PORTION 4 OF THE FARM NO 491

APPLICATION FOR

REZONING & CONSENT USE

CLIENT: SILVER FALCON TRADING 96 PTY LTD

PREPARED BY: MARIKE VREKEN TOWN & REGIONAL PLANNERS

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SECTION A: BACKGROUND

1. BACKGROUND

Portion 4 of the Farm no 491 was originally known as "Funda Quarry" that was mined by DenRon. Mining on the site has been in operation for 10 years under licence held by Derby Concrete cc. Given that the period of mining as agreed with the surrounding agricultural community, had expired, and activities were accordingly terminated on 30 April 2009 which coincided with the termination of the Mining Licence, the Licence holders have decided to lodge a closure application for the site. Mining activities have recently came to an end. The quarry was decommissioned and the property was sold to Silver Falcon Trading 96 (Proprietary) Limited during 2008.

The quarry was rehabilitated and the farm is currently being used for agricultural purposes, which include horse farming, organic vegetable farming, and small vineyard, rehabilitation of the indigenous forest and the production of furniture with the alien trees that are removed.

The owners initially started with small scale horse farming, but later discovered that the organic waste which the horses produce could be used to cultivate organic vegetables. An organic vegetation patch was thus planted and delivered great success. An indigenous forest is located on the northern slopes of the farm, which Silver Falcon Trading 96 started to rehabilitate by eradicating the alien vegetation. These alien trees are taken and used to manufacture furniture. While these trees are being removed on an ongoing basis, Silver Falcon Trading 96 has started an indigenous tree nursery on the farm, which tourists could buy to neutralise their carbon footprint, and replant in the forest area on the farm.

FIGURE 1: ORGANIC VEGETATION PATCH

FIGURE 2: NURSERY OF INDIGENOUS TREES

The new owners of the property are undertaking various agricultural and tourism initiatives in order to create an economically viable and environmentally sustainable enterprise on the farm.

2. THE APPLICATION

Application is hereby made on behalf of the Silver Falcon Trading 96 (Proprietary) Limited No 2004/004511/07 (refer ***Annexure A***: Company Resolution & Power of Attorney) for:

(i) for a Consent use to allow five additional dwellings on the "Agriculture Zone I" zoned property; in terms of Clause 4.6 of the Section 8 Scheme Regulations as promulgated in P.N. 1048/1988, in respect of Remainder of Portion 4 of the Farm Wittedrift No 491, in the Bitou Municipality and Division of Knysna, Western Cape Province.

(ii) a Consent use to allow a tourism facility on the "Agriculture Zone I" zoned property; in terms of Clause 4.6 of the Section 8 Scheme Regulations as promulgated in P.N. 1048/1988, to allow the operation of a organic farming teaching centre.

(iii) The rezoning of a portion of the property from "Agriculture Zone I" to "Agricultural Zone II" to allow the operation of an "Agricultural Industry" (manufacturing of timber products), in terms of Section 17 of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985)

The application form is attached as ***Annexure B*** to this report.

At this point, it should be noted that the EIA Regulations (GN R544 – 546 of 18 June 2010, as amended and promulgated in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) are not applicable to the subject property as:

- The "agricultural industry" does not exceed 2000m² in extent (Listing notice 1, activity 8);
- No construction will be within 32m of a water course - The "lake" on the property is a man-made, rehabilitated quarry (Listing notice 1, activity 11 & Listing Notice 3, activity 16);
- Access is obtained via existing farm roads (Listing notice 1, activity 22);
- The "transformation" does not exceed 1 ha (Listing notice 1, activity 22);
- The proposed additional dwellings will not be tourism accommodation (Listing Notice 3, Activity 5 & 6);

3. PROPERTY DESCRIPTION, SIZE AND OWNERSHIP

A Copy of the Title Deed of Portion 4 of the Farm No 491, Wittedrift, containing the details outlined below, is contained in ***Annexure C***.

