

DRAFT BASIC ASSESSMENT REPORT

PROPOSED "MT VERNON ESTATE" DEVELOPMENT ON
PORTION OF PORTION 36 OF FARM
BRONKHORST NO 748, PAARL



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July 2016



DEPARTMENT of
ENVIRONMENTAL AFFAIRS
& DEVELOPMENT PLANNING

Provincial Government of the Western Cape

MT VERNON ESTATE
DTAFT BASIC ASSESSMENT REPORT

**Basic Assessment Report in terms of the NEMA Environmental Impact
Assessment Regulations, 2014**

AUGUST 2010

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by DEA&DP in terms of the EIA Regulations, 2014 and must be completed for all Basic Assessment applications.
2. This report must be used in all instances for Basic Assessment applications for an environmental authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as amended, and the Environmental Impact Assessment Regulations, 2014, and/or a waste management licence in terms of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEM: WA), and/or an atmospheric emission licence in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (NEM: AQA).
3. This report is current as of 2 August 2010. It is the responsibility of the Applicant / EAP to ascertain whether subsequent versions of the report have been published or produced by the competent authority.
4. The required information must be typed within the spaces provided in the report. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. It is in the form of a table that will expand as each space is filled with typing.
5. Incomplete reports will be rejected. A rejected report may be amended and resubmitted.
6. The use of "not applicable" in the report must be done with circumspection. Where it is used in respect of material information that is required by the Department for assessing the application, this may result in the rejection of the report as provided for in the regulations.
7. **While the different sections of the report only provide space for provision of information related to one alternative, if more than one feasible and reasonable alternative is considered, the relevant section must be copied and completed for each alternative.**
8. Unless protected by law all information contained in, and attached to this report, will become public information on receipt by the competent authority. If information is not submitted with this report due to such information being protected by law, the applicant and/or EAP must declare such non-disclosure and provide the reasons for the belief that the information is protected.
9. This report must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. No faxed or e-mailed reports will be accepted. **Please note that for waste management licence applications, this report must be submitted for the attention of the Department's Waste Management Directorate (tel: 021-483-2756 and fax: 021-483-4425) at the same postal address as the Cape Town Office Region A.**
10. Unless indicated otherwise, two electronic copies (CD/DVD) and three hard copies of this report must be submitted to the Department.

DEPARTMENTAL DETAILS

CAPE TOWN OFFICE REGION A (Cape Winelands, City of Cape Town: Tygerberg and Oostenberg Administrations)	CAPE TOWN OFFICE REGION B (West Coast, Overberg, City of Cape Town: Helderberg, South Peninsula, Cape Town and Blaauwberg Administrations)	GEORGE OFFICE (Eden and Central Karoo)
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<p>Department of Environmental Affairs and Development Planning Attention: Directorate: Integrated Environmental Management (Region A2) Private Bag X 9086 Cape Town, 8000</p> <p>Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town</p> <p>Queries should be directed to the Directorate: Integrated Environmental Management (Region A2) at: Tel: (021) 483-4793 Fax: (021) 483-3633</p>	<p>Department of Environmental Affairs and Development Planning Attention: Directorate: Integrated Environmental Management (Region B) Private Bag X 9086 Cape Town, 8000</p> <p>Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town</p> <p>Queries should be directed to the Directorate: Integrated Environmental Management (Region B) at: Tel: (021) 483-4094 Fax: (021) 483-4372</p>	<p>Department of Environmental Affairs and Development Planning Attention: Directorate: Integrated Environmental Management (Region A1) Private Bag X 6509 George, 6530</p> <p>Registry Office 4th Floor, York Park Building 93 York Street George</p> <p>Queries should be directed to the Directorate: Integrated Environmental Management (Region A1) at: Tel: (044) 805 8600 Fax: (044) 874-2423</p>
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View the Department's website [at http://www.capegateway.gov.za/eadp](http://www.capegateway.gov.za/eadp) for the latest version of this document.

DEPARTMENTAL REFERENCE NUMBER(S)

File reference number (EIA):	16/3/3/1/B3/28/1019/16
File reference number (Waste):	
File reference number (Other):	

PROJECT TITLE

Mr Vernon Estate

DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Environmental Assessment Practitioner (EAP):	Johan Neethling Environmental Services		
Contact person:	Johan Neethling		
Postal address:	P O Box 16594		
	VLAEBERG	Postal code:	8018
Telephone:	021 4614386	Cell:	0834493920
E-mail:	jneeth@mweb.co.za	Fax:	086 544 4868
EAP Qualifications	PhD Forestry, HonsB Publ Admin		
EAP Registrations/Associations	Member of IAIAAsa, Founder member EAPASA		

Details of the EAP's expertise to carry out Basic Assessment procedures

Dr Johan Neethling – PhD in Forestry, is a member of the International Association of Impact Assessment (South Africa) and a founding member of the Environmental Assessment Practitioners Association of South Africa. The latter is a precursor to a compulsory accreditation system of Environmental Assessment Practitioners to be promulgated by the authorities in the near future, ex-Chief Director of Western Cape Department of Environmental Affairs and Museums. 40+ years experience in environmental management. 19 years experience in executing Environmental Impact Assessments (original checklists, Basic Assessments and Scoping and EIA processes). Compiled numerous EMPr's and acted as ECO on development sites. More than 300 different projects and processes. See www.ines.co.za for details of past projects

EXECUTIVE SUMMARY OF THE CONTENT OF THE BASIC ASSESSMENT REPORT:

Portion of Portion 36 of the Farm Bronkhorst No 748, Paarl, is 21.8965 ha in extent. An area of 1.8485ha must be ceded for road widening purposes along the R44, leaving 19.9992 ha for development. The proposed development will consist of about 100 single residential erven covering a total of 8.7852 ha and comprising about 44% of the total area and about 50 group housing units comprising 1.8957ha covering about 10% of the site. The area set aside for tourist related activities such as a farm stall is 2.44542ha in extent (about12% of site). Private open space will be 2.5681 ha in extent and will comprise about13% of the development. Private roads will be 4.2960ha in extent for a coverage of about 21%.

Appendix B2

No site alternatives were considered. The present and preferred site is the only one under consideration. The applicants have an option on the property and propose to develop the site in accordance with the The Klapmuts Spatial Development Framework. The KSDF was approved in 2007 by the Stellenbosch Municipality in terms of the Municipal Systems Act.

Originally two **types of activity** options were considered namely that of residential development coupled with a commercial node at the intersection of the R44 and R45. After considering the various needs in the Klapmuts area the applicants revised their activity options to that of residential coupled with a tourist related activity such as a farm stall in stead of commercial at the R44/R45 node.

No go option. Do not develop the residential units on the relevant properties and leave the land as agriculture. The site is at present used for intensive agriculture and is totally transformed into wheat fields and orchards. The site can continue to be used for agriculture as part of the larger Mt Vernon Farm but that would not support the aims of the Klapmuts Spatial Development Framework. The KSDF was approved in 2007 by the Stellenbosch Municipality in terms of the Municipal Systems Act and is an effort to alleviate the huge shortage of development land in the Stellenbosch Municipality and to stimulate economic activity in Klapmuts.

ENVIRONMENTAL LEGAL REQUIREMENTS

The National Environmental Management Act (NEMA, Act 107 of 1998) makes provision for the identification and assessment of activities that are potentially detrimental to the environment and which require authorisation from the competent authority (in this case, the Provincial Department of Environmental Affairs and Development Planning, DEA&DP) based on the findings of a BAR.

The following listed activities are triggered in terms of Listing Notice 1 (Government Notice R. 983)

No 10. The development and related operation of infrastructure exceeding 1000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes

- (i) with an internal diameter of 0,36 metres or more; or
- (ii) with a peak throughput of 120 litres per second or more;

excluding where-

- (a) such infrastructure is for bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve; or
- (b) where such development will occur within an urban area.

No 12. The development of-

- (i) canals exceeding 100 square metres in size;
- (ii) channels exceeding 100 square metres in size;
- (iii) bridges exceeding 100 square metres in size;
- (iv) dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size;
- (v) weirs, where the weir, including infrastructure and water surface area, exceeds 100 square metres in size;
- (vi) bulk storm water outlet structures exceeding 100 square metres in size;
- (vii) marinas exceeding 100 square metres in size;
- (viii) jetties exceeding 100 square metres in size;
- (ix) slipways exceeding 100 square metres in size;
- (x) buildings exceeding 100 square metres in size;
- (xi) boardwalks exceeding 100 square metres in size; or
- (xii) infrastructure or structures with a physical footprint of 100 square metres or more;

where such development occurs-

- (a) within a watercourse;
- (b) in front of a development setback; or
- (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -

excluding-

- (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;
- (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
- (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;
- (dd) where such development occurs within an urban area; or
- (ee) where such development occurs within existing roads or road reserves.

No 28. Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development:

- (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or
 - (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;
- excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes

The following listed activities are triggered in terms of Listing Notice 1 (Government Notice R. 985)

No 4. The development of a road wider than 4 metres with a reserve less than 13,5 metres.

(f) In Western Cape:

i. Areas outside urban areas;

(aa) Areas containing indigenous vegetation;

(bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined;

or

ii. In urban areas:

(cc) Areas zoned for conservation use; or

(dd) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.

SITE DESCRIPTION

The locality of the subject property has both a regional and local significance. It is situated on the corner of the R44 and R45 in Klappmuts with: • Single Residential, Group Housing, Hotel/Conference and Tourist Facilities approved on Anura Wine Estate on its eastern boundary • Commercial uses at Pot Belly farm stall, butchery, restaurant and shop • Industrial uses across the R44 on its western boundary • Residential Uses across the R45 on its northern boundary; with agriculture to the south.

In a regional context, Klappmuts can be described as relatively small urban settlement with a distinctly rural character. The popularity of Stellenbosch and the central location of Klappmuts between Stellenbosch, Paarl and Wellington as well as its direct access to the N1-Highway and rail linking it to the Cape Metropolitan Area and the whole region, has over the last 10 years stimulated substantial interest and focus on the future development of Klappmuts.



Figure 1: Locality (First Plan)



Figure 2: Proposed concept layout . (First Plan)

Due to the increase in through traffic and the anticipated growth of Klappmuts, an approved Road Management Scheme has been adopted for the area. In terms of this approved scheme $\pm 27m$ of the subject property, along the western boundary ($\pm 1,8485ha$) has been identified for the future road widening of the R44.

- The R44 and R45 (both significant sub-regional provincial distributors) form the site's western and northern boundaries respectively.
- A farm dam forms the site's eastern boundary.
- A tourism focal point, Pot Belly, is located to the west of the site.
- A graveyard is located on the R45 to the north-eastern side.
- Road Widening of $\pm 27m$ wide proposed adjacent to the R44
- The Anura Development – comprising residential and tourism activities on the eastern boundary

The southern boundary constitute agricultural activities of the remainder of the Mt Vernon farm

Geology and Soils

Mt Vernon has a flat topography. The most obvious natural landscape feature is the farm dam to the east of the site. The underlying geological formation is Cape Granite and the soils are all in situ or transported granite derivatives. See [Appendix G5 Soil Report](#).

Vegetation

According to the most recent national vegetation map (Mucina & Rutherford 2006), the proposed site is located in an area that would have naturally consisted of Swartland Granite Renosterveld . Swartland Granite Renosterveld is categorised as a Critically Endangered terrestrial vegetation type on the National List of Threatened Ecosystems published in terms of the National Environmental Management: Biodiversity Act (Act No. 10 of 2004) (Government Notice 1002 of 9 December 2011). The natural vegetation on the site was however totally destroyed during many years of agriculture. No CBA's or ESA's were mapped for the site. The immediate area to the east is an CBA due to its relatively undisturbed state. [Appendix D1](#).

PLANNING CONTEXT

The site is zoned for agricultural use and the application is for rezoning to Subdivisional Area. The subject property was partially included in the urban edge and identified as a growth area for Klappmuts. The portion included by way of the approved urban edge line as indicated on the SDF, was seemingly done on an arbitrary basis with no detail consideration of the specific characteristics of the land and surrounding uses – especially when considering the narrow strip of agricultural land located between the urban edge to the east and the farm dam and wetland to the west which adjoins Anura Wine Estate which has been granted the necessary town planning and environmental approvals for mixed use development including Single Residential, Group Housing, Hotel/Conference and Tourist Facilities. The urban edge line as indicated on the KSDF includes a $\pm 15ha$ portion of the subject property parallel to the R44 but it leaves a narrow strip of land $\pm 5ha$ in area outside the urban edge. This narrow strip is deemed impractical for future agricultural use and an application was launched to include this 5ha in the urban edge of Klappmuts.

SERVICES

The Stellenbosch Municipality is the service provider.

