects the evolution of the Cape farm werf tradition from the 18th century, the influence of the Arts and Crafts Movement and the work of one of South Africa's foremost architects, Herbert Baker.
- It also reflects a range of built form and settlement typologies, e.g. farm werfs, managerial residences, farm cottages, planned labourer's villages (Lanquedoc and Thembaletu hostel) and mission settlement (Pniel).
- It has a distinctive and legible pattern of agricultural settlement which has evolved in response to fertile soils, water availability and movement routes, and has resulted in a pattern of farm werfs strung out along the Dwars and Berg Rivers. The riverine corridor contributes significantly to the setting and provides strong edge conditions to heritage places, e.g. Rhone and Boschendal.
- It has a strong relationship with a regional scenic route network, e.g. the R310, and variation of views ranging from dramatic distant views towards the mountains and focused views on landmark buildings, e.g. Boschendal.
- It reflects the history of farm labour, i.e. slavery, indentured labour, wage labour, migrant labour, and related shifts from a feudal to a corporate to a democratic order. Its community has worked and inhabited the landscape for generations resulting in strong linkages between place and social identity.

7.2 PRECINCT ASSESSMENT

The site is situated at a regional gateway at the intersection of the R45 and R310 and the junction of two valley systems, namely the Dwars River and Berg River Valleys. The R45 and R310 form a major part of a regional scenic and tourism route network.

The site is situated on the northern boundary of a highly significant historical precinct incorporating the farm werfs of Boschendal and Rhone and their agricultural frames, as well as the R310 scenic corridor and the Dwars River corridor. The werf is a PHS and is of outstanding heritage value, one of the most iconic farm werfs within the Cape Winelands. It is worthy of Grade I heritage status in terms of its historical, architectural, social and aesthetic value. Of particular value at a precinct scale is the prominent landmark status of the Boschendal homestead along the R310 scenic route with dominant views towards the homestead within a vineyard setting and the Drakenstein Mountains beyond. Also of value are views from the Boschendal homestead looking across vineyards and the development site, towards Wemmershoek Mountains beyond.

7.3 SITE ASSESSMENT

The site is largely vacant, derelict and lacks visual amenity.

A number of buildings situated on the site are associated with the history of Rhodes Fruit Farms and the development of the fruit industry during the mid-20th century. However, the primary buildings associated with this history of food (fruit) processing are located off the site to the north and north-west. None of the buildings on the site are worthy of formal protection in terms of the NHRA. The archaeological assessment of the site concludes that it is not archaeologically sensitive as it has been heavily transformed. No evidence of Early or Middle Stone age archaeological material was encountered, nor are there any buildings that require grading. No mitigation is recommended.

8. HERITAGE-RELATED DESIGN INDICATORS

It is widely accepted that Boschendal is one of the 'jewels in the crown' of the Cape Winelands, The sub-region also plays a very significant role on the regional economy of the Western Cape, via the tourism and agricultural sectors.

It is also apparent that the spatial quality of the sub-region is being rapidly eroded, particularly through the inappropriate location of new development (particularly incremental scatter), inappropriate forms of development (particularly suburban, as opposed to rural, forms) and inappropriate forms of urban, as opposed to rural, infrastructure.

It is clear, therefore that an appropriate approach to any heritage impact assessment in the region should be comprehensive and conservative: heritage indicators must give prospective developers a very clear indication of what is acceptable. Further, the site cannot be assessed in isolation. Indicators should relate to the region as a totality and the assessment should occur across scales.

The indicators which are discussed below are organized under a number of headings:

- (i) Locational indicators
- (ii) Sub-regional indicators
- (iii) Village indicators
- (iv) Street indicators
- (v) Visual indicators
- (vi) Architectural indicators

8.1 OVERARCHING PRINCIPLES

Two central starting points have informed the assessment which follows. The first is that the real heritage value of the broader site lies in the totality, not only in the parts. It is the historical dynamic balance between the three landscapes of society (wilderness, rural and urban) which lies at the heart of its value. In terms of this, it is the wilderness and rural landscapes which have historically been, and must remain, dominant. The erosion of value currently being experienced is the result of increasing dominance of urban and suburban landscapes at the expense of the others.

The second is the principle of authenticity. This has a number of implications:

- Wilderness landscapes should remain as pristine as possible.
- Rural landscapes must take the form of working farms, with the Infrastructure, noises and smells which accompany this – it cannot be substituted by artificial green forms such as gardens.
- Infrastructure forms should be rural, not urban.
- The historical cultural landscape should be conserved and celebrated (the cultural landscape takes the form of appropriate human responses to the place over time and includes built forms, objects, planting and geometries). Of particular importance in terms of geometries is retaining the orthogonal geometries of rural landscapes and the promotion of horizontality to retain the dominance of sky and agricultural planes.
- Settlement should capture qualities of village, not suburbia.

8.2 LOCATIONAL INDICATORS: WHERE DEVELOPMENT SHOULD NOT GO

Given the significance of the sub-region, the central question is not where development should go, but where development should not go. This issue has been explored through a rigorous process of analysis.

The full analysis can be found in Annexure B. In simplified form, this has followed a number of steps.

A set of indicators was developed for the broader Boschendal site in three categories: natural systems, the cultural landscape and public structural and design informants (Table 1). All of these were mapped and a composite constraints and informants map was produced for each category (Figures 16, 17, 18).

An approach to settlement formation in regional space was then conceptualized. This conceptualization is again based on the principle of authenticity. It is underpinned by a number of central principles, based on international theory and precedent.

- Development should not be scattered but should gravitate towards the main regional sub-routes (in this case, the R45 and the R310).
- Development along these routes should not be continuous, but should take the form of a hierarchical system of 'beads on a string', with the highest order settlement clusters corresponding with points of highest accessibility. These points correspond with cross-over points, where local agricultural superblocks interconnect with the higher order routes. In this way, discontinuous regional corridors of development emerge over time. The maximum width of the corridor should be defined by comfortable walking distance (750 meters).
- The highest order regional routes should appropriately be rural scenic routes. These routes should run continuously through the rural and wilderness landscapes of which they are a part. Appropriately, therefore, settlement should not occur on these routes, but should be set-back a minimum of 75 meters from them. Similarly, in order to create continuities of agriculture, settlement should not be two-sided, traversing the route, but should be one-sided only, switching from side to side. In this way, the scenic experience is optimized.

This conceptual approach is expressed diagrammatically in Figure 19 and is diagrammatically applied to the broader context of the site in Figure 20.

It can be seen that the site in question lies at the intersection of the two highest order routes in the sub-region - the R45 and the R310.

3. All the indicators (natural systems, cultural landscape, existing public structure and design factors and settlement) were overlain, in order to produce a composite constraints and informants map (Figure 21).

4. This was then interpreted to identify development potential in terms of three categories: 'no-go' areas (where no development should be allowed); 'tread lightly' areas (where some low impact development could be considered, subject to strict controls); and 'full development potential' (where more concentrated development could be considered) (Figure 22).

8.3 SUB-REGIONAL INDICATORS

Given that the location of the village is acceptable, the setting of the development must respect the following sub-regional indicators:

- The broader cultural landscape context should be respected (Figure 23).
- Within the rural corridors along the R45 and the R310, the scenic route parameters, in conjunction with the view cones associated with the Boschendal Homestead and its setting, must be respected.
- The northern edge of the village should be set-back from the R45, in order to acknowledge the scenic nature of the R45.

- The southern-most edge of the village should be no closer than 300 meters from the Boschendal homestead werf wall, in order to celebrate its setting and the agricultural context.
- Agricultural activity associated with Boschendal should be brought hard against the edges of the village, in order to reinforce the agricultural context of the werf and homestead.
- Planting mitigation measures should be used to 'edge' the village, to clarify its domain and to contribute to the cultural landscape expression.
- The settlement should be announced by strategically located measures which contribute to the creation of a gateway, a sense of arrival, the effect of 'pauseway' and traffic calming. These should be consistent with measures previously introduced at Pniel, thereby extending design language as a 'family' of elements in the broader valley. Traffic circles (in an appropriate rural form) should announce entry into the settlement both from the R45 and the R310. The speed limit within the village should not exceed 60 kilometers an hour.
- Access into the village should respect the safety requirements of the Provincial Roads Engineer.
- The southern and eastern portions of the village should be buffered by 'tread lightly' zones of development in order to protect long views from the homestead and from the scenic routes.

8.4 VILLAGE INDICATORS

The central, non-negotiable, challenge with respect to settlement is to create qualities of 'village', not 'suburbia'.

8.4.1 Qualities of Village

Positively performing villages internationally exhibit a number of qualities.

- Their location is accessible in term of regional movement infrastructure.
- They are relatively small.
- They are mixed-use (for convenience), although the main activities are residential.
- Their economies are supported by the local region, while they predominantly provide goods and services to the local region.
- They are compact: they do not sprawl, although they allow easy pedestrian access into the surrounding countryside.
- They are social entities, not just a collection of houses: they require places for social gathering and expression.
- There is a clear distinction between more public and more private activities, with more public activities gravitating towards the most accessible locations.
- The qualities of street space are central to the overall quality of the village.
- Pedestrian and NMT movement is dominant, although vehicular access to all parts of the site is possible.
- They are safe, in the sense that there is no residual space that lacks surveillance.
- They offer diverse living conditions to a demographically wide range of inhabitants.
- Large parts of the village are widely accessible: only the most private places may have controlled access.
- Their infrastructure is rural, not urban.
- Their country setting is brought into daily life through 'inside-out' views.

8.4.2 Village Spatial Indicators

- The form of the village should be compact, to discourage sprawling forms, now or in the future. However, cul-de-sacs are discouraged, to enable easy pedestrian access to the countryside.

- Large parts of the village (particularly the more public parts) should be accessible to the public. Some security control may be exercised in more private precincts.
- There should be a range and mix of activities. Non-residential activities should be small-scale and occur on the ground floor in central zones, to encourage a vibrant street life in the central areas.
- There should be a range of choices both in terms of lifestyle (from quite public to very private living), housing types and affordability levels.
- The settlement should be organized around a hierarchical 'family' of public or social spaces, with the level of hierarchy largely corresponding to levels of accessibility.
- The highest order space should be the primary gathering space (the village green) for the entire village and for visitors.
- There should be a clear hierarchy of public routes, with the hierarchy corresponding with degrees of continuity of the route.
- The highest order route should be a mixed-use high street.
- The movement hierarchy should be pedestrian and NMT-dominant, while vehicular access should be possible to all parts of the development.
- The movement network must promote permeability. It should take the form of a grid, although the grid may be distorted to soften it.
- The pattern of sub-division should reinforce active street boundaries and prevent 'dead-edges' (edges which lack surveillance) from fronting onto the public domain. To this end, buildings facing onto public streets should be brought to the front of the plot and 'build-to' lines should be defined to make the street in terms of important routes. This system also promotes primarily green hollow blocks.
- The rural and wilderness settings of the village should be brought into the daily lives of inhabitants by using streets as viewing corridors opening up important vistas.
- Higher order public institutions and activities should be used to reinforce patterns of access and higher order spaces. Similarly, a gradation of height should reinforce the hierarchy of publicness. No building should exceed 3 storeys. These occur only in the densest parts. There should be a minimum height of two storeys in the more embedded private areas and one storey in the 'tread lightly' zones.
- The stormwater run-off system should be designed as a network and should occur on the surface (as a place-making element), in the form of 'grachts' or swales).
- Rural elements of infrastructure (for example, grachts and tree canopies), should be used, as opposed to urban elements such as kerbs or high walls.
- Building types should be used structurally in appropriate places to reinforce structure (for example, street-liners, T-Junctions buildings, corner buildings, pavilions).
- No rears of buildings should front onto any form of public space.
- Planting mitigation measures (for example, avenues and wind-breaks) should be used to 'finish-off' the southern edge of the village, while at the same time consolidating the northern edge of the agricultural setting of the Boschendal homestead and werf precinct. Structural planting should also be used to reinforce the structural hierarchy. Wherever possible, orthogonal geometries should be used to give expression to the cultural landscape of the Winelands of the Cape.

8.5 STREET INDICATORS

Street space contributes the largest amount of public space in almost any settlement. The quality of the streetscape, therefore, fundamentally impacts on the quality of the entire settlement. The fundamental challenge lies in defining a movement network that reflects qualities of 'street', not 'road'. There is a fundamental difference. 'Roads' are largely mono-functional conduits or 'pipes' for the movement of vehicles. 'Streets' are multifunctional spaces which accommodate a range of human activities, including different modes of movement. When they are positive, they reflect a number of characteristics: they are defined, humanly-scaled, multi-functional (in particular, they make NMT a pleasant and safe experience) and they are subject to surveillance.