Title Deed Description:	Remainder Portion 4 of the Farm No 491, situate in the Bitou Municipality, Division of Knysna, Province of the Western Cape
Property Owner:	Silver Falcon Trading 96 (Proprietary) Limited (Nr. 2004/004511/07)

Title Deed Number:	T004233/10
Title Deed Restrictions:	There are no restrictive conditions that could prevent the proposed additional dwellings, tourist facility or agricultural industry.
Bonds:	A bond is registered against this property. An application for the bond holder's written permission was lodged and the financial institution's written consent will be provided in due course.
Property Size:	166, 1036 (One Hundred and Sixty Six Comma One Zero Three Six) Hectares
Servitudes:	the application area is entitled to a servitude road across Portion 3 of Farm 306, providing access to the application area. The servitude road is shown on S.G. Diagram 4923/2004 (***Annexure D***)

SECTION B CONTEXTUAL INFORMANTS

4. LOCALITY *(refer Plan 1)*

Portion 4 of the Farm No 491, (hereafter referred to as "the application area") is situated approximately 3km northwest of the Wittedrift village. Access to the farm is obtained from the "Stofpad" road via a servitude road across Portion 3 of the Farm Wittedrift No 306. The Bitou River forms the southern boundary of the property.

5. CURRENT LAND USE AND ZONING

5.1 Land Use

The application area is currently used for bona fide agricultural purposes and agricultural processing. Current farming activities include horse farming, grazing, organic gardens, processing of indigenous and alien trees into furniture and the rehabilitation of indigenous plant species.

5.2 Zoning

The subject property is deemed to be zoned as "Agriculture Zone I" in terms of the Section 8 Scheme Regulations.

6. SURROUNDING LAND USE AND CHARACTER OF THE AREA

The application area and surrounding properties are mostly characterised by agricultural and rural residential land uses. The farms to the south and east of the application area are mainly used for agricultural and rural residential purposes. The Bitou River flows to the south of the application area and forms the communal property boundary of various farms in this valley.

The proposed additional dwelling units, tourism facilities and agricultural industry (timber furniture manufacturing) on the property will not impact on the agricultural and rural residential character of the area.

7. SITE CHARACTERISTICS *(Refer Plan 2)*

The application area is located northwest of the existing Wittedrift village and receives vehicular access from the "Stofpad" Road via a servitude road across Portion 3 of the Farm Wittedrift No 306. The application area is approximately 2.5km from Wittedrift.

The farm is located on the south western slopes of the Wadrift hill. The Bitou river road forms the southern boundary of the farm. A tributary stream of the Bitou River runs through farm.

The topography of the site is characterised by steep undulating hills to the north, with a moderately southwester sloping plateau that is used for agricultural purposes.

The highest part of the application area is to the northwest, with an average altitude of 200m above MSL. The lowest part of the application area is on the Bitou River at approximately 20m above MSL.

The portion where the proposed additional dwellings are proposed is located to the east of the farm and is located in close proximity to the existing quarry and farm house. This area is mainly disturbed and was previously used for sand quarry.

The portion where the proposed agricultural industry is proposed is located to the south of the farm, within the existing farm barn.

The improvements on the farm consist of the existing main dwelling house, manager's house and associated outbuildings, as well as a facility which is used to make furniture from the timer currently growing on the farm.

The portion of the site where the additional dwellings is proposed obtains vehicular access via an existing gravel road which was used by the trucks for the quarry.

According to information contained in the Bitou SDF, the portion of the application area that is proposed for the additional dwellings; tourist facilities and agricultural industry, are identified as soils of poor suitability for arable agriculture. The proposed land uses are therefore not located on high potential agricultural land, and the proposed uses will have no negative impact on the agricultural potential of the property. The owners merely attempt to diversify the agricultural income from the farm.

