

**Boschendal Farmlands:
Groot Drakenstein - Simondium Valley
Composite Heritage Indicators**



May 2009

Prepared by
N. Baumann • S. Winter • D. Dewar • P. Louw
Heritage Consultants

Contents

1	Introduction	1
1.1	Purpose of the Document	1
1.2	Structure of the Document	1
2	Heritage Indicators	1
3	The Structural Argument	5
4	Integrating the Arguments	5
5	Towards a Synthesis	5
6	Conclusion	5

List of Appendices

- Appendix A : Chronological Development of Public Route Network and Settlement South of the River.
- Appendix B : Record of Feedback Process to Date.

List of Figures

	Page
Fig. 1. The Conceptual Approach of Interlinked Corridors and Agricultural Superblocks	6
Fig. 2. The Ideas Applied to Context - The Groot Drakenstein - Simondium Valley in the Winelands of the Western Cape	7
Fig. 3. Informants and Constraints	8
a. Natural Environment	
b. Heritage and Cultural Landscape	
c. Public Structural Informants	
d. Possible Development Opportunities	
Fig. 4. Composite Informants, Constraints and Opportunities	9
Fig. 5. Composite Heritage and Settlement Indicators	10
Fig. 6. Heritage and Settlement Indicators: Layers	11
a. Consolidated Working Farm and Historic Core	
b. Publically Accessible Routes, Views and Vistas	
c. Possible Development Pockets within the Intensive Agricultural Zone	
d. Possible Tread Lightly Development Pockets within the Extensive Agricultural Zone	

1. Introduction

1.1 Purpose of the Document

This document, records under one cover, a comprehensive and spatialized interpretation of heritage indicators for the broader Boschendal area. It is based on insights gained through the scoping process and it draws on information provided through a wide range of specialist studies, generated through the preliminary HIA and EIA process.

Its starting point is recognition of the cultural and settlement landscapes, and the significance of respecting authenticity as a guiding principle which needs to inform planning and design.

1.2 Structure of the Document

The document is structured in the following way. Section 2 describes the full range of indicators which need to be respected. These are based on an interpretation of existing conditions (natural, cultural and public infrastructural). The indicators are spatialized to define 'tread lightly' and 'development possibility' areas.

Section 3 introduces spatial structural constraints which result from the important heritage principle of authenticity. In essence, this requires that the historic logic of settlement and movement systems, and the synergies between these, are respected. The implication of these issues is explored diagrammatically.

In section 4, design informants identified in the baseline studies are overlain over identified development opportunities to provide a composite framework of informants, constraints and opportunities.

In section 5, the empirically and historically devised informants are overlaid, to provide a clear composite system of heritage indicators.

Two appendices are attached to the document.

One investigates the issue of historical rights of way south of the river. It results in the clear conclusion that there has always been a public right of way south of the river and that this right must be respected in any new development.

The second records, for the record, the historical interaction of proposals and responses which has been part of the HIA scoping process.

2. Heritage Indicators

This section provides a comprehensive set of indicators which should be respected in the planning and design process. Critical points of departure for the heritage impact process are the EIA_HIA baseline studies. The indicators have been endorsed by the South African Heritage Resources Agency (SAHRA) and Heritage Western Cape (HWC).

Indicators are organized around five central principles relating to impact:

- (i) Respect for the natural landscape

- (ii) Work sympathetically with the landscape: Respecting traditions
- (iii) Authenticity
- (iv) Respect for social heritage
- (v) Avoid negative cumulative impacts.

The indicators are shown in Table 1.

SUBJECT AREA	INDICATOR
	<ul style="list-style-type: none"> No development on slopes steeper than 9° No development on elevated exposed sites, i.e. above the 320m contour line
	2.4 Hydrology <ul style="list-style-type: none"> No development in areas prone to flooding No development in wetlands No development within 100 year flood-plains No building within riverine corridors
	5.5 Botanical ecology <ul style="list-style-type: none"> No development in areas of high bio-diversity value Protect and enhance rare or endangered indigenous species or habitats Clear invasive vegetation
	5.5 Faunal ecology <ul style="list-style-type: none"> No development in areas of high bio-diversity value Protect and enhance rare or endangered species or habitats Maintain established migration corridors Create new continuous linking agricultural and ecological corridors
	5.5 Landscape characteristics <ul style="list-style-type: none"> Identify and respect subtle landscape characters and make this a primary informant of precinct design
	2.8 Scenic routes <ul style="list-style-type: none"> All scenic routes to run within a generous buffer of green space

SUBJECT AREAS	INDICATOR
	<ul style="list-style-type: none"> Unimpeded sight-lines from important public view points
	3.1 Maximize the extent of the working farm <ul style="list-style-type: none"> Keep the footprint of new development as small as possible Push new development to the edges of the working farm Put in place measures for the long term retention of the working farm and wilderness areas
	3.2 Maintain the dominance of the natural and rural environment <ul style="list-style-type: none"> Ensure large undeveloped agricultural and wilderness rooms Ensure that settlement occurs in relatively small pockets Separate development parcels by continuities of significant green corridors – never less than 200 meters, preferably more – except in the cross-road conditions Reduce visual intrusion of new development to the greatest degree possible No development in proclaimed reserves and wilderness areas
	3.3 Maintain rural settlement and infrastructural forms <ul style="list-style-type: none"> Seek qualities and forms of coherent free-standing villages, not suburbia Avoid urban infrastructural forms (underpasses, speed bumps, traffic circles and road widening) maintain pedestrian dominance (generous sidewalks where necessary; slow traffic through spatial design)

SUBJECT AREA	INDICATOR
	<p>3.4 Ensure that patterns of settlements respect the logic of the regional and sub-regional movement structure</p> <ul style="list-style-type: none"> Promote hierarchical corridors of development: development should occur in corridor zones and, as far as is possible, not in free-standing pockets. Development zones should correspond with hierarchies of movement. The zones should be defined in terms of pedestrian movement. In this case, the highest order corridor should not exceed 1.5km in width from the central movement spine in total (e.g. 1.5km kilometers, one-sided). The secondary zones should not exceed 0.75 kilometer in width in total. Settlement should preferably occur in wider zones of more intensive agriculture. Greater intensity should be allowed at points of higher accessibility (for example, cross-road conditions). Here, minimum green corridor widths of 75 meters should apply. Any extensions/expansions of the sub-regional structure should reinforce the higher order movement system (the agricultural superblock system – see settlement baseline study).
4. Respecting Social Heritage	<p>4.1 Respect historical institutions and practices which are valued locally. For example:</p> <ul style="list-style-type: none"> Traditional pedestrian desire and rights of way lines (Appendix A) Use of the river Use of indigenous natural resources (for example, plants) Local cultural symbols and institutions (height controls etc.) No development of land of historical or current religious significance (for example, cemeteries, holy or sacred places)

SUBJECT AREA	INDICATOR
	<ul style="list-style-type: none"> Reverse historical negative social practices <ul style="list-style-type: none"> Promote informal social interaction Break down spatial barriers between communities
5. Avoid negative cumulative impacts	<p>5.1 Infrastructural capacity</p> <ul style="list-style-type: none"> Make maximum use of historical investments in bulk infrastructure Minimize excess capacity in new bulk infrastructure Reinforce existing social facilities
	<p>2.2 Precedent</p> <ul style="list-style-type: none"> Create a new settlement pattern based on principles which are replicable in other parts of the winelands Avoid creating negative precedent
	<p>3.3 Management structure</p> <ul style="list-style-type: none"> Ensure the management structure and institutional arrangements in place can ensure the long term protection of the remaining agricultural and wilderness landscapes
	<p>5.4 Farm subdivisions</p> <ul style="list-style-type: none"> Ensure that farm sub-divisions are logical in terms of continuing farming operation, in the event of unforeseen, non-predictable changes. In particular, each farm sub-division should be viable on its own, in terms of land size, water, soil quality and so on.

3. The Structural Argument

The location of settlement in regional space is a central dimension of the heritage principle of authenticity. It requires that patterns of new settlement respond to the historical logics of settlement formation in the broader region, particularly with respect to regional and sub-regional movement routes. The essence of the spatial argument is laid out in Settlement Baseline Study.

Figures 1 and 2 diagrammatically give form to the central structural concerns.

Figure 2 shows diagrammatically two interlinked regional and sub-regional corridors of different hierarchical significance. The diagram expresses the major spatial requirements.

- Development is pushed to the edges of the farm to maximize the uninterrupted extent of the working farm.
- Development locationally responds to the logic of the two regional routes, to create two corridors of development (one major, one minor).
- The width of the corridor is controlled. Within the major corridor, development should not occur further than 1.5 kilometers from the major movement spine (an internationally recognized standard for a comfortable walking distance). Development within the corridor should be one-sided, to allow for agriculture to abut the spine directly. In the case of the smaller corridor, settlement should not occur outside of a band wider than 0.75 kilometers. In this case, the sub-regional route, however, may move through the development, becoming, in places, a village 'high street'.
- Within the total zone abutting the movement spine (3 kilometers in the case of the highest order corridor and 0.75 in the case of the smaller corridor) intensive agriculture should be encouraged.
- Within any one corridor, new settlement should not be continuous. Rather, it should take the form of 'beads on a string allowing continuous green space (agricultural or ecological) to connect the two sides of the corridors. This ensures that agriculture and wilderness landscapes remain dominant. As a rule of thumb, these green corridors should not be less than 200 meters but should preferably be more than this.
- More intensive activity is allowed at points of highest accessibility: the cross-roads conditions. In these zones, the 'green' corridors can be reduced to 75 meters.
- Special places (for example, the homesteads) can be free-standing in agricultural space, celebrating their significance.

Figure 2 also shows conceptually the introduction of the agricultural superblock (see settlement baseline study). Any (limited) development which does not fall with the corridors should follow the principle of the agricultural superblock.

Figure 2 notionally applies these structural principles in the broader context of the Groot-Drakenstein-Simondium valley and environs. It clearly shows the consistency between the proposed new and historical patterns of development.

4. Integrating the Arguments

Figure 3 reiterates the spatialization of the heritage indicators developed in previous studies: figure 3 A shows natural landscape informants; figure 3 B heritage and cultural landscape informants; and figure 3 C public structural informants. In figure 3 D these are overlaid to show possible development opportunities in terms of 'possible development pockets' and 'tread light' areas.

In figure 4, all factors of relevance which derive from the landscape are integrated into a composite statement of constraints, informants and opportunities.

5. Towards a Synthesis

In figure 5, the structural argument and the conceptual factors shown in figure 4 are integrated into a statement of heritage and settlement indicators. This represents zones which can be considered for development from an heritage, environmental and settlement perspective.

In figure 6, the layers making up this synthesis are for clarity, disaggregated into layers. Figure 6 A shows the consolidated working farm and historic core; figure 6 B, publically accessible routes, views and vistas; figure 6 C possible development pockets within the intensive agricultural zone; and figure 6 D, possible tread lightly pockets within the extensive agricultural zone.

6. Conclusion

This document is a culmination of the insights gained in the scoping phase of the HIA. All new development should respect and respond to the constraints outlined here. Any deviation from the composite indicators needs to be formally motivated in writing. Both the motivation and the response to it will be entered as part of the public record.

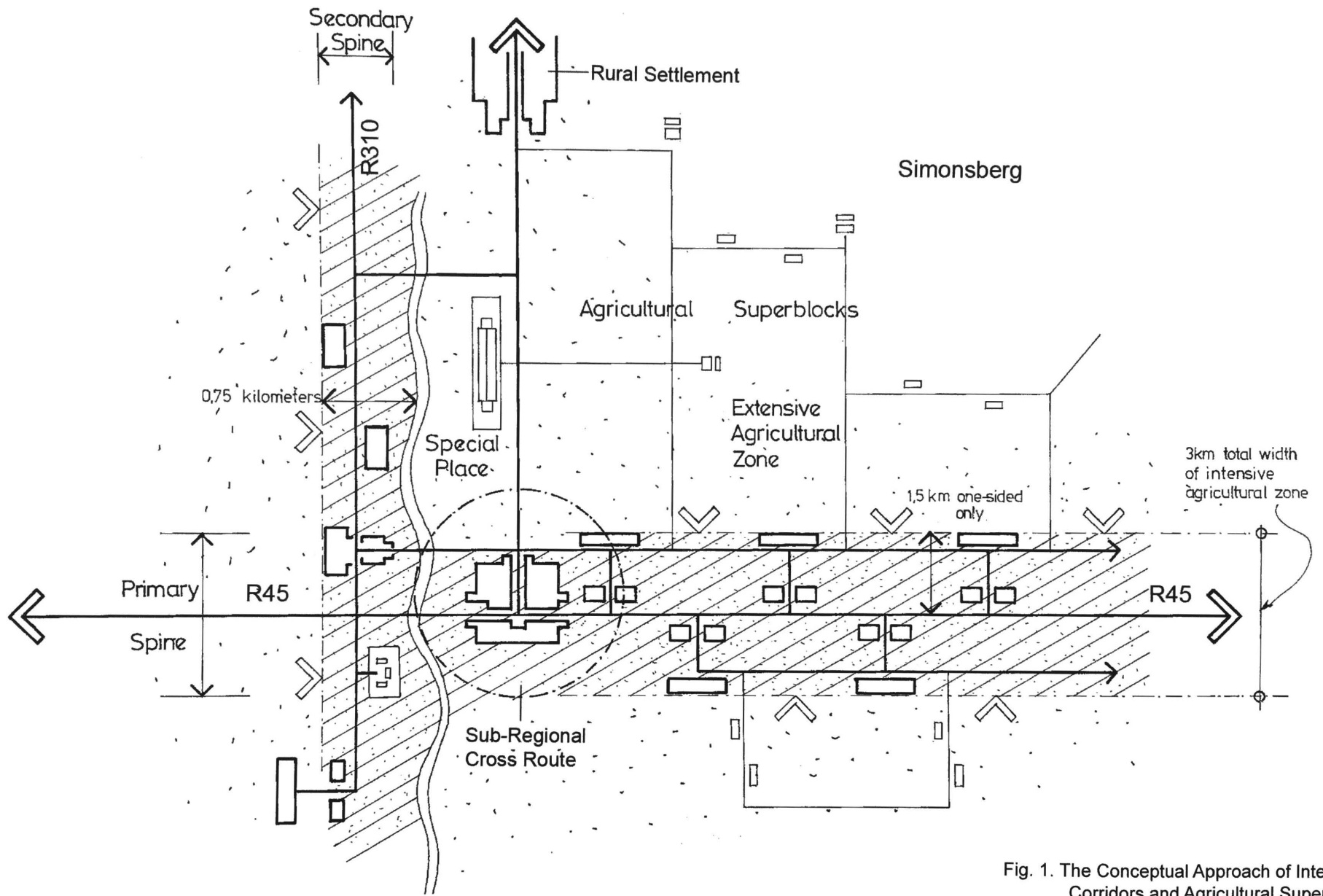


Fig. 1. The Conceptual Approach of Interlinked Corridors and Agricultural Superblocks