PROCESS TO DATE

A public participation process (PPP) is underway in terms of Regulation 41 of the EIA Regulations 2014: **Appendix F1**

- Newspaper Advertisement

Notices in English and Afrikaans, notifying the public of the project and requesting I&APs to register their comments, were placed in the Paarl Post of 7 July 2016. **Appendix F2.**

- Site notice

In order to inform surrounding communities and immediately adjacent landowners of the proposed development, site notices were placed at the entrance to the site. See photographic evidence in **Appendix F3.**

- Draft BAR

All adjacent landowners, the local authority, ward councillor and relevant organs of state were registered as I&AP's. The draft BAR was made available to all the above plus the Department of Environmental Affairs and Development Planning for a comment period of 30 days.

See **Appendix F5**

ENVIRONMENTAL MANAGEMENT PROGRAMME

A Construction Phase Environmental Management Programme (CEMP) is required in terms of the amended NEMA. A draft CEMP was compiled and is attached as **Appendix H**

CONCLUSIONS AND RECOMMENDATIONS

The site is highly altered by many years of agriculture. It is earmarked for development in the KSDF and the Western Cape department of Agriculture has no objection to the proposed rezoning. Environmental authorisation for the mixed use development is recommended.

SECTION A: ACTIVITY INFORMATION

1. PROJECT DESCRIPTION

(a) Is the project a new development?	YES	NO
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(b) Provide a detailed description of the development project and associated infrastructure.

Portion of Portion 36 of Farm 748, Paarl is 19.9992 ha in extent. The whole portion is to be developed.

SG Code C05500080000074800036

Residential component

Portion of Portion 36 of the Farm Bronkhorst No 748, Paarl, is 21.8965 ha in extent. An area of 1.8485ha must be ceded for road widening purposes along the R44, leaving 19.9992 ha for development.

The proposed development will consist of about 100 single residential even covering a total of 8.7852 ha and comprising about 44% of the total area and about 50 group housing units comprising 1.8957ha covering about 10% of the site. Private open space will be 2.5681ha in extent and will comprise about 13% of the development. Private roads will be 4.2960ha in extent for coverage of about 21%.

Farm Stall/Tourist Facility

The area set aside for tourist related activities such as a farm stall is 2.44542ha in extent (about 12% of the site). Located on the corner of the R44 and R45 Routes. The zoning of this area will remain agriculture and the application and proposed uses will comply with the applicable zoning regulations i.e.: Max 100m² farm stall; product to be sold will be artisanal in nature (local produce, food etc.); the tourist facility will be limited to the activities as permitted by the specific consent use i.e. a restaurant, lecture room, gift shop etc.

Access to the property will be in accordance with the approved Klappmuts Road Management Scheme and limited to the following 2 access points: **Access off the R44:** Access to Portion 1 and the Remainder Farm will be taken off the R44 directly opposite the Pot Belly commercial node in accordance with the approved road management scheme. This access will form part of the future signalised traffic intersection and will give access to both the proposed residential developments on the site as well as the remainder Portion 36 i.e. Mt Vernon Wine Estate. Access will be managed by way of a registered servitude across Portion 1 in favour of Mt Vernon on the Remainder.

Access off the R45: Access to the farm stall/tourist facility component will be in line with the existing conditions of approval of the Simonsberg Village i.e. directly opposite the existing T-junction entrance. This will be done by way of upgrading the existing

T-junction to a full intersection.

Landscaping and open space areas.

- An integrated interconnected passive and active open space system will form an integral part of the design which will include; A central open space: A central open space will be provided as a central focal and recreational area within the development.
- Landscaped road reserves and cul-de-sac "courtyards". The internal road layout will be designed not to only accommodate vehicular traffic but to form an integral part of the open space system through appropriate design and hard and soft landscaping.
- Landscape transition area and buffers: a landscaped berm along the R44 to ensure an attractive interface with the R44 – the latter also being a scenic drive as well as to reduce noise impacts from the high volumes of passing traffic.
- Recreation Area: It has been agreed with Mt Vernon Farm that the dam and wetland area on the Remainder will be available under agreement with the future Home Owners' Association for recreational purposes while all rights to the water use will remain with the farm.
- Jogging path, trim park and recreational facilities will be included in the open areas.

Appendix B2

(c) List all the activities assessed during the Basic Assessment process:

GN No. R. 983 Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 1 (GN No. R. 983)	Describe the portion of the development as per the project description that relates to the applicable listed activity.
9	The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water – (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more, excluding where: a. such facilities or infrastructure are for bulk transportation of water or storm water or storm water drainage inside a road reserve; or b. where such development will occur within an urban area.	The whole development will be serviced by bulk services pipelines.
10	The development and related operation of infrastructure exceeding 1000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where- (a) such infrastructure is for bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve; or (b) where such development will occur within an urban area.	The whole development will be serviced by bulk services pipelines.
12	The development of- (i) canals exceeding 100 square metres in size; (ii) channels exceeding 100 square metres in size; (iii) bridges exceeding 100 square metres in size; (iv) dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size; (v) weirs, where the weir, including infrastructure and water surface area, exceeds 100 square metres in size; (vi) bulk storm water outlet structures exceeding 100 square metres in size; (vii) marinas exceeding 100 square metres in size; (viii) jetties exceeding 100 square metres in size; (ix) slipways exceeding 100 square metres in size; (x) buildings exceeding 100 square metres in size;	It is the intention to route storm water from the site to the farm dam adjacent to the site.

	<p>(xi) boardwalks exceeding 100 square metres in size; or</p> <p>(xii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs-</p> <p>(a) within a watercourse;</p> <p>(b) in front of a development setback; or</p> <p>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -</p> <p>excluding-</p> <p>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</p> <p>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</p> <p>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</p> <p>(dd) where such development occurs within an urban area; or</p> <p>(ee) where such development occurs within existing roads or road reserves.</p>	
28	<p>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development:</p> <p>(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or</p> <p>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.</p>	The whole development will be effected on agricultural land.
GN No. R. 546 Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 3 (GN No. R. 985)	Describe the portion of the development as per the project description that relates to the applicable listed activity.
4	<p>The development of a road wider than 4 metres with a reserve less than 13,5 metres.</p> <p>(f) In Western Cape:</p> <p>i. Areas outside urban areas;</p> <p>(aa) Areas containing indigenous vegetation;</p> <p>(bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or</p> <p>ii. In urban areas:</p> <p>(cc) Areas zoned for conservation use; or</p> <p>(dd) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority</p>	The roads in the proposed development will be wider than 4m in areas with limited indigenous vegetation.

If the application is also for activities as per Listing Notice 2 and permission was granted to subject the application to Basic Assessment, also indicate the applicable Listing Notice 2 activities:

GN No. R. 984 Activity No(s):	If permission was granted in terms of Regulation 20, describe the relevant Scoping and EIA Activity(ies) in writing as per Listing Notice 2 (GN No. R. 984)	Describe the portion of the development as per the project description that relates to the applicable listed activity.
	N/A	

Waste management activities in terms of the NEM: WA (Government Gazette No. 32368):

GN No. 718 - Category A Activity No(s):	Describe the relevant <u>Category A</u> waste management activity in writing.
	N/A

Please note: If any waste management activities are applicable, the **Listed Waste Management Activities Additional Information Annexure** must be completed and attached to this Basic Assessment Report as **Appendix I**.

If the application is also for waste management activities as per Category B and permission was granted to subject the application to Basic Assessment, also indicate the applicable Category B activities:

GN No. 718 – Category B Activity No(s):	Describe the relevant <u>Category B</u> waste management activity in writing.
	N/A

Atmospheric emission activities in terms of the NEM: AQA (Government Gazette No. 33064):

GN No. 248 Activity No(s):	Describe the relevant atmospheric emission activity in writing.
	N/A

(d) Please provide details of all components of the proposed project and attach diagrams (e.g. architectural drawings or perspectives, engineering drawings, process flow charts etc.).

Buildings	YES
Provide brief description:	
Dwelling units single residential and farm stall and tourist related buildings.	
Infrastructure (e.g. roads, power and water supply/ storage)	YES
Provide brief description: Stellenbosch Municipality confirmed availability of services. See Appendix E	
<p>Roads: Access to the property will be in accordance with the approved Klapmuts Road Management Scheme and limited to the following 2 access points: Access off the R44: Access to Portion 1 and the Remainder Farm will be taken off the R44 directly opposite the Pot Belly commercial node in accordance with the approved road management scheme. This access will form part of the future signalised traffic intersection and will give access to both the proposed residential developments on Portion 1 as well as the remainder Portion 36 i.e. Mt Vernon Wine Estate. Access will be managed by way of a registered servitude across Portion 1 in favour of Mt Vernon on the Remainder.</p> <ul style="list-style-type: none"> • Access off the R45: Access to the farm stall/tourist facility component will be in line with the existing conditions of approval of the Simonsberg Village i.e. directly opposite the existing T-junction entrance. This will be done by way of upgrading the existing T-junction to a full intersection. <p>See Appendix G4 for the Traffic Impact Report and Appendix G2 for the Engineering Services Report Internal road widths vary from 12 to 20m for the access road.</p> <p>Power: ICE Group (Electrical) estimated the required electricity supply at 2500kVA and Eskom has confirmed sufficient spare capacity in their network. Appendix G2</p> <p>Water Supply: The Stellenbosch Municipality indicated that water storage and reticulation capacity will be available based on the fact that certain developments that were earmarked for implementation in the first phase planning as determined by the Klappmuts Growth Model, did not succeed. The link to the bulk water will have to be done as part of the development conditions.</p> <p>Sewerage: The Average Daily Dry Weather Flow (ADDWF) for the proposed development is 150,5kl/day, while the Peak Wet Weather Flow (PWWF) is 470,2 kl/day. The site slopes from southwest to northeast. No current municipal connection to the property exists and the closest municipal point to connect to according to the Klappmuts Growth Model is north of the site, adjacent to the Simonsberg Village development, and described therein. All of the residential- and tourist facility area would drain to this proposed point and directed to the Klappmuts 3 Pump station as described in the growth model. The Stellenbosch Municipality have confirmed that sewerage capacity will be available after the upgrading of the Klappmuts waste water treatment works to a capacity of 3,5 Ml per day. The work is planned to be completed by June 2017. Appendix G2. See confirmation of capacity by the Stellenbosch Municipality in Appendix E.</p> <p>Stormwater: The proposed development covers an area of approximately 21 ha. The largest part of the site naturally drains towards an adjacent irrigation dam. The overflows of the dam presently drain towards open channels on either side of the irrigation dams. These channels combine and drain into an existing pond. This pond drains through a system of large culverts under the R45 into the upper reaches of the Mosselbank River system. A Post Construction Storm Water Management model was compiled to analyse the post-development runoff after the attenuation facilities were introduced. The rainfall input for the model is defined by means of rain gauges which use the specified design storm curve and total storm rainfall to generate a time-stepped precipitation. The modelling results show that</p>	

to maintain the pre-development levels of the peak flow, 5000 m³ attenuation is required in the existing irrigation dam for catchment A and 400 m³ for catchment B. Catchment A, which will consist mostly of residential units, will drain into the irrigation dam. The irrigation dam will be modified so that a portion of the irrigation dam will have an attenuation function. This will be done by reducing the full supply level by approximately 200 mm. To do this will require an orifice outlet structure near the overflow structure. Catchment B cannot drain into the irrigation dams and will therefore require an onsite attenuation pond.

Appendix G3

Processing activities (e.g. manufacturing, storage, distribution)		<u>NO</u>
Provide brief description:		
N/A. This proposal is for the development of a residential village with single residential units and a farm stall.		
Storage facilities for raw materials and products (e.g. volume and substances to be stored)		
Provide brief description		<u>NO</u>
N/A. This proposal is for the development of a residential village with single residential units and a farm stall.		
Storage and treatment facilities for solid waste and effluent generated by the project	<u>YES</u>	
Provide brief description		
Temporary stockpiling of construction materials and builders rubble during the construction period. This will be regulated by the EMP		
Other activities (e.g. water abstraction activities, crop planting activities)	Yes	<u>NO</u>
Provide brief description		
N/A. This proposal is for the development of a residential village with single residential units and a farm stall		

2. PHYSICAL SIZE OF THE ACTIVITY

NB. The subject property is known as Portion 36 of the Farm Bronkhorst No 748 Division Paarl and registered in the name of R44 Farms (Pty) Ltd (Reg no. 97/21244/07) and covers 110,7959ha.

In 1999 the owners of Farms No 35/748 and 36/748 Paarl submitted a subdivision application in respect of an exchange of land situated on the common boundary between the two subject land units. On 18 May 2000 the subdivision and consolidation diagrams were duly approved by the Surveyor-General creating Portion 40 of the Farm Bronkhorst no 748, but to date the diagrams have not been registered in the Deeds Office. The Approval was however granted in terms of Section 23 of Ordinance No 15/1985 and in terms of Act No 70/1970. The subdivision was not subject to a validity period, therefore both Statutory Approvals are still valid and the land units are capable of registration in the Deeds Office. After such registration the subject property will be known as Portion 40 of the Farm Bronkhorst No 748 Paarl, covering 110,7574ha.