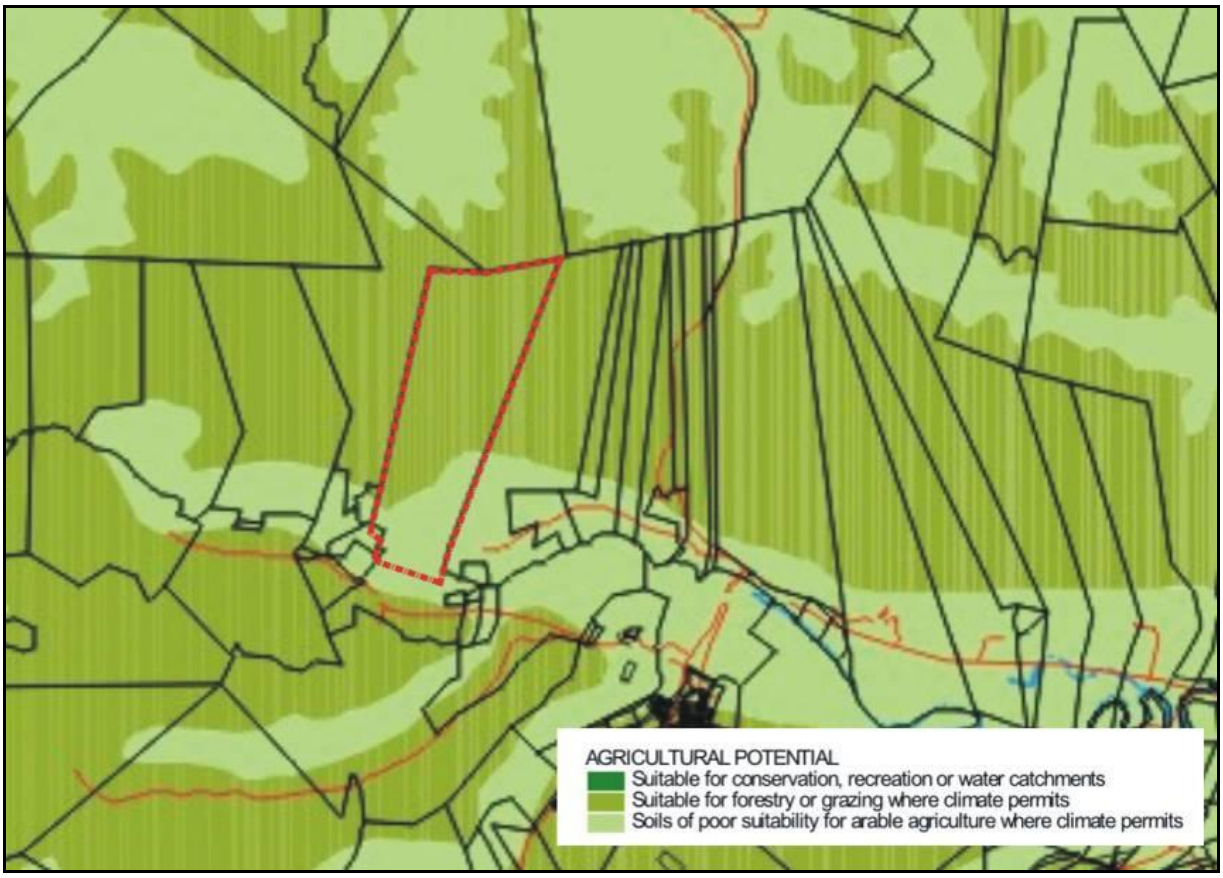

FIGURE 3: AGRICULTURAL POTENTIAL

As mentioned in Paragraph 1 of this report, Portion 4 of the Farm no 491 was originally known as "Funda Quarry", that was mined by DenRon. Mining on the site has been in operation for 10 years under licence held by Derby Concrete cc. Given that the period of mining as agreed with the surrounding agricultural community, had expired, and activities were accordingly terminated on 30 April 2009 which coincided with the termination of the Mining Licence, the Licence holders have decided to lodge a closure application for the site. Mining activities have recently come to an end. The quarry was decommissioned and the property was sold to Silver Falcon Trading 96 (Proprietary) Limited during 2008.

Attached in **Annexure E** one will find a copy of DenRon civil's application for closure of the sand quarry. This proves that it is not a natural watercourse but, scaring in the landscape to due human activity.

FIGURE 4: EXISTING FARM HOUSE

FIGURE 5: EXAMPLE OF FURNITURE MADE ON SITE

FIGURE 6: GRAVEL ROAD (STOFPAD ROAD) TO THE FARM

FIGURE 7: MAIN ENTRANCE OF THE FARM

FIGURE 8: REHABILITATED QUARRY

FIGURE 9: REHABILITATED QUARRY

8. EXISTING POLICY FRAMEWORKS

8.1 Knysna, Wilderness, Plettenberg Bay Regional Guide Plan, 1982

The abovementioned document was approved as a Guide Plan by the (then) Minister of Constitutional Development and Planning on 21 September 1982 with a view to provide guidelines for the future spatial development of the Garden Route region. On 9 February 1996 the (then) Deputy-Minister of Land Affairs declared that the "Guide Plan" should be deemed as a Regional Structure Plan. Although the Regional Structure Plan has not yet been reviewed in totality since its original preparation and adoption, it remains in full force and effect as a statutory planning document.