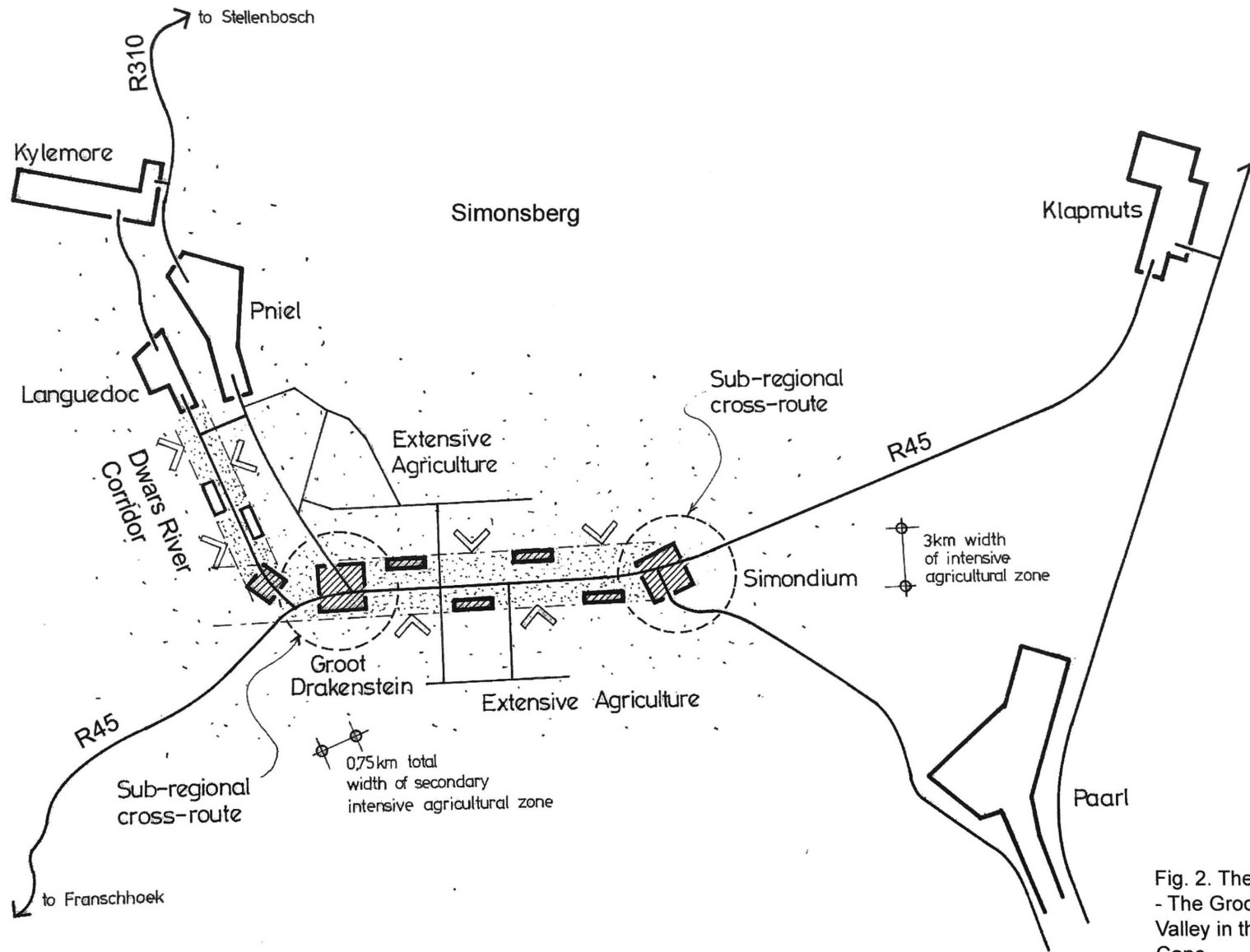


Fig. 2. The Ideas Applied to Context
 - The Groot Drakenstein - Simondium
 Valley in the Winelands of the Western
 Cape

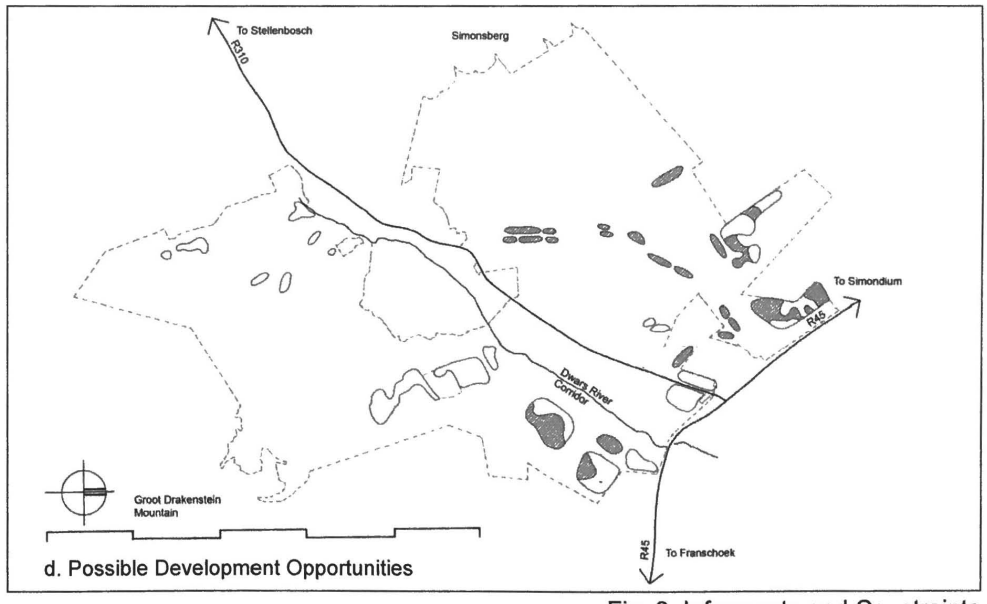
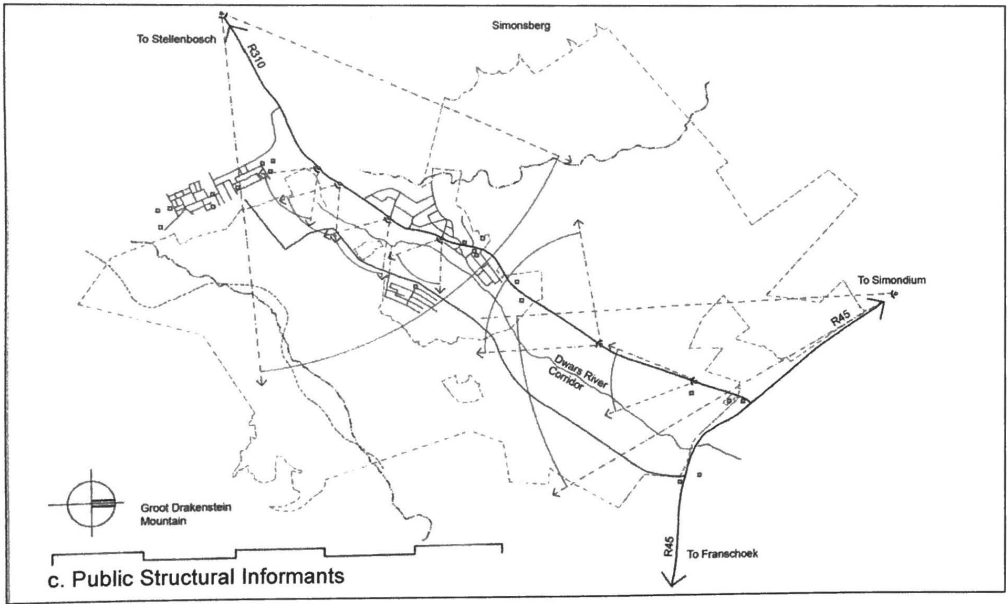
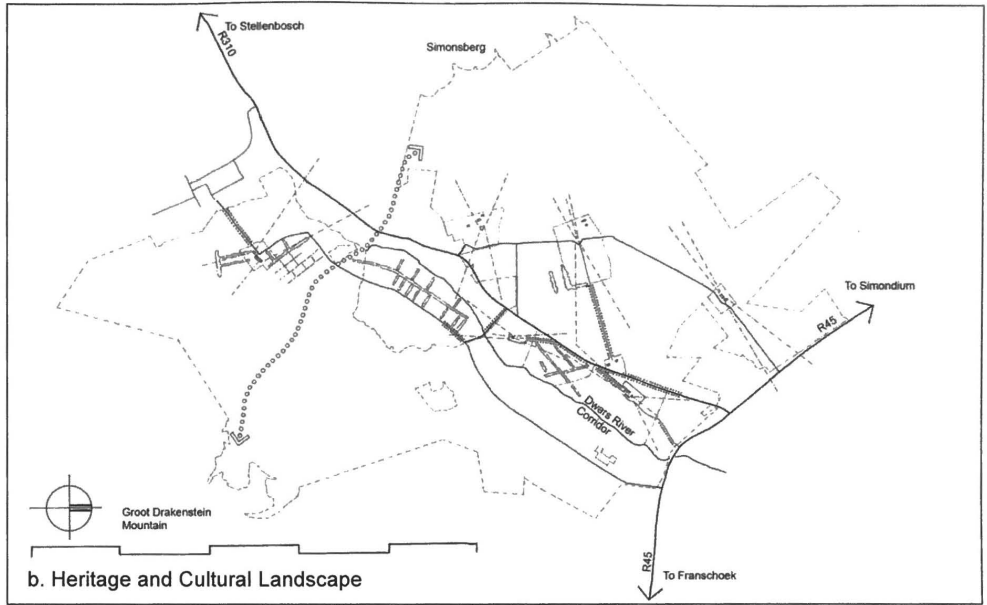
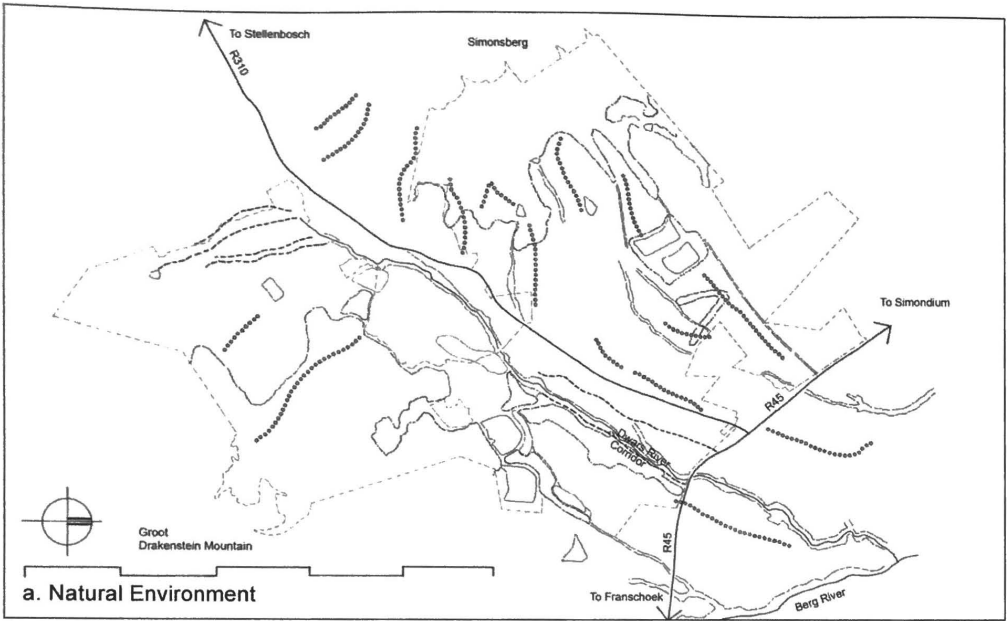