- The street hierarchy should be clear and legible, with the dominance of the 'high street' apparent.
- Blocks should be relatively small to promote permeability.
- Street edges must be clearly defined (by building fronts, verandas, low walls, fences, hedges and so on). Almost all buildings should be background buildings, the primary role of which is to define

- public space, including street space. Buildings should be used structurally to define streets.
- Street must be humanly scaled (the height of defining elements on the edges should be appropriate to the width of the street).
- Streets must ensure surveillance in the sense of having ‘human eyes’ over the street space. By definition, therefore, front-defining edges must allow for a degree of transparency.
- Streets should be multi-functional: they should be able to accommodate a range of human conditions. By definition, then, they should not be scaled only to accommodate movement. Part of this is accommodating a range of movement modes in different places.
- The threshold between public street space and private residential space must be clear (frequently scaling elements such as stoeps and pergolas can be used as modulating devices in house-street relationships).
- Minor streets should be a minimum of 7 meters to allow vehicles to turn.
- Kerbs and other suburban elements of streetscape should not be used.

8.6 VISUAL INDICATORS

The visual indicators outlined here have been derived from the visual baseline study prepared by Oberholzer and Lawson. The full VIA is included as Annexure D.

The purpose of identifying visual indicators is for these to contribute to the heritage assessment and in turn to inform the planning and design of the proposed village.

The heritage indicators and directives (Baumann et al, 2015) are supported as these have significant visual implications. Specifically, these include:

- Maintaining a visual setback along the R45 scenic route.
- Maintaining a 300m agricultural setback from the Boschendal homestead werf wall.
- Bringing agriculture to the edge of the proposed village.
- Using avenues and windbreaks to define edges for the proposed village;

Other general urban design, landscaping and architectural guidelines include the following:

Building Heights:

- Generally restrict buildings to 2 storeys to minimise visual intrusion above tree canopies.
- 3-storey buildings could be strategically used in commercial areas to emphasize focal points.
- 1-storey buildings should be used in visually sensitive areas (such as those immediately visible from the Boschendal homestead or R310).

Open Space and Landscaping:

- The village open spaces should ideally be laid out as a continuous system of both hard and soft spaces to ensure functional continuity and visual legibility, as opposed to a patchwork of fragmented spaces.
- The community open spaces and general landscaping should be designed in sympathy with the strongly orthogonal cultural/agricultural landscape and werf-type layout typical in the Winelands. Excessively gardenesque-type landscaping should be avoided.
- The services of a professional landscape architect should be employed at an early stage of the project to ensure appropriate external design.

Streets and Parking:

- Streets should also be laid out in sympathy with the orthogonal pattern of the farmlands, tree belts and irrigation canals. Curvilinear or diagonal street layouts should be avoided.
- Parking areas fronting onto the scenic routes should be avoided, and parking should preferably be

screened with buildings, walls, berms and/or trees. Parking should ideally be organised into small parking courts of about 20 cars to avoid visually bland and climatically exposed parking lots.

- Excessive use of asphalt and barrier kerbs should be avoided to retain the rural character of the area. Streets and parking should ideally have dish channels or grassed swales. Parking areas could have gravel to minimise runoff and the need for stormwater structures. Landscaped detention ponds with litter and silt traps could be used.

Lighting and Signage:

- Outdoor lighting should generally be discrete to maintain the rural ambience of the area. Low-level bollard-type lights and reflectors should be used to minimise light spillage.
- Advertising signage, banners and flags should be avoided, particularly along the scenic routes. The use of low-level signs, or fixing signs to walls, helps to minimise visual clutter.

Environmental management:

An Environmental Management Plan (EMP) should be prepared to ensure that visual mitigation measures are implemented and damage to environmental and heritage resources minimised, particularly during the construction period.

8.7 ARCHITECTURAL INDICATORS AND CONTROLS

Two levels of concern are addressed in this section:

- Generic indicators; these logically flow from the preceding settlement-orientated indicators. However, the focus shifts to individual or complexes of buildings. Particular emphasis is placed on how each building ‘works’ with its neighbour, in order to contribute jointly towards the character of the villages as a whole.
- Mandatory controls to achieve the generic indicators. These generally relate to the public interface and fronts of the units (that portion of the unit which is visible from the street) as well as aspects relating to roof silhouette and sky-lines.

8.7.1 Generic architectural indicators

- All new buildings should reflect recessive architecture (they should be background buildings).
- More important public buildings should not mimic the architecture of the past (e.g. the use of gables etc.). They should be modern in their architecture. Nevertheless, the ‘wall-plate’ architecture of the Cape should dominate.
- No architectural themes (e.g. Tuscan).
- Buildings, structures, built elements and landscaping should promote the natural, rural, historical and architectural character of the broader Boschendal precinct within the Valley.
- Existing architecturally significant buildings and homesteads of historical or aesthetic importance, including their landscape settings, should be conserved and, where necessary, enhanced.
- The character of new buildings and associated elements must reflect qualities of ‘Capeness’ and ‘ruralness’, expressed in the spirit of contemporary design.
- Buildings must be designed to optimize their spatial and design structural role (e.g. gateway buildings, corner buildings, landmark buildings, street-liners, pavilions).
- Most buildings must be designed as background buildings, to make them as unobtrusive and recessive as possible. More prominent buildings should be used strategically (for example, as landmarks or as terminating elements for important axes).
- Buildings and their associated elements (walls, hedges, etc.) must contribute to defining, and thus making, the street along which they are located.
- The geometries of horizontality reflected in the landscape, must be respected, especially in considerations of roof silhouettes.
- Buildings generally must be kept low but height should be used to reinforce spatial structure.

- Roof silhouettes must be as unobtrusive as possible.
- Proportions must be elegant, with wall surfaces dominating openings and cut-outs (apertures). The apertures should be vertically proportioned;
- Surveillance over public space, including the street, is compulsory: no dead-edges are allowed.
- Colours must be muted.
- Where appropriate, use barnyard architecture to define space.

8.7.2 Mandatory Controls

- Buildings should not occur at an angle to the street boundary.
- Compulsory build-to lines should be defined to ensure that buildings play their spatial and design structural role most effectively, (e.g. buildings close to the street).
- The maximum height is three storeys in dense areas, two storeys in the more embedded areas and one storey in the tread-lightly zones.
- No more than ground floor plus one more floor for flat roofed buildings.
- All flat roofed buildings should have a parapet on three sides order to create a 'boxed feeling. No gutters should appear on the front of the unit but should occur to the rear.
- For pitched-roof buildings, ground floor only is permitted. Upper floor accommodation must be within the pitch.
- When roofs are pitched, the allowable range is between 35° - 45°.
- No mono-pitched roofs are allowed.
- No tiled roofs are allowed.
- Significant interruptions to the horizontality promoted by the roof silhouettes (e.g. high chimneys) are not allowed.
- No expressed gable ends (parapets) are allowed. Roof materials must project over the end walls and finish flush with the outside face.
- No dormer windows are allowed in the roof of upper floor accommodation in pitched-roof buildings facing the public street.
- The use of skylights is acceptable if not visible from the road.
- Windows in the dominant facade must be vertically proportioned, consistent with the traditions of walled architecture.
- Process is important in enhancing diversity: no one designer should be allowed to design more than four contiguous building, to prevent monotony.

STUDY	CRITERIA
CATEGORY A: NATURAL LANDSCAPE	
<p>Landform</p> <p>Minerals, fault lines and unstable soils</p> <p>Productive quality of soils</p> <p>Areas prone to flooding Wetlands Floodplains</p> <p>Riverine corridors</p> <p>Botanical ecology</p> <p>Faunal ecology</p>	<ul style="list-style-type: none"> • No development on ridge-lines • No development on land steeper than 9 degrees • No development on elevated exposed slopes, i.e. above the 320m contour line <ul style="list-style-type: none"> • No development over these. However, not applicable in this case <ul style="list-style-type: none"> • Classified as good, moderate and poor. No building on good agricultural soils or on embedded moderate soils <ul style="list-style-type: none"> • No development in these • No development in these • No development within 100 year floodplain <ul style="list-style-type: none"> • No development within riverine corridors <ul style="list-style-type: none"> • No development in areas of high biodiversity value • Protect and promote rare or endangered indigenous species or habitats • Clear invasive vegetation <ul style="list-style-type: none"> • No development in areas of high biodiversity value • Protect and promote rare or endangered species or habitats • Maintain established migration patterns

Table One: Baseline Studies, and the Criteria Used in the Synthesis

STUDY	CRITERIA
CATEGORY B: CULTURAL LANDSCAPE	
<p>Landscape character</p> <p>Archaeology</p> <p>Historical built form and settings</p>	<ul style="list-style-type: none"> • Identify landscape types or characters for more detailed precinct study • Protect and avoid important archaeological remains; • Graded as 1, 2, 3A, 3B & 3C • Protect and enhance the historical architectural set pieces of the Valley (e.g. Rhone, Boschendal , Goede Hoop, Bethlehem, Rhodes Cottage/Nieuwedorp) • Protect and enhance the range of other conservation-worthy places (e.g. werfs, cottages, grave sites, ruins, outbuildings, social facilities) • No or limited new development within zones of high sensitivity, subject to more detailed heritage assessment at a precinct or site specific level • Retain and enhance historical fabric • Reinforce and enhance landscape settings • Allow for the demolition of structures of no or limited heritage significance, which detract from that significance
CATEGORY C: PUBLIC STRUCTURAL DESIGN INFORMANTS	
<p>Regional settlement and route structure</p> <p>Bulk infrastructure</p> <p>Architecture</p> <p>Social facilities</p> <p>Planting</p>	<ul style="list-style-type: none"> • Integrate new development with existing settlement and route structure • Do not repeat or reinforce interventions of the past which are at variance with the historical settlement structure • Wherever possible, make use of existing bulk infrastructure • Ensure that new building development is of a high quality design, craftsmanship and landscaping, appropriate to the significance of the site and its setting • Continue the tradition of commissioning pre-eminent architects, urban designers and landscape architects to reflect the significance of the site • Where possible, reinforce existing facilities • Protect and enhance planting patterns and trees of stature

Table One (continued): Baseline Studies, and the Criteria Used in the Synthesis

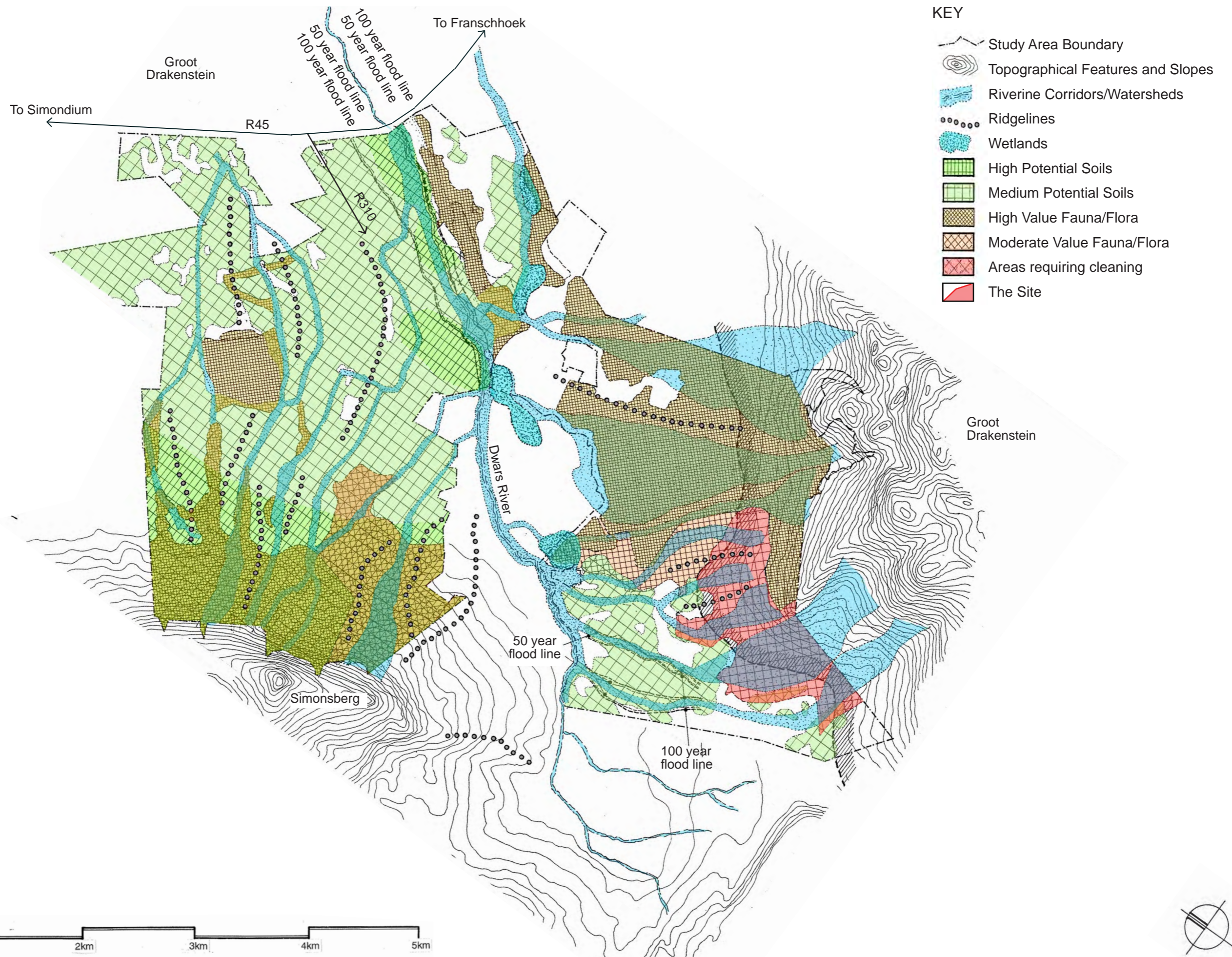


Figure 16: The Groot Drakenstein-Simondium Valley: Composite Constraints and Informants Relating to the Natural Environment

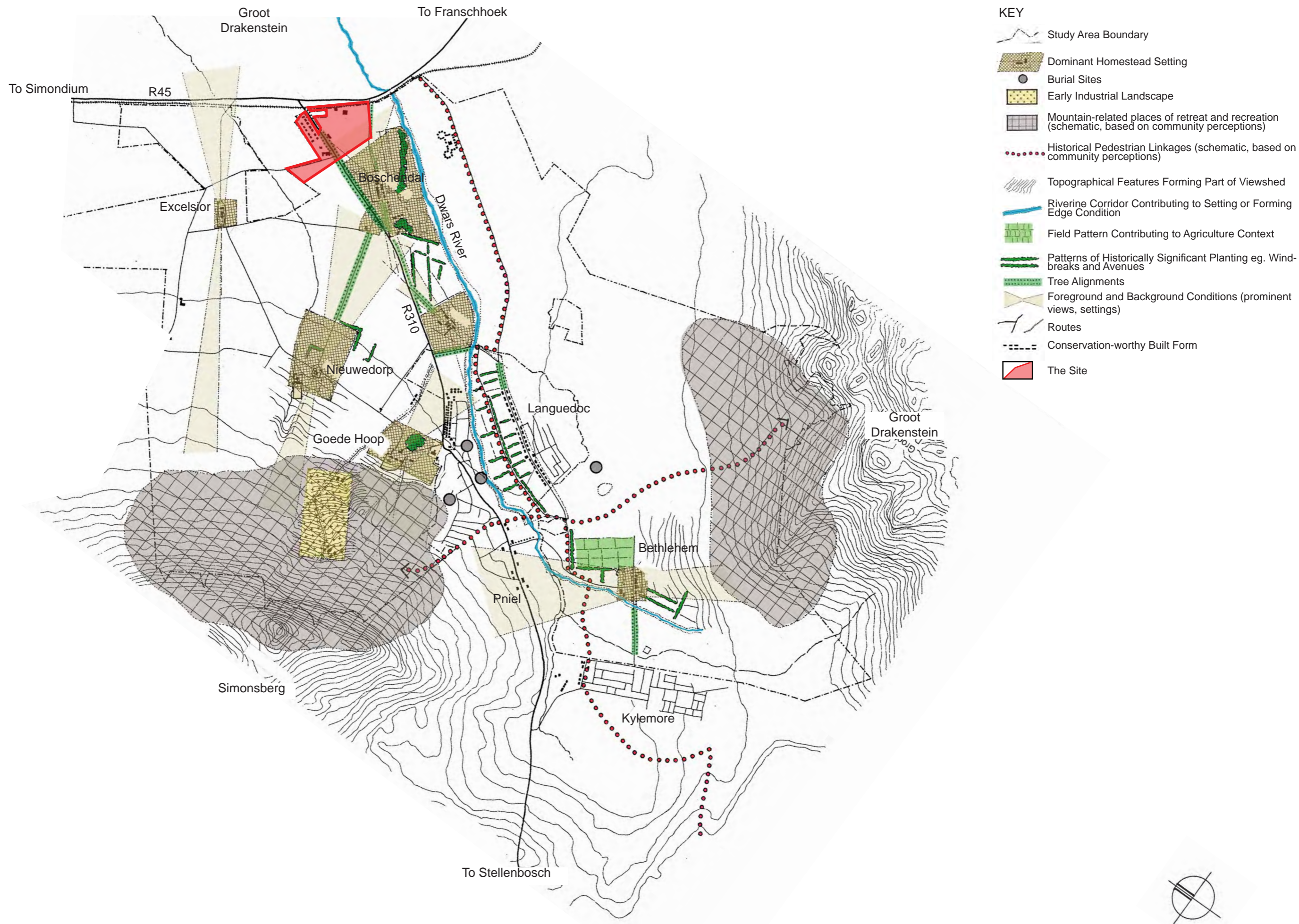


Figure 17: The Groot Drakenstein-Simondium Valley: Composite Constraints and Informants Heritage and Cultural Landscape

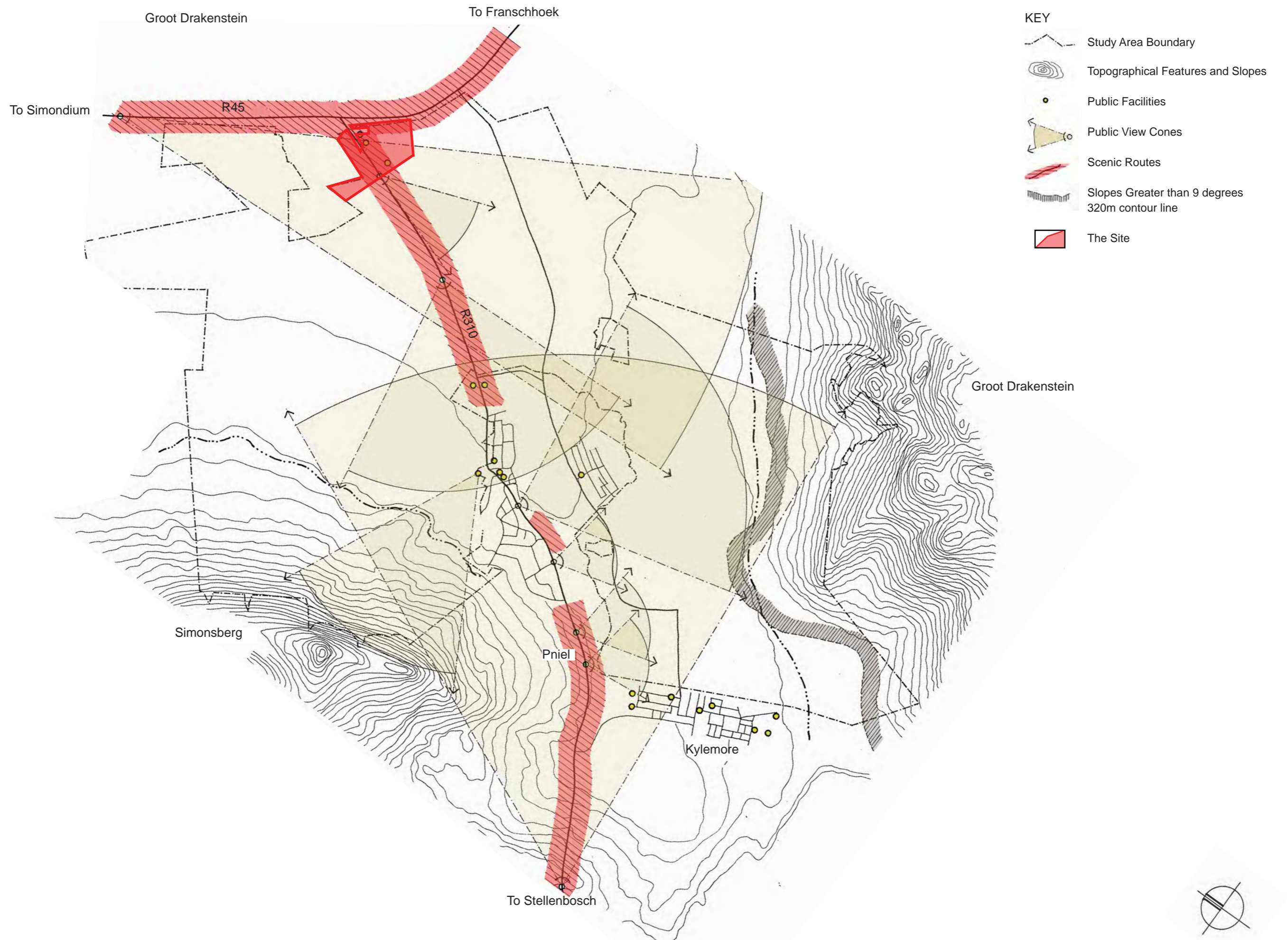


Figure 18: The Groot Drakenstein-Simodium Valley: Constraints and Informants Relating to Existing Public Structure and Design Factors

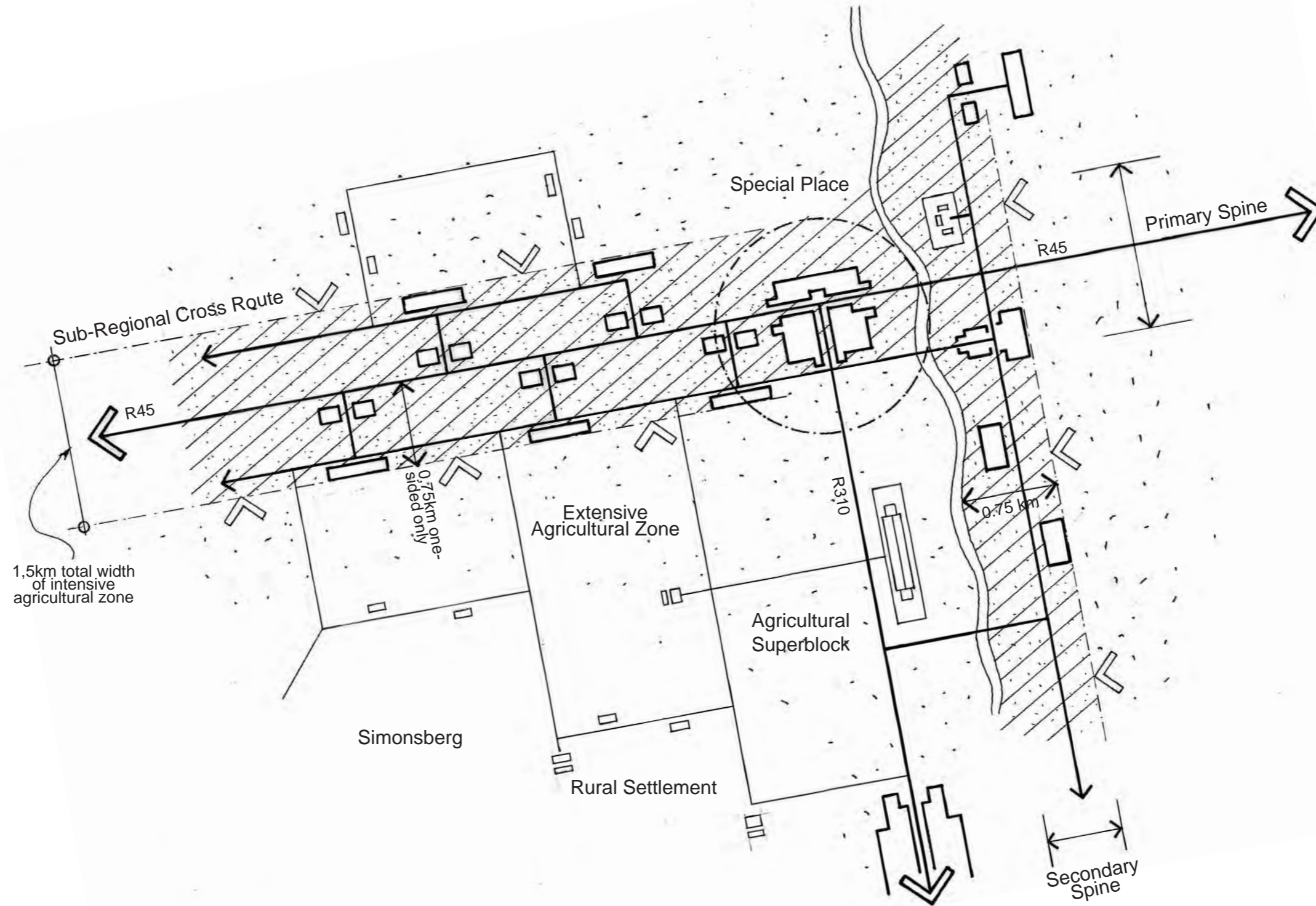


Figure 19: The Conceptual Approach of Interlinked Corridors and Agricultural Superblocks

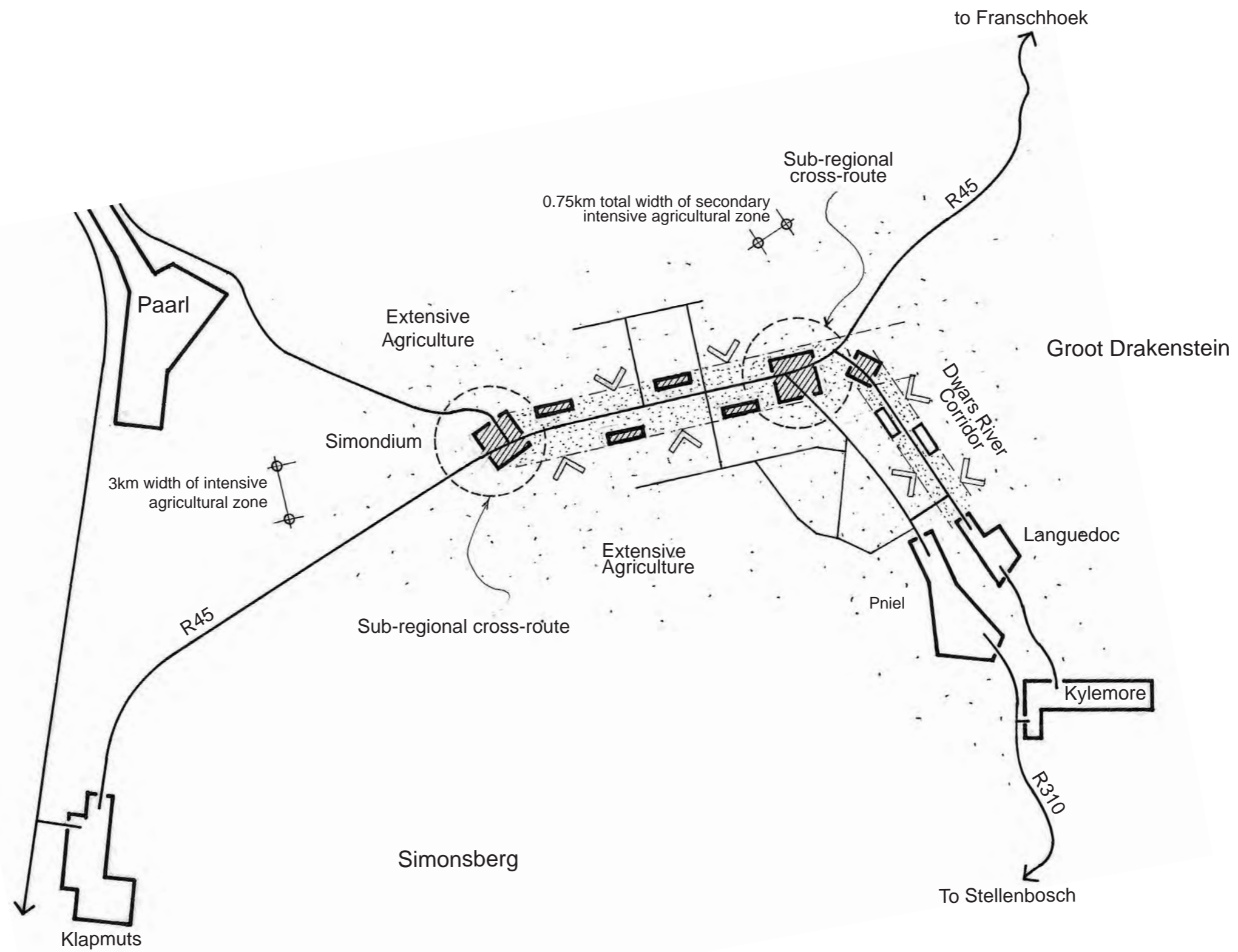


Figure 20: The Ideas Diagrammatically Applied to the Context-The Groot Drakenstein-Simondium Valley

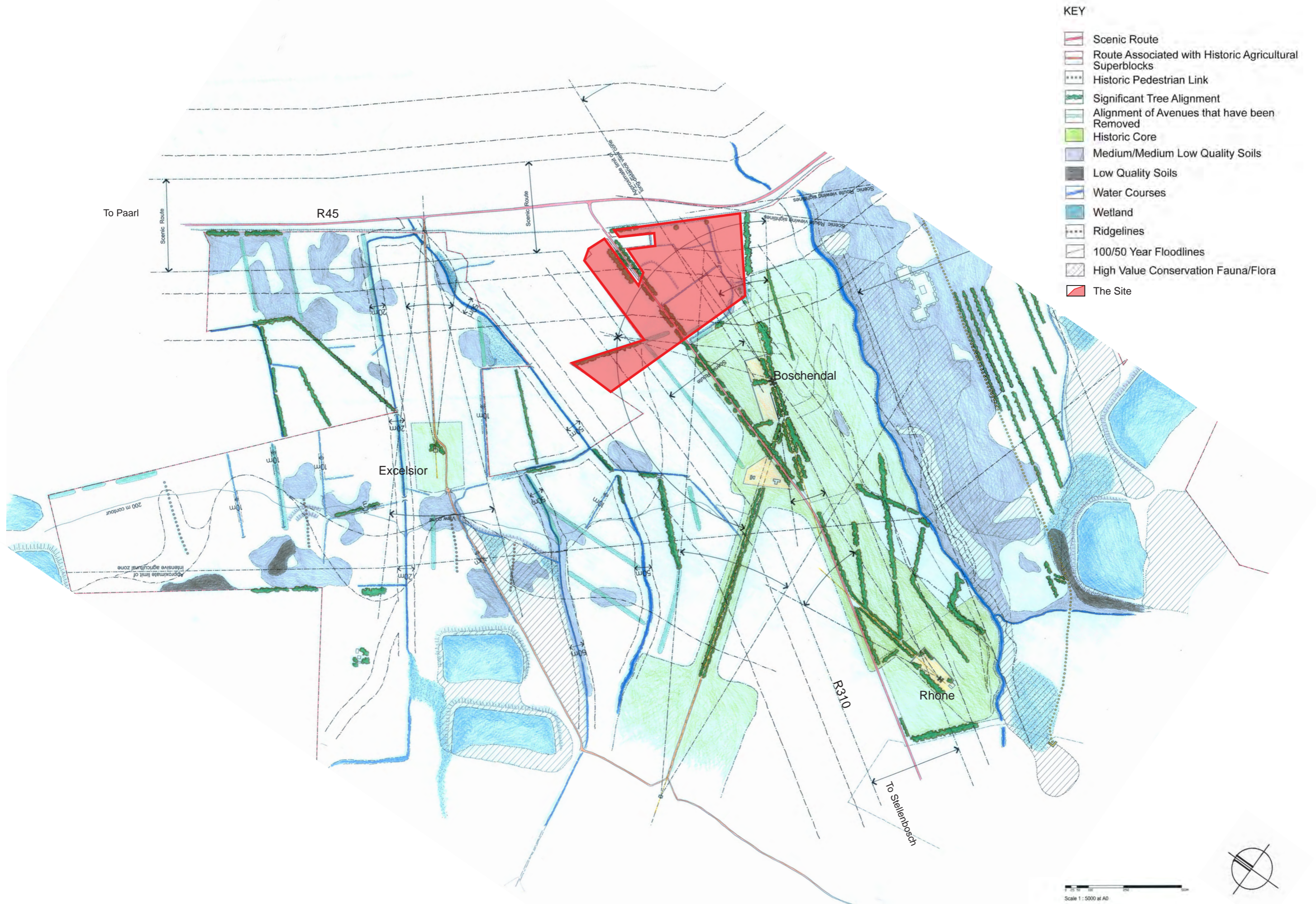


Figure 21: Composite of Precinct-Specific Refined Constraints and Informants: Northern Precinct

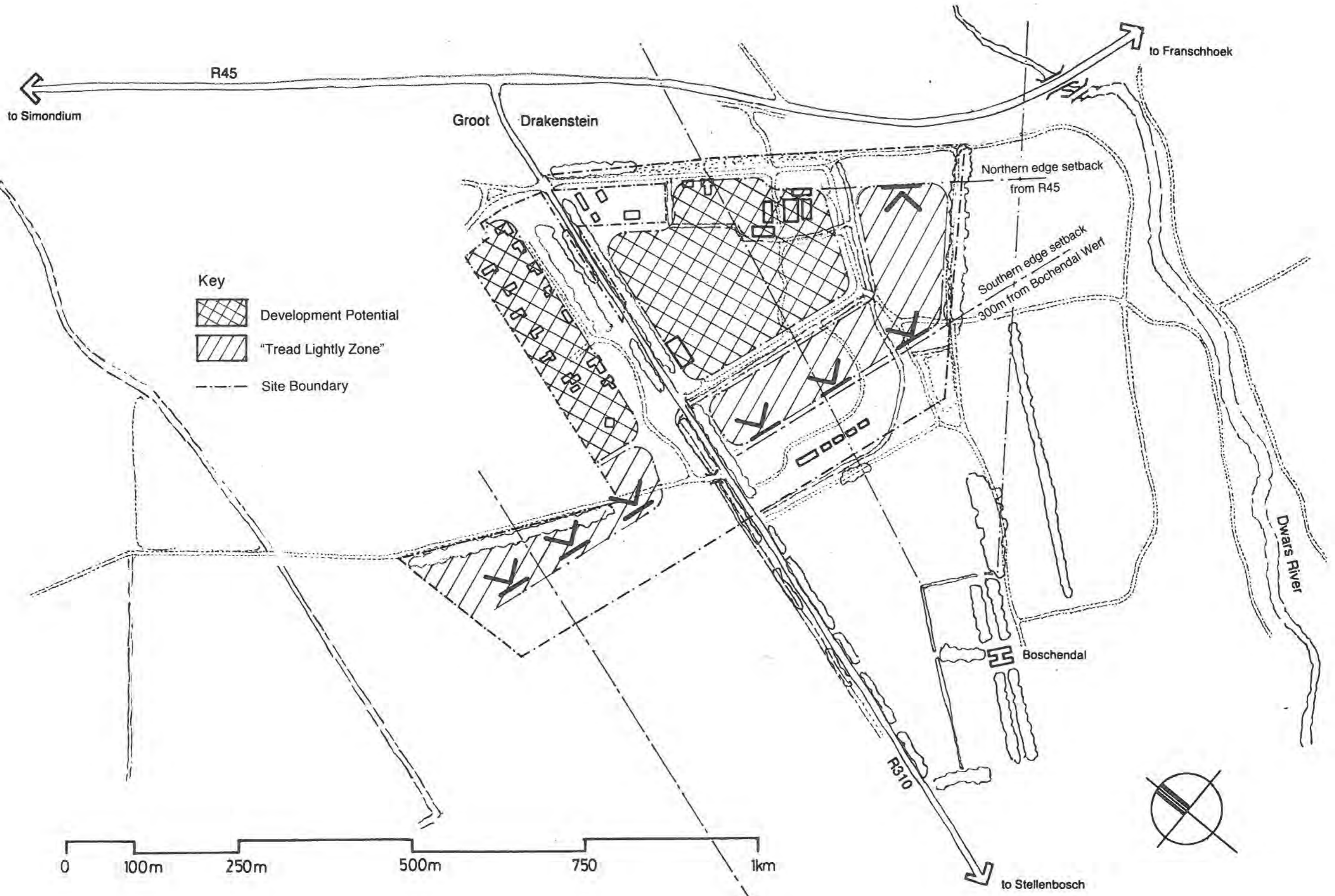


Figure 22: Village Definition and Density Gradient

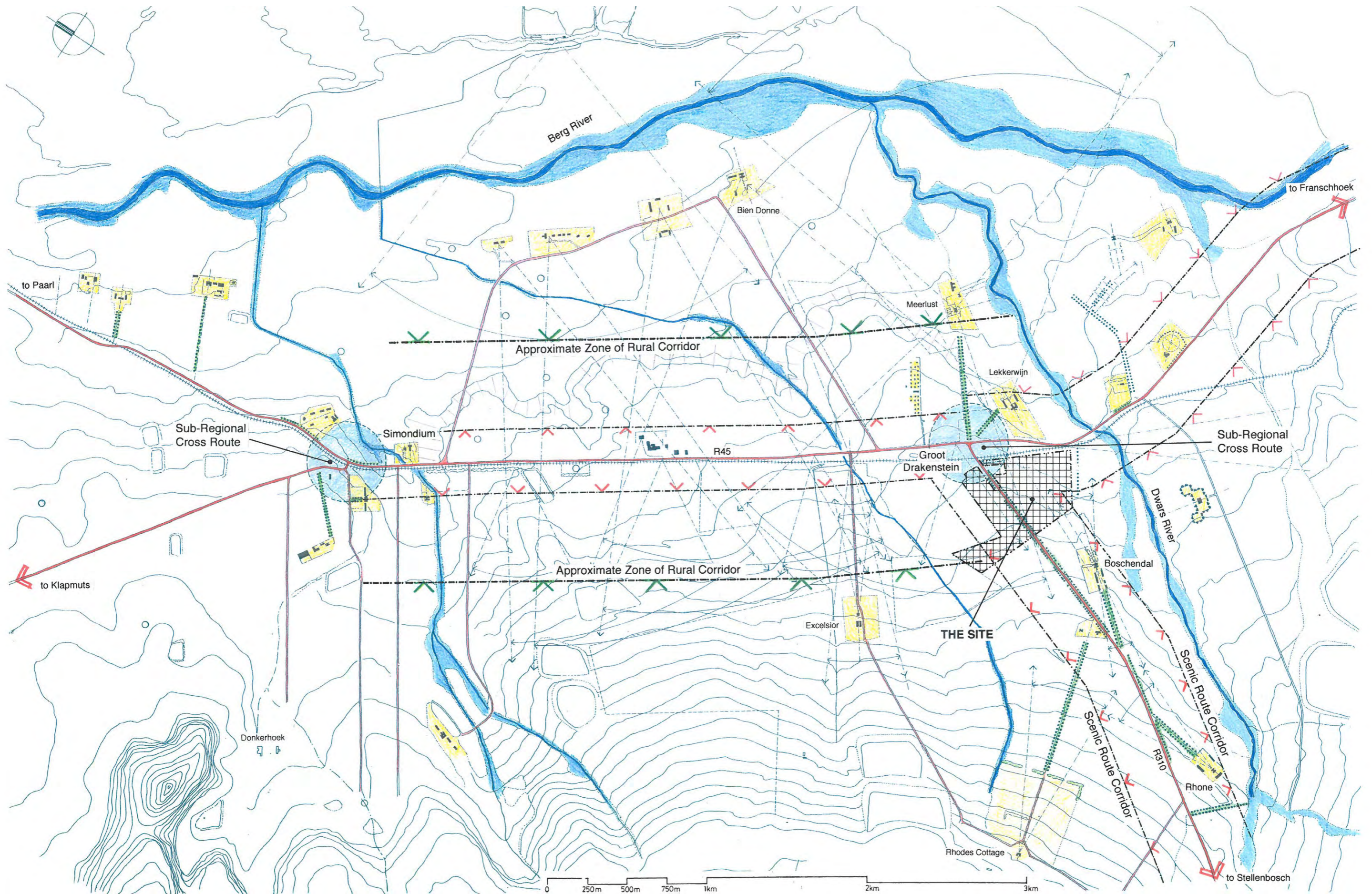


Figure 23: Broader Cultural Landscape: Rural Corridor Zone

9. ASSESSMENT OF HERITAGE IMPACTS FOR EACH ALTERNATIVE

This section provides an assessment of the heritage impacts associated with the three alternatives identified for assessment by the Environmental Assessment Practitioner (EAP).

The three alternatives identified are:

Alternative 1: No Go Option.
Alternative 4: May 2014
Alternative 5: October 2015

An assessment of impacts is based on the heritage indicators identified in Section 8 of this HIA. No major distinction is made between Alternative 5a, 5b and 5c. However, it is concluded that Alternative 5c is the preferred alternative. The VIA also concludes that Alternative 5c will have marginally less visual impact.

9.1 OVERARCHING PRINCIPLES: DOMINANCE OF WILDERNESS AND RURAL LANDSCAPES AND AUTHENTICITY

9.1.1 Alternative 1: No Go Option

The No Go alternative (Alternative 1) reveals no dynamic balance between the three landscapes identified (wilderness, rural and urban). It is neither wilderness, rural nor urban. It is essentially a relic landscape, containing remnants of previous agro-industrial activities which are no longer functioning.

9.1.2 Alternative 4: May 2014

While the alternative does begin to address qualities of a rural village, the village morphology and the nature of the spatial organisation of the proposed village is primarily geometric, strictly orthogonal and rigid in conception. It has more of an urban quality than that of a rural village. The dynamic balance between the three landscapes referred to above is thus not clear.

9.1.3 Alternative 5: October 2015

The preferred alternative, Alternative 5, addresses many of the limitations of the previous alternative. The grid is looser, more organic and informal and there is a greater sense of fit with the rural landscape. The emphasis is on the continuity of public and common spaces for most of the village which binds the various precincts together and integrates the village into the surrounding landscape.

A dynamic balance is evident between the three landscapes referred to. The historical cultural landscape is conserved and celebrated. The loose orthogonal geometrics of rural landscapes are integrated into the layout and the sense of horizontality is retained and enhanced. Village qualities, rather than suburban qualities are evident in the village morphology.

9.2 LOCATIONAL INDICATORS: REGIONAL AND SUBREGIONAL

9.2.1 Alternative 1: No Go Option

The heritage indicators identified in Section 9 established a conceptual approach to rural settlement patterns evident in the Dwars River Valley. In such a conception development should respond positively to natural systems, the cultural landscape and public structural and design informants. Development should not be scattered but should gravitate towards the main sub-regional routes (the R45 and R310). The highest order settlements should cluster at the points of highest accessibility.

The No-Go Option represents no positive response to the development potential of the site in terms of the conceptual approach to the rural settlement pattern referred to above. The intersection of the R45 and R310 does establish a development opportunity within the constraints identified and the no development option does not present a positive response to the opportunity established.

9.2.2 Alternative 4 and 5

Alternative 4 and 5 are assessed together as there are no discernible differences with regard to regional and sub-regional locational criteria. Both respond positively to the rural settlement pattern referred to above, the pattern of natural systems, the cultural landscape and the public structural and design informants. Development is appropri-

ately set back from the R310 scenic route and the view cone towards the Boschendal homestead is respected.

The southernmost edge of the village is not closer than 300m to the Boschendal homestead werf wall as established in the heritage indicators. To emphasize the agricultural context agricultural activity is brought up hard against the edges of the village. Similarly the southern and eastern portions of the village are buffered by "tread lightly" zones of development in order to protect long views from the homestead and from the scenic routes as required by the heritage indicators referred to in Section 9.

The Urban Design Framework, dated November 2015, indicates a positive response to "traffic calming measures and design elements to create a sense of arrival, e.g. traffic circles that are rural in form and the imposition of speed limits.

The VIA concludes that the proposed siting of low-density residential development on the eastern and western edges of the village in Precincts F2 and F3 could result in a suburban visual effect. These developments thus need to be mitigated by the retention of the existing orchard and introduction of tree belts. Of particular concern is the removal of the orchard located on the eastern edge of the village and its replacement with low-density single residential erven. The orchard provides visual screening and contributes to the rural context of the village. It is thus recommended that these residential erven be reduced in size to exclude the existing orchard from the proposed development. From a heritage perspective, these development pockets are consistent with the 'tread-lightly' areas to protect long views from the homestead and from the scenic routes. The building grain of the village establishes a gradation from fine grain in the centre to loose grain towards the edges, which is consistent with village morphology. However, the HIA concurs with the findings and recommendation of the VIA that in order to retain the productive agricultural character of the eastern edge of the village, that the proposed residential erven in Precinct F2 be made smaller to exclude the existing orchard, as currently shown in Alternative 5c.

As recommended in section 9.8 below, the five focus areas related primarily to the detailed treatment of the scenic route through the village should be subject to further heritage assessment. Refer to Figure 24.

9.3 VILLAGE QUALITIES AND SPATIAL INDICATORS

9.3.1 Alternative 1: No Go Option

As no development is indicated in this option there is no assessment related to village scale indicators.

9.3.2 Alternative 4: May 2014

Alternative 4 to a large extent addresses many of the village spatial indicators identified in section 8.

- Easy pedestrian access to the countryside is evident.
- Large parts of the village are accessible to the public.
- A range and mix of activities is evident. Non-residential activities are proposed to be small-scale in nature and occur on the ground floor in the central zones to encourage a vibrant street life in these areas.
- A range of choice is evident, from public to private living, with a range of housing types with an emphasis on the medium to high income market.
- The village is organized around a hierarchical 'family' of public or social spaces, with the level of hierarchy largely corresponding to levels of accessibility.
- The highest order space is the primary gathering space (the village green) for the entire village and for visitors in Alternatives 4 and 5. This primary public space or village green is located along a route running parallel to the R310.
- A clear hierarchy of public routes is evident with a mixed use high street located at a right angle to the major green space parallel to the R310 and aligned through the centre of gravity of the village.
- The movement hierarchy indicates a pedestrian and NMT dominance but with the possibility of vehicular access to all parts of the development.

While both Alternatives 4 and 5 positively address the village spatial qualities referred to above, the primary difference between the two alternatives relates to the response to the rural context, and the rural qualities embedded

in the village morphology which is more evident in Alternative 5 than Alternative 4.

The nature of the spatial organization of the village is clearly more informal, looser and less rigid in Alternative 5 than in Alternative 4.

- In Alternative 4 the pattern of sub-division reinforces active street boundaries to a lesser extent and the possibility of 'dead-edges' from fronting onto the public domain is more pronounced. While buildings facing onto public streets are brought to the front of the plot and 'build-to' lines are evident, there is a sense of monotony in the uniformity of the building lines which contributes to a sense of urbanity rather than the rural quality required. A denser, more urban morphology is illustrated rather than the looser, primarily green hollow blocks referred to in the Indicators section.
- While heights are not specified in the Alternatives presented it is evident from previous submissions, including elevations, that Alternative 4 indicates a degree of uniformity in heights with a higher incidence of 3 storeys than illustrated in Alternative 5. A greater variation in density is evident in Alternative 5 compared to Alternative 4.
- The denser, more formal layout of Alternative 4 allows for less opportunity for rural elements of infrastructure to be implemented ('grachts', 'swales' and tree canopies).

9.3.3 Alternative 5

As indicated above, both Alternatives 4 and 5 respond positively to many of the village spatial indicators included in Section 8.

The primary difference between the two alternatives is the response to the rural context and the rural village morphology and nature of the spatial organization, more evidently rural in quality in Alternative 5 compared to Alternative 4.

Alternative 5 also makes provision for a range of income levels including a 10% allocation to housing for key workers, i.e. 47 units.

Alternative 5 is thus considered to be an evolution of Alternative 4, to loosen the strictly orthogonal geometry of the latter, and to provide a greater variety of building forms and public spaces.

In Alternative 5 building types are used structurally in appropriate places (street corners, T-junction, buildings, corner buildings etc.) to reinforce the public spatial structure and to add texture and variety to the village form.

The kinks in the grid, the generally smaller blocks and the hierarchy and variety of public and common spaces contribute to a more complex and intimate village than is evident in Alternative 4.

The VIA supports the general layout and design principles proposed in Alternative 5. It raises a visual concern with the building massing of three storeys in Precincts E1 and E2, as this could detract from the rural character of the area. More refined articulation of building elevations and roofscapes in these Precincts, by expressing individual units, is recommended at the next stage of design development, i.e. at the precinct plan level. The HIA supports this recommendation.

9.4 STREET INDICATORS

9.4.1 Alternative 1: No Go Option

As no development is indicated in this option there is no assessment relative to street scale indicators.

9.4.2 Alternative 4 and 5

As the alternatives are illustrated primarily at the site area scale, and minimal indication of street scale treatment is provided, the assessment of the two alternatives is integrated in this section. Both alternatives address the following:

- A clear and legible street hierarchy, with the dominance of the 'high street'.
- Relatively small cadastrally defined development blocks to promote permeability.
- Clearly defined street edges, with a gradation of public, semi-public, semi-private and private interfaces.
- Predominantly humanly-scaled streets, with heights of buildings generally related to street widths.

- Multi-functional use of street spaces, particularly higher-order streets such as the 'high-street'.

However, in all of the above instances, the qualities of rural village are more pronounced in Alternative 5 than in Alternative 4. Blocks are smaller and there is thus more permeability. There is a greater variety in building form and the nature of public spaces in the former compared to the latter. Alternative 5 has a more distinctive rural village morphology and spatial organisation than Alternative 4.

9.5 OPEN SPACE AND LANDSCAPING INDICATORS

9.5.1 Alternative 1: No Go Option

As no development is indicated in this option there is no assessment relative to open space and landscaping indicators.

9.5.2 Alternative 4 and 5

As the alternatives are illustrated primarily at the site area scale, and minimal indication of landscaping treatment is provided, the assessment of the two alternatives is integrated in this section. The nature and extent to which the open space and landscaping indicators are addressed are more positive in Alternative 5 than in Alternative 4.

- The village open space system illustrated in Alternative 5 is more continuous and diverse than that illustrated in Alternative 4. Open space systems have different forms and shapes and the axial relationships set up by the distorted grid provides a range of near and long views mostly associated with prominent landmarks in the context, namely the landmark Boschendal homestead and the surrounding mountain peaks, which contribute to the binding of the village into the rural context. Functional continuity and visual legibility are more apparent in Alternative 5 than in Alternative 4.
- While an orthogonal form in response to the structure apparent in the surrounding cultural/agricultural landscape and waf-type layouts typical in the Winelands is respected, the orthogonal grid is distorted in Alternative 5 to provide a greater sense of fit with the landscape and to provide a more complex spatial syntax than is evident in Alternative 4.
- A sense of a more ornamental, as opposed to a productive/functional landscape treatment, is also more evident in Alternative 4 than in Alternative 5.

The HIA concurs with the VIA recommendation that the proposed village development be softened through major site rehabilitation and landscape mitigation that is appropriate for the cultural and agricultural setting, and that a Landscape Framework Plan be prepared as part of rural settlement making. This should be prepared as part of the next planning iteration and by a professional landscape architect with proven professional experience working in a rural landscape context of high heritage significance.

9.6 STREETS AND PARKING INDICATORS

9.6.1 Alternative 1: No Go Option

As no development is indicated in this option there is no assessment related to roads and parking indicators.

9.6.2 Alternative 4 and 5

The alternatives are illustrated primarily at the site area scale. The Urban Design Framework, dated November 2015 does, however, contain detail of parking provision which provides sufficient grounds for the assessment of the two alternatives. The assessment of the two alternatives is integrated in this section although the level of detail, and the analysis at precinct scale, is developed only for alternative 5.

As with the above, the extent to which the indicators are addressed is more positive in Alternative 5 than in Alternative 4.

While in both alternatives streets are laid out in sympathy with the orthogonal pattern of the farmlands, tree belts and irrigation canals, the distorted and looser grid evident in Alternative 5 provides a greater sense of fit and a more nuanced response to the particularities of the site and the context.

With regard to parking provision there is a sense that parked cars could possibly dominate the streetscape in Alternative 4 whereas in Alternative 5 greater use is made of internal parking courts which would remove the parked cars from the predominantly public space system.

The VIA identifies the use of the green buffers on both sides of the R310 for parking lots, and the need for screening of large parking lots to be a visual concern. A number of visual mitigations are recommended to minimise the effects of parking, as well as lighting, signage and construction activities relating to the development. These include the following:

- Parking areas along the R310 should be set back from the scenic route to allow multiple rows of trees for screening.
- Parking should be screened with buildings, walls, berms and/or trees, where possible.
- Parking should be organised into smaller parking courts of about 20-30 cars to avoid visually and climatically exposed parking lots.
- Excessive use of asphalt and barrier kerbs should be avoided to retain the rural character of the area. Parking areas could have gravel surfaces for visual informality and to minimise stormwater runoff.
- Stormwater should consist of dish channels and grassed swales, or traditional furrows (as indicated in the proposed Urban Design Framework).

From both a heritage and visual perspective, screening should not imply 'blocking out', but should rather filter sight lines and views, thereby promoting transparency and layering.

9.7 SIGNAGE, LIGHTING AND ARCHITECTURAL INDICATORS

The Urban Design Framework dated November 2015 provides insufficient detail at site and precinct scales to enable the assessment of the extent to which the alternatives, in particular Alternative 5 addresses the rural village qualities emphasized in the heritage indicators section.

It is recommended that an Integrated Environmental Management Plan be formulated to address the mandatory controls and guidelines related to lighting, signage and architectural and landscaping treatment included in Section 8.7, 8.8 and 8.9 above and formulated in Section 5 of the Urban Design Framework.

9.8 IMPLEMENTATION

Section 6 of the Urban Design Framework includes proposals for implementation. Five action areas are identified related primarily to the scenic route through the village, the 'high street' and the 'gateways' into the village. Refer to Figure 24.

It is recommended that precinct plans, which include detailed site and transportation planning, design and landscaping for these five focus areas be subject to further more detailed heritage assessment in terms of a 'package of plans' approach which is regarded as an appropriate process in terms of the complexity of the design proposal and the high heritage significance of the Cape Winelands cultural landscape context.

The conclusions and recommendations of the Traffic Impact Assessment including the proposed road geometries must be subject to detailed design particularly with respect to place-making qualities, pedestrian access, non-motorised transport and public transport, and be incorporated into precinct level plans and heritage assessment referred to above.

The HIA and VIA concur that proposals be formulated for the phasing of the development to ensure an integrated form of development and that is tied in with landscape mitigation. This would address the potential visual and heritage impacts of uncompleted phases associated with a large-scale project resulting in vacant land and the visual detracting of a building site. Each phase should be implemented as a completed development as far as possible, including all landscaping. To this end a Phasing Plan should be prepared. As a first step, planting and other elements of edge-making to define the overall site, should be undertaken as soon as possible.

9.9 SUMMARY

It is concluded that Alternative 1, the No Go option does not address the opportunities evident in the site location and the derelict nature of existing site conditions. The overall heritage impact of this alternative is thus regarded as medium negative. The overall heritage impact of Alternative 5, including the mandatory controls and guidelines specified in the Urban Design Report and recommended mitigation measures, is regarded as potentially medium-high positive. Should these mandatory controls, guidelines and mitigation measures not be implemented then

6.3 ACTION AREAS AND ACTION PROJECTS:

The attached Fig.83 illustrates areas of considerable importance in terms of the scenic route and public accessible areas of the development. These areas are of interest from a design perspective and has been identified as areas that require particular attention and scrutiny as a measure to ensure an appropriate design response to the historical cultural context.

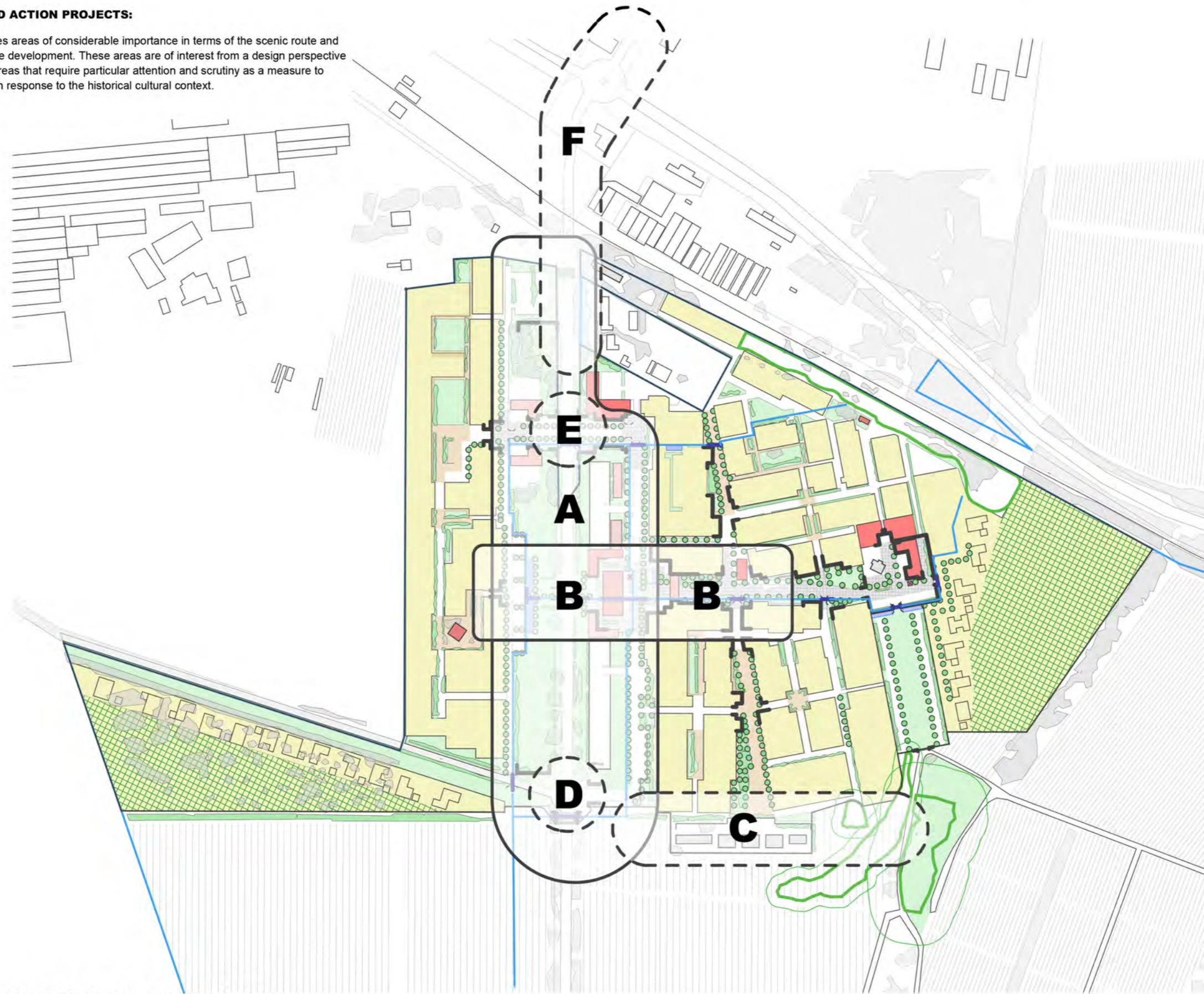


Fig. 120 Action Areas and Action Projects

Figure 24: Implementation Focus Areas

the overall heritage impact of Alternative 5 is potentially medium-high negative. Table 2 provides a summary of the envisaged impacts associated with Alternative 1 and 5.

10. CUMULATIVE IMPACTS

The proposed village would involve a major new element in an area of high heritage significance. The cumulative impacts of the proposed development (Alternative 5) are not regarded as significant from a heritage perspective subject to the implementation of the mitigation measures identified in Section 9. It adds to an existing development node that is consistent with the rural corridor concept identified in the heritage indicators (Section 8).

11. IMPACT TABLE

Table 2: Summary of heritage impacts before and after mitigation

Impact Criteria	Alternative 1 No Development	Alternative 5 (without mitigation)	Alternative 5 (with mitigation)
Intensity of Impact	Low	High	High
Spatial extent	Local	Local	Local
Duration	Long term > 15 years	Long term > 15 years	Long term > 15 years
Probability	Probable	Highly Probable	Highly Probable
Significance	Medium	Medium-high	Medium-high
Status	Negative	Negative	Positive
Confidence	High	High	High

12. OUTCOME OF THE PUBLIC CONSULTATION PROCESS AS PART OF THE PRE-APPLICATION NEMA PROCESS

A public participation process was followed in terms of the NEMA pre-application public participation process.

A notice was issued to all interested and affected parties on the 14th October 2015 by the environmental consultants, Doug Jeffery Environmental Consultants. The draft basic assessment (BAR) was made available on the company website and copies were lodged at the Pniel public library. An open house meeting was held on the site on the 2nd November 2016. Options for opportunities to participate were specified in the notification. The documentation was also submitted to HWC. The item was tabled at the IACOM meeting on the 18th January and a site meeting was conducted on the 26th January. The documentation was also submitted to SAHRA in October 2016.

12.1 CONSERVATION AND COMMUNITY BODIES

Comments were received from the following:-

- The Vernacular Architecture Society of South Africa and the Cape Institute of Architecture (joint submission).
- The Stellenbosch Interest Group.
- The Boschendal Treasury Trust (Desmond Adams representing Kylemore).

Copies of these comments are included in Annexure H.

12.1.1 The Vernacular Society of South Africa and the Cape Institute of Architecture

The general approach and the proposed development project are supported. It was compatible with the Stellenbosch SDF and the exceptional cultural significance of the surrounding heritage farms, the scenic routes and the broader Dwars River Valley.

It was stated that it was critical that systems be put in place for the monitoring and management of development over time. This will be essential to ensure the ongoing management of the scale and detail of development in the village as well as the critical interface between the proposed village and the surrounding historically significant environment.

12.1.2 The Stellenbosch Interest Group (SIG)

The findings and recommendations of the HIA are supported.

Issues were raised regarding the VIA, related to buildings height (the proliferation of 3 storey structures) and the potential impact of traffic circles and traffic lights.

Response:

•A variation in building heights is regarded as an important factor in providing a degree of diversity and to avoid urban and architectural monotony. Such variation is considered to contribute to village character. The location of three storey structures has been carefully sited to function as street liners and as feature elements on street corners. The densities established support a range of land uses which contribute to diversity and urban vitality.

12.1.3 The Boschendal Treasury Trust

The Trust states that any development should be to the benefit of previously disadvantaged residents.

Response:

The Social Impact Assessment (SIA), dated July 2016, contains a detailed analysis of the envisaged social and economic impacts of the proposed development. They include, in summary:

- Business opportunities

Total capital expenditure will be in the region of R1,08bn. The majority of the work during the construction placed will likely be undertaken by local contractors and builders.

Retail and commercial component, including farmer's market, shops and restaurants, places of entertainment, offices etc. will create opportunities for local companies and entrepreneurs.

- Employment opportunities (construction phase)

750 employment opportunities will be provided over a three to four year period. The estimated wage bill over the four phases will amount to some R240m.