This Guide Plan earmarked the farm for "agricultural/ forestry" and "nature area" purposes. The portion of the farm where the proposed additional units is proposed is earmarked for "agricultural / forestry" purposes. The application area is currently used for agricultural purposes and will remain as an agricultural property. Therefore, the proposal could be regarded as being consistent with the Sub-regional Structure Plan.

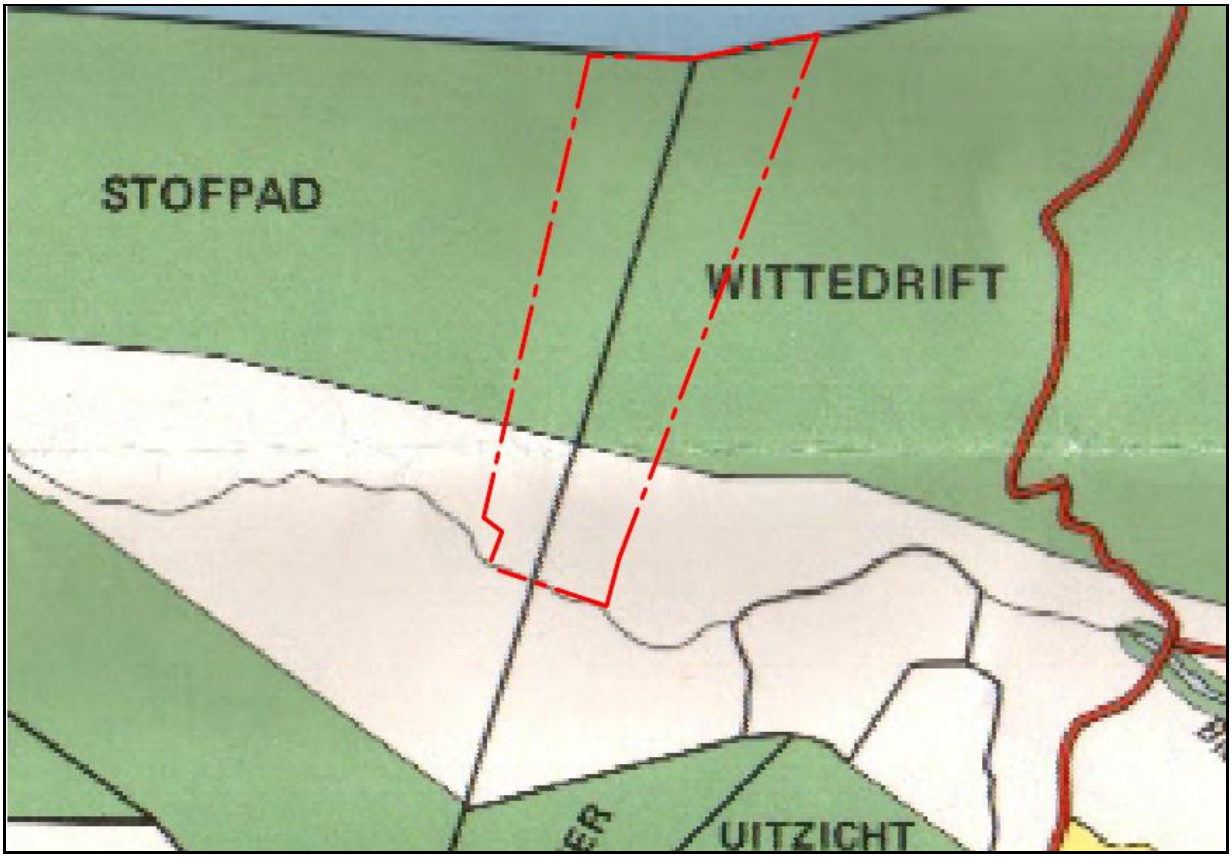

FIGURE 10: EXTRACT FROM THE KNYSNA WILDERNESS PLETTENBERG BAY GUIDE PLAN.