Fig. 3. Informants and Constraints



Fig. 4. Composite Informants, Constraints and Opportunities

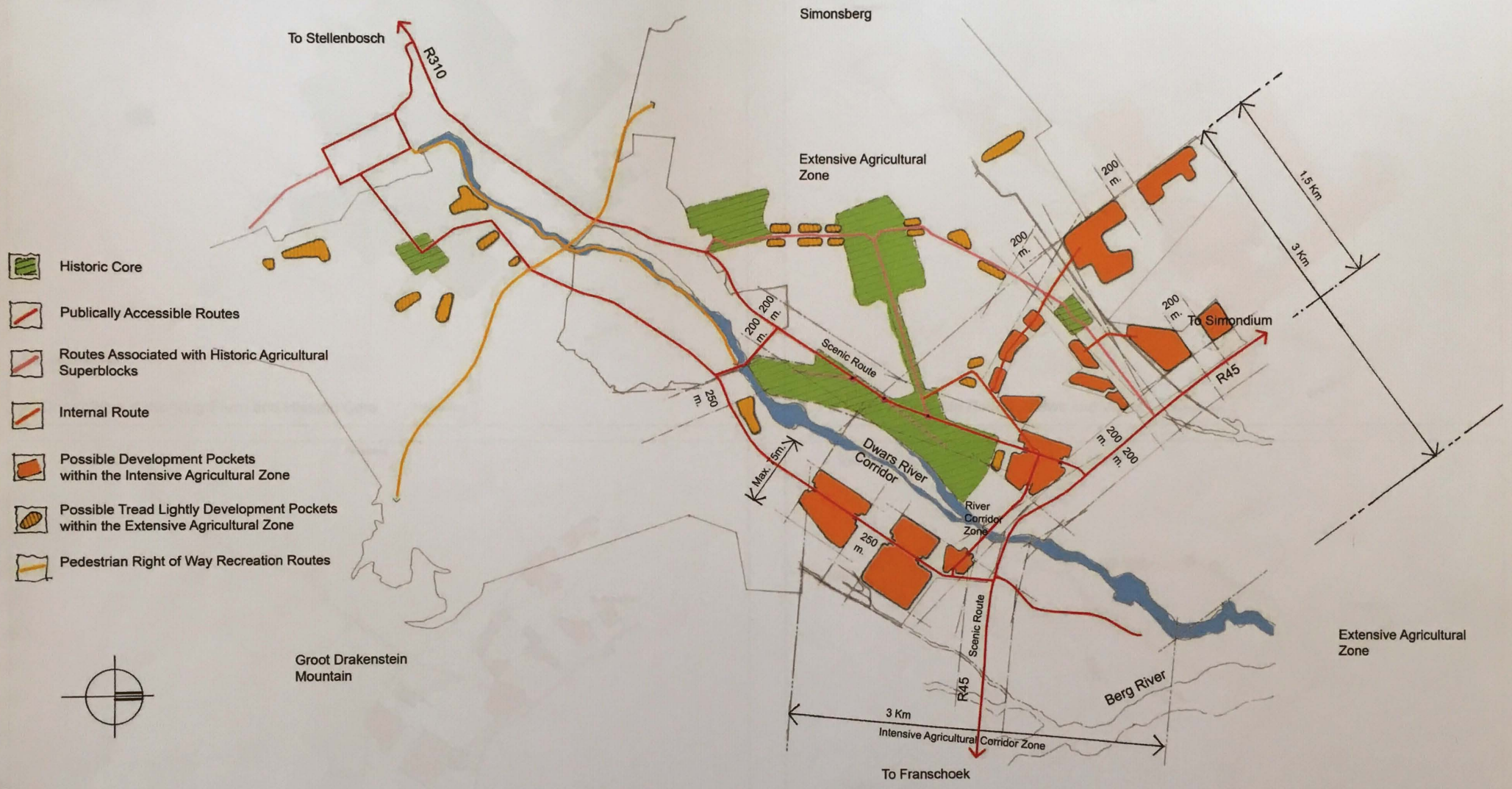


Fig. 5. Composite Heritage and Settlement Indicators

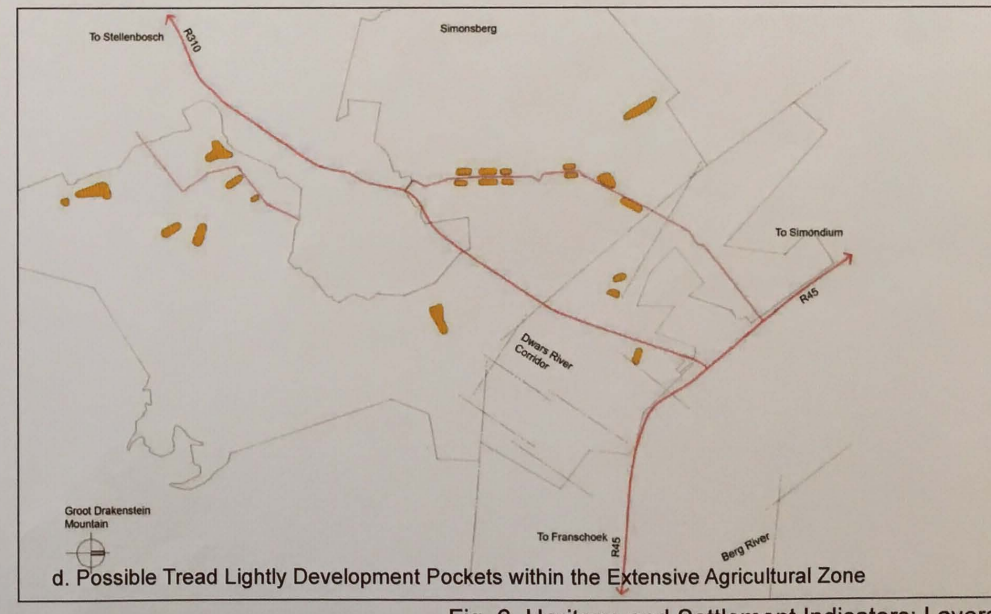
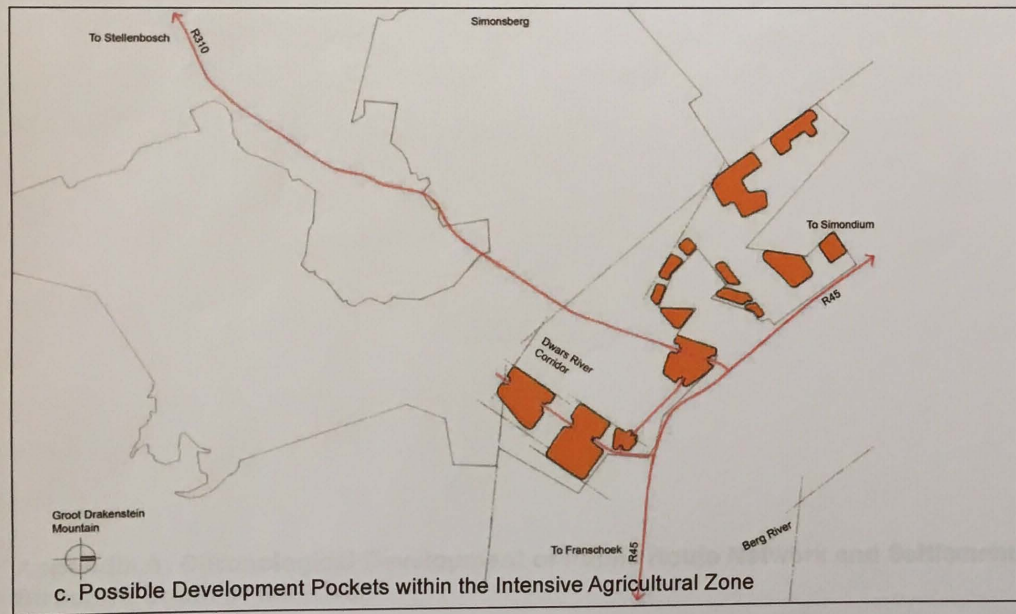
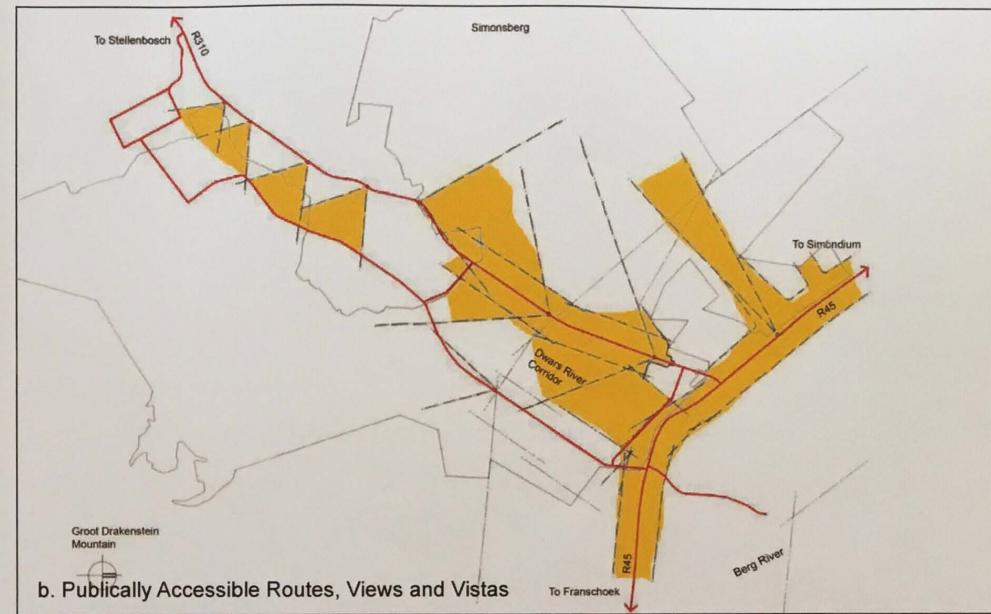
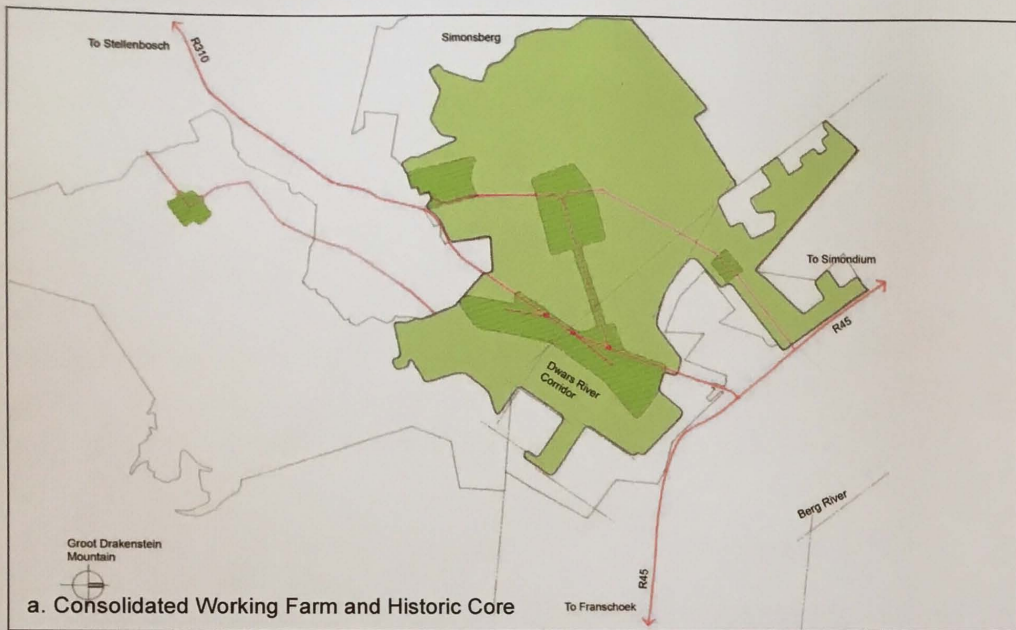


Fig. 6. Heritage and Settlement Indicators: Layers

**Appendix A: Chronological Development of Public Route Network and Settlement
Structure South of the River.**

Boschendal Farmlands:
Groot Drakenstein - Simondium Valley
Composite Heritage Indicators for E.I.A.

May 2009

Piet Louw
Architects • Urban Designer • City Planner
Dave Dewar
City and Regional Planner
Baumann & Winter
Heritage Consultants

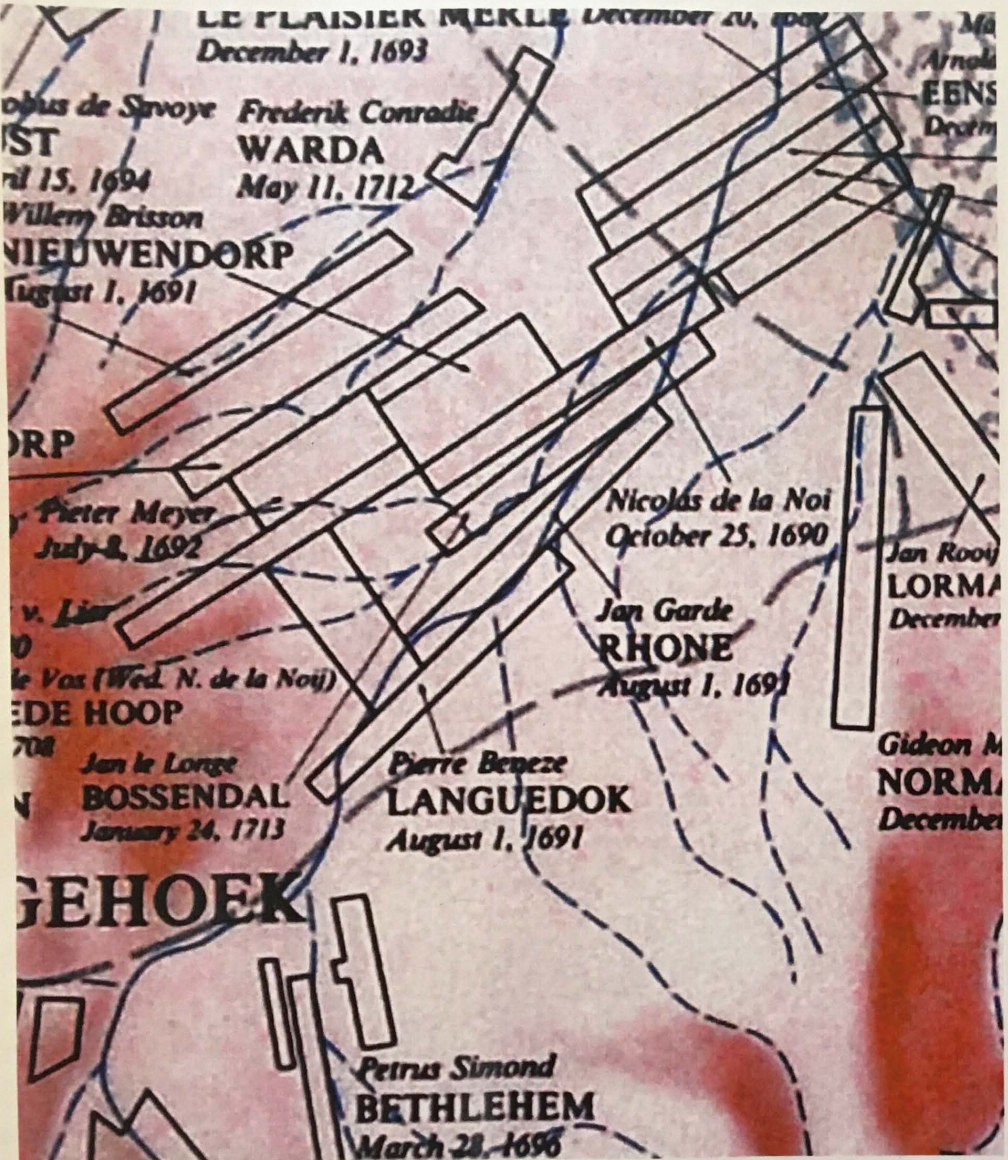


Figure 1: Freehold Land Grants of the South Western Cape Colony 1657-1750. Prepared by Leonard Guelke (Private Collection)