We are however using the registered designation for the site, Portion 36 of Farm Bronkhorst No 748

	Size of the property:
(a) Indicate the size of the property (cadastral unit) on which the activity is to be undertaken.	110.7959 ha
	Size of the facility:
(b) Indicate the size of the facility (development area) on which the activity is to be undertaken.	19.9992 ha
	Size of the activity:
(c) Indicate the physical size (footprint) of the activity together with its associated infrastructure: <u>The activity and its associated infrastructure are interlinked</u>	19.9992 ha
(d) Indicate the physical size (footprint) of the activity:	19.9992 ha
(e) Indicate the physical size (footprint) of the associated infrastructure: <u>Roads</u>	4.2960ha

and, for linear activities:

	Length of the activity:
(f) Indicate the length of the activity: <u>N/A</u>	m

3. SITE ACCESS

<p>(a) Is there an existing access road? Yes. The site is presently accessed from the main access road to the Mt Vernon Wine Farm off the R44. Access to the property will be in accordance with the approved Klappmuts Road Management Scheme and limited to the following 2 access points: Access off the R44: Access to Portion 1 and the Remainder Farm will be taken off the R44 directly opposite the Pot Belly commercial node in accordance with the approved road management scheme. This access will form part of the future signalised traffic intersection and will give access to both the proposed residential developments on Portion 1 as well as the remainder Portion 36 i.e. Mt Vernon Wine Estate. Access will be managed by way of a registered servitude across Portion 1 in favour of Mt Vernon on the Remainder. Access off the R45: Access to the farm stall/tourist facility component will be in line with the existing conditions of approval of the Simonsberg Village i.e. directly opposite the existing T-junction entrance. This will be done by way of upgrading the existing T-junction to a full intersection.</p>	<p><u>YES</u></p>	<p>NO</p>
<p>(b) If no, what is the distance over which a new access road will be built? . Access is taken directly from the R44 for the residential component and directly from the R45 for the Farm Stall and tourist facility. No access roads <i>per se</i> will be built.</p>		

(c) Describe the type of access road planned:

Access off the R44: Access to the residential portion will be taken off the R44 directly opposite the Pot Belly commercial node in accordance with the approved road management scheme. This access will form part of the future signalised traffic intersection and will give access to both the proposed residential developments on the site as well as the remainder Portion 36 i.e. Mt Vernon Wine Estate. Access will be managed by way of a registered servitude across the site in favour of Mt Vernon Wine Estate on the Remainder.

Access off the R45: Access to the farm stall/tourist facility component will be in line with the existing conditions of approval of the Simonsberg Village i.e. directly opposite the existing T-junction entrance. This will be done by way of upgrading the existing T-junction to a full intersection.

The road surface would be conventional asphalt

Please Note: indicate the position of the proposed access road on the site plan.

4. DESCRIPTION OF THE PROPERTY ON WHICH THE ACTIVITY IS TO BE UNDERTAKEN AND THE LOCATION OF THE ACTIVITY ON THE PROPERTY

(a) Provide a description of the property on which the activity is to be undertaken and the location of the activity on the property.

Regional context

The subject property is currently zoned Agricultural I and is surrounded by a mixture of land uses and zonings which include:

- Single Residential, Group Housing, Hotel/Conference and Tourist Facilities approved on Anura Wine Estate on its eastern boundary
- Commercial uses at Pot Belly farm stall, butchery, restaurant and shop
- Industrial uses across the R44 on its western boundary
- Residential Uses across the R45 on its northern boundary.

Due to the increase in through traffic and the anticipated growth of Klappmuts, an approved Road Management Scheme has been adopted for the area. In terms of this approved scheme +/- 27m of the subject property, along the western boundary (±1,8485ha) has been identified for the future road widening of the R44.

The following aspects contextualise the subject property:

- The R44 and R45 (both significant sub-regional provincial distributors) form the site's western and northern boundaries respectively.
- A farm dam forms the site's eastern boundary.
- A tourism focal point, Pot Belly, is located to the west of the site.
- A graveyard is located on the R45 to the north-eastern side.
- Road Widening of ±27m wide on the proposed Portion 1 adjacent to the R44
- The Anura Development – comprising residential and tourism activities on the eastern boundary.



Proposed concept layout . (First Plan)

(b) Please provide a **location map** (see below) as **Appendix A** to this report which shows the location of the property and the location of the activity on the property; as well as a **site map** (see below) as **Appendix B** to this report; and if applicable all alternative properties and locations.

<p>Locality map: Appendix A</p>	<p>The scale of the locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following:</p> <ul style="list-style-type: none"> • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; • the prevailing wind direction (during November to April and during May to October); and • GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).
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<p>Site Plans: Appendix B</p>	<p>Detailed site plan(s) must be prepared for each alternative site or alternative activity. The site plan must contain or conform to the following:</p> <ul style="list-style-type: none"> • The detailed site plan must be at a scale preferably at a scale of 1:500 or at an appropriate scale. The scale must be indicated on the plan. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be indicated on the site plan. • The position of each element of the application as well as any other structures on the site must be indicated on the site plan. • Services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the development must be indicated on the site plan. • Servitudes indicating the purpose of the servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to):
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	<ul style="list-style-type: none"> ○ Rivers. ○ Flood lines (<i>i.e.</i> 1:10, 1:50, year and 32 meter set back line from the banks of a river/stream). ○ Ridges. ○ Cultural and historical features. ○ Areas with indigenous vegetation (even if it is degraded or infested with alien species). ● Whenever the slope of the site exceeds 1:10, then a contour map of the site must be submitted.
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(c) For a linear activity, please also provide a description of the route.

N/A

Indicate the position of the activity using the latitude and longitude of the centre point of the site. The co-ordinates must be in degrees, minutes and seconds. The minutes should be given to at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.	Latitude (S):			Longitude (E):		
	33°	48'	35.10"	18°	52'	38.21"
SG 21 Digit Code	C05500080000074800036					

(d) or:

For linear activities:	Latitude (S):			Longitude (E):		
● Starting point of the activity	°	'	"	°	'	"
● Middle point of the activity	°	'	"	°	'	"
● End point of the activity	°	'	"	°	'	"

Please Note: For linear activities that are longer than 500m, please provide an addendum with co-ordinates taken every 100 meters along the route.

5. SITE PHOTOGRAPHS

Colour photographs of the site and its surroundings (taken of the site and from the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. [Photographs](#) must be attached as [Appendix C](#) to this report. It should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

Site/Area Description

For linear activities (pipelines, etc.) as well as activities that cover very large sites, it may be necessary to complete copies of this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area which is covered by each copy No. on the Site Plan.

1. GRADIENT OF THE SITE

Indicate the general gradient of the sites (highlight the appropriate box).

Flat	Flatter than 1:10	1:10 – 1:4	Steeper than 1:4
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2. LOCATION IN LANDSCAPE

(a) Indicate the landform(s) that best describes the site (highlight the appropriate box(es)).

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	<u>Undulating plain/low hills</u>	Dune	Sea-front
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(b) Please provide a description of the location in the landscape.

The site lies in flat terrain, in a landscape dominated by low undulating geomorphology typical of a granite derived landscape. It is situated on the south-eastern outskirts of Klapmuts village in the corner between the R44 and R45 regional roads.

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

(a) Is the site(s) located on or near any of the following (highlight the appropriate boxes)?

Shallow water table (less than 1.5m deep)		<u>NO</u>	UNSURE
Seasonally wet soils (often close to water bodies)	<u>YES</u>		UNSURE
Unstable rocky slopes or steep slopes with loose soil		<u>NO</u>	UNSURE
Dispersive soils (soils that dissolve in water)		<u>NO</u>	UNSURE
Soils with high clay content	<u>YES</u>		UNSURE
Any other unstable soil or geological feature		<u>NO</u>	UNSURE
An area sensitive to erosion		<u>NO</u>	UNSURE
An area adjacent to or above an aquifer.			<u>UNSURE</u>
An area within 100m of the source of surface water	<u>YES</u>		UNSURE

The development will be within 100m of the farm dam and wetland on the remainder of the farm.

(b) If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department. (Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

(c) Please indicate the type of geological formation underlying the site.

<u>Granite</u>	Shale	Sandstone	Quartzite	Dolomite	Dolorite	Other
Please provide a description.						
The site has soils both in situ and transported of granite origin. The Klapmuts area is underlain by granites from the Paarl Pluton associated with the well known Paarl Mountain to the north.						

4. SURFACE WATER

(a) Indicate the surface water present on and or adjacent to the site and alternative sites (highlight the appropriate boxes)?

Perennial River		<u>NO</u>	UNSURE
Non-Perennial River	<u>YES</u>		UNSURE
Permanent Wetland	<u>YES</u>		UNSURE
Seasonal Wetland	<u>YES</u>		UNSURE
Artificial Wetland. <u>Man made dam</u>	<u>YES</u>		UNSURE
Estuarine / Lagoonal wetland		<u>NO</u>	UNSURE

(b) Please provide a description.

The Freshwater Study concluded: The majority of the subject property has been significantly disturbed and transformed as a result of historical agricultural activities. No watercourses as defined by the National Water Act are found on the subject property. The site is within 500m of three artificial impoundments which have been developed within an unchannelled valley bottom wetland. Furthermore, several artificial drainage channels were identified on the subject property two of which are more pronounced, the presence of which is not considered to be significant since the features were artificially created for agricultural and road drainage purposes and cannot be defined as true watercourses. The adjacent unchannelled valley bottom wetland is not considered to play a significant role in the maintenance of biodiversity due to the degree to which features have been transformed. A moderately low importance in terms of function and service provision was calculated.

Appendix G1

5. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as **Appendix D1** to this report.

(a) Highlight the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category).

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	<u>No Natural Area Remaining (NNR)</u>	See Appendix D1 . No CBA's or ESA's were mapped for the site. There are some Swartland Granite Renosterveld CBA and ESA areas adjacent to the site.

(b) Highlight and describe the habitat condition on site.

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes etc).
Natural	0%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	0%	
Degraded (includes areas heavily invaded by alien plants)	0%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	100%	Totally transformed by agriculture.

(c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems		
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	<u>Critical</u>	Wetland (including rivers, depressions, channelled and un-channelled wetlands, flats, seeps pans, and artificial	Estuary	Coastline
	Endangered			
	Vulnerable			

	Least Threatened	wetlands)			YES	NO	YES	NO
		YES	NO	UNSURE				

(d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

According to the most recent national vegetation map (Mucina & Rutherford 2006), the proposed site is located in an area that would have naturally consisted of Swartland Granite Renosterveld. Swartland Granite Renosterveld, is under great threat from agricultural activities and to a lesser extent from urban sprawl. The remaining habitat of Swartland Granite Renosterveld has decreased to around 15%, thereby supporting the national listing as 'Critically Endangered' (DEA 2011). **Appendix D1**

The site is however totally transformed and no natural vegetation is present on site. There are no wetlands on the site.

A valley bottom wetland and artificial dam occurs adjacent to the site. See **Appendix G1**

6. LAND USE OF THE SITE

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes or more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):				

(a) Please provide a description.

The site consists of wheat fields and olive orchards.

7. LAND USE CHARACTER OF SURROUNDING AREA

(a) Highlight the current land uses and/or prominent features that occur within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site.

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial

Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes or more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archeological site
Other land uses (describe):				

(b) Please provide a description, including the distance and direction to the nearest residential area and industrial area.

The site is situated on the outskirts of the Klappmuts Village with all of its suburban infrastructure, within 500m.

8. SOCIO-ECONOMIC ASPECTS

Describe the existing social and economic characteristics of the community in order to provide baseline information.

The following is extracted from: Klappmuts SDF (2007).

According to the population census (2001), Klappmuts had a population of close to 4 000 people. The population has grown substantially since 1996, when the census recorded 1 515 people in the settlement, indicating a growth rate of 32% per annum during that period. Increasing demand for development in Klappmuts suggests that population size could continue growing rapidly. Population statistics have been extracted from Stellenbosch Municipality SDF, 2005

Approximately 60% of Klappmuts residents earn no income in the formal economy. Only 0.7% of people (27) earn more than R 6401 per month. Approximately 20% of people earn between R1 and R800 per month, 12.7% of people earn between R801 and R1 600, 4.9% earn between R1 601 and R3200 and 1.4% earn between R3201 and R6400, and 0.7% of residents earn more than this. This means that some 93% of the population earn no formal income or earn less than R1 600 per month.