8.2 Draft Bitou SDF, May 2006

The current Bitou SDF was adopted by the Bitou Municipality during 2006.

This SDF earmarks the northern part of the farm as a transitional area and the southern part of the farm as a buffer area for ecological processes. The ecological processes most likely refer to the flood plain of the Bitou River. It should be noted that the mapping of this plan is on a very broad brush scale and that the boundaries of the different SPC categories should not be applied on a fine scale. The areas of the farm where the additional units; tourist facilities and agricultural industry are located; are most definitely not within the floodplain of the Bitou River. It is therefore argued that the proposed units are within a buffer / transition area and that it will not have any detrimental impacts on the Bitou river ecological corridor.

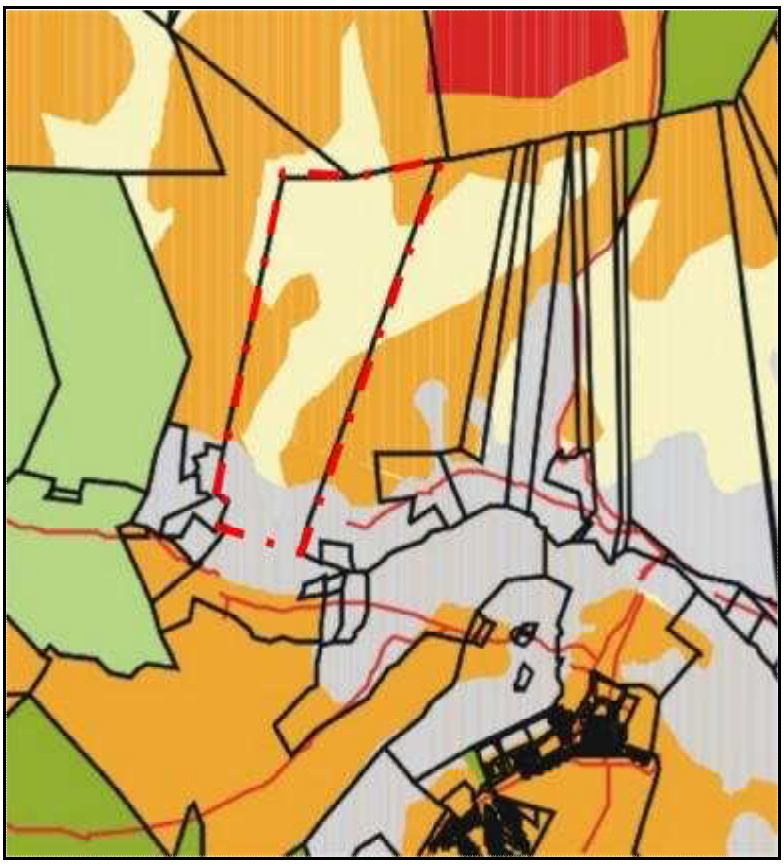

FIGURE 11: EXTRACT FROM THE DRAFT BITOU SDF.

According to this draft SDF, activities that have a minimal ecological footprint can be permitted in the Buffer Area. For example, eco-estates and resorts whose buildings have minimal footprints (already existing or built on timber piers), use off grid services (solar power, rainwater harvesting, grey water recycling, urine diversion/eco loos) and are built from local recyclable materials. Buildings primarily associated with managing biodiversity or agriculture, including for tourism purposes will be permitted in buffer areas.

The proposal is therefore consistent with the draft Bitou SDF.

8.3 Garden Route Biodiversity Sector Plan for George Knysna & Plettenberg Bay

A Biodiversity Sector Plan provides a synthesis of prioritised information to planners and land-use managers, enabling the integration of biodiversity into land-use planning and decision making[g] (LUPDM). It identifies those sites that are critical for conserving biodiversity and in this way, facilitates the integration of biodiversity into decision making (i.e. mainstreaming biodiversity). Mainstreaming is crucial to overcoming the "conservation versus development" mindset, and for ensuring sustainable development (National Biodiversity Framework, 2007).