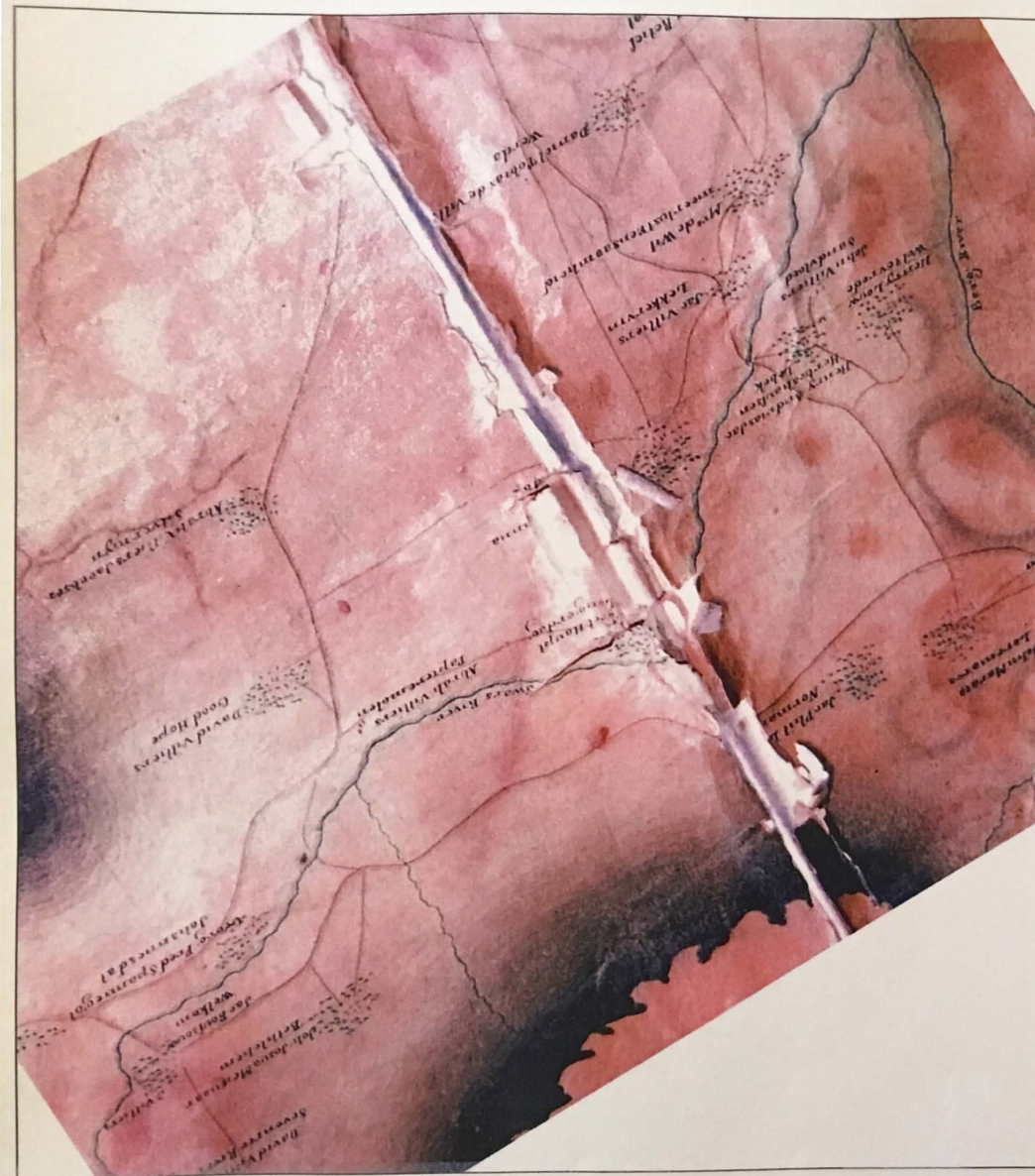


Figure 2: Military Survey of the Districts of Hottentots Holland, Stellenbosch and Franshoek dated 1808. Prepared by Thibault (CA/M3/405)

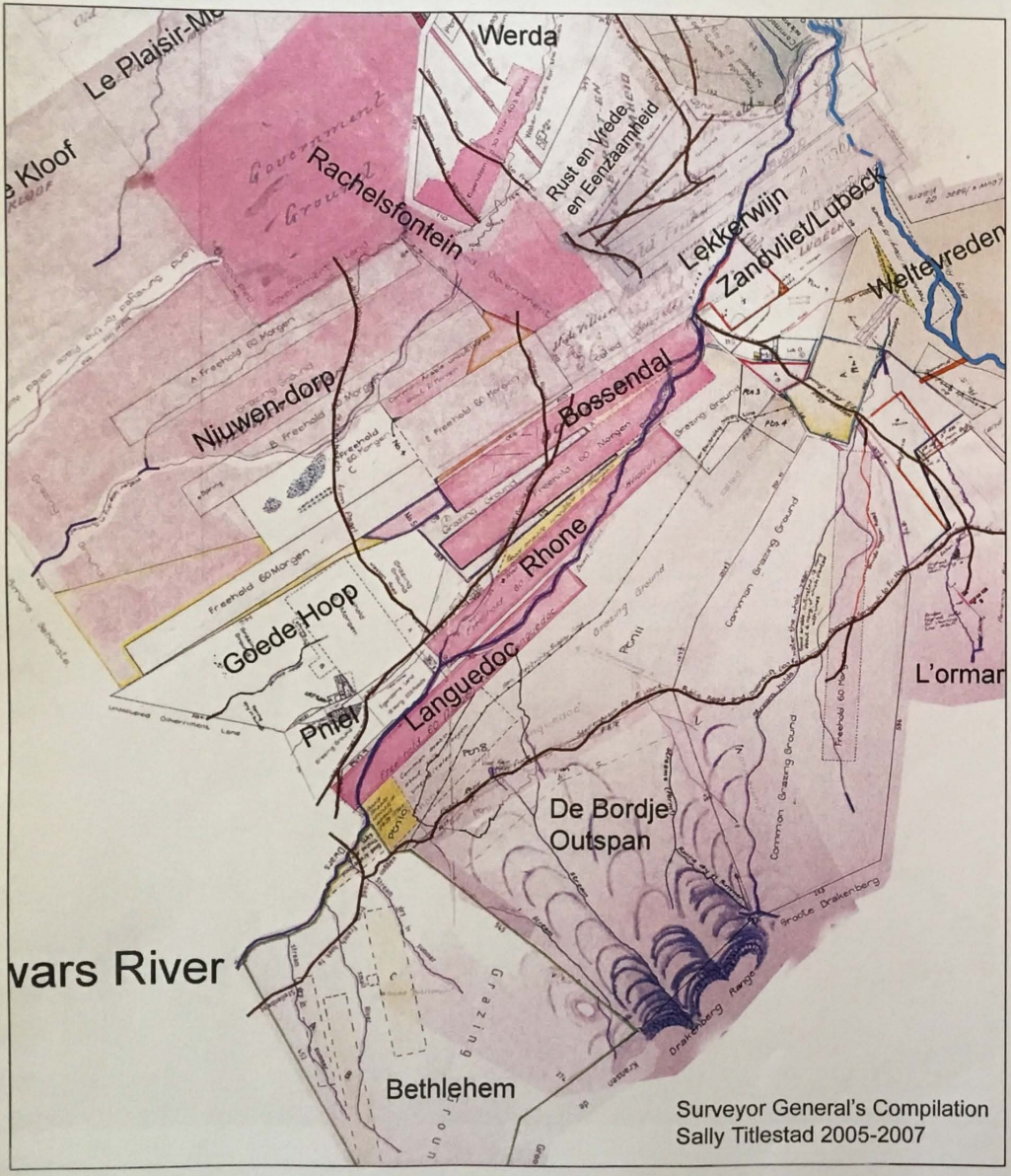


Figure 3: Surveyor General's Compilation of the Dwars River Valley 1820 to 1880. Prepared by Sally Titlestad 2005-2007



Figure 4: Divisional Map of Paarl dated 1900. Prepared by Surveyor General (CA M2/907)

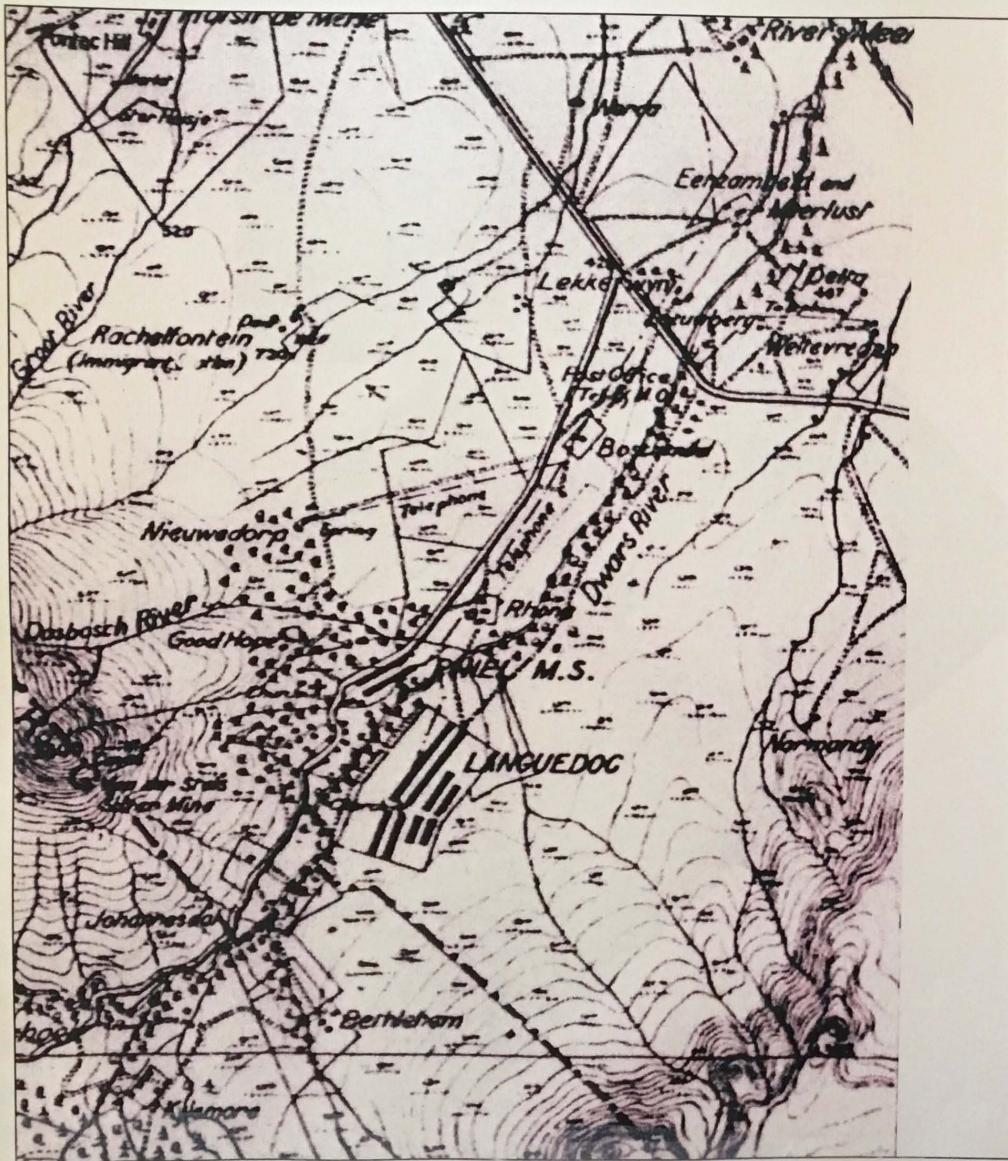


Figure 5: Inch Series of Cape Paarl and Stellenbosch Districts dated 1901. Unknown Mapping Section (KR CPA 1901).