- Employment (operation phase)

Approximately 800 employment opportunities (retail, hotel, domestic workers, gardeners). The majority will be to the benefit of HD members of the local community.

- Housing

Provision of 10% of the total number of housing units (approximately 47 units) for affordable housing for key workers.

- Provision of commercial and retail facilities.

- Provision of community facilities:

- Market square.

- Public open space network.
- Pre-school crèche.
- Upgrade of existing clinic.

- Training and skills development programmes to benefit members of the local communities.
- Generation of funds for community development initiatives.

5% of the value of the initial sale of all properties, and 0.5% of all re-sales to be allocated to a Trust to fund development initiatives in the local area, particularly education and skills development.

- Other community initiatives (as per the SIA):
 - Pre-school and aftercare facility.
 - Food nutrition programme for local schools.
 - Rachelsfontein social centre for local staff and their families, including sports fields, theatre, amphitheatre, meeting rooms, lecture halls, library etc.
 - The formation of an Agricultural College, possibly in association with Elsenberg Agricultural College.

The SIA concludes that the development is supported on condition that the recommended mitigation measures relating primarily to procedural issues are implemented.

12.2 HERITAGE AUTHORITIES

12.2.1 HWC

The draft document was tabled at IACOM on the 7th December 2016 and a site meeting was conducted on the 26th January 2017. HWC's interim comment on the HIA report is included in Appendix H. The following comments were received:

The general support of the urban design framework and the compact village node proposed is noted. However, before responding to the comments made individually, the following general observations are made. Concern is expressed that there is no reference made to the heritage indicators and whether or not these are supported. Prior to the urban design framework being formulated, extensive multi-scaled heritage indicators were formulated by the heritage consultants to guide the framework. The issues before HWC therefore were two-fold: are the indicators appropriate; and does the concept adequately respond to the indicators? As the comments stand they relate entirely to the proposals. A thorough perusal of the indicators would have negated some of the comments as the logic underpinning the design decisions is clearly indicated in the indicators document.

The specific concerns raised are addressed below:

Comment:

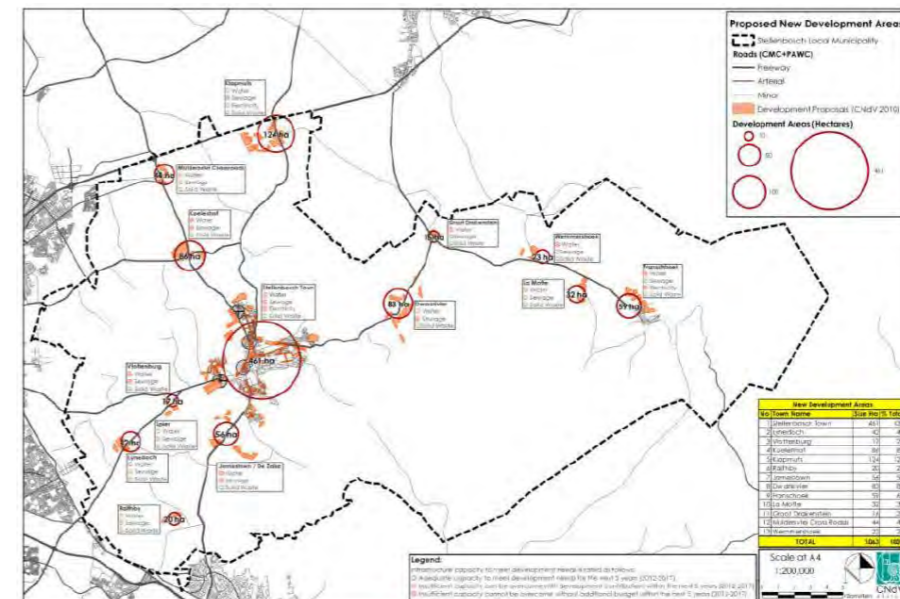
- 1. The need for further clarification on the link to the broader municipal vision for the area, particularly in respect to actual and potential edges to urban and rural development.**

Response:

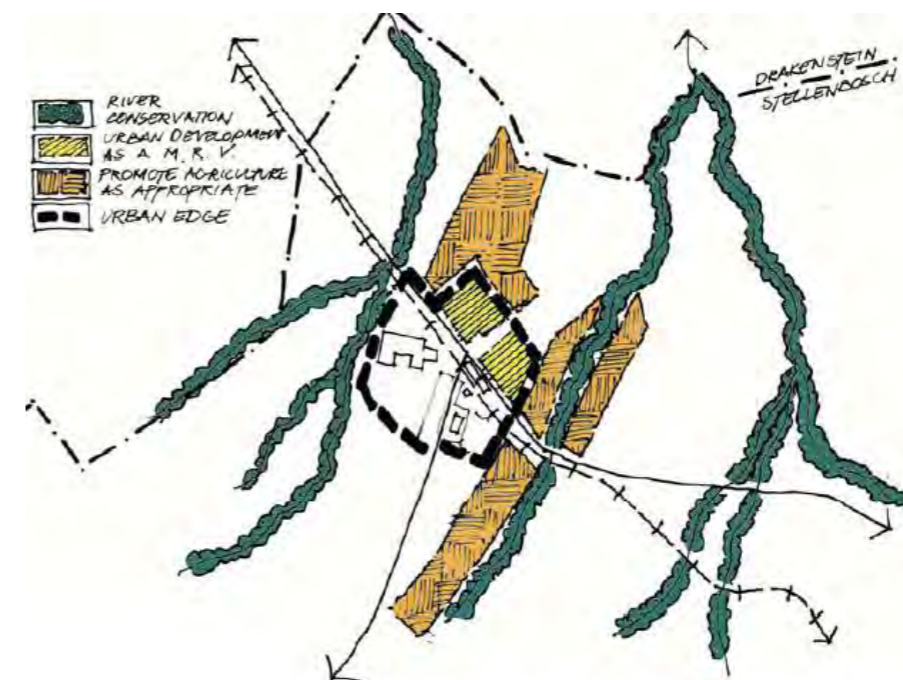
There is considerable uncertainty in the Stellenbosch area about the future of the area. Accordingly, the indicator process began around the conceptual question of how to think responsibly about the selective intensification of the countryside in a manner in which the wilderness and agricultural dominance is not threatened. A conceptual model of interlinked corridors, villages and agricultural superblocs was formulated. This was followed by detailed analysis of the constraints and informants relating to the natural landscape, the cultural historic landscape and historic investments in the broader study area to determine where development should not occur. The two studies, conceptual and contextual, provided the motivation for a nodal form of development at the intersection of the R44 and the R310. Figure 16, 17 and 18 of the HIA provide a detailed mapping of the constraints and informants related to the natural landscape, the cultural historical landscape and the existing public structure.

The node was supported by the Stellenbosch Municipality which incorporated the node into their Spatial Development Framework, (SDP) 2013.

The SDP is indicated below.



Proposed new development nodes within the SLM



Groot Drakenstein Node and urban edge

However, the precise definition of the urban edge was not clear.

The following response to the comments raised by HWC has been compiled by the consultant town planner, Anine Trumpelmann from @planning Town Planning.

The 2013 SDF sets out the principle of a system of interconnected nodes as the basis on which development is supported in the Municipality. These nodes vary from major towns (such as Stellenbosch and Franschhoek) to new nodes identified at points of high access such as the Groot Drakenstein node, in which the Boschendal Village proposals are located.

The Stellenbosch Municipality confirmed during the pre-application process that a small portion of the development proposed falls outside what has been considered by the Municipal officials to be the urban edge as it is drawn in the SSDF. The team was advised that the urban edge needed to be amended in order to create congruency between the SSDF and the proposals.

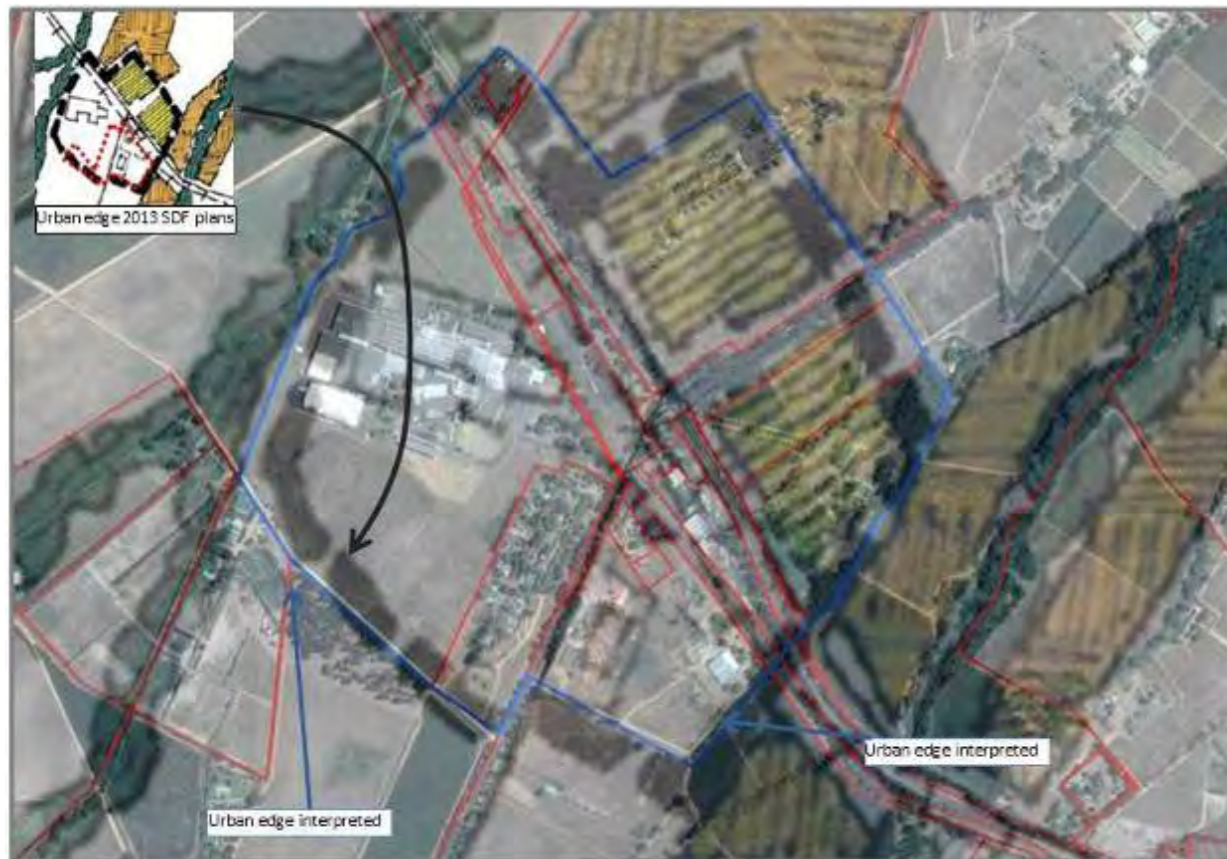
The Municipality is in the process of its 5 year review of the SDF, which should be adopted by June 2017. In this

review, the Groot Drakenstein Node proposals and urban edges of this node are developed in more detail through the specialist studies and input prepared as part of the Boschendal Village proposals.

The Urban Edge which was included in the 2013 SSDF was schematically drawn with a very thick line which was coarse grained in nature and not informed by actual heritage and environmental considerations.

Since this schematic representation of the Urban Edge presented problems to the municipality's planning department, the urban edge was re-interpreted based on high level information available on aerial photography. This resulted in the department generating a more nuanced line for the Urban Edge for the Groot Drakenstein Node. This line is illustrated by the blue line. In this regard the following should be noted:

- The thick black dotted line is the urban edge as drawn in the SDF approved in 2013;
- The red lines are cadastral boundaries;
- The blue line is the department's interpretation of the urban edge (done in 2016);
- There is no consistency as to whether the blue line is outside or inside the thick black dotted line which is the SDF 2013 urban edge; and
- The urban edge as depicted in this drawing was also not informed by any site specific informants, edge-making criteria, specialist studies or site analysis.



Motivation for the revised Urban Edge

When the urban edge line as interpreted by the municipality's planning department in 2016 is superimposed on the village proposals, it is clear that the proposed village exceeds the urban edge on the south western urban edge, and southern urban edge. The team was advised to make representation to the municipality for amending the urban edge in the SDF, a process that is currently underway. This representation was indeed done and submitted to the Municipality on 31 January 2017. The Municipality undertook to feed this input on the revision of the urban edge into the official SDF review process which is currently underway and which will be concluded by June 2017.



FIGURE 2: Existing Urban Edge (purple) and proposed revised Urban Edge (orange)

The municipality, in meetings, confirmed that the above proposals to amend the urban edge will be incorporated in the review of the Stellenbosch Spatial Development Framework (SSDF) and should be approved by the municipality by June 2017. The matter of the minor discrepancy between the 2013 urban edge and the proposals will therefore be resolved before a final decision is made on this rezoning.

Comment:

2. **Concern regarding the proposed building typologies, particularly related to the proposed development to the west of the R310, in particularly the suburban strip of single residential sprawling to the west.**

Response:

The HIA contains a comprehensive analysis of the components of what constitutes village morphology. A central theme running through the analysis is the emphasis on a transition zone and a density gradient, particularly at the interface between the urban and rural. Internationally villages reflect this pattern. The provision of choice is also regarded as a critical factor underpinning the concept of the density gradient.

The following diagrams illustrate the heritage indicators and directives included in the HIA report.

HERITAGE INDICATORS & DIRECTIVES



Movement Network Exploration – Option 5

HERITAGE INDICATORS & DIRECTIVES



Village Definition and Density Gradient



Hierarchical Public Space Network



Planting Mitigation and Village Edge-Making

The strip of single residential housing to the west of the R310 forms part of this density gradient. The layout is not regarded as constituting a suburban layout. The units are located on relatively narrow erven facing onto the street. Units are located to the front of the erven and have a visual spatial relationship with the street. A coherent streetscape is thus established. This is fundamentally in contrast to a suburban type layout where the unit is typically located in the middle of the plot and where no streetscape quality is discernable.

As indicated in Section 6.3 (Figure 24), the intention is for agriculture to butt up against the rear of the units. Ornamental (suburban) gardens are precluded. The stipulation for units in this zone to be embedded in agriculture will form part of the Landscape Framework Plan which is a core recommendation of the HIA.

Comment:

3. Certain housing typologies need to be further developed, including the issue of height and suburban density.

Response:

As indicated above, the suggestion of suburban densities is contested. Rather a density gradient is indicated. The urban design concept is based on a compact relatively dense village morphology, with a specific focus to avoid any form of suburban quality. All units are located to function as street liners, or to mark street corners to enhance urban legibility and to create a coherent village and streetscape.

The Recommendations contained in the HIA refer to a 'package of plans' approach and identify a number of focus areas which need to be subject to detailed site planning and design and which must be subject to HWC approval. These focus areas would include the more detailed analysis of housing typologies, including the issue of height and roof treatment to ensure street cross-sections which contribute to positive social spaces.

Reference should be made to the Architectural Directives in the Urban Design Framework (Section 2.14).

Comment:

4. Clarification required in respect of the proposed parking areas and edge treatment along the R310. Concern was raised that this area might look like a suburban shopping parking lot.

Response:

As indicated above, this area was identified as one of the focus areas which required further detailed design.

In the assessment the VIA stressed the need for green buffers on both sides of the R310 and the need to screen parking areas. The following mitigation measures were identified in the VIA and will be incorporated into the next level of analysis referred to above:

- Parking areas along the R310 should be set back from the scenic route to allow multiple rows of trees for screening.
- Parking should be screened with buildings, low walls, bems and/or trees.
- Parking should be organized into smaller parking courts of about 20 - 30 cars to avoid visually and climatically exposed parking lots.
- Excessive use of asphalt and barrier kerbs should be avoided to retain the rural character of the area. Parking areas should have gravel surfaces for visual informality and to minimize storm-water run-off.
- Storm water should consist of dish channels and grassed swales, or traditional furrows (as indicated in the proposed Urban Design Framework).

From a heritage perspective, screening should not imply 'blocking out' but should rather filter sight lines and views, thereby promoting transparency and layering. The Urban Design Framework makes specific reference to compulsory soft landscaping treatment of these parking areas.

Comment:

5. More vigorous illustrations required of the visual impacts, particularly at a more immediate scale and in relation to the portion of the site where 3 storey development is proposed, as well as the impact to and from the R45 and R310 scenic routes.

Response:

As indicated above a 'package of plans' approach has been adopted and a number of focus areas have been identified which require further analysis. The areas referred to in the HWC comment will be the subject of the analysis, including visual impact, referred to. The issue is not regarded as necessary the number of storeys but rather height. The equivalent of 2.5 to 3 storeys is common in villages internationally. Strategic height in specific locations is regarded as important in terms of orientation. Height is thus used structurally to provide orientation.

Comment:

6. The social impact assessment must be included in the HIA. It is also recommended that the appropriate engagement with local community representatives and I&AP's is undertaken and that they form a meaningful part of the process.

Response:

The Social Impact Assessment is included in the revised HIA. Refer to Section 13 below and Appendix G. It details the nature of community benefits proposed and discussed with community representatives.

The results of these deliberations and the formalization of the proposed Trust are also included in the SIA.

Comment:

7. The relationship between the proposed development and the Boschendal werf needs to be explored more thoroughly, particularly in response to old movement routes existing gateways etc.

Response:

The axial relationship through the Boschendal werf formed an integral part of the analysis. (Refer to Figures 22 and 23 of the HIA). The 300m radius from the Boshendal werf, the retention of the existing cottages at this interface, and its definition as a "tread lightly zone" are regarded as sufficient measures to minimize any visual impact from the Boschendal werf. This area (Focus Area C) is also identified as one of the focus areas requiring further analysis at the next phase of design development.

It should be noted that the development proposed consciously breaks with historic patterns for heritage reasons. This discontinuity is regarded as good heritage practice.

The historical evolution of movement routes and gateways has been extensively analyzed in the document 'Catalogue of historical images and evidence', compiled by Sally Titlestad in association with Baumann and Winter in 2007/2008. Particular attention should be paid to the Thibault map of the area (1808) which clearly indicates historical routes. The catalogue is included in the HIA as Appendix F. The realignment of the main access route formed part of the development proposed by the Fagans and implemented by Amfarms in the late 1970s.

12.2.2 SAHRA

The draft HIA report was submitted to SAHRA on the 13th October 2016. A presentation by the heritage consultants was requested and this took place at the SAHRA offices on the 21st February 2017. SAHRA's interim comment on the HIA report is included in Appendix H.

As with the response to the HWC comment referred to above, the general support of the Urban Design Framework and the recommendations made in both the HIA and SIA are noted. Similarly, the concern of the heritage consultants is reiterated in that no explicit reference is made to the approval of the heritage indicators. The general comments made in reference to the response to the HWC interim Comment above thus also apply.

The specific concerns raised are addressed below:

Comment:

- 1. All specialist recommendations must be duly complied with by the applicant.**

Response:

It is recommended that the integrated set of recommendations should form conditions of approval by DEA&DP.

Comment:

- 2. Concern is raised regarding the impact of the revised urban edge and the proposed amendment in terms of the impact it would have on place character and the significance of the cultural landscape.**

Response:

The Urban Design Framework, which incorporates the revised urban edge, (Alternative 5), is noted as being favourable by SAHRA. As indicated in the response to the HWC Interim Comment above, extensive multi-scaled heritage indicators were formulated to guide the framework. The design indicators have thus been addressed in the overall design of the development. Overall, it is our view that the development will improve the current unsightly site.

Comment:

- 3. The recommendation that the following should form part of the final report:**

- 3.1. Spatial reference i.e. GPS co-ordinates, be plotted in the context of the plan and site map.**

Response:

Approval is being sought for an Urban Design Framework and not a precinct plan nor a SDP. The spatial referencing referred to is more properly addressed at these levels of analysis. Similarly technical drawings relating to the proposed interventions will be produced at the next level of analysis, at precinct and SDP level. The refined plans will be referred back to SAHRA for comment.

- 3.2 As part of the construction phase, a suitably qualified heritage consultant should be appointed and that a Construction Management Plan should be formulated to ensure that no historic fabric of significance is compromised during construction.**

Response:

A Construction Management Plan will form part of the overall Environmental Management Plan recommended.

It should be noted that no historic fabric of any significance was identified in the heritage analysis contained in the draft HIA.

13. HERITAGE IMPACTS RELATIVE TO SUSTAINABLE SOCIAL AND ECONOMIC BENEFITS

The social impact assessment included as Appendix G identifies a number of positive social-economic impacts of the proposed development as outlined below.

- Business opportunities

Total capital expenditure will be in the region of R1,08bn. The majority of the work during the construction placed will likely be undertaken by local contractors and builders.

Retail and commercial component, including farmer's market, shops and restaurants, places of entertainment, offices etc. will create opportunities for local companies and entrepreneurs.

- Employment opportunities (construction phase)

750 employment opportunities over a three to four year period. The estimated wage bill over the four phases will amount to some R240m.

- Employment (operation phase)

Approximately 800 employment opportunities (retail, hotel, domestic workers, gardeners). The majority will be to the benefit of HD members of the local community.

- Housing

Provision of 10% of the total number of housing units (approximately 47 units) for affordable housing for key workers.

Provision of community facilities:

- Market square.
- Public open space network.
- Pre-school crèche.
- Upgrade of existing clinic.

- Training and skills development programmes to benefit members of the local communities.

- Generation of funds for community development initiatives.

5% of the value of the initial sale of all properties, and 0.5% of all re-sales to be allocated to a Trust to fund development initiatives in the local area, particularly education and skills development.

- Other community initiatives (as per the SIA):

- Pre-school and aftercare facility.
- Food nutrition programme for local schools.
- Rachelsfontein social centre for local staff and their families, including sports fields, theatre, amphitheatre, meeting rooms, lecture halls, library etc.
- The formation of an Agricultural College, possibly in association with Elsenberg Agricultural College.

The SIA concludes that the development is supported on condition that the recommended mitigation measures relating primarily to procedural issues are implemented.

14. CONCLUSIONS AND RECOMMENDATIONS

A key component of the study methodology was the formulation of a comprehensive set of heritage indicators and directives which followed a rigorous process of analysis and against which the development proposals have been assessed. This method recognises that the site cannot be assessed in isolation, that indicators should relate to the region as a totality and that the assessment should occur across scales. It is foregrounded by the principle of maintaining the dominance of wilderness and rural landscapes as opposed to the increasing dominance of urban and suburban landscapes, and the principle of authenticity. It sets out criteria for where development should not occur and establishes an acceptable argument for the location of a village at the intersection of the R45 and the R310. It then provides a set of indicators for what constitutes a rural village in terms of its relationship with its setting, spatial structure, patterns of access and use. These are then developed further at the level of street, visual and architectural indicators.

The proposed development conforms to the identified heritage indicators and will improve the area. The No-Go option does not address the opportunities evident in the site's location and the derelict nature of existing site conditions. The overall heritage impact of the No-Go alternative (Alternative 1) is thus regarded as medium negative. The overall heritage impact of the preferred alternative (Alternative 5), including the mandatory controls and guidelines specified in the Urban Design Report and recommended mitigation measures, is regarded as potentially medium-high positive. However, should these mandatory controls, guidelines and mitigation measures not be implemented, then the overall heritage impact of the proposed development is potentially medium-high negative.

The SIA concludes that the social-economics benefit to be derived from the proposed development will have positive impacts including business, employment and housing opportunities, community facilities and the generation of funds for community development initiatives.

It is recommended that HWC endorse the HIA report as having satisfied the requirements of Section 38 (3) and HWC's requirements for archaeological, visual and built environment studies. It recommends that HWC endorse Alternative 5 subject to the following:

- The design development must proceed in accordance with the Urban Design Framework dated November 2015 (Annexure E) and the Heritage Indicators in Section 8 (pages 14-22) of the HIA report.
- The proposed residential erven in Precinct F2 must be reduced in extent to exclude the existing orchard from the proposed development, as shown in Alternative 5c.
- More refined articulation of building elevations and roofscapes in Precincts E1 and E2 must be undertaken at the precinct plan level.
- The Landscape Framework Plan prepared by CNdV Landscape Architects should be implemented. Refer to Figure 25.
- An Integrated Environmental Management Plan must be formulated to address mandatory controls and guidelines related to lighting, signage and architectural and landscaping treatment included in Section 8.7, 8.8 and 8.9 above and formulated in Section 5 of the Urban Design Framework.
- The five focus or action areas identified in Figure 24 of the document entitled 'Boschendal Village Project: Urban Design Framework with Precinct Plans, Controls and Guidelines' prepared by Philip Briel and Wilko Le Roux of Philip Briel Architecture and Urban Design, dated November 2015 relate to the more public parts of the scheme. In accordance with the 'package of plans' approach these focus areas must be subject to detailed precinct plans, which include detailed site and transportation planning, design and landscaping. Precinct plans for these areas must return to HWC for approval and be subject to precinct level heritage assessment.
- The conclusions and recommendations of the Traffic Impact Assessment including proposed road geometries must be subject to detailed design particularly with respect to place-making qualities, pedestrian access, non-motorised transport and public transport, and be incorporated into precinct level plans and heritage assessment referred to above.
- A Phasing Plan must be prepared to ensure an integrated form of development that is tied in with landscape mitigation. Each phase should be implemented as a completed development as far as possible, including all landscaping. As a first step, planting and other elements of edge-making to define the overall site, should be undertaken as soon as possible.

15. REFERENCES

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