SANParks, together with Cape Nature prepared these guidelines to accompany and further explain the Garden Route Critical Biodiversity Areas (CBA) Map for the George, Knysna and Bitou municipalities (Section 3). The CBA map divides the landscape into five categories; namely Protected Areas, Critical Biodiversity Areas, Ecological Support Areas, Other Natural Areas and No Natural Areas Remaining. The first three mentioned categories represent the biodiversity priority areas which should be maintained in a natural to near natural state. The last two mentioned categories are not considered biodiversity priority areas, and can be targeted for sustainable development.

According to the Biodiversity Sector Plan, the site is earmarked as a **Critical Biodiversity Area** (CBA) as well as transformed area. CBAs incorporate: (i) areas that need to be safeguarded in order to meet national biodiversity thresholds;(ii) areas required to ensure the continued existence and functioning of species and ecosystems, including the delivery of ecosystem services; and/or (iii) important locations for biodiversity features or rare species.

However, according to the Critical Biodiversity Areas Map, there are areas of land (partially or wholly transformed or degraded land) that have been classified as ESAs (Ecological Support Areas) or even CBAs (Critical Biodiversity Areas). Although these areas are heavily degraded or transformed, they still play an important role in supporting ecological processes.

The document describes Ecological Support Areas (ESAs) as the following:
"***Ecological Support Areas (ESAs)*** *are supporting zones or areas which must be safeguarded as they are needed to prevent degradation of Critical Biodiversity Areas and formal Protected Areas. Although biodiversity pattern and process are interdependent, there are situations where even though pattern is disrupted, certain processes are able to continue functioning. Riparian zones and wetlands in areas of intensive agriculture or plantations may still play an important role in maintaining water quality in rivers that flow through these areas. In Protected Areas and Critical Biodiversity Areas, both pattern and process need to be protected against degradation, whereas in Ecological Support Areas, the protection of ecological processes is required*."

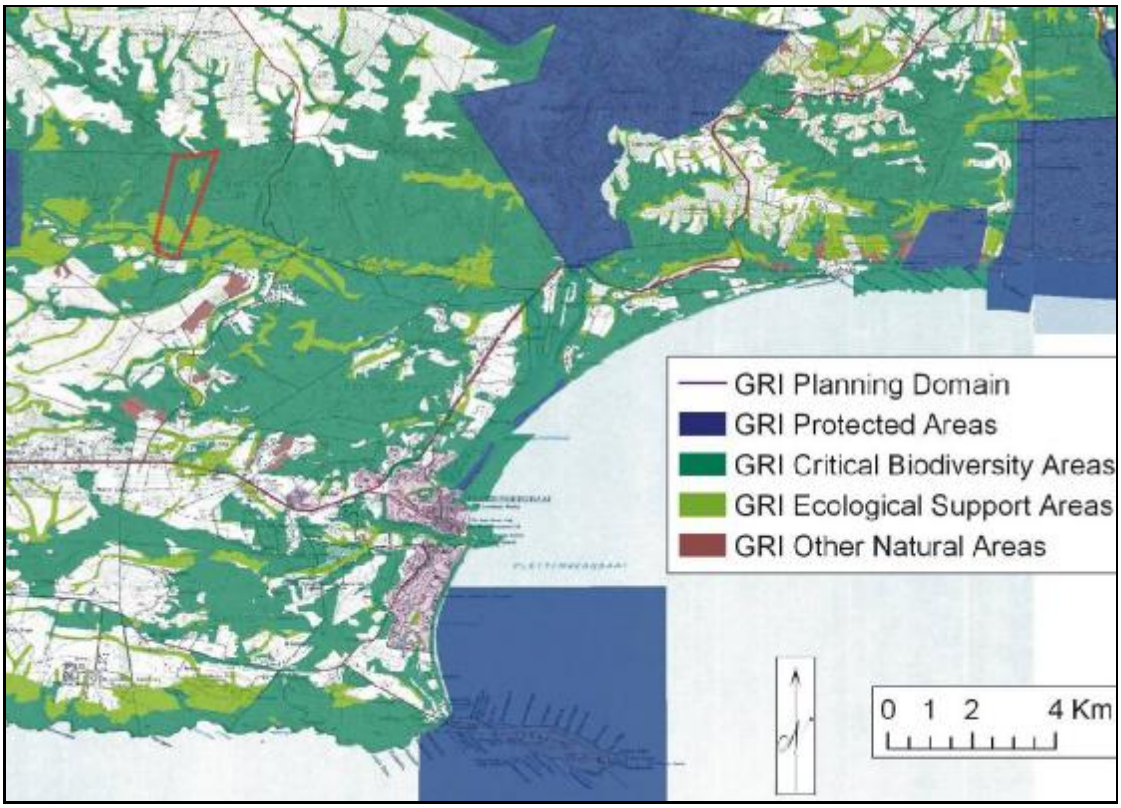

FIGURE 12: CRITICAL BIODIVERSITY AREAS (CBA) MAP

8.4 Western Cape Spatial Development Framework: Rural Land Use Planning and Management Guidelines

The Western Cape Provincial Government has developed guidelines to provide guidance to its social partners on land use planning and management outside the urban edge (i.e. in rural areas). Forming part of the roll-out of the Provincial Spatial Development Framework (PSDF), their objectives in introducing rural land use planning and management guidelines are:

> To ***promote sustainable development in appropriate rural locations*** throughout the Western Cape, and ensure that the poor also share in the growth of the rural economy.
> To ***safeguard the functionality of the province's life supporting ecosystem services*** (i.e. environmental goods and services).
> To ***maintain the integrity***, ***authenticity*** and ***accessibility*** of the Western Cape's significant farming, ***ecological***, ***cultural and scenic rural landscapes***, and natural resources.
> ***To provide clarity*** to the provincial government's social partners on ***what kind*** of ***development is appropriate beyond the urban edge***, suitable locations where it could take place, and the desirable form and scale of such development

According to these guidelines, the principles underpinning the Western Cape's rural land use management guidelines are as follows:

> Decisions on rural development applications should be based on the following sustainable land use principles:
> - social inclusion,
> - effective protection and enhancement of the environment,
> - prudent use of natural resources, and
> - maintaining high and stable levels of economic growth.
>
> Good quality and ***carefully sited development should be encouraged in existing settlements.***
> ***Accessibility*** should be a ***key consideration*** in all development decisions.
> New building development in the open countryside away from existing settlements should be strictly controlled regarding scale, height, colour, roof profile, etc.
> ***Priority*** should be given ***to the re-use of previously developed*** sites in preference to greenfield sites.
> All ***development in rural*** areas should ***be well developed and inclusive***, in keeping and scale with its location, and sensitive to the character of the rural landscape and local distinctiveness.

These guidelines made the following recommendations with regard to the placing of additional dwelling units on Farms:

- Development to target existing farm precincts and disturbed areas, with the employment of existing structures and footprints to accommodate development.
- Development associated with farm diversification or "value adding" should:
  - not result in excessive expansion and encroachment of building development and land use into the farm area; and
  - not to be located in visually exposed areas given the extensive landscape of extensive landscape areas.

Development (i.e. farm diversification or "value-adding") to be located within or peripheral to the farmstead precinct or outposts and should be accommodated in reused, converted or replaced farm building (i.e. existing footprint) or to target disturbed areas.

It is the considered opinion that the proposal for five additional dwelling units, agricultural industry and tourist facility is consistent with the Provincial Government's draft Rural Land use Management guidelines.

9. SERVICES INFRASTRUCTURE

No municipal services exist for the application area.

Rainwater is an excellent source of good quality water that can be collected and stored (Red Book, 1994). Based upon the Red Book (1994), and the successful use of rainwater at most farms throughout the country, including the existing farm house at the application area, potable water from rainwater is proposed for the intended additional dwelling units.

The electrical supply to the application area is directly from Eskom. The electrical supply to the proposed additional units will be from Eskom or alternative supplies such as solar energy.

The sewerage of the proposed units will be treated with environmentally friendly systems such as "Biolytix" or "Clear Edge".

10. TRAFFIC CIRCULATION AND ACCESS

Access to the proposed units will be obtained via an existing servitude road on the farm. This road obtains access from the "Stofpad" road that connects this area with the Wittedrift Village.

SECTION C: DEVELOPMENT PROPOSAL

11. THE APPLICATION

The development proposal for Portion 4 of the Farm No