Image © 2009 DigitalGlobe

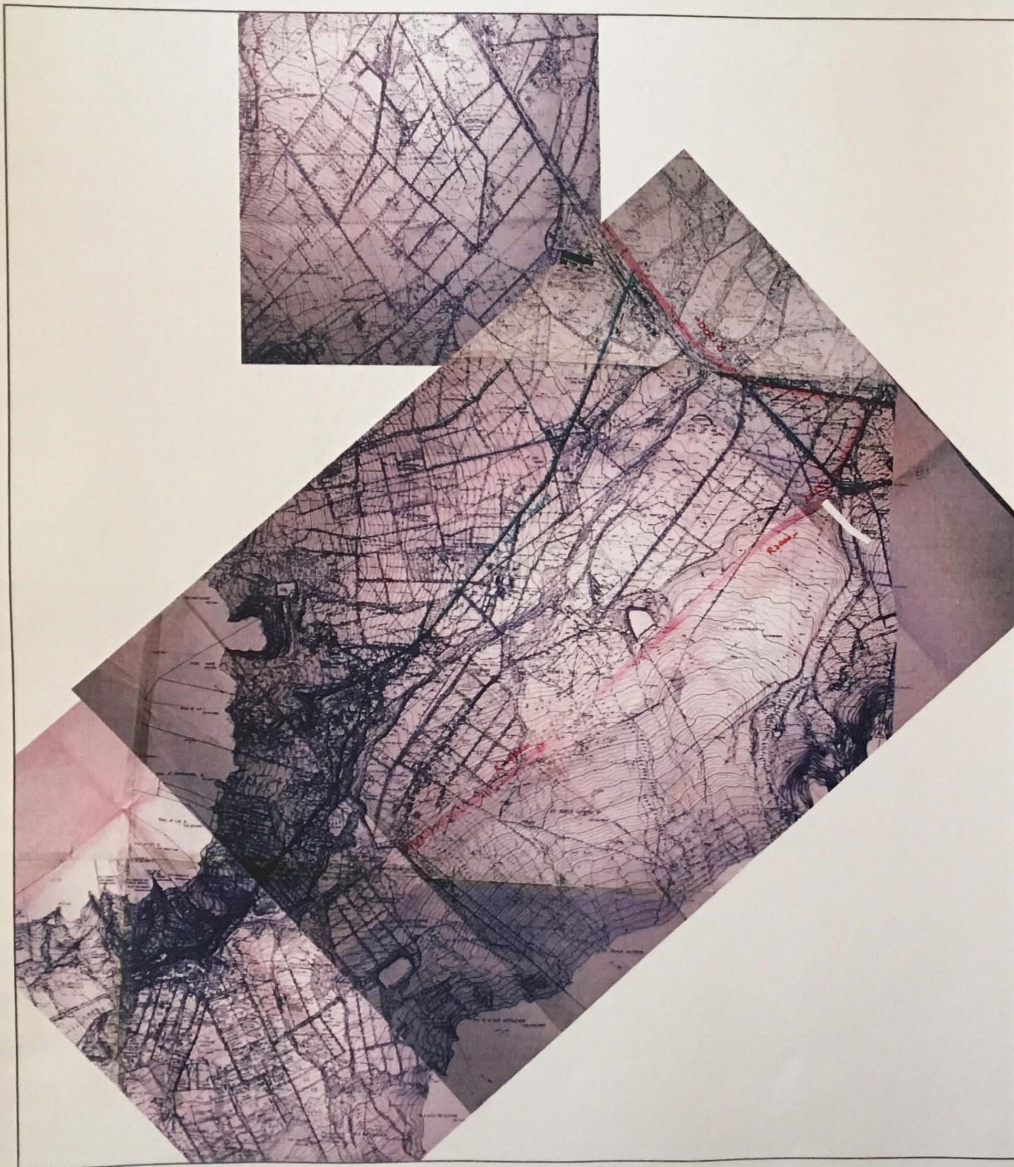


Figure 6: Topographical Survey, Berg River Project dated 1996. Prepared by the Department of Water Affairs (Boschendal Collection)

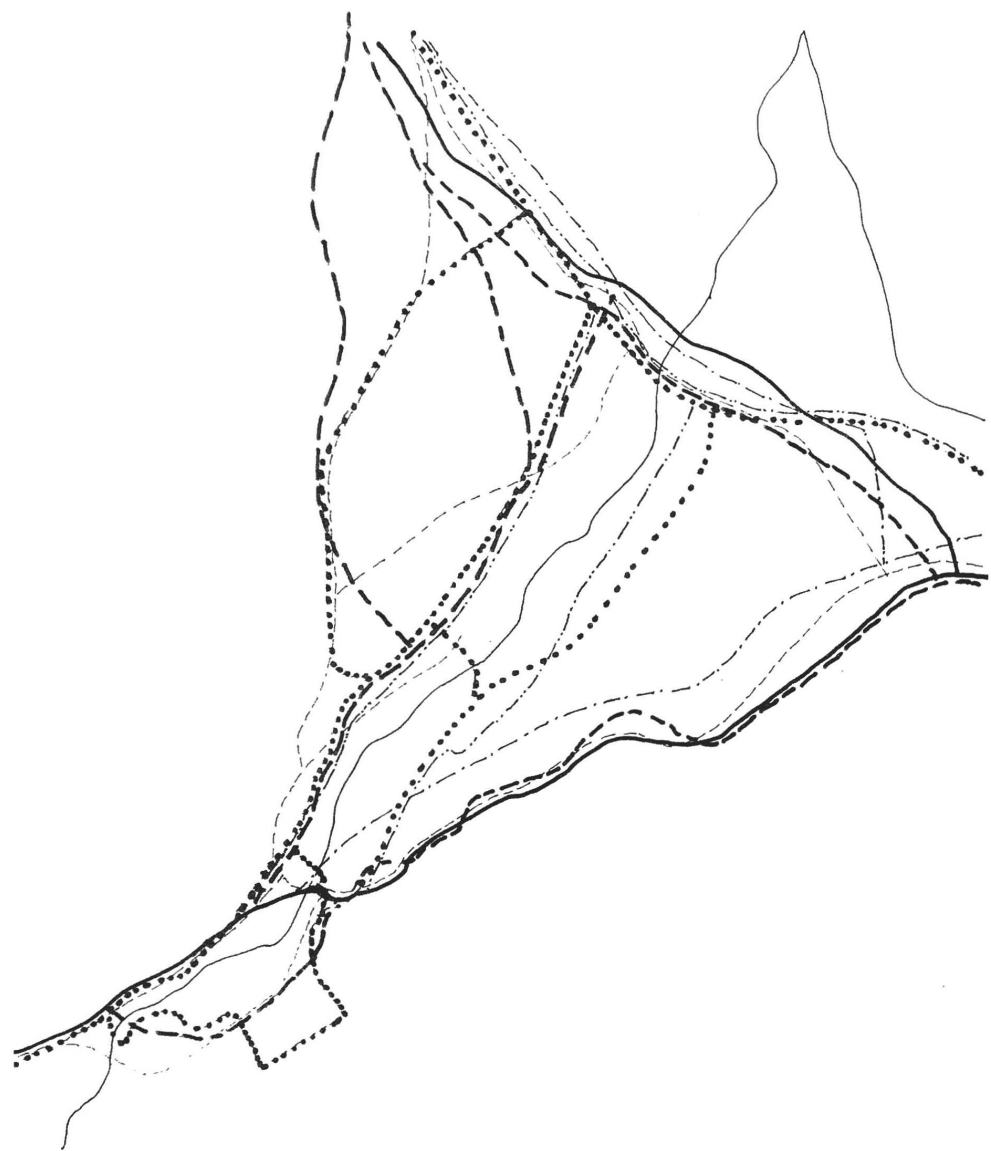


Figure 7: Historical route composite

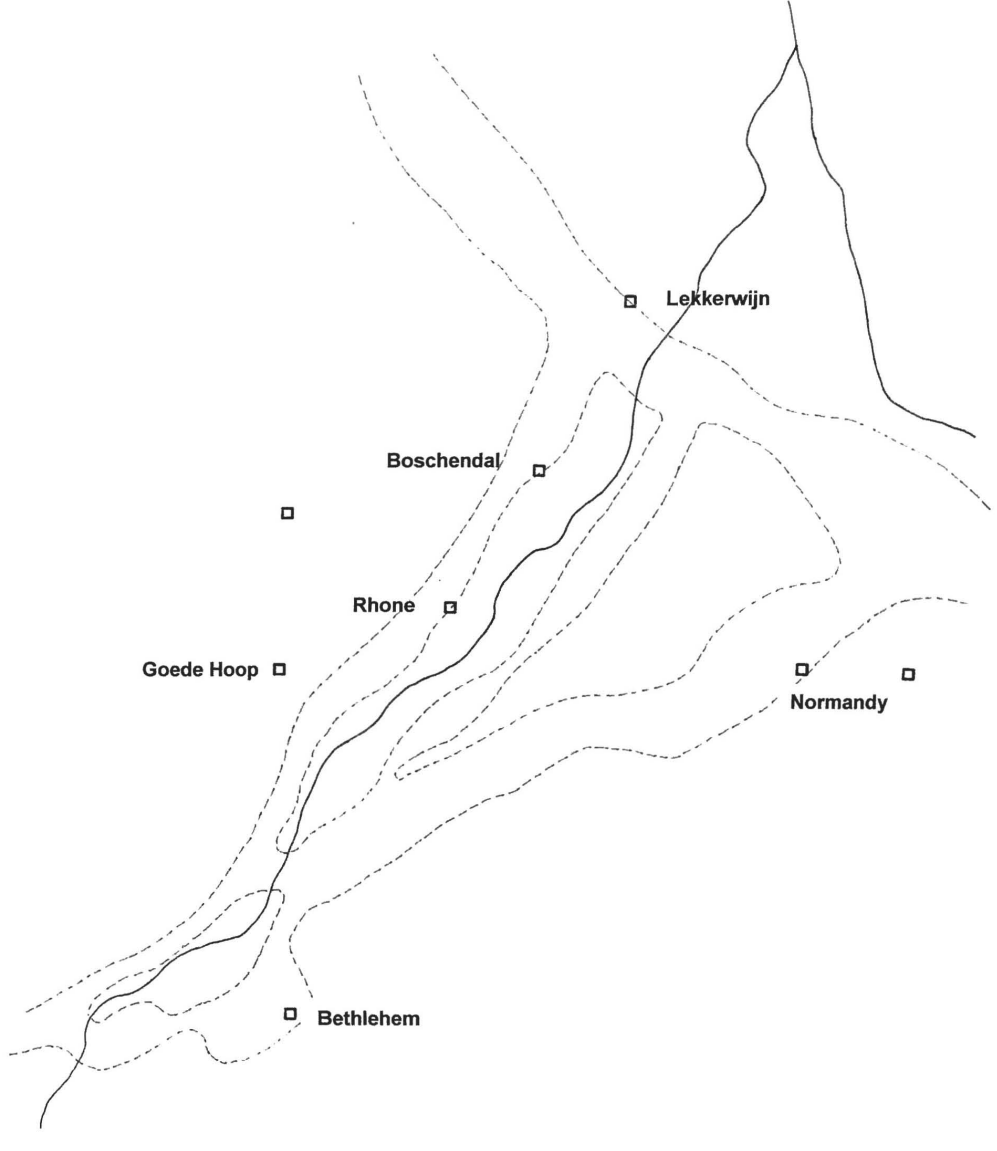


Figure 8: Historical route zones

Appendix B: Record of Feedback Process to Date.

Boschendal Farmlands:
Groot Drakenstein - Simondium Valley
Composite Heritage Indicators for E.I.A.

May 2009

Piet Louw
Architects • Urban Designer • City Planner
Dave Dewar
City and Regional Planner
Baumann & Winter
Heritage Consultants

1. Some Generic Concerns about the Concept for Boschendal

The concept as tabled has a number of generic problems which cannot be solved through mitigation. These problems relate to the development as a whole and exclude environmental comment which will be provided by relevant authorities.

- 1.1. It willfully ignores objective constraints provided by the heritage and environmental teams. It does this without providing any evidence of alternative or supplementary information which negates this interpretation. It appears that the concept is programmatically driven. In areas as sensitive as this, carrying capacity must be informed by the characteristics of the land, not by a pre-determined programme.
- 1.2. There are serious problems with respect to the central heritage criteria of authenticity. This takes three forms.
 - 1.2.1. The dominance of working agricultural land in the critical balance between agriculture and development is severely compromised. This is both an issue of the scale and the form of the proposed development.
 - 1.2.2. The need for development to reflect a structural logic in its location by conforming with the agricultural superblock is ignored. The overall impact is one of isolated housing estates located in green space: this is not a rural concept.
 - 1.2.3. The concept of an 'agricultural village' is ignored. The scale of erven in the retirement village, for example, is +/- 600 m² - this is a suburban scale.
- 1.3. Related to the above, the concept fails to bring collective benefits to the valley as a whole, by operating as an integrated system. A number of pockets of development, for example, are treated as cul-de-sacs. In effect, this represents a form of fragmented gated communities. It would be impossible, for example, to serve (viably) the development with some form of public transportation.
- 1.4. The concept fails to distinguish between 'developable' and 'tread lightly' zones. The form of development in both is the same. 'Tread lightly' zones require very small interventions in an overwhelmingly dominant agricultural setting.
- 1.5. The concept introduces inappropriate land uses. The idea of a golf course in the valley is simply unacceptable. Although green, it is not a rural activity. Similarly, an underpass is not a form of rural infrastructure.

- 1.6. The concept shows a serious disregard for heritage issues. For example:
 - It turns an historic axis into a cross-route and lacerates the integrity of the axis;
 - It inserts new development into the visual, settings and domains of influence of historic homesteads.
- 1.7. Development extends into the flood plain: this is unacceptable.
- 1.8. The concept introduces multiple river crossings which diminish the positive impact of the river and detracts from the rural feel.