In terms of household income per annum, 12.5% of households do not earn any formal income. In Klappmuts, 52.5% of households earn between R9601 and R38400 per annum. Only 3% of households earn R76801 or more. It is clear that improving people's economic well-being in Klappmuts is dependent on whether or not increases in income can be achieved.

Education levels in Klappmuts are fairly low. Approximately 10% of the population of Klappmuts have no schooling. The number of people in Klappmuts that have some education, but have not completed matric includes 59%. Some 7.2% of the Klappmuts population have a matric certificate. Only 1.4% of Klappmuts residents have tertiary education.

Occupations are directly related to education levels. Generally, there are very few professionals in Klappmuts (0.5%) 16.2% of people are employed in elementary jobs in Klappmuts. 4.5% of people are employed in craft/trade, 3.4% are plant/machine operators, 2.1% are service workers, shop and market sales workers. Some 67.5% of residents are not economically active.

In 2001, some 662 or 71.4% of households in Klappmuts occupied formal housing structures. Informal households in Klappmuts included 256 (27.6%). This equates to a significant housing shortage.

9. HISTORICAL AND CULTURAL ASPECTS

(a) Please be advised that if section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), is applicable to your proposed development, then you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Section 38 of the Act states as follows: "38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
 - (b) the construction of a bridge or similar structure exceeding 50m in length;
 - I any development or other activity which will change the character of a site-
 - (i) exceeding 5 000 m2 in extent; or
 - (ii) involving three or more existing erven or subdivisions thereof; or
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
 - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
 - (d) the re-zoning of a site exceeding 10 000 m2 in extent; or
 - (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,
- must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development."

(b) The impact on any national estate referred to in section 3(2), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii), of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), must also be investigated, assessed and evaluated. Section 3(2) states as follows: "3(2) Without limiting the generality of subsection (1), the national estate may include—

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- I historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds, including—
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the Gazette;
 - (v) historical graves and cemeteries; and
 - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
 - (h) sites of significance relating to the history of slavery in South Africa;
 - (i) movable objects, including—
 - (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)."

Is section 38 of the National Heritage Resources Act, 1999, applicable to the development?		Yes	NO
		UNCERTAIN	
If YES, explain:	The activity involves the construction of a development that will change the character of a site that exceeds 5 000m².		
	See HWC Record of Decision dated 27 July 2015. No further action under Section 38 was required. See Appendix D2		
Will the development impact on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999?		YES	NO
		UNCERTAIN	
If YES, explain:			
Will any building or structure older than 60 years be affected in any way?	YES	NO	UNCERTAIN
If YES, explain:			

Please Note: If uncertain, the Department may request that specialist input be provided.

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

(a) Please list all legislation, policies and/or guidelines that have been considered in the preparation of this Basic Assessment Report.

LEGISLATION	ADMINISTERING AUTHORITY	TYPE Permit/ license/ authorisation/comment / relevant consideration (e.g. rezoning or consent use, building plan approval)	DATE (if already obtained):
NEMA	DEADP	Environmental Authorisation	This application
LUPO & Municipal Bye-laws	Stellenbosch Municipality	LUPO Application	Pending
National Water Act	Department of Water Affairs	Water Use License	Pending
Act 70 of 1970	Provincial Dept of Agriculture	Recommended	23/05/16
Act 70 of 1970	National Dept of Agriculture	Subdivision of Agric Land	Pending
National Heritage Resources Act	Heritage Western Cape	Comment	27/07/15

POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
Guidelines to Alternatives March 2013	DEA&DP
Guideline on Transitional Arrangements (March 2013).	DEA&DP
Guidelines on Need and Desirability March 2013	DEA&DP
Guidelines on Public Participation March 2013	DEA&DP
Guidelines for Management Plans June 2005	DEA&DP
Guidelines to Alternatives March 2013	DEA&DP
Guideline on Exemption Applications (March 2013).	DEA&DP
Information Document on the Guidelines, Policies and Decision Making Instruments Relevant to EIA Applications	DEA&DP

(b) Please describe how the legislation, policies and/or guidelines were taken into account in the preparation of this Basic Assessment Report.

LEGISLATION / POLICY / GUIDELINE	DESCRIBE HOW THE LEGISLATION / POLICY / GUIDELINE WERE TAKEN INTO ACCOUNT (e.g. describe the extent to which it was adhered to, or deviated from, etc).
Guidelines on Public Participation March 2013	Public Participation Process
Guidelines to Alternatives March 2013	Presentation of alternatives
Guidelines on Specialists	Assessing need for specialist input in the proposed development
Guidelines on Need and Desirability March 2013	Assessing the need and desirability of the proposed development
Guidelines to Management Plans June 2005	Drafting Environmental Management Plan for project
Guideline on Exemption Applications (March 2013).	To determine validity of applying for exemption.
Information Document on the Guidelines, Policies and Decision Making Instruments Relevant to EIA Applications	All guidelines were consulted and adhered to while undertaking this Basic Assessment Process.
National Environmental Management Act, 1998 (Act 107, 1998).	This application is being undertaken according to the National Environmental Management Act, 1998, as amended, 2014 EIA Regulations.
National Heritage Resources Act, 1999 (Act 25 of 1999).	HWCs Final Comment has been included as Appendix D2 .
National Water Act, 1998 (Act No. 36 of 1998)	A Water Use Licence Application has been submitted to the DW&S (refer to Appendix D3). The Water Use Licence Application will address the following aspects of the development: •Development near water bodies.

Subdivision of Agricultural Land Act, Act 70 of 1970.	The Subdivision of Agricultural Land Act, Act 70 of 1970 is applicable to the property. The required application together with supporting documents has been lodged with the National Department of Agriculture, Forestry and Fisheries in order to obtain approval for the site to be removed from the database of agricultural land.
Land Use Planning Ordinance, 1985 (Act No. 15 of 1985).	Application is being made in terms of Section 17 of the Land Use Planning Ordinance No 15 of 1985 for the rezoning of the site from agriculture to subdivisinal area.

Please note: Copies of any permit(s) or licences received from any other organ of state must be attached this report as **Appendix E**.

SECTION C: PUBLIC PARTICIPATION

The public participation process must fulfil the requirements outlined in NEMA, the EIA Regulations, and if applicable the NEM: WA and/or the NEM: AQA. This Department's *Guideline on Public Participation* (August 2010) and *Guideline on Exemption Applications* (August 2010), both of which are available on the Department's website (<http://www.capegateway.gov.za/eadp>), must also be taken into account.

Please highlight the appropriate box to indicate whether the specific requirement was undertaken or whether there was a deviation that was agreed to by the Department.

1. Were all potential interested and affected parties notified of the application by –			
(a) fixing a notice board at a place conspicuous to the public at the boundary or on the fence of –			
(i) the site where the activity to which the application relates is to be undertaken; and	YES	DEVIATED	
(ii) any alternative site mentioned in the application;	N/A	DEVIATED	
(b) giving written notice to –			
(i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;	YES	Deviated	
(ii) the occupiers of the site where the activity is to be undertaken and to any alternative site where the activity is to be undertaken;	Yes	DEVIATED	
(iii) owners and occupiers of land adjacent to the site where the activity is to be undertaken and to any alternative site where the activity is to be undertaken;	YES	DEVIATED	
(iv) the municipal councillor of the ward in which the site and alternative site is situated and any organisation of ratepayers that represent the community in the area;	YES	DEVIATED	
(v) the municipality which has jurisdiction in the area;	YES	DEVIATED	
(vi) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	DEVIATED	
(vii) any other party as required by the competent authority;	YES	DEVIATED	
I placing an advertisement in –			
(i) one* local newspaper; and	YES	DEVIATED	
(ii) any official <i>Gazette</i> that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	YES	DEVIATED	N/A
(d) placing an advertisement in at least one* provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken.	YES	DEVIATED	N/A

* **Please note:** In terms of the NEM: WA and NEM: AQA a notice must be placed in at least two newspapers circulating in the area in which the activity applied for is to be carried out.

2. Provide a list of all the state departments that were consulted: Department of Water Affairs CapeNature Heritage Western Cape Department of Transport and Public Works Provincial Department of Agriculture National Department of Agriculture, Forestry and Fisheries DEA&DP: Directorate of Chemical Management and Pollution. Department of Environmental Affairs and Development Planning (DEA&DP)



3. Please provide an overall summary of the Public Participation Process that was followed. (The detailed outcomes of this process must be included in a comments and response report to be attached to the final Basic Assessment Report (see note below) as **Appendix F**.

A public participation process (PPP) is being undertaken in terms of Regulation 56 of NEMA (as amended) Appendix F1

- Identification of Interested and Affected Parties (I&APs)

Key applicable stakeholders were identified and an initial database of I&APs was opened. Refer to **Appendix F4**

The stakeholders included landowners and occupiers of land adjacent to the site, the ward councillor, local municipality, local home owners associations, and relevant organs of State.

- Newspaper Advertisement

An advertisement, notifying the public of the project requesting I&APs to register and comment, were placed in the Paarl Post of 7 July 2016. **Appendix F2**

- Site notice

In order to inform surrounding communities and immediately adjacent landowners of the proposed development, site notices were placed at the entrance to the site. **Appendix F3.**

- Draft BAR

A copy of this Draft Bar is made available, for a 30 day comment period, to the following Organs of State:

1. CapeNature
2. Department of Water Affairs
3. Department of Transport and Public Works
4. Provincial Department of Agriculture
5. National Department of Agriculture
6. Heritage Western Cape
7. DEA&DP: Directorate of Chemical Management and Pollution.
8. Department of Environmental Affairs and Development Planning (DEA&DP), to allow the latter to alert organs of State of the 30 day comment period.

The Draft Bar is also made available for a 30 day commenting period to:

1. Adjacent landowners
2. Local Home Owners Association
9. The Stellenbosch Municipality
3. The Ward Councillor
4. A copy of the Draft Bar is also available in the Klapmuts Primary School Public Library and on the JNES website www.jnes.co.za

Please note:

Should any of the responses be "No" and no deviation or exemption from that requirement was requested and agreed to /granted by the Department, the Basic Assessment Report will be rejected.

A list of all the potential interested and affected parties, including the organs of State, notified and a list of all the register of interested and affected parties, must be submitted with the final Basic Assessment Report. The list of registered interested and affected parties must be opened, maintained and made available to any person requesting access to the register in writing.

The draft Basic Assessment Report must be submitted to the Department before it is made available to interested and affected parties, including the relevant organs of State and State

departments which have jurisdiction with regard to any aspect of the activity, for a 30-day commenting period. With regard to State departments, the 30-day period commences the day after the date on which the Department as the competent/licensing authority requests such State department in writing to submit comment. The applicant/EAP is therefore required to inform this Department in writing when the draft Basic Assessment Report will be made available to the relevant State departments for comment. Upon receipt of the Draft Basic Assessment Report and this confirmation, this Department will in accordance with Section 24O(2) and (3) of the NEMA request the relevant State departments to comment on the draft report within 40 days.

All comments of interested and affected parties on the draft Basic Assessment Report must be recorded, responded to and included in the Comments and Responses Report included as **Appendix F** to the final Basic Assessment Report. If necessary, any amendments in response to comments received must be effected in the Basic Assessment Report itself. The Comments and Responses Report must also include a description of the public participation process followed.

The final Basic Assessment Report must be made available to registered interested and affected parties for comment before submitting it to the Department for consideration. Unless otherwise indicated by the Department, a final Basic Assessment Report must be made available to the registered interested and affected parties for comment for a minimum of 21-days. Comments on the final Basic Assessment Report does not have to be responded to, but the comments must be attached to the final Basic Assessment Report.

The minutes of any meetings held by the EAP with interested and affected parties and other role players which record the views of the participants must also be submitted as part of the public participation information to be attached to the final Basic Assessment Report as **Appendix F**.

Proof of all the notices given as indicated, as well as of notice to the interested and affected parties of the availability of the draft Basic Assessment Report and final Basic Assessment Report must be submitted as part of the public participation information to be attached to the final Basic Assessment Report as **Appendix F**.

SECTION D: NEED AND DESIRABILITY

Please Note: Before completing this section, first consult this Department's *Guideline on Need and Desirability* (August 2010) available on the Department's website (<http://www.capegateway.gov.za/eadp>).

1. Is the activity permitted in terms of the property's existing land use rights?	YES	<u>NO</u>	Please explain
<u>Rezoning from agricultural use to sub-divisional area has been applied for.</u>			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	<u>YES</u>	NO	Please explain
<u>See the LUPO application Appendix G8 for a summary of adherence to the principles of the PSDF</u>			

(b) Urban edge / Edge of Built environment for the area	<u>YES</u>	NO	Please explain
<p>The site is zoned for agricultural use and the application is for rezoning to Subdivisional Area. The subject property was partially included in the urban edge and identified as a growth area for Klapmuts. The portion included by way of the approved urban edge line as indicated on the SDF, was seemingly done on an arbitrary basis with no detail consideration of the specific characteristics of the land and surrounding uses – especially when considering the narrow strip of agricultural land located between the urban edge to the east and the farm dam and wetland to the west which adjoins Anura Wine Estate which has been granted the necessary town planning and environmental approvals for mixed use development including Single Residential, Group Housing, Hotel/Conference and Tourist Facilities. The urban edge line as indicated on the KSDF includes a ±15ha portion of the subject property parallel to the R44 but it leaves a narrow strip of land ±5ha in area outside the urban edge. This narrow strip is deemed impractical for future agricultural use and an application was launched to include this 5ha in the urban edge of Klapmuts.</p>			
(c) Integrated Development Plan and Spatial Development Framework of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	<u>YES</u>	NO	Please explain
<p>The Klapmuts Spatial Development Framework (KSDF) (2007) was approved for the area to promote, guide and manage the future urban development of the town identified as a local growth node within the Greater Stellenbosch Municipal Area. As part of the Spatial Development Framework (SDF), an urban edge was approved for Klapmuts, which incorporated an arbitrary ±15h of the subject property within the urban edge identified for future urban development.</p>			
(d) Approved Structure Plan of the Municipality	<u>YES</u>	NO	Please explain
<p>The subject property is located within the urban edge for Paarl that was approved by Council in 2010. The property is earmarked in the approved DMSDF for urban development purposes.</p>			
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	<u>NO</u>	Please explain
<p>Draft Stellenbosch Municipal ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF) (June 2014)</p> <p>The Stellenbosch area has been extensively transformed in the past for a range of agricultural uses and settlements. Most of the areas that could support productive land uses have already been converted, and the ecosystem services underpinning those uses are reaching, have reached or have exceeded their capacity to support further growth.</p> <p>The site has been totally transformed by agriculture in the past and there is nothing left of the original West Coast Granite Renoster Veld. Urban development in line with the The Klapmuts Spatial Development Framework (KSDF) (2007) as approved for the area to promote, guide and manage the future urban development of the town is thus supported.</p>			
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
<p>N/A</p>			

3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved Spatial Development Framework (SDF) agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	<u>YES</u>	NO	Please explain
<p>In the Klapmuts Growth Model 2008-2027 as Part of the KSDF Mt Vernon was identified as part of the first phase and should have been completed by 2012.</p>			
4. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occur here at this point in time?	<u>YES</u>	NO	Please explain

In the Klapmuts Growth Model 2008-2027 as Part of the KSDF Mt Vernon was identified as part of the first phase and should have been completed by 2012.			
5. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES		Please explain
<p>The Klapmuts Spatial Development Framework (KSDF)(2007) was approved for the area to promote, guide and manage the future urban development of the town identified as a local growth node within the Greater Stellenbosch Municipal Area. As part of the Spatial Development Framework (SDF), an urban edge was approved for Klapmuts, which incorporated an arbitrary ±15h of the subject property within the urban edge identified for future urban development.</p> <p>Although the KSDF identified Klapmuts as an area of high growth potential, one of the main challenges is the substantial capital investment required for bulk infrastructural upgrades to accommodate such future growth.</p> <p>The Klapmuts Development Forum (KDF) was, in collaboration with the Stellenbosch Municipality, to agree a growth model for Klapmuts. 20 ha of the subject property was included in the growth model with 15ha being earmarked for 225 medium density housing units and 5ha for commercial development.</p> <p>This application has thus been compiled in accordance with the principles of the approved Klapmuts Spatial Development Framework and the Growth Model.</p> <p>The proposed development will also provide employment opportunities during the construction and operational phases in an area in which unemployment is high.</p>			
6. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix E.)	YES	NO	Please explain
<p>The municipality has confirmed availability. See Appendix E</p>			
7. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix E.)	YES	NO	Please explain
<p>The proposed development has been included in the master planning of the Municipality in terms of its bulk infrastructure planning.</p> <p>Messrs ICE Group Consulting Services (Pty) Ltd was appointed to evaluate the current standard of civil and electrical engineering services and infrastructure on the property as well as what would be required internally to accommodate the redevelopment of the property into a residential development as proposed. They also compiled a Storm Water Management Report. See Appendices G2 & G3.</p> <p>The municipality has confirmed availability. See Appendix E</p>			
8. Is this project part of a national programme to address an issue of national concern or importance?	YES	NO	Please explain
9. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES	NO	Please explain
<p>The Klapmuts Spatial Development Framework (KSDF)(2007) was approved for the area to promote, guide and manage the future urban development of the town identified as a local growth node within the Greater Stellenbosch Municipal Area. As part of the Spatial Development Framework (SDF), an urban edge was approved for Klapmuts, which incorporated an arbitrary ±15h of the subject property within the urban edge identified for future urban development.</p>			
10. How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas (built and rural/natural	YES	NO	Please explain

environment)?			
The site is 100% transformed and there will be no impact on sensitive natural features.			
Heritage Western Cape has indicated that no heritage features will be affected by the proposed development. See Appendix D2			
11. How will the development impact on people's health and wellbeing (e.g. in terms of noise, odours, visual character and sense of place, etc)?		<u>NO</u>	Please explain
The proposed development is not out of character with the land use and character of the surrounding environment. The subject property is currently zoned Agricultural I and is surrounded by a mixture of land uses and zonings which include: <ul style="list-style-type: none"> • Single Residential, Group Housing, Hotel/Conference and Tourist Facilities approved on Anura Wine Estate on its eastern boundary • Commercial uses at Pot Belly farm stall, butchery, restaurant and shop. • Industrial uses across the R44 on its western boundary. • Residential Uses across the R45 on its northern boundary. 			
12. Will the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?	YES	<u>NO</u>	Please explain
Developing this privately owned property will not lead to any opportunity costs to others.			
13. What will the cumulative impacts (positive and negative) of the proposed land use associated with the activity applied for, be?	<u>YES</u>	NO	Please explain
Negative cumulative impacts the proposal will be increasing demands for services made on the resources and infrastructure of the municipality and the provincial road system in the area. The number of units in the proposed development is relatively small and these increased demands have been factored into the Klapmuts Growth Model. There are positive cumulative impacts in the form of optimum use of the site in line with the KSDF.			
14. Is the development the best practicable environmental option for this land/site?	<u>YES</u>	NO	Please explain
The site is currently farm land in the growth node of Klapmuts. The no-go option will maintain the <i>status quo</i> with no impact on the micro environment of the site. It will however not contribute to the economic potential of the site and the future growth model.			
15. What will the benefits be to society in general and to the local communities?			Please explain
Apart from the temporary and permanent employment which will be created by this development, the financial benefit to the local economy of Klapmuts and the Stellenbosch Municipality in particular in the form of rates and taxes, will be significant.			
16. Any other need and desirability considerations related to the proposed activity?			Please explain
The fact that access to the proposed development will be taken directly from the existing major roads in the area points to its optimum location within the Klapmuts growth node. The existing, and planned facilities for Klapmuts will be shared with the proposed development. According to the approved spatial planning policies for the Stellenbosch Municipal area, a large part of the subject property is earmarked for urban development purposes. The proposed development of the property for residential and tourist related purposes, is therefore directly in line with the KSDF recommendations and is therefore desirable from a spatial planning point of view.			

(17) Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account:

a) Promote the integration of the principles of environmental management set out in Section 2 of NEMA into the making of all decisions which may have a significant effect on the environment;

This Application has been undertaken in accordance with the NEMA EIA Regulations (2014), the provisions of which take into account the general objectives of Integrated Environmental Management in Section 23 of the NEMA

b) Identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits and promoting compliance with the principles of environmental management set out in Section 2;

Impacts associated with the development have been identified, assessed and mitigated and these are detailed in Section F of this BAR.

c) Ensure that the effects of activities on the environment receive adequate consideration before actions are taken in connection with them;

This Application has been undertaken in accordance with the NEMA EIA Regulations (2014), the provisions of which take into account the general objectives of Integrated Environmental Management in Section 23 of the NEMA. Please refer to the attached Environmental Management Programme (**Appendix H**).

d) Ensure that adequate and appropriate opportunity for public participation in decisions that may affect the environment;

This Application includes a public participation component which has been undertaken in accordance with the requirements of Chapter 6 of the EIA Regulations, 2014. Please refer to Section C of this BAR for details relating to public participation

e) Ensure the consideration of environmental attributes in management and decision-making which may have a significant effect on the environment;

The public participation component of this application allows Organs of State which have jurisdiction over the activity to review and comment on the application. As such, these Organs of State have an opportunity to include any environmental sensitivity identified in this application, in their decision-making going forward;

f) Identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in Section 2.

The EMP compiled for this application has been informed by the impact assessment undertaken, which is based on specialist input and the EAP's numerous years in the environmental management field. An Environmental Control Officer (ECO) will control the construction activities.

(18) Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account:

The investigation of the proposed activity and its associated impacts has considered the benefits as well as the possible harm of the activity for the receiving social, economic and biophysical environment.

The impacts of this activity on the receiving environment have been considered without favouring any particular aspect of the receiving environment over another aspect; nor favouring any particular community over any other affected by the proposed development.

All interested and affected parties identified as possibly impacted (or benefitted) by the activity have been given the opportunity to participate in the Basic Assessment process through the public participation process undertaken in accordance with Chapter 6 of the NEMA EIA Regulations.

Possible negative environmental impacts associated with the activity has led to the recommendation of a number of mitigation measures to either avoid any such impacts altogether; or to ensure that such impacts remain at an acceptable level without adversely impacting the environmental common heritage.

The mitigation measures recommended for implementation during the development of the site, are considered by the EAP to represent the Best Practical Environmental Option for land use at this site.

SECTION E: ALTERNATIVES

Please Note: Before completing this section, first consult this Department's *Guideline on Alternatives* (August 2010) available on the Department's website (<http://www.capecapegateway.gov.za/eadp>).

"Alternatives", in relation to a proposed activity, means different means of meeting the general purposes and requirements of the activity, which may include alternatives to –

- (a) the property on which, or location where, it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

The NEMA prescribes that the procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must, *inter alia*, with respect to every application for environmental authorisation –

- ensure that the general objectives of integrated environmental management laid down in NEMA and the National Environmental Management Principles set out in NEMA are taken into account; and
- include an investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity.

The general objective of integrated environmental management is, *inter alia*, to "identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management" set out in NEMA.

1. In the sections below, please provide a description of any identified and considered alternatives and alternatives that were found to be feasible and reasonable.

Please note: Detailed written proof the investigation of alternatives must be provided and motivation if no reasonable or feasible alternatives exist.

- (a) Property and location/site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The Klapmuts Spatial Development Framework (KSDF) (2007) was approved for the area to promote, guide and manage the future urban development of the town identified as a local growth node within the Greater Stellenbosch Municipal Area. As part of the Spatial Development Framework (SDF), an urban edge was approved for Klapmuts, which incorporated an arbitrary ±15h of the subject property within the urban edge identified for future urban development.

The applicant acted on these initiatives for growth in the Klapmuts urban fabric by securing an option for development on the land and embarking on planning and design proposed development.

As such no alternative site locations have been considered, but a number of alternative layouts and potential land uses have been considered, in accordance with the relevant legislative requirements.

- (b) Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

In accordance with the KSDF guidelines the applicants propose to do a residential development with a commercial component (in the form of a farm stall and related tourist related activities) at the intersection of the R44 and R45. No other alternative developments were considered. The current residential proposal with a farm stall component is considered to be the most appropriate, both in terms of land use planning (KSDF), the needs of the applicant and the broader community.

- (c) Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Site Layout Alternatives

The general design and layout of the development has been the subject of a number of design exercises and was refined and revised through inter alia specialist studies and public participation. This led to the eventual acceptance of a preferred layout.

Alternative Layout 1. Rejected Alternative 1. See Appendix B1

The Klapmuts Spatial Development Framework (KSDF) (2007) was approved for the area to promote, guide and manage the future urban development of the town identified as a local growth node within the Greater Stellenbosch Municipal Area. As part of the Spatial Development Framework (SDF), an urban edge was approved for Klapmuts, which incorporated an arbitrary ± 15 h of the subject property within the urban edge identified for future urban development.

Although the KSDF identified Klapmuts as an area of high growth potential, one of the main challenges is the substantial capital investment required for bulk infrastructural upgrades to accommodate such future growth. The Klapmuts Development Forum (KDF) was further formed, in collaboration with the Stellenbosch Municipality, to agree a growth model for Klapmuts. The property owner was represented on the KDF and 26 ha of the subject property was included in the growth model with 15ha being earmarked for 225 medium density housing units and 5ha for commercial development.

This was a fairly dense proposal with flats and group housing. The commercial component would consist of retail and office space.

Alternative Layout 2. Preferred Alternative 2. See Appendix B2

Residential component

Portion of Portion 36 of the Farm Bronkhorst No 748, Paarl, is 21.8965 ha in extent. An area of 1.8485ha must be ceded for road widening purposes along the R44, leaving 19.9992 ha for development.

The proposed development will consist of about 100 single residential erven covering a total of 8.7852 ha and comprising about 44% of the total area and about 50 group housing units comprising 1.8957ha covering about 10% of the site. Private open space will be 2.5681ha in extent and will comprise about 13% of the development. Private roads will be 4.2960ha in extent for coverage of about 21%.

Farm Stall/Tourist Facility

The area set aside for tourist related activities such as a farm stall is 2.44542ha in extent (about 12% of site).

A farm stall/tourist facility, ± 1500 m² GLA, is proposed on the agricultural portion located on the corner of the R44 and R45 Routes. The farm stall/tourist facility will be accommodated as a Consent Use within the existing Agricultural Zoning of the property i.e. a farm stall, tourist facility and possible meeting/lecture room.

Access to the property will be in accordance with the approved Klapmuts Road Management Scheme and limited to the following 2 access points:

Access off the R44: Access to Portion 1 and the Remainder Farm will be taken off the R44 directly opposite the Pot Belly commercial node in accordance with the approved road management scheme. This access will form part of the future signalised traffic intersection and will give access to both the proposed residential developments on Portion 1 as well as the remainder Portion 36 i.e. Mt Vernon Wine Estate. Access will be managed by way of a registered servitude across Portion 1 in favour of Mt Vernon on the Remainder.

Access off the R45: Access to the farm stall/tourist facility component will be in line with the existing conditions of approval of the Simonsberg Village i.e. directly opposite the existing T-junction entrance. This will be done by way of upgrading the existing T-junction to a full intersection.

- (d) Technology alternatives (e.g. to reduce resource demand and resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Technology alternatives: Standard brick and mortar technology will be used in the construction of the housing units. This technology is tried and tested and the most cost effective in supplying housing. In the final design of the buildings energy saving technologies such as solar water heating and grey water harvesting will be considered. Resource demand reducing technologies have been included in the preferred option and include:

- Low flow showerheads
- Dual flush toilets
- Low energy lighting
- Thermal insulation of the ceilings

(e) Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Operational alternatives: Promotion of gas as an alternative energy source must be considered
Resource demand reducing activities have been included in the preferred option and include:
-External house lighting is not recommended.
-Other resource demand reducing technologies include the maintenance of geyser at 60° Celsius.
-Recycling
-Grey water use for garden irrigation

(f) the option of not implementing the activity (the No-Go Option):

No go option. Do not develop the residential units and farm stall on the site and continue with the agricultural activities. This is certainly a feasible option.

This option will not contribute to the much needed growth opportunities for Klapmuts as envisaged in the KSDF and Growth Model.

The applicant further advises that the "no-go" option would be undesirable for the following reasons:

- No capital investment of the order of R400 to R500 million would occur and there will be no opportunities for temporary or permanent employment during the construction and operational phases of development.
- No upliftment of previously disadvantaged individuals via employment opportunities in both phases of the development and no spin-offs such as greater tourism to the area would occur.
- No contribution would occur to the local economy via the payment of rates and taxes.

(g) Other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

N/A

(h) Please provide a summary of the alternatives investigated and the outcomes of such investigation:

Please note: If no feasible and reasonable alternatives exist, the description and proof of the investigation of alternatives, together with motivation of why no feasible or reasonable alternatives exist, must be provided.

Summary

No-Go Alternative

The consequences of implementing the no-go alternative would be that the site would remain as an agricultural unit with a wheat field and small olive orchard. Limited potential for increase in social and economic benefits to the larger community.

Layout Alternatives

Of the number of options considered the preferred option of dividing the site in two with a drastically reduced number of erven gaining access through Val de Vie demonstrates a willingness on the part of the developer to respond to public input and concerns.

SECTION F: IMPACT ASSESSMENT, MANAGEMENT, MITIGATION AND MONITORING MEASURES

Please note: The information in this section must be duplicated for all the feasible and reasonable alternatives (where relevant).

1. PLEASE DESCRIBE THE MANNER IN WHICH THE DEVELOPMENT WILL IMPACT ON THE FOLLOWING ASPECTS:

(a) Geographical and physical aspects:

Noise, Dust and Vibration

Construction phase:

There will be dust, noise and vibration impacts associated with the development during the construction phase, with construction vehicles and equipment being used on site, emissions of dust from materials stockpiles, and the use of construction machinery and vehicles, etc. These impacts will be mitigated by construction phase measures contained in the Construction EMP.

Operation phase

No dust impacts will occur during the operational phase, as all surfaces will then be paved, grassed and landscaped. Noise impacts will be limited to that normally associated with a residential estate and is not anticipated to be problematic.

The farm stall and tourist facility is not expected to generate undue noise. It is also located at the intersection of two very busy roads with a large proportion of heavy vehicles. Operation of the farm stall will not add to the ambient noise.

Traffic

Construction phase

Heavy vehicles entering and exiting the site on two very busy regional roads will need careful management. Temporary slip lanes may be necessary. On the R44 these could be precursors to the widening of the road.

Operation phase

The Traffic Impact Statement concludes that the R44/Potbelly Pantry/Proposed Access intersection should be signalised with dedicated right turning lanes on all approaches.

Due to intersection spacing requirements on a Class 3-road as per the *Road Access Guidelines*, the signalisation of this intersection will not be possible. The tourist facility development will thus be limited in accordance with the capacity of the R45/Simonsberg Village/Proposed Development (tourist facility) intersection as a stop-controlled intersection (with free-flow conditions on the R45).

It can thus be concluded that the R45/Proposed Access (tourist facility portion of development) should be able to accommodate the expected traffic volumes (including the surrounding developments and the proposed development)

See **Appendix G4** for the Traffic Impact Statement

(b) Biological aspects:

Will the development have an impact on critical biodiversity areas (CBAs) or ecological support areas (CSAs)?		NO
If yes, please describe:		
There are no CBA and ESA designated areas on the site. The adjacent CBA and ESA areas in the valley bottom wetland will not be impacted. As such the development will not have an impact on critical biodiversity or ecological support areas.		
Will the development have an impact on terrestrial vegetation, or aquatic ecosystems (wetlands, estuaries or the coastline)?		NO
If yes, please describe:		
The site is totally transformed with wheat fields and an olive orchard. No natural vegetation remains. The adjacent aquatic ecosystem will not be impacted.		
Will the development have an impact on any populations of threatened plant or animal species, and/or on any habitat that may contain a unique signature of plant or animal species?		NO
If yes, please describe:		
No such plants or animals found on site		
Please describe the manner in which any other biological aspects will be impacted:		
Since the site has been cultivated in the past, no significant ecological impacts are expected.		

(c) Socio-Economic aspects:

What is the expected capital value of the activity on completion?	R 300 000 000
What is the expected yearly income or contribution to the economy that will be generated by or as a result of the activity?	Unknown at this stage
Will the activity contribute to service infrastructure?	<u>YES</u>
How many new employment opportunities will be created in the construction phase of the activity?	80
What is the expected value of the employment opportunities during the construction phase?	R 9 000 000
What percentage of this will accrue to previously disadvantaged individuals?	60 %
How will this be ensured and monitored (please explain):	
Tender documentation will stipulate the BEE portion linked to the project and will be monitored by the client / project manager during the construction phase. Non-compliance will result in the contractor paying a penalty. The conditions of the Employment Equity Act will be enforced.	
How many permanent new employment opportunities will be created during the operational phase of the activity?	100
What is the expected current value of the employment opportunities during the first 10 years?	R 40 000 000
What percentage of this will accrue to previously disadvantaged individuals?	60 %
How will this be ensured and monitored (please explain):	
The developer's procurement policy and employment BEE ratios as required by the BEE act governing companies.	
Any other information related to the manner in which the socio-economic aspects will be impacted:	
Temporary employment with design and construction. Local employment may be created with garden and domestic household services Security services	

(d) Cultural and historic aspects:

There are no historic buildings on the site. The proposed development is not out of keeping with the characteristics of the adjacent residential area. Heritage Western Cape approved the development. See Appendix D2
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2. WASTE AND EMISSIONS

(a) Waste (including effluent) management

Will the activity produce waste (including rubble) during the construction phase?	<u>YES</u>	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	As per single dwelling M ³	
Building rubble will be temporarily stored and protected on site to be disposed of at the approved municipal landfill site. Run-off will be associated with construction activities e.g. cleaning and flushing. The Environmental Management Programme (EMP) specifies how construction effluent and solid waste is to be stored and disposed of.	About 4 cub m	

Will the activity produce waste during its operational phase?	<u>YES</u>	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?		
Household refuse is one wheely bin per dwelling per week during occupation of house. The farm stall will also generate domestic type waste plus a limited quantity of organic waste. The latter will be separated before disposing to the municipal waste stream.		

Where and how will the waste be treated / disposed of (describe)?
Waste is collected by the Stellenbosch Municipality disposed of according to the waste management plan of the Municipality.
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type per phase of the development?
Household refuse will be temporarily stored on site in bins (one wheely bin per household per week) to be collected and disposed of at the approved municipal landfill site. Toilets and bathroom facilities will generate

sewage/effluent that will be treated at the Municipal sewage treatment works. The Farm stall/ tourist facility will also generate domestic type waste plus organic waste. No classified hazardous waste will be generated

Has the municipality or relevant authority confirmed that sufficient capacity exist for treating / disposing of the waste to be generated by this activity(ies)? If yes, provide written confirmation from Municipality or relevant authority	YES	NO
Written confirmation in Appendix E		
Will the activity produce waste that will be treated and/or disposed of at another facility other than into a municipal waste stream?		No
If yes, has this facility confirmed that sufficient capacity exist for treating / disposing of the waste to be generated by this activity(ies)? Provide written confirmation from the facility and provide the following particulars of the facility:	YES	NO
Does the facility have an operating license? (If yes, please attach a copy of the license.)	YES	NO
Facility name:		
Contact person:		
Postal address:		
	Postal code:	
Telephone:	Cell:	
E-mail:	Fax:	

Describe the measures that will be taken to reduce, reuse or recycle waste:
The Stellenbosch Municipality is slowly rolling out a recycling system but it is not yet operational in this area

(b) Emissions into the atmosphere

Will the activity produce emissions that will be disposed of into the atmosphere?	YES	NO
If yes, does it require approval in terms of relevant legislation?	YES	NO
Describe the emissions in terms of type and concentration and how it will be treated/mitigated:		

3. WATER USE

Please indicate the source(s) of water for the activity by ticking the appropriate box(es)

Municipal	Water board	Groundwater	River, Stream, Dam or Lake	Other	The activity will not use water
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If water is to be extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:	m ³
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Please provide proof of assurance of water supply (eg. Letter of confirmation from municipality / water user associations, yield of borehole)

[Written confirmation from the municipality is attached in Appendix E.](#)

Does the activity require a water use permit / license from DWAF?	YES
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If yes, please submit the necessary application to Department of Water Affairs and attach proof thereof to this application. [Appendix D3](#)

Describe the measures that will be taken to reduce water demand, and measures to reuse or recycle water:

[Resource demand reducing technologies have been included in the preferred option and include:](#)

- [Low flow showerheads](#)
- [Dual flush toilets](#)
- . [Water wise gardening](#)

[Grey water irrigation systems will be considered.](#)

4. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

The electrical supply authority for this area is Eskom. The supply will be taken at bulk MV level and internal metering will be private.

If power supply is not available, where will power be sourced from?

5. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The installation of low energy lighting is to be included in the building plans. Thermal insulation of the ceilings is a standard building requirement. Geysers are to be insulated and the temperature setting is recommended at 60° Celsius. Street lights are to have CFL (Compact Fluorescent light bulbs) or LED (light emitting diodes). Geyser blankets and pipe insulation is to be used to wrap around the geyser and hot water pipes To retain the heat. Vertical geysers are to be installed as they are more energy efficient than horizontal geysers. Geyser timers are to be considered to automatically switch geysers on and off at certain times, thus providing hot water when needed.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

Solar water heating must be explored in the Architectural design of the buildings and this is a cost-effective solution to save energy for water heating.

Solar PV (photovoltaic) panels with battery storage is improving all the time and it is becoming more cost effective to generate electricity, and with the improvement of batteries, store it for use when the sun does not shine. The cost of these systems can be included in the price of the units as it adds value to the asset. For additional saving of electricity, LED lights and/or other compact energy saving lamps should be used.

PREFERRED ALTERNATIVE

6. DESCRIPTION AND ASSESSMENT OF THE SIGNIFICANCE OF IMPACTS PRIOR TO AND AFTER MITIGATION

Please note: While sections are provided for impacts on certain aspects of the environment and certain impacts, the sections should also be copied and completed for all other impacts.

- (a) Impacts that may result from the planning, design and construction phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase.

Potential impacts on the geographical and physical aspects:	Storm water channelled to adjacent dam.
Nature of impact:	Negative
Extent and duration of impact:	Permanent
Probability of occurrence:	Medium

Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	High
Proposed mitigation:	The most important recommended mitigation measures for reducing the potential operational-phase impacts on freshwater ecosystems to low levels of significance are (1) the inclusion of vegetated channels in the stormwater management system for the proposed development, (2) the construction of sediment traps/sumps at the inlets to the dam.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential impacts on geographical and physical aspects:	Movement of construction vehicles on existing roads in the vicinity.
Nature of impact:	Negative
Extent and duration of impact:	Local and temporary
Probability of occurrence:	High
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium. Frequent trips by heavy vehicles turning into busy roads.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Temporary turning lanes on both the R44 and R45.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium

Potential impact on geographical and physical aspects:	Dust generation during construction
Nature of impact:	Negative
Extent and duration of impact:	Local and Temporary
Probability of occurrence:	High during dry and windy periods
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Restriction of vehicle speeds. Standard EMP procedures, including watering of dusty areas and straw and geo-textile stabilization. See Appendix H
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential impact on biological aspects:	Impact on indigenous vegetation.
Nature of impact:	Low-Negative
Extent and duration of impact:	Local and Permanent

Probability of occurrence:	Low
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Very-Low. Loss of the CBA and ESA area is not considered to have any severe impacts (i.e. Very Low).
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Since the site supports no intact natural vegetation, threatened species or identified (botanically related) ecological processes, loss of (a) vegetation and (b) ecological processes would result in Low Negative Impact. Furthermore, if the development is approved this should be on the condition that locally indigenous species comprise most of the landscaping species so that local biodiversity can be enhanced. This may even result in a positive overall impact if implemented properly. See Appendix H for the EMPr
Cumulative impact post mitigation:	Low negative. Medium Positive
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low negative. Medium Positive

Potential impacts on socio-economic aspects:	Creation of construction phase job opportunities
Nature of impact:	Positive
Extent and duration of impact:	Local and short-term
Probability of occurrence:	High
Degree to which the impact can be reversed:	This is a positive impact
Degree to which the impact may cause irreplaceable loss of resources:	None
Cumulative impact prior to mitigation:	Low positive
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	None
Degree to which the impact can be mitigated:	Low positive
Proposed mitigation:	Create construction jobs
Cumulative impact post mitigation:	Low positive
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	High

Potential impacts on socio-economic aspects:	Impact on residents in Val de Vie along the proposed entrance road.
Nature of impact:	Negative
Extent and duration of impact:	Local and permanent
Probability of occurrence:	High
Degree to which the impact can be reversed:	Irreversible
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Cumulative impact prior to mitigation:	High negative
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	These residents at present live adjacent to an open area. This will be replaced by a road carrying traffic from 35 residential units. The noise and visual impact will be mitigated by berms and landscaping. The small number of vehicles coupled with the mitigation measures will reduce the impact to Low negative. See Appendix G6
Cumulative impact post mitigation:	Low negative
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential impacts on cultural-historical aspects:	Visual Impacts. While the development will result in a change in the visual landscape from an unbuilt agricultural site, to a built area, the scenic resources of the greater environment will be minimally
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	affected. The widening of the road will result in the loss of the existing windbreak of <i>Casuarina</i> trees.
Nature of impact:	Negative
Extent and duration of impact:	Local and permanent
Probability of occurrence:	High
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	A vegetated berm will be introduced between the R44 and the development. This will serve a dual purpose of screening the development from the road and create a green pleasing view from the road. Landscaping will be done with indigenous plantings.
Cumulative impact post mitigation:	Neutral to positive
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low negative. Medium-high positive

Potential noise impacts:	There will be noise associated with the construction phase
Nature of impact:	Negative
Extent and duration of impact:	Local and Short-term
Probability of occurrence:	Probable
Degree to which the impact can be reversed:	Medium
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium-low
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Working hours will be restricted to normal working hours. <ul style="list-style-type: none"> All noise and sounds generated by plant or machinery must adhere to SABS specifications for the maximum permissible noise levels for residential areas. All plant and machinery are to be fitted with adequate silencers. No sound amplification equipment such as sirens, loud hailers or hooters may be used on site, after normal working hours, except in emergencies. If work is to be undertaken outside of normal work hours, permission must be obtained from the Local Authority.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential visual impacts:	Lighting during construction phase
Nature of impact:	Negative
Extent and duration of impact:	Local and Temporary
Probability of occurrence:	Medium
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium- Low
Degree to which the impact can be mitigated:	
Proposed mitigation:	Lighting on site is to be sufficient for safety and security purposes, but shall not be intrusive to neighbouring residents, or interfere with road traffic. Temporary construction lights must be designed to reflect light downwards, thus reducing the impact of light pollution.

	<ul style="list-style-type: none"> Should overtime/night work be authorised, the Contractor shall be responsible to ensure that lighting does not cause undue disturbance to neighbouring residents. In this situation low flux lighting shall be utilised.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

(b) Impacts that may result from the **operational phase** (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.

Potential impacts on the geographical and physical aspects:	Storm water channelled to adjacent dam.
Nature of impact:	Negative
Extent and duration of impact:	Permanent
Probability of occurrence:	Medium
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	High
Proposed mitigation:	The most important recommended mitigation measures for reducing the potential operational-phase impacts on freshwater ecosystems to low levels of significance are (1) the inclusion of vegetated channels in the stormwater management system for the proposed development, (2) the construction of sediment traps/sumps at the inlets to the dam.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential impact biological aspects:	Alien plant introduction in the development.
Nature of impact:	Negative
Extent and duration of impact:	Local and Temporary
Probability of occurrence:	Medium
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	No planting of CARA listed alien invasive plants in gardens. No dumping of garden refuse in the riparian zone of the dam. Removal of alien invasive species and replacement with suitable indigenous species in the recreational area around the dam.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential impacts on socio-economic aspects:	Impact on traffic patterns on the R44 and R45
Nature of impact:	Negative
Extent and duration of impact:	Local and permanent
Probability of occurrence:	High
Degree to which the impact can be reversed:	High with traffic management measures recommended in the Traffic Impact Statement.
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	High

Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	The R44/Potbelly Pantry/Proposed Access intersection should be signalled with dedicated right turning lanes on all approaches. The tourist facility development will thus be limited in accordance with the capacity of the R45/Simonsberg Village/Proposed Development (tourist facility) intersection as a stop-controlled intersection (with free-flow conditions on the R45).
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential impacts on socio-economic aspects:	Impact on municipal services
Nature of impact:	Negative
Extent and duration of impact:	Regional and permanent.
Probability of occurrence:	High
Degree to which the impact can be reversed:	High with added capacity and prior planning
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	In the KSDF and Growth Plan provision was made for bulk services. This is confirmed by the Local authority. See Appendix E
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential impacts on the socio-economic aspects:	Increased economic activity and provision of employment in the area
Nature of impact:	Positive
Extent and duration of impact:	Local and Permanent
Probability of occurrence:	High
Degree to which the impact can be reversed:	Low
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium positive
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	Medium positive
Proposed mitigation:	
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	High

Potential impacts on the cultural-historical aspects:	Heritage Western Cape considered this impact to be low. Appendix D2
Nature of impact:	Neutral
Extent and duration of impact:	Local and Permanent
Probability of occurrence:	High
Degree to which the impact can be reversed:	High. Replacing old structures with modern
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium- Low
Degree to which the impact can be mitigated:	
Proposed mitigation:	Architectural guidelines and landscaping designs.
Cumulative impact post mitigation:	Low

Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
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Potential noise impacts:	Normal noise associated with a residential development.
Nature of impact:	Negative to neutral
Extent and duration of impact:	Permanent and Local
Probability of occurrence:	High
Degree to which the impact can be reversed:	Low
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	Traffic calming design in layout and low noise surface treatment for roads.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium

Potential visual impacts:	These residential units will be visible from surrounding properties
Nature of impact:	Negative to neutral
Extent and duration of impact:	Local and Permanent
Probability of occurrence:	High
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	While the development will result in a change in the visual landscape from an unbuilt, green, to a built area, the scenic resources of the greater environment will be minimally affected, but at the local scale will be moderately affected. If following mitigation measures are implemented, the visual impact will be low. Landscaping of the berm between the R44 and the development. Planting of quick growing and slower growing indigenous trees and shrubs and thus constructing a landscaped areas to screen the new built development
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Potential visual impacts:	Lighting
Nature of impact:	Negative
Extent and duration of impact:	Local and Permanent
Probability of occurrence:	High
Degree to which the impact can be reversed:	Medium
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Cumulative impact prior to mitigation:	High
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Street and other permanent light sources must be designed to reflect light downwards. Thus reducing the impact of light pollution. Limited street/parking lighting; Keeping street/parking lighting to low level lighting; and Limiting external lighting on the residential buildings.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium-Low

- (c) Impacts that may result from the **decommissioning and closure phase** (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase.

NB This is a proposed residential and tourist development and does not involve decommissioning or closure of any facilities.

Potential impacts on the geographical and physical aspects:	
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

Potential impact biological aspects:	
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

Potential impacts on the socio-economic aspects:	
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

Potential impacts on the cultural-historical aspects:	
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable	

loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

Potential noise impacts:	
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

Potential visual impacts:	
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

(d) **Any other impacts: N/A**

Potential impact:	
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

LAYOUT ALTERNATIVES

- (a) Impacts that may result from the **planning, design and construction phase** (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase.

NB The rejected layout will have the same impacts as the preferred layout.

Potential impacts on geographical and physical aspects:	
Nature of impact:	
Extent and duration of impact:	
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	

NOTE: All other impacts remain the same as for the preferred alternative.

“No-Go Alternative”. This means no development in the area

Potential impact biological aspects:	Agriculture continues. No biological impact
Nature of impact:	Neutral
Extent and duration of impact:	Local and long term
Probability of occurrence:	High
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Development as proposed in preferred alternative.
Cumulative impact post mitigation:	High positive
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	High positive

Potential impacts on socio-economic aspects:	Lack of capital investment in the area and provision of employment
Nature of impact:	Negative
Extent and duration of impact:	Local and permanent
Probability of occurrence:	High
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High (Opportunity cost)
Degree to which the impact can be mitigated:	High

Proposed mitigation:	Develop the area through an appropriate development that uplifts the socio-economic status of the area.
Cumulative impact post mitigation:	High positive
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	High positive

SPECIALIST INPUTS/STUDIES AND RECOMMENDATIONS

Please note: Specialist inputs/studies must be attached to this report as **Appendix G**. Also take into account the Department's Guidelines on the Involvement of Specialists in EIA Processes available on the Department's website (<http://www.capegateway.gov.za/eadp>).

Specialist inputs/studies and recommendations:

A **fresh water assessment** was done by Kim Dalhuizen of Scientific Aquatic Services. See **Appendix G1**.

Conclusions

Scientific Aquatic Services (SAS) was appointed to conduct a freshwater ecological assessment as part of the environmental assessment and Water Use Licence Application. There are no wetlands or water courses on the site. The adjacent farm dam and wetland will not be impacted.

The Traffic Impact Study was done by iCE Engineers. Appendix G4

Conclusion

- 1) That the consolidated R44/Proposed Development (residential)/Potbelly Pantry intersection (in line with the **Access Management Plan** by *Aecom*) be signalised with dedicated right turning lanes on all approaches;
- 2) That the consolidated R45/Proposed Development (tourist facility)/ Simonsberg Village intersection (± 250 metres east of the R44/R45 intersection in line with PGWC correspondence) be stop-controlled on the side streets;
- 3) That the existing 80 km/h speed limit sign on the R44 to the south of the consolidated R44/Proposed Development (residential)/Potbelly Pantry intersection should be relocated further south of the intersection in accordance with the South African Road Traffic Signs Manual;
- 4) That street lighting be provided on the R44 and R45 from where it currently exists to beyond the proposed development accesses;
- 5) That the internal road layout, refuse removal and parking be addressed at Site Development Plan submission stage;
- 6) That public transport embayments be provided on the R44 at the R44/R45 intersection southern leg outbound and at the R44/Proposed Development (residential)/Potbelly Pantry intersection northern and southern legs outbound;
- 7) That pedestrians be accommodated at the R44/Proposed Development (residential)/Potbelly Pantry signalised intersection;
- 8) That a pedestrian gate be considered at the R44/R45 intersection for pedestrians to/from the tourist facility portion of the proposed development; and
- 9) That, as per the recommendation in the TIA for the Erf 1336 development the existing "tweespoor" road along the R44 south of the R44/R45 intersection on the western side of the R44 be replaced with a footway up to Potbelly Pantry.

Storm water management plan Appendix G3

This report deals mainly with the technical aspects of the site for civil engineering works.

LUPO Report Appendix G8

Land use application

8. IMPACT SUMMARY

Please provide a summary of all the above impacts.

Summary table of impacts for preferred alternative		
Impact	Significance rating	
	Without mitigation	With mitigation
Construction Phase		
Impact on water resources	Medium	Low
Movement of heavy construction vehicles.	Medium	Low
Dust generation during construction	Medium	Low
Impact on wetland resources.	Medium-Low	Low negative. Medium positive
Impact on indigenous vegetation.	Medium	Low
Noise associated with the construction	Medium-low	Low

Creation of construction phase job opportunities	Low	High positive
Lighting during construction phase	Medium	Low
Impact on residents in Val de Vie along the proposed entrance road.	Medium	Low
Impact on cultural aspects. Visual.	Medium	Low
Visual impacts	Low	Low
Operation phase		
Impact on municipal services	Low	Low
Alien plant invasion	Medium	Low
Impact on traffic patterns	Low	Low
Operational impacts on fresh water systems.	Low	Low
Normal traffic noise associated with a residential development.	Medium	Medium
Lighting	Medium	Medium-Low
Increased economic activity and job creation.	Medium positive	High positive
Heritage impacts	Low	Low
Visual impacts	Low	Low
Decommissioning and closure phase		
NB This is a proposed residential development and does not involve decommissioning or closure of facilities.		
No-go alternative		
Impact	Without mitigation	With Mitigation (Development)
Further degradation of the site through increased invasive alien vegetation, Site should be actively managed	High Negative	High Positive
Lack of capital investment in the area and provision of employment	High negative	High positive
Summary table for alternative layout options		
Impact	Significance rating	
NB The rejected layouts will have the same impacts as the preferred layout.	Without mitigation	With mitigation
All other impacts remain the same as for the preferred alternative.		

9. OTHER MANAGEMENT, MITIGATION AND MONITORING MEASURES

(a) Over and above the mitigation measures described in Section 6 above, please indicate any additional management, mitigation and monitoring measures.

An Environmental Management Programme has been drawn up for the construction and operational phase of the development. Please see **Appendix H** for the Draft EMPr. Compliance with the Environmental Management Programme is essential

(b) Describe the ability of the applicant to implement the management, mitigation and monitoring measures.

The applicant budgeted for the construction of the development and has the financial wherewithal to implement these measures. The same applicant very successfully implemented the previous phases of the Val de Vie Estate.

Please note: A draft ENVIRONMENTAL MANAGEMENT PROGRAMME must be attached this report as Appendix H.

SECTION G: ASSESSMENT METHODOLOGIES AND CRITERIA, GAPS IN KNOWLEDGE, UNDERLYING ASSUMPTIONS AND UNCERTAINTIES

(a) Please describe adequacy of the assessment methods used.

This Basic Assessment was undertaken in accordance with the principles of Integrated Environmental Management as detailed in Section 23 of NEMA and in the NEMA EIA Regulations (2010). This Basic Assessment was undertaken in accordance with the DEA&DP Guidelines and reference literature detailed in Section B10 of this BAR. The EAP feels it reasonable to conclude that the criteria listed in the above references ensured an adequate assessment of this environmental application. One of the fundamental aims of a Basic Assessment Process is to ensure that the demands of sustainable development are met on a project level, within the context of the greater area. The most common definition of sustainable development is development that meets the needs of the present while not compromising the needs of future generations. The BAR for the proposed The Vines development is therefore being undertaken with sustainable development as a goal. The assessment looked at the impacts of the proposals on the environment and assesses the significance of these, as well as proposes mitigation measures, as required, to reduce anticipated impacts to acceptable levels. This is to ensure that the development makes "*equitable and sustainable use of environmental and natural resources for the benefit of present and future generations*"

(b) Please describe the assessment criteria used.

Protocol for the Assessment of Impacts (from DEAT 2002 and the NEMA regulations 2014)

Nature of the Impact:

Description of the type of effect the activity would have on the affected environment.

Extent of the Impact:

Reflects the importance of the environment on:

- ◆ a local (site area);
- ◆ surrounds (site area and its surroundings);
- ◆ regional (Western Cape) or
- ◆ a national scale.

Impacts on threatened wetlands or seeps, or those that provide ecosystem functions on a regional or national scale are considered to constitute a regional or national scale impact.

Duration of the Impact:

- ◆ Short term (0-5 years);
- ◆ Medium term (6-15 years);
- ◆ Long term (16-30 years);
- ◆ Permanent (mitigation, either human or natural, will not occur in such a way or in such time span that the impact can be considered transient).

Intensity of the Impact:

- ◆ Low (affects the environment such that natural functions or processes are not affected – or not degraded significantly more than their present state);
- ◆ Medium (affected environment is altered but natural functions or processes continue, albeit in a modified/ increasingly modified way);
- ◆ High (natural functions or processes are altered to the extent that they will temporarily or permanently cease).

Probability of Occurrence:

- ◆ Improbable (low likelihood of the impact occurring);
- ◆ Probable (distinct possibility of the impact occurring);
- ◆ Highly probable (the impact will most likely occur).
- ◆ Definite (impact will occur regardless of any prevention measures)

Status of the Impact:

- ◆ Negative
- ◆ Positive
- ◆ Neutral

Significance of impact (Degree to which the impact will cause irreplaceable loss of resources):

- ◆ No significance: the impacts do not influence the environment in any way.
- ◆ Low significance: the impacts will have a minor influence on the environment. These impacts require some attention to modification of the project design where possible, or alternative mitigation.
- ◆ Moderate significance: the impacts will have a moderate influence on the environment. The impact can be ameliorated by a modification in the project design or implementation of effective mitigation measures.
- ◆ High significance: the impacts will have a major influence on the environment.
- ◆ No development: the impacts will have the "no-go" implication on the development or portions of the development regardless of any mitigation measures that could be implemented. This level of significance must be well motivated.

Degree to which impact can be reversed:

- ◆ Low (can only be removed with great difficulty and expense)
- ◆ Medium (can be removed with moderate difficulty and expense)
- ◆ High (can easily and cheaply be removed)

Degree of Confidence in Predictions:

It is necessary to state the degree of confidence (low, medium or high) in the predictions based on the available information and level of knowledge and expertise.

Accumulative Impact:

Consideration must be given to the extent of any accumulative impact that may occur due to the proposed development. Such impacts must be evaluated with an assessment of similar developments already in the environment. Such impacts will be either positive or negative, and will be graded as being of negligible, low, medium or high impact.

(c) Please describe the gaps in knowledge.

No gaps were identified

(d) Please describe the underlying assumptions.

The following assumptions are made:

- The information on which the report is based (i.e. diagrams, plans and project information) is correct.
- The construction of this proposed development will be in line with the recommendations in this report, which will be enforced by the implementation of detailed Environmental Management Programme. Much of the long-term success lies in the effective implementation of the measures prescribed in the Environmental Management Programme.

(e) Please describe the uncertainties.

Implementation of mitigation and management measures is the responsibility of the applicant and contactors. The successful implementation of these measures are therefore not in the hands of the EAP, and the effectiveness of the implementation remains uncertain. It is therefore suggested that an ECO be appointed in order to ensure compliance with the relevant conditions and mitigations.

SECTION H: RECOMMENDATION OF THE EAP

In my view (EAP), the information contained in this application form and the documentation attached hereto is sufficient to make a decision in respect of the activity applied for.

YES

NO

If "NO", list the aspects that should be further assessed through additional specialist input/assessment or whether this application must be subjected to a Scoping & EIR process before a decision can be made:		
N/A		
If "YES", please indicate below whether in your opinion the activity should or should not be authorised:		
Activity should be authorised:	YES	NO
Please provide reasons for your opinion		
The EAP has not identified any reasons as to why the proposed development cannot proceed provided that the mitigation measures proposed by the independent specialists and in the EMP are implemented.		
If you are of the opinion that the activity should be authorised, then please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an authorisation.		
<p>Should the project be authorized, the following recommendations could be included as conditions, where applicable:</p> <p>WASTE</p> <ul style="list-style-type: none"> All building rubble should be removed on a monthly cycle, during construction, thus no storage of rubble on site for periods longer than a month. <p>NOISE:</p> <ul style="list-style-type: none"> All noise and sounds generated by plant or machinery must adhere to SABS 0103 specifications for the maximum permissible noise levels for residential areas. All plant and machinery are to be fitted with adequate silencers. <p>No sound amplification equipment such as sirens, loud hailers or hooters may be used on site, after normal working hours, except in emergencies.</p> <ul style="list-style-type: none"> If work is to be undertaken outside of normal work hours, permission must be obtained from the Local Authority. Prior to commencing any such activity the Contractor is also to advise the potentially affected neighbouring residents. Dates, times and the nature of the work to be undertaken are to be provided. Notification could include letter-drops. <p>No Kikuyu grass should be planted. No fertilizers to be used in the garden area. No planting of CARA listed invasive alien species.</p> <p>Energy efficient and water saving devices and technologies included in the impact assessment should be implemented with operation. Recycling activity points are indicated.</p> <p>Strict adherence to the Environmental Management Programme</p>		
Duration and Validity: Environmental authorisations are usually granted for a period of three years from the date of issue. Should a longer period be required, the applicant/EAP is requested to provide a detailed motivation on what the period of validity should be.		
An extension of the authorisation time period is not required.		

SECTION I: APPENDICES

The following appendices must be attached to this report:

Appendix		Tick the box if Appendix is attached
Appendix A:	Locality map	✓
Appendix B:	Alternative Layout 1 (Preferred)	✓
Appendix C:	Photographs	✓
Appendix D1:	Biodiversity Overlay	✓
Appendix D2:	Heritage Matters And HWC ROD	✓

Appendix D3	Water & Sanitation Matters	✓
Appendix D4	Dept of Agriculture Approval	✓
Appendix E:	Permit(s) / license(s) from any other organ of state including service letters from the municipality	✓
Appendix F1:	Public participation process	✓
Appendix F2:	Newspaper Notices	✓
Appendix F3:	Site Notice Boards	✓
Appendix F4:	Initial Interested and Affected Parties (I&AP's)	✓
Appendix G1:	Fresh Water Study	✓
Appendix G2:	Engineering Services Report	✓
Appendix G3:	Storm Water Report	✓
Appendix G4:	Traffic Impact Assessment	✓
Appendix G5:	Soil Report	✓
Appendix G6:	Title Deeds	✓
Appendix G7:	Power of Attorney	✓
Appendix G8:	Klapmuts Growth Model	✓
Appendix H :	Environmental Management Programme	✓
Appendix I:	EAP Terms of Reference	✓

DECLARATIONS

THE APPLICANT

I, in my personal capacity or duly authorised (please circle the applicable option) by thereto hereby declare that I:

- regard the information contained in this report to be true and correct, and
- am fully aware of my responsibilities in terms of the National Environmental Management Act of 1998 ("NEMA") (Act No. 107 of 1998), the Environmental Impact Assessment Regulations ("EIA Regulations") in terms of NEMA (Government Notice No. R. 543 refers), and the relevant specific environmental management Act, and that failure to comply with these requirements may constitute an offence in terms of the environmental legislation;
- appointed the environmental assessment practitioner as indicated above, which meet all the requirements in terms of regulation 17 of GN No. R. 543, to act as the independent environmental assessment practitioner for this application;
- have provided the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the environmental legislation including but not limited to –
 - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
 - costs incurred in respect of the undertaking of any process required in terms of the regulations;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the regulations;
 - costs in respect of specialist reviews, if the competent authority decides to recover costs; and
 - the provision of security to ensure compliance with the applicable management and mitigation measures;
- am responsible for complying with the conditions that might be attached to any decision(s) issued by the competent authority;
- have the ability to implement the applicable management, mitigation and monitoring measures;
- hereby indemnify, the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of, inter alia, the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Please Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the applicant:

Name of company:

Date:

THE INDEPENDENT ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

I, **Johannes Hendrik Neethling** as the appointed independent environmental practitioner ("EAP") hereby declare that I:

- act/ed as the independent EAP in this application;
- regard the information contained in this report to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- have and will not have no vested interest in the proposed activity proceeding;
- have disclosed, to the applicant and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the application was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- have ensured that the comments of all interested and affected parties were considered, recorded and submitted to the competent authority in respect of the application;
- have kept a register of all interested and affected parties that participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Note: The terms of reference must be attached.



Signature of the environmental assessment practitioner:

Johan Neethling Environmental Services cc

Name of company:

Date: