
UPPER GREEN VALLEY

**PROPOSED TOWNSHIP
DEVELOPMENT ON PORTIONS 28 AND
32 OF THE FARM WITTEDRIFT 306
BITOU MUNICIPAL AREA**

PLANNING REPORT FOR THE EIA PROCESS

February 2021



on behalf of the Bitou Housing Team and the Bitou Municipality

CONTENTS

1. INTRODUCTION.....	4
2. ADMINISTRATIVE	5
3. LEVEL OF PLANNING	5
4. DEMAND AND SUPPLY OF SUBSIDIZED AND AFFORDABLE HOUSING	5
4.1 DEMAND FOR SUBSIDY HOUSING.....	5
4.2 ESTIMATED SUPPLY OF HOUSING IN THE UPPER GREEN VALLEY PROJECT	5
5. ALTERNATIVE SITES.....	6
6. STATUTORY FRAMEWORK	6
6.1 Spatial Planning Land Use Management Act, no 16/2013 (SPLUMA).....	6
6.2 Western Cape land use planning act, no 3 of 2014 (LUPA).....	7
6.3 GARDEN ROUTE SPATIAL DEVELOPMENT FRAMEWORK, 2017 (SDF).....	7
6.4 BITOU Spatial Development Framework, 2019 (BSDF).....	7
6.5 BITOU HOUSING SETTLEMENT PLAN	7
6.6 INTEGRATED DEVELOPMENT PROGRAMME (IDP).....	7
6.7 BITOU LAND USE PLANNING BYLAW	7
6.8 ZONING SCHEME BY-LAW	8
7. CHARACTERISTICS OF THE SITE.....	8
7.1 LOCALITY	8
7.2 SITE CHARACTERISTICS.....	8
7.2.1 NATURAL ENVIRONMENT	8
7.2.2 PHYSICAL FEATURES	8
8. SPATIAL CONTEX OF THE SITE.....	8
9. THE LAYOUT.....	8
9.1 LIMITING FACTORS.....	8
9.2 OVERARCHING DESIGN CONCEPT	9
9.3 HOUSING AND TYPOLOGIES.....	9

PROPOSED TOWNSHIP DEVELOPMENT ON PORTIONS 28 AND 32 OF THE FARM WITTEDRIFT 306
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9.4 LAND USES PROVIDED.....	9
9.5 DENSITY.....	10
10. NON-RESIDENTIAL LAND USES	10
10.1 SOCIAL FACILITIES	10
10.2 OPEN SPACES, Parks and play lots	11
10.3 Economic opportunities	11
11. ACCESS AND TRAFFIC FLOW	11
11.1 ACCESS TO THE SITE	11
11.2 PUBLIC TRANSPORT	12
12. BULK SERVICES.....	12
13. MEETING THE SPLUMA PRINCIPLES.....	12
14. THE WAY FORWARD: PLANNING APPLICATIONS	12
15. CONCLUSION	12

REPORT ON SPATIAL PLANNING, REZONING AND SUBDIVISION

1. INTRODUCTION

The purpose of this report is to explain and provide information with regard to the spatial planning and township layout issues pertaining to the Upper Green Valley housing project. The report must be read together with the latest 2019 layout plan and specialist reports for the purposes of the EIA process at the time of the commencement of the process.

The said Upper Green Valley housing project referred to in this report consists of the rezoning, consolidation and subdivision of Portions 28 and 32 of the Farm Wittedrift no 306. To distinguish the project from other projects in the existing Green Valley, the site is referred to as Upper Green Valley.

More issues may be identified during the EIA process that will also be addressed in the formal rezoning and subdivision application. The issues discussed hereunder are the known key planning issues that affect the principles of the proposal at the time of writing.

The plans to be read with this report at the time of writing, are the following:

1. Green Valley Preliminary Framework & Rezoning – Locality plan.
2. Plan GV/SITE/05 of 12 June 2019 – Preliminary subdivision plan for rezoning and subdivision.
3. Consolidation, subdivision and rezoning of Portion 28 and 32 of Farm 306.

Various specialist reports are being prepared during the writing of this report that should be read together with this report. Pre-liminary reports available at the time of writing are:

- Fresh Water Habitat Impact Assessment – SES, March, 2017
- Final Report on the Socio-economic Surveys in Harkerville (Forest View Barracks), Green Valley (Wittedrift) and Kurland Village (The Crags) – Embale Shamba, 2016
- Socio-economic Baseline Scoping Report - T Barbour, 2017
- Proposed PRT Low Cost Housing Units – Keith Lurie Architecture
- Electrical Services report - CMB Electrical Engineers
- Preliminary capacity analysis of the bulk water & sewer services - GLS, June 2017.

Quick facts of the layout plan

- **730 residential units – ± 359 single, ± 371 double storey**
- **Developable land = 19,35 ha**
- **Gross density on developable land = 38 units per ha**
- **Nett residential density = 50 units per ha**
- **Road length = ± 5 000 m**
- **Length of road per unit = 6.8 m**

2. ADMINISTRATIVE

Property	Size (ha)	Owner	Title Deed	Zoning
Portion 28 of Wittedrift 306	219.8077 ha	Bitou Municipality	T61204/2016	Agriculture
Portion 32 of Wittedrift 306	1.7131 ha	Bitou Municipality	T 82917/2001	Agriculture

In general, in this report, the two properties are referred to as 'Upper Green Valley' or the 'site'. It is locally known as "Oppie Koppie".

3. LEVEL OF PLANNING

The layout plan presents preliminary planning which will be adjusted to the latest contour survey of the site and other inputs received during consultations. The high density sites will be further subdivided according to detailed site planning.

A formal subdivision plan will be submitted for formal and final consideration in terms of LUPA.

4. DEMAND AND SUPPLY OF SUBSIDIZED AND AFFORDABLE HOUSING

4.1 DEMAND FOR SUBSIDY HOUSING

The need for housing has to be evaluated in terms of the municipal surveys of the demand for subsidy housing in the Bitou municipal area.

The 2017 Municipal Economic Outlook, as quoted in the SDF, estimates the housing demand at 4 829 families. It must be noted that a large portion of this number consists of backyard dwellers which are known to increase rapidly. The demand could thus be more.

The demand in Green Valley is estimated by the municipal Human Settlements Department at about 970, consisting of 291 families on the data base, 180 backyarders and the balance being those not on the data base and increases in numbers.

4.2 ESTIMATED SUPPLY OF HOUSING IN THE UPPER GREEN VALLEY PROJECT

It is estimated that the project, according to the current layout plan, can provide for ± 730 units. The split between subsidy and affordable housing could be:

Subsidy housing = ± 657 (90%)

Affordable housing = ± 73 (10%)

The preliminary estimates of the typologies are as follows:

Double storey row housing = ± 371 units

Single dwellings = ± 359 units

The number of double storey units is limited by the slopes of the site where the type of housing preferably requires a relatively flat site. The number of high density units is calculated by the length of the street block and the length of the row of units as per the designed typology that could fit into the street block. The typologies are illustrated in a design manual by Keith Lurie Architecture.

5. ALTERNATIVE SITES

This is not a case where alternative sites have to be compared to find the preferred site in the context of Plettenberg Bay. Almost all development sites adjacent to Plettenberg Bay and the rural settlements will be taken up by subsidized housing. It is also the only suitable site adjacent to Wittedrift that could accommodate the required number of units. Even densification in Wittedrift and Green Valley will not provide in the need to the extent that Upper Green Valley will do.

The site for this project forms the first phase of the Upper Green Valley development. It is situated on the flatter part of the site that could be sewered by gravitation. Further developable areas will require more expensive bulk services.

6. STATUTORY FRAMEWORK

The spatial planning legislative framework within which the planning and design of the site is done, consists of the following:

6.1 SPATIAL PLANNING LAND USE MANAGEMENT ACT, NO 16/2013 (SPLUMA)

The spatial principles in the Act represent an approach to address the spatial injustices of the past and to prevent unsustainable development.

The five founding principles as set out in Section 7 (a) to (e) of SPLUMA that apply throughout the country and to the all SDFs are (as quoted from the Eden SDF¹):

- 1. Spatial Justice:** Redressing past spatial and other development imbalances through improved access to and use of land by disadvantaged communities.
- 2. Spatial Sustainability:** Relates to the need to promote spatial planning and land use management and land development systems that are based on and promote the principles of socio-economic and environmentally sustainable development in South Africa.
- 3. Efficiency:** The spatial efficiency pillar places significant importance on the optimization of existing resources and the accompanying infrastructure, including the oiling of development application procedures in order to promote growth and employment.
- 4. Spatial Resilience:** Relates to mitigation, adaptability and innovations to secure communities from spatial dimensions of socio-economic and environmental (climate change) shocks.

¹ Draft Eden Spatial Development Framework, 2017

5. **Good Administration:** Spatial planning vision and objectives are not only highly dependent upon a strong co-ordinating role of central government, but is also predicated upon good governance mechanisms, incorporating meaningful consultations and coordination with a view to achieving the desired outcomes across the various planning spheres and domains.

Based on these principles, a township layout needs to be designed with due consideration to the spatial dynamics of the area and how it will function in the future residential neighbourhood.

6.2 WESTERN CAPE LAND USE PLANNING ACT, NO 3 OF 2014 (LUPA)

LUPA, based on the national legislation for spatial planning (SPLUMA). reiterates the land use planning principles of SPLUMA which must be applied in land use planning.

6.3 GARDEN ROUTE SPATIAL DEVELOPMENT FRAMEWORK, 2017 (SDF)

The Garden Route District SDF, among many other directives for efficient growth of the region, promotes containing urban growth to sustain a stronger economy, mitigate disaster risks and to protect the environment. It also promotes the development of settlements where the access, economic, social and educational needs are met. The densification of the urban areas and a more effective use of space for large urban uses are emphasized, including a more effective design of school sites.

6.4 BITOU SPATIAL DEVELOPMENT FRAMEWORK, 2019 (BSDF)

The BSDF acknowledges Wittedrift, which includes Green Valley, as rural node within the urban edge. The site concerned is included in the urban footprint – see figure 59 in the SDF. It is proposed that the local economy of Wittedrift be enhanced by being a service centre for surrounding agricultural activities and agro-industries as well as by small home base retail and service businesses.

6.5 BITOU HOUSING SETTLEMENT PLAN

The Housing Settlement Plan (HSP) is dated 2010 and the housing demand figures are out of date. The areas identified for housing have since that date been analyzed and more clearly demarcated. No mention was made of a site at Upper Green Valley. The present demand for subsidized housing – see par4 - gives a more accurate picture of the demand than the HSP.

6.6 INTEGRATED DEVELOPMENT PROGRAMME (IDP)

The latest 2017 – 2022 IDP includes the SDF proposals of which the development of Upper Green Valley forms part.

6.7 BITOU LAND USE PLANNING BYLAW

The Bitou Planning Bylaw prescribes the procedure for applying for a change in land use, rezoning and subdivision and will be complied with in the application that will follow.

6.8 ZONING SCHEME BY-LAW

The municipality is still busy with the compilation of their new Zoning Scheme By-law. The new erven for the proposed layout will be zoned in terms of this By-law. This By-law will be based on the Provincial Standard Draft Zoning Scheme By-law and includes adjustments made for local circumstances.

7. CHARACTERISTICS OF THE SITE

7.1 LOCALITY

The site is located on the plateau above Wittedrift and Green Valley with the only practical vehicular access to it presently being through the Green Valley settlement.

7.2 SITE CHARACTERISTICS

7.2.1 NATURAL ENVIRONMENT

The natural environment will be comprehensively described in the specialists' reports yet to be finalized. It is observed from their preliminary findings that the vegetation is of critical biodiversity nature in surrounding areas.

7.2.2 PHYSICAL FEATURES

The undulating landscape on the ridge makes an attractive neighborhood possible. The steep valleys with natural vegetation as described in the specialists' reports are form-giving elements. Furthermore the steep slopes on all sides of the site will necessitate quite steep gradients for the possible access roads.

8. SPATIAL CONTEXT OF THE SITE

The Wittedrift / Green Valley settlement is historically a rural node and has been recognized as such in the 2019 SDF as well as in previous SDF's. Even though it is a node apart from Plettenberg Bay. It is economically and sociologically tied to the main town.

The CBA protected areas and flood plains in and around Wittedrift/Green Valley defines the urban footprint of future expansion of the node, including the site of the proposed settlement. The footprint of the proposed layout is included in the spatial pattern for Wittedrift / Green Valley – Figure 59 in the SDF report.

9. THE LAYOUT

9.1 LIMITING FACTORS

There are a number of constraints that determine the layout on the site:

- Topography – the whole development is surrounded by a slope of more than 1:4.

- Natural vegetation and wetland areas that require a 30m buffer area around them.
- High density housing typology that requires level sites that preferably run along the contours (double row house units).
- Bus and taxi routes that require an easy flowing route running through the area as a collector road system with 20m and 16m reserves. Further parameters for these roads are access junctions at 100m intervals and limited high density housing fronting on the roads because of the high number of narrow erven that would then gain direct access.
- Low lying areas that would have required sewer pump stations due to the high maintenance costs, are avoided.

9.2 OVERARCHING DESIGN CONCEPT

Taking into account the constraints mentioned above, sound planning design and engineering principles were applied to produce the framework for the layout and erven. In general the design principles of the 'Red Book'² were followed. The contours of the site had to be taken into account in designing the street blocks in order to avoid excessive gradients for streets and to provide level areas for the rows of buildings.

The above constraints with the limited area that is developable, left no options for alternative layouts. A central main street from north to south across the flat part of the site forms the spine around which the rest of the layout was developed. The street pattern had to be linked to the possible access roads to the site. Community uses were placed along the main street.

A street hierarchy and pattern is applied that allows for efficient flow of public traffic. The main traffic distributors are 20m and 16m wide.

9.3 HOUSING AND TYPOLOGIES

The typologies that are used aim at high density and consist of double storey row units on the flatter sites and single units which could be double or single storey, on the steeper sites. Sketches of the typologies are presented in the manual *Proposed PRT Low Cost Housing Units by Keith Lurie Architecture* and they have been successfully implemented in New Horizons. The erf sizes are determined by the extent of each typology and housing unit.

The high density buildings consist of double storey units on erven that will be 4 m wide. For variety in the design of the block, the blocks are designed with single storey units on the sides. Erf sizes for the single dwellings will vary between 250m² and 300m². See also par 9.6 below on the density achieved in the layout.

9.4 LAND USES PROVIDED

The land uses in the layout are determined by the required social facilities as mentioned in par 10.

² Guidelines for Human Settlement Planning and Design – CSIR, 2005

The principle of clustering land uses which are of social importance is promoted in the spatial planning documents such as the PSDF and the Eden SDF. On a small scale it is done here at the street crossings where the main distributor roads meet.

9.5 DENSITY

The gross density on the developable land is 38 units per ha and the nett residential density is about 50 per ha. The density achieved is relatively high in comparison with the conventional layouts and the 6.8m street length per unit indicates an efficient layout.

10. NON-RESIDENTIAL LAND USES

10.1 SOCIAL FACILITIES

Sites for social facilities were provided according to the guidelines in the Development Parameters for the provision of facilities within Settlements in the Western Cape³.

The facilities in Upper Green Valley must be seen in the context of what is available in Green Valley and Wittedrift and those that are lacking might be provided in the new project. This will require further study to determine the real demand. The provision of sites for facilities must therefore be regarded as preliminary until more information is available.

It has been observed that facilities such as places of worship and crèches require more sites than recommended by the guidelines. The number of sites for these uses is a function of the demand, in a certain sense. Three places of worship are provided instead of the calculated one site. One ECDC is provided because this facility and small creches, are catered for elsewhere in the town and at churches.