2. More specific concerns

An overlay of the various environmental and heritage informants and constraints diagrams and the updated development proposal reveals a number of specific concerns as follows:

- 2.1. There are a number of instances where development is proposed on medium agricultural soils. While the soils information included in the Phase 1 study is subject to further more detailed analysis at the precinct scale, the overarching principle of retaining the dominant productive agricultural character of the landscape should be adhered to. The justification for developing on medium agricultural soils which are embedded within rural context is not apparent from an environmental and heritage perspective. This issue is of particular concern in the case of proposed new development pockets within the Bethlehem Farmstead and the Rhodes Nieuwedorp Precincts and where the design response does not distinguish between poor and medium agricultural soils.
- 2.2. The proposed new road infrastructure is at strong variance with the principle of making use of existing bulk infrastructure and integrating new development with the existing route structure. Of particular concern are the proposed new river crossings, the by-pass behind Lanquedoc and the cross route/underpass on the R310, and the impact of these heavy engineering solutions on the agricultural context.
- 2.3. The proposed new cross route is of major concern. It is at strong variance with the E-W linear route system through the Valley which is related to the river. It cuts across the visual-spatial relationship between Boschendal and Rhone and the particular geometries of this agricultural context. It also cuts across the historical axial approach road to Rhodes Cottage.
- 2.3. The proposals do not take into account the hierarchical nature of the historical route network, i.e. regional, local and farm roads. Further clarity is required regarding the different roles of the route network in terms

of connectivity, integration with the settlement structure and axial relationships.

- 2.4. The continuous nature of the linear settlement pattern of the proposed new development threatens the agricultural continuity of the landscape. A nodal pattern of settlement and the principle of "beads on a string" should be adhered to by the provision of adequate agricultural gaps between settlement nodes.
- 2.5. The dead end nature of a number of roads and single access points will result in a "gated" settlement and fragmented community pattern which is not integrated with the larger public structure. This is a major threat to the authenticity of the cultural landscape.
- 2.6. The location of development pockets within the scenic corridor along the R310 is likely to have a visual impact, especially in terms of upwards views across an agricultural setting towards the Simonsberg.
- 2.6. The agricultural setting between Boschendal and Rhone is regarded as a "no-go" area from a heritage perspective. The location of a hotel complex within this context is regarded as highly inappropriate, especially in terms of the size of the proposed new footprint in comparison to the historical werfs.
- 2.7. The location of new development directly in front of the historical Excelcior homestead responds unsympathetically to its agricultural setting and axial relationship with the R45. The proximity of new development in relation to the historical werf also blurs the distinction between old and new.
- 2.8. The location of new development within the agricultural setting of the historical Bethlehem werf is also regarded as highly inappropriate.
- 2.9. A standard 600m² plot size across the entire landscape is not congruent with an agricultural context. Consideration needs to be given to concept of an agricultural village as opposed to a suburban context which would require a plot size of not larger than 300m² and would considerably reduce the development footprint.

The above mentioned concerns and suggestions are illustrated and synthesized on the accompanying diagram as follows:

- Areas where development extends into the "no-go areas".
- Areas where development is located on medium agricultural soils but does not "tread lightly".
- Areas where development is located on medium agricultural soils which are embedded in a rural context.
- Areas where development intrudes into the historical and agricultural settings of important heritage places.

- Areas where development intrudes into the scenic corridor.
- Areas where a continuous nature of the linearity of settlement pattern breaks the agricultural continuity of the landscape.
- Routes which need to be removed/relocated in terms of their visual-spatial impact.
- Routes which need to be connected and integrated with the larger public structure.
- Areas where a distinction between historical fabric and new interventions is required.

3. The Map

To assist communication, the major problems have been mapped. The map is based on three levels of information:

- The proposed concept;
- The constraints and informants identified in the EIA and HIA process, which are overlaid on this (the 'developable' and 'tread lightly' areas);
- Problem areas which are evident from this overlay.

The problems are of a number of generic types.

- A lack of connectivity. These identify areas where movement continuity is broken, thereby reducing permeability and publicness. These lacks have the effect of creating a fragmented form of development.
- Development which intrudes into the riverine corridor and areas of high floristic value. This is an internationally accepted criterion for no development.
- Intrusions into the flood plain. This relates primarily to the proposed hotel complex. Again, this is a internationally and nationally accepted criteria for no development.
- Negative impacts on the agricultural settings and domains of the historically significant homesteads: level 1.

This large precinct reflects significant intrusions into the domains of a number of the early homesteads and along the primary scenic route. It is widely accepted in heritage theory and practice that the settings of historically important buildings are as important as the object itself.

- Negative impacts on the agricultural settings and domains of historically significant homesteads: level 2.

In both of these precincts, development occurs too close to the homestead: creating space is required.

- Multiple river crossings. As discussed, these significantly change the nature and role of the river in the landscape.

ENVIRONMENTAL & HERITAGE ANALYSIS

RESPONSE TO ALTERNATIVE 1

PIET LOUW AND DAVID DEWAR ARCHITECTS, URBAN DESIGNERS & PLANNERS
BAUMANN & WINTER HERITAGE CONSULTANTS



Notes on the Second Amendment to the Proposed Boschendal Plan, Tabled by Dennis Moss and Associates at the Meeting at Rhone on the 15th February, 2008

Introduction

These notes primarily record points requiring clarification about the proposal tabled by Dennis Moss Associates relating to the Boschendal development. The points are grouped under areas of concern raised in the preliminary review of the plan by the EIA/HIA team.

The second part of the memorandum tables HIA/EIA indicators relating to where development could be considered, in response to the composite informants and constraints tabled by Louw & Dewar in August 2007. This assessment moves from the starting point correctly identified in a recent memorandum from Mr Clive Venning that "the primary task is to restore Boschendal to its former glory". It accepts that some development may be necessary to achieve this. At the heart of the issue of 'restoring' Boschendal is the retention and consolidation of the working farm. To this end, new development should be largely consolidated on the edges of the farm, corresponding structurally with the agricultural superblocks.

Note that the parcels of potentially developable land identified incorporate the findings of the composite informants and constraints analysis (identifying 'developable', 'tread lightly' and 'no-go' area) tabled by Louw and Dewar in August 2007.

Two cautionary notes need to be added to this assessment.

Firstly, the larger boundaries of land parcels identified on the accompanying map should not be taken to imply that development can occur ubiquitously right up to the boundaries: actual proposals still need to respect the informants and constraints identified earlier. Rather, they represent an attitude: that development should take the form of a (internally and externally) coherent, villages with hard, fixed edges defined by tree planting. Particularly, development should not take suburban form. The edges of the parcels also acknowledge the dominant orthogonal geometry of the surrounding agricultural land.

Secondly, the indicators advanced here suggest nothing about how and in what form development should occur within the land parcels: a matter of considerable importance. Indicators and guidelines on this will be tabled in approximately one week.

Part 1. Points of Clarification

1. Access

- Are the sections of road infrastructure indicated with a cross on the attached map proposed to be discontinued or not?
- Where and how many are the access points and controlled gates?
- How many and where are the river crossings and road underpasses?
- Is the connecting spine to the South of the R310 which is shown lightly on the plan proposed for development or not?

Concern

The primary concern is that the network of access is used to create what are, in fact, structurally gated communities or 'two worlds': a 'world' of integrated poorer communities who have very little to do with a second 'world' of interconnected wealthy settlements. The central principles of integration; settlement reinforcement and authenticity are, in our view, non-negotiable.

2. Scale

- What is meant by a 'retirement and hospitality precinct'?
- What is meant by a 'conservation estate'?
- How much, where and in what form does the proposed development take?

Concern

The scale of development is clearly an issue. The proposal is not clear about how much development, where and in what form the development will take. However, in this phase, gaining agreement about structural clarity of development is more significant than numbers.

3. The Dominance of Agriculture

- Clarify the footprint of the proposed working farm and the (spatial) functional relationships which support this activity.

Concern

The issue of maintaining the dominance of working agriculture is central to authenticity and the character of the place. This requires that the core of the farming area is not fragmented through development. It is not clear from the proposal where the inviolate edges of the working farm lie. An attempt has been made in part 2 of this document to clarify this.

4. The Form of Development

Erven depicted on the plan have a standardized footprint of around 1200 sq metres. Is this notional only?

Concern

Two central concerns underpin this query.

- (a) Uniformity.
The use of a standardized erf size will lead to unrelenting monotony. Within villages, a variety of erf sizes (and thus housing opportunities) should occur.
- (b) The size of 1200 sq metres is, when applied at scale, quintessentially suburban - a model which is not sustainable and which the state is seeking to move away from. This size is neither 'village' or 'arcadian'.

5. Landscape Language

The concept shows considerable extents of planted routes. Is this notional?

Concern

Historically, the pattern of planting is of four kinds.

- groves of trees planted to provide shade and to announce settlement

- the selective, ceremonial, use of avenues to mark approaches of particular importance. Avenues of this kind are direct and always terminate on a focal point. The patterns indicated on the proposal are not of this kind: they are simply trees lining roads and they reduce the impact and structural significance of the avenues

- windbreaks

- the orthogonal geometry of agriculture

This selective use of planting should be played through in the concept.

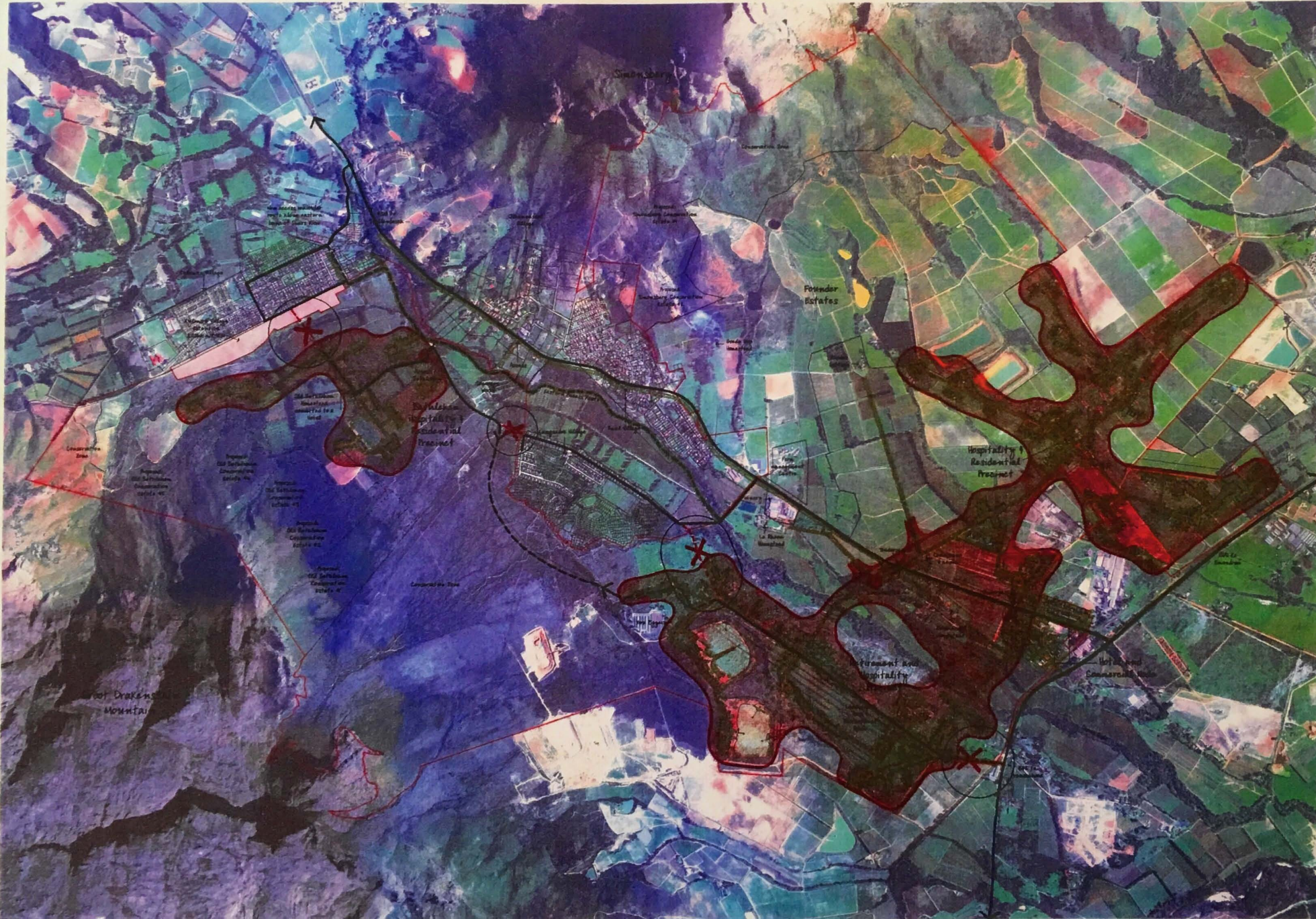
Part 2: Design Indicators

In order to facilitate the process, the structural implications of the constraints and informants identified in August 2007 are played through in the accompanying map. The provision identified in the introductory remarks pertain.

Conclusion

These queries and comments are offered constructively, as a response to the concept tabled by Dennis Moss and Associates. We stand ready to elaborate these issues, if required.

ENVIRONMENTAL AND HERITAGE RESPONSES TO THE INITIAL PROJECT



BOSCHENDAL

SECOND ROUND ASSESSMENT
OF
PROPOSED BOSCHENDAL
DEVELOPMENT
DATED 4TH DECEMBER 2007

BAUMANN & WINTER
HERITAGE CONSULTANTS

PIET LOUW AND DAVID DEWAR
ARCHITECTS, URBAN DESIGNERS & PLANNERS

**SOME INITIAL COMMENTS ON BOSCHENDAL PLANNING AND DESIGN
PREMISE DATED 27TH MAY 2008**

(Comments are cross referenced with various components of the plan proposals)

To be read in conjunction with email forwarded to Doug Jeffery, Boschendal and DMP on the 6th June 2008.

1. The agricultural core of the working farm has been retained with development located on the edges of this core predominantly to the north. However, there is a need to understand how the concept of the agricultural super block is expressed elsewhere across the estate. There is also the need for a clear definition of the various components of the working farm and relationships between these components in terms of ownership, farm management and farming operations. These issues need to be resolved spatially in terms of a diagram. Comment from the Department of Agriculture is also important.

The extensive use of tree belts within the agricultural landscape is questioned. Clarity on their agricultural role is required. There is a concern that their role is largely ornamental or as a visual screening device. There is also the concern that the proliferation of tree lined routes across the landscape does not reflect a hierarchical route structure and the traditional role of tree planting in accentuating higher order routes.

2. There is concern regarding the proposed use of a landscaped earth berm to screen the proposed retirement village from view from the R45. The use of berms is not appropriate along a major scenic route such as the R45. They serve to block views into the landscape.
3. There is concern regarding the lack of connectivity of the route structure. Security concerns need to be addressed but there are alternative ways of accommodating these requirements, e.g. the provision of non-motorised access (bicycle or pedestrian) between the retirement village and Lanquedoc. The preference is for the use of existing route structure rather than new routes which promote self-containment and lack of connectivity. In principle, the proposed new river crossings should not occur at the expense of the existing route structure.
4. The siting of the proposed retirement village is considered appropriate in terms of its relatively degraded context and low visibility. However, the garden city layout is considered inappropriate within the surrounding heritage context.
5. The adaptive reuse of the hostel site should include a semi-public or public component with appropriate means of interpretation of its social-historical

value. The fabric of the main administration building should be retained for this purpose.

6. The interface between the central precinct and the Boschendal homestead precinct needs to be carefully resolved, especially the treatment of the proposed hotel. Other comments regarding the central precinct include the following:
 7. Consideration should be given to a more urban quality of the precinct, especially at the entrance to the precinct along the R310. The concept of development being structure around a positive public space needs to be explored further. Opportunities exist for higher densities and mixed uses. The opportunity also exists for the triangular space at the entrance to Cannery Row to be integrated into a public space related to the R310. Similar to the Pniel church werf.
 8. The low level crossing behind the Boschendal homestead is probably the best location in terms of the woodland setting and existing geometries. However, of concern is a proposed new river crossing immediately adjacent to an existing one.
9. Western precinct
 - 9.1. Node 1: It is suggested that the layout be reconfigured to follow the principles of "lateral enclosure" and "edge continuity". The current form is suburban and introverted.
 - 9.2. Node 2: The footprint of the development should not exceed the existing footprint/coverage. All mature trees must be retained. The proposed node between the dams is questioned. There is no logic to proposed location apart from the existing cottages.
 - 9.3. Node 3: The extension of the node towards node 2 is questioned. Need to allow for greater distance between nodes to retain a sense of agricultural continuity between different nodes.
 - 9.4. Node 4: The node should feed onto the spine. It has no apparent logic in isolation away from the spine. Soils?
 - 9.5. Node 5: The densities should be higher along the road and should follow the principles of "lateral enclosure" and "edge continuity". The concept of a village street rather than a through road should be adhered to. The opportunity for a village square/high density node related to the R44 not been optimised. Similar to Simondium node and concept of "beads on the string".
 - 9.6. Node 6: There is insufficient distance from Node 3. A larger distance between the nodes is required to create a sense of agricultural continuity. Similarly, the size of the gaps along the western "arm" is questioned. The two smaller nodes should not exceed the footprint of the existing "disturbed" areas.

9.7. Node 7: There is concern regarding the almost continuous built form along the route. The built form should result in "pulses" of activity along the route with an equal balance between built form and agriculture. There is concern regarding sense of "sameness" in terms of the treatment of different nodes and with no distinction between tread lightly and development areas.

10. There is concern regarding the combined impact of three underpasses on the scenic drive qualities of the R310. The proposed underpass (1) could perhaps be argued as appropriate in terms of providing a connection between farming operations either side of the R310. But there is a need to understand more about these farming operations and how they are expressed spatially. Such an underpass would need to be very low key and carefully detailed. The proposed underpasses (2) and (3) are seriously questioned. The combined impact of three underpasses will change the nature of the road and are likely to promote separation rather than integration.

11. Some form of connectivity and linkage must be provided along the secondary route system between the R310 and the R45. Importantly, the route must be kept "open" in order to not exclude its potential of becoming a public route in the future.

12. Southern Precinct. There is a need to check the contours and visual sensitivity issues in order to comment on Nodes 3, 4 and 5. However, Nodes 1 and 2 appear to be OK. There is a lack of clarity regarding the Founders Estates type development nodes 1-7. There is a general lack of clarity regarding settlement structure and the agricultural super block concept. The proposed housing component appears to dominate the landscape.

13. It is not clear why the Kylemore extension has not been included in the proposals for the Southern Precinct.

Sarah Winter & Nicolas Baumann
8th June 2008

ENVIRONMENTAL & HERITAGE ANALYSIS

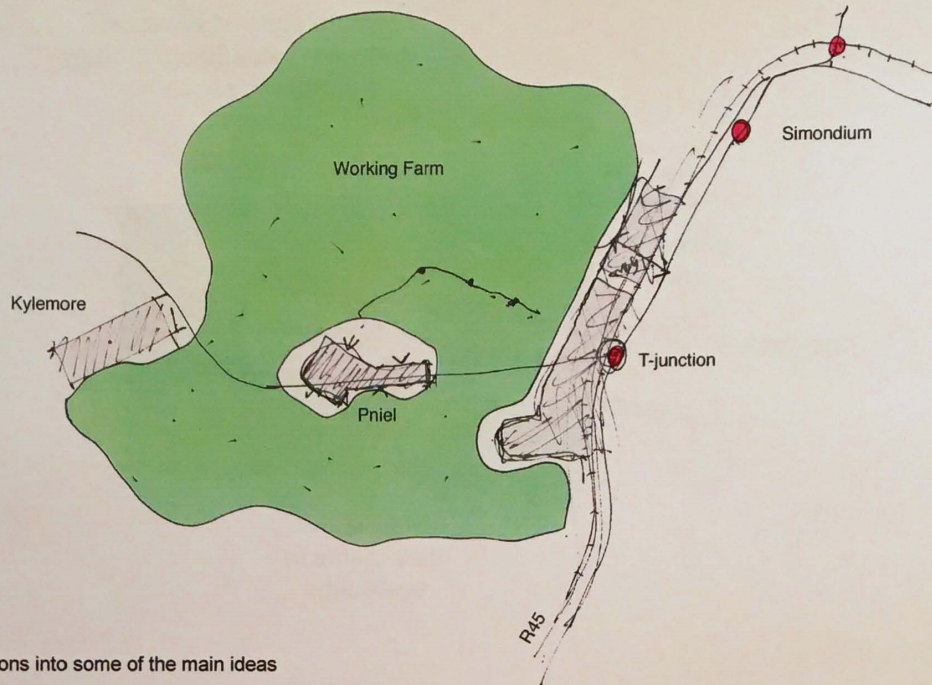
A DIAGRAMMATIC INDICATION OF THE SPATIAL RELATIONSHIPS SUGGESTED BY THE ENVIRONMENTAL AND HERITAGE INDICATORS

BOSCHENDAL
HERITAGE AND ENVIRONMENTAL INDICATORS
7th MARCH 2008



PIET LOUW AND DAVID DEWAR ARCHITECTS, URBAN DESIGNERS & PLANNERS
BAUMANN & WINTER HERITAGE CONSULTANTS

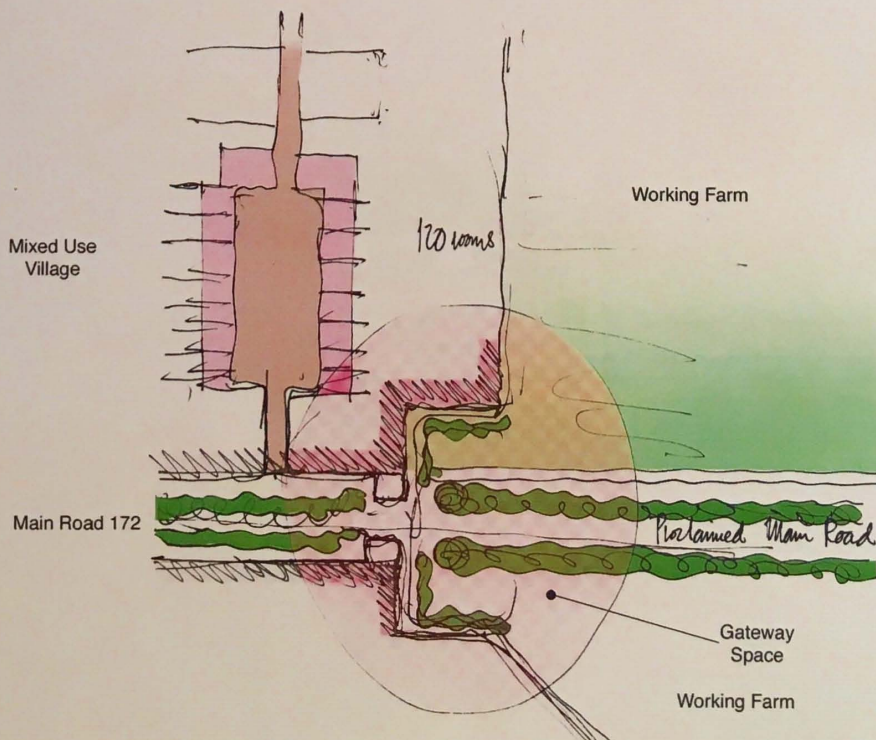
SOME DIAGRAMMATIC EXPLORATIONS OF IDEAS AS PART OF ON-GOING INTERACTION BETWEEN THE PLANNING AND HIA/EIA TEAMS



Diagrammatic explorations into some of the main ideas

- Consolidate the working farm, as the most positive environmental issue
- Push new development to the edges
- Reinforce existing movement and utility infrastructure, as an important dimension of authenticity.

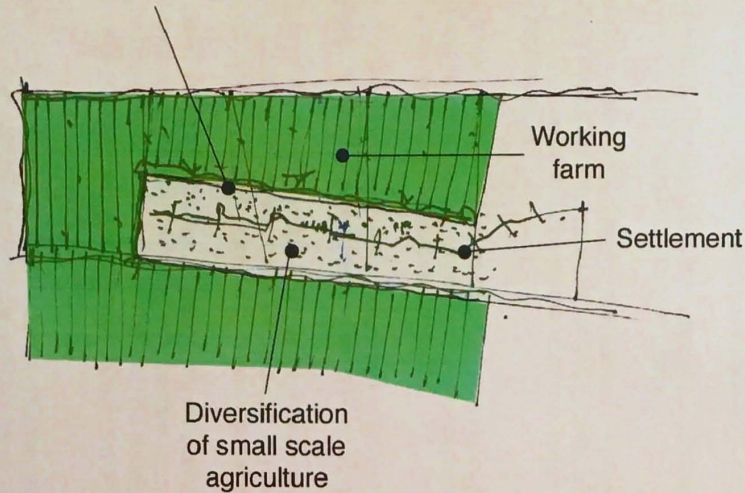
SOME DIAGRAMMATIC EXPLORATIONS OF IDEAS AS PART OF ON-GOING INTERACTION BETWEEN THE PLANNING AND HIA/EIA TEAMS



Reinforcing the emerging urban corridor along R45 and creating a gateway space off it, to announce entry into a new system of smaller settlements ('beads on a string').

SOME DIAGRAMMATIC EXPLORATIONS OF IDEAS AS PART OF ON-GOING INTERACTION BETWEEN THE PLANNING AND HIA/EIA TEAMS

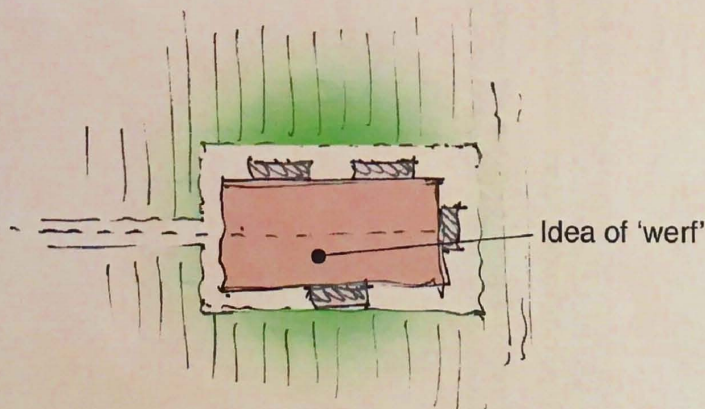
Tree belts as edge making
(strong geometries reflecting
the idea of 'werf')



The idea of small enclosed and defined settlements, the importance of spatial and social 'hearts' and the diversification of agriculture, both commercial and more local.

ENVIRONMENTAL & HERITAGE ANALYSIS

SOME DIAGRAMMATIC EXPLORATIONS OF IDEAS AS PART OF ON-GOING INTERACTION BETWEEN THE PLANNING AND HIA/EIA TEAMS



The idea of small enclosed and defined settlements, the importance of spatial and social 'hearts' and the diversification of agriculture, both commercial and more local.

**BOSCHENDAL ESTATE
COMMENTS ON REVISED PROPOSALS DATED 15TH JULY 2008**

The heritage consultants support the revisions to the proposals for Boschendal Estate as reflected in the latest plans dated 15th July. More specifically, the following principles are supported from a heritage perspective:

- The shifting of new development towards the edges of the working farm in order to ensure that this agricultural core remains intact.
- The introduction of a variation in plot sizes within each of the proposed development nodes ranging from the clustering of smaller units around a central space or at a cross route condition to the location of larger plots on the edges of the settlement.
- The location of discrete development nodes within an agricultural landscape. The distance between the proposed development nodes is regarded as sufficient to encourage a sense of agricultural continuity.
- The introduction of a diversity of agriculture, especially in terms of providing an interface between the development nodes and the core working farm.

As outlined above many of the major heritage issues and concerns have been addressed in the latest proposals. However, there are a number of remaining issues and concerns still requiring further resolution. These include the following:

- The intrusion of development into the homestead setting of Excelcior. The proposed development within "Node 3" intrudes into the view cone forming the backdrop to the homestead. It is recommended that this development node be reconfigured to ensure that development does not encroach into this view cone.
- The footprint of the core working farm and its interface with the residential development in terms of an agricultural buffer needs to be clearly defined. The tree planting pattern needs to reflect this agricultural pattern.
- At a sub-regional level, the issue of public access and the need for the reinforcement of the movement network and settlement structure is still of concern. The provision of a secondary movement route which is connected to the main system should be explored. It is felt that this issue can be resolved without compromising concerns for security and privacy. A suggested concept is illustrated in the accompanying diagram.

- The retention and enhancement of the experiential qualities of the R310 is critical in terms of its overarching heritage and public role in the Valley. Therefore action projects aimed at improving its experiential qualities are to be encouraged, e.g. upgrading of the Priel Church Werf/entrance to Goede Hoop and intersection with the R45. Care must be taken to address the variation of experiences along this scenic route corridor, e.g. open versus closed views. The tree planting pattern and edge treatments must reflect this variation. Of concern in this regard is the proposed continuous pattern of tree planting on either side of the R310.
- Related to the above concern, is the impact that new development will have on the road infrastructure. It is critical that the main public routes are not over-engineered. A traffic impact assessment needs to address this issue.

We are of the opinion that the above mentioned remaining issues and concerns can be resolved and look forward to being of assistance in this regard.

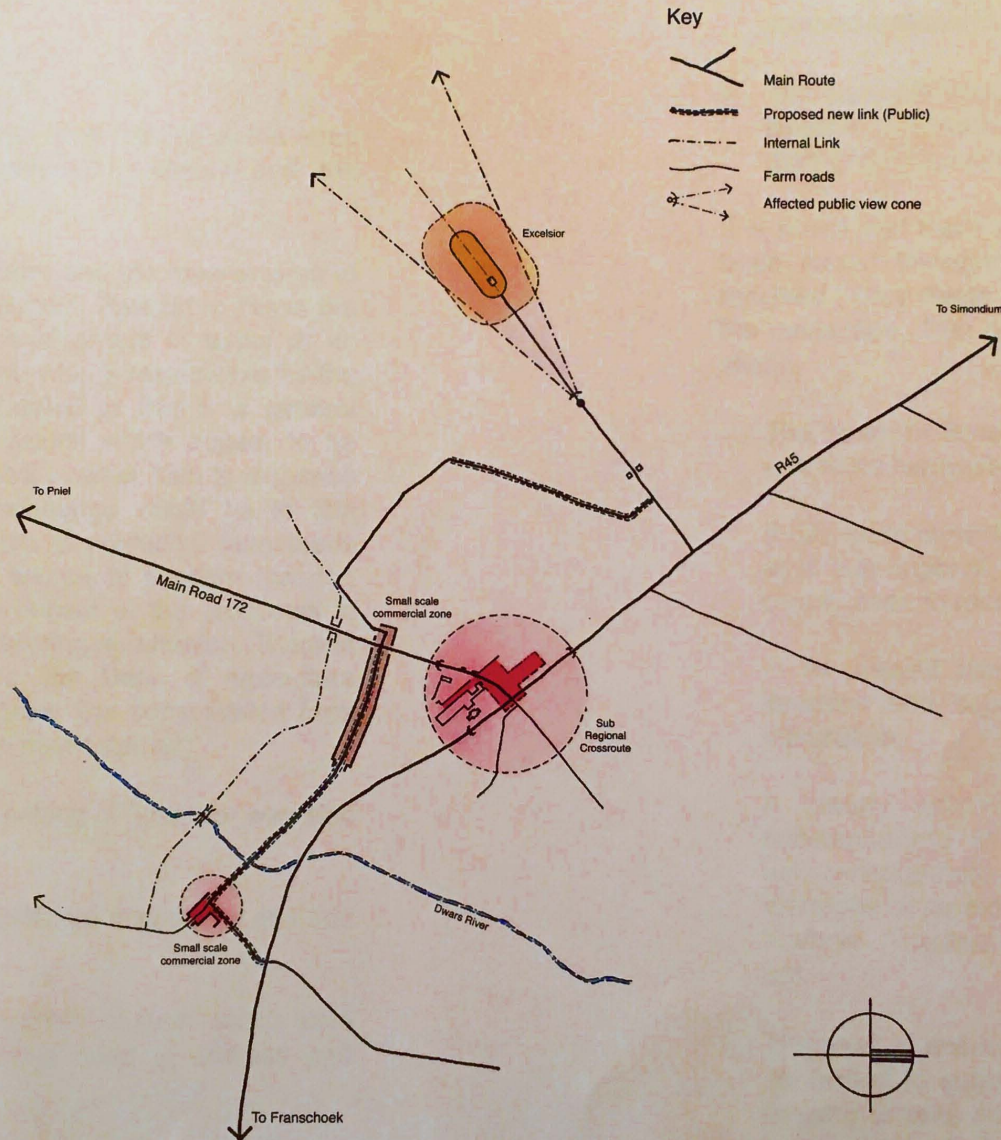
Piet Louw
Dave Dewar
Sarah Winter
Nicolas Baumann

20th July 2008

ENVIRONMENTAL & HERITAGE ANALYSIS

PIET LOUW AND DAVID DEWAR ARCHITECTS, URBAN DESIGNERS & PLANNERS
BAUMANN & WINTER HERITAGE CONSULTANTS

PROPOSED PUBLIC INTERFACE



**COMMENTS ON BOSCHENDAL SUSTAINABLE DEVELOPMENT INITIATIVE:
PROPOSED SITE DEVELOPMENT PLAN: ALTERNATIVE 4, DATED 11 SEPTEMBER
2008 (DRAFT TWO)**

Please find herewith our comments on the abovementioned plan which was presented at the open house meeting on the 11th September 2008. These comments should be read in conjunction with the responses to previous iterations of design development, dated November 2007, February 2008, May 2008 and 15 July 2008.

The last communication included, inter alia, the following:

- The need to resolve recurring concerns at the sub-regional level relating to the need to reinforce the existing settlement structure and movement network and the associated issues relating to public access.
- The need to clearly identify the footprint of the working farm and the mechanisms to be put in place to ensure the efficacy of the 99 year leasehold. Related to this is the need for clarity on the interface with the residential development in terms of an agricultural buffer. The nature and extent of this buffer, and who is responsible for the farming operation, needs to be clearly established. Related to this is a general concern relating to the nature of the underlying subdivisions which appear to be arbitrary and related to minimum farm sizes and marketability rather than in response to natural attributes or historical patterns. A logical sequence would be to first determine the carrying capacity of the landscape in terms of additional farmsteads and then to determine the subdivision pattern. It is a source of concern that the Department of Agriculture evidently will not assess the impact of the proposals in terms of the 99 year lease but rather in terms of the underlying subdivision. There is thus a duality in terms of what is being assessed i.e. the Dept. of Agriculture assessing the 24 farming units, and the EIA/HIA assessing the consolidated farm which could give rise to a great amount of confusion in the public domain.
- The intrusion into view cones, particularly the homestead setting of Excelsior was also identified as a source of concern.
- The need to ensure that the experiential qualities of the R310 are maintained and that all routes retain a rural quality.

Subsequent to the open house meeting there have been a number of submissions from interested and affected parties which the heritage consultants need to address and communicate to the design team.

Heritage Western Cape, the statutory authority responsible for heritage management at a provincial level, has expressed concern regarding the potential extent and scope of development proposed and the precedent that could be set. It also expressed concern that the development proposals resembled urban sprawl and were inappropriate within a very sensitive cultural landscape. The proposals were considered inappropriate for an

area that had been identified for possible World Heritage Status. (BELCOM minutes dated 22 January 2009).

Similarly, the Cape Institute of Architects has raised the following concerns:

- The potential negative impact on the possible World Heritage Site status of the area.
- The lack of connectivity of the routes serving the proposed villages and the perception of isolated, gated suburban enclaves, separating the rich from the poor.
- The overall scale of development particularly that of the retirement village and concerns related to the likelihood of a contrived and sanitised suburban environment.
- The possible impact of the proposed hotel site on the iconic heritage value of the Boschendal Manor House, particularly in terms of the significant axis onto the front door of the homestead and the werf beyond.

It is noted that there are recurring themes related to the core heritage issues that have been raised throughout the design development process and which are yet to be resolved. They relate primarily to the issue of authenticity and how this is expressed in the landscape. Two consequential concerns have been raised from the inception of the study:

- The need for development to reflect a structural logic in terms of settlement pattern and route hierarchy.

It has been consistently argued that there is a structural pattern evident in the Valley at a sub-regional level and for any development proposal to succeed; it must be clearly seen to reinforce and enhance this pattern, not negate it.

In its present configuration, the present plan is considered to reflect concepts of isolation and separateness with limited points of access and opportunities for integration.

A clearly articulated, unambiguous public space structure, would contribute substantially to the development of an integrated settlement-pattern which reflects the acknowledgement of a transformed society. Such an integrated system with a hierarchy of permeability and publicness can bring collective benefits to the valley as a whole. A pattern of isolated villages with limited connectivity and public access will not.

- The need to ensure the dominance of working agriculture has similarly been identified as central to authenticity and character of place. This requires that the core of the farming area is not fragmented through development. Development should also be rural, not suburban, and should always remain subsidiary to the agricultural component. How to achieve the critical balance between agriculture and development and at what threshold a landscape is perceived as losing its agricultural rural character and acquiring a suburban one is not clear and is difficult to quantify. However, it is evident from the public process so far, and from the comments of such heritage organizations such as HWC and the CIA Heritage Committee that the appropriate

balance has not been achieved and that there is simply too much development on the site.

The above two core concerns are regarded as key heritage issues which need to be resolved at the macro scale. While precinct level analysis can continue, detailed assessment would only be able to be finalised once these underlying structural concerns have been resolved.

The following heritage issues related to the Alternative 4 SDP deal more specifically with detailed spatial concerns, but reflect the broader heritage issues referred to above:

1. There appears to be minimal differences between the nodes in the various precincts. It is evident that there are a variety of environmental, visual-spatial and historical differences which make each precinct unique in character but this is not reflected in the urban form illustrated in the SDP. The baseline studies clearly distinguished between areas which could be considered for development and "tread lightly" areas. This distinction is similarly not evident in the layout and urban morphology illustrated.
2. The intrusion of development into the homestead setting of Excelsior is still evident with the proposed development of Node 3 intruding into the view cone forming the backdrop to the homestead. It is recommended that this development node be reconfigured to ensure that development does not encroach into this view cone.
3. The lack of any point of access linking the eastern precinct to the R45. It has been suggested that a route linking Lanquedoc to the R45, parallel to the river and the R310, would reinforce the movement hierarchy evident in the Valley and could provide a range of collective benefits to the Valley as a whole. Related to this lack of connectivity is the entrance proposed at the entry to the eastern precinct from the south, effectively isolating Lanquedoc from the proposed development. The notion of entrance presupposes perimeter fencing around this precinct.
4. In terms of a sub-regional movement hierarchy there also appears to be an opportunity for a public route linking the eastern central and western precincts, parallel to the R45. This would enable the proposed villages to function as "beads on a string" rather than the present isolated enclaves indicated in the SDP.
5. The rural quality of the R310 appears to be compromised by a series of roundabouts. These devices tend to have an suburban engineered traffic dominated character to them which is inimical to the rural quality envisaged. They do not appear to be consistent with the approved upgrading of the R310 which is about to be implemented.
6. The extent and spatial definition of the central precinct comprising the Boschendal and Rhone homesteads needs to be clarified. Related to this is the key issue of public access and management. The proposed entrance to Boschendal immediately adjacent to the proposed underpass linking the central and western precincts is potentially problematic in that it could present an over-engineered, suburban character as discussed above.

7. Similarly the purpose of underpass 3, linking the proposed hotel to the western precinct is questioned, especially as there is an at grade intersection some 150m to the north. The perception of separateness and isolation is reinforced.
8. There needs to be clarification regarding the development rights attached to the farm subdivisions. Development of homesteads on farms, 1, 2, 3 and 4 in the western precinct in particular, could have a high negative visual and heritage impact if strict development controls are not implemented.
9. Similarly development on the Old Bethlehem and Simonsberg Conservancy Estates needs to be carefully controlled to minimise visual impact.
10. The detailed design of the hotel and commercial precinct needs to be clearly evaluated in terms of its spatial proximity to the Boschendal homestead and the powerful axis established by the homestead, werv and tree lined avenue. It is suggested that there should be a positive response to the geometries evident.
11. There needs to be clarification regarding the positioning of some of the development nodes in relation to contour lines and tributaries. There appears to be the possibility of some intrusion into drainage lines, e.g. Node 4 at Bethlehem.
12. The visual impact assessor has noted the positioning of nodes 3, 4, 5, 6 and 7 on a visually exposed landscape which could impact on the R45 scenic route and these nodes are located in relatively close proximity thus giving the visual impression of suburbia rather than hamlets. Several of the nodes are only 100 to 200m apart which, if observed from the scenic routes and surrounding viewpoints, will tend to visually merge together. As a general principle, the spaces between nodes should be larger than the node itself.

It is suggested that the above comments are made in the spirit of cooperation and in the interests of the place-making qualities and heritage value of the Valley as a whole. They represent an attempt to build on the range of comments we have made in the past and to incorporate the comments made in response to the public participation process, including the comments made by Heritage Western Cape.

Regards

David Dewar,
Piet Louw,
Sarah Winter,
Nicolas Baumann
Bernard Oberholzer

19th February 2009