UPPER GREEN VALLEY – PROVISION OF SITES FOR SOCIAL FACILITIES				
Land use	Parameter	Size of site	Calculated no of sites	Number of sites provided
Pre-primary school (Early Childhood Development Centre)	1 x 2400 people, 750m or 10 minutes walking distance	300-500m ² building	1	1
Primary school	1 per 3000-4000 people, 1 per 1000 units	2 ha or 2,5 ha with sportsfield	0	1
Secondary school	1 per 6000 people, 1 per 1500 units	3.0 ha	0	0
Clinic	0.125 ha per 5000 people, 5000m maximum	0.05 ha	0	0

³ Development parameters: A Quick Reference for the Provision of Facilities within Settlements of the Western Cape, Western Cape Government Environmental Affairs and Development Planning, 2014

	from users			
Community hall	1 per 10000 people	0.2 - 0.5 ha	0.5	1
Library	1 per 2500 units	0.1-0.2 ha	0.5	0
Place of worship	1 per 500 units, 1 per 2000 people	150 - 3000m ² building, 1 parking bay per 5 seats	1.5	3
Neighbourhood play lots	1 per 250 units, within 500m walking distance	500m ² minimum	3	As many as needed on open spaces
Functional park	1000m ² per 500 units	4000m ²	1	1
Provisional number of dwelling units: 730; estimated population (4 per household): 2920				

10.2 OPEN SPACES, PARKS AND PLAY LOTS

The site is surrounded by large open spaces because of the slopes and vegetation that will provide passive open space and opportunities for recreation. Small open spaces are provided centrally among the residential areas. Play lots can be provided in these spaces. An urban space is provided in conjunction with the business sites.

One functional park is provided with a rectangular form on a flat terrain where informal sport can be played.

The key to successful play lots and active open space is that they should be developed as part of the construction phase and that the community takes ownership thereof.

10.3 ECONOMIC OPPORTUNITIES

The future residents are already part of the local economy of Wittedrift and the nearby Plettenberg Bay. The new neighborhood will mainly be a residential area but the social facilities that will be created, will provide new work opportunities. There is also always a demand for space for entrepreneurs for some or other small business. Therefore two business sites are provided for the needs of residents and local business entrepreneurs. The one site could serve as a business centre with a taxi rank and parking that can be integrated into the site and street design with the open space serving as an urban square for recreation.

11. ACCESS AND TRAFFIC FLOW

11.1 ACCESS TO THE SITE

Various options for feasible access routes were investigated by the engineers. The access road will have to be economical and accessible for taxis and buses. In terms of the principle of social integration there will have to be a link to Wittedrift, even if only a pedestrian way.

Traffic in the neighborhood will flow by means of the road hierarchy in the layout, i.e. a 20m wide major distributor road and 16m streets for public transport and main distribution and 12m, 10m and 8m wide streets in the residential areas.

11.2 PUBLIC TRANSPORT

Public transport in Plettenberg Bay consists of taxi transport only and the service will have to be extended to this new area.

12. BULK SERVICES

The consulting engineers on the project prepared reports on the bulk services required.

13. MEETING THE SPLUMA PRINCIPLES

The layout can be compared with the SPLUMA principles:

SPLUMA Sec 7	Principle	Comments
(a)	Spatial justice	The project concerned aims to contribute to spatial justice to communities and settlements that were previously excluded from the urban structure that was envisaged.
(b)	Spatial sustainability	The project concerned will promote development of land in a location that is environmentally sustainable. The community will be integrated into the economy of the town.
(c)	Efficiency	Upgrading of infrastructure will benefit the whole of Wittedrift. The needs of the community will create a demand for new employment opportunities.
(d)	Spatial resilience	The layout plan and land use management system for the area will ensure sustainable livelihoods in the communities. Disaster management is taken into account in the planned accessibility of the neighbourhood.
(e)	Good administration	The environmental and rezoning processes will ensure participation by all spheres of government and other stakeholders to ensure the approval of an effective new neighbourhood.

14. THE WAY FORWARD: PLANNING APPLICATIONS

After environmental authority is granted, the layout plan will be finalized for approval.

Planning applications required for the development, in terms of Section 36 of LUPA and Section 17 and 20 of the Bitou Land Use Planning Bylaw, will be submitted and are as follows:

- a) Consolidation of Portions 28 and 32 of the Farm Wittedrift no 306.
- b) Subdivision and rezoning of the land portions in the subdivisional area into residential and non-residential erven and a remainder as indicated on the subdivisional plan.

15. CONCLUSION

The site and proposed land use is well situated to provide in the need for housing and complies with the spatial and environmental objectives for the area. The proposed land use planning and layout for the

Upper Green Valley project complies with the SPLUMA principles and will create a well balanced neighborhood that will provide in the housing needs of the area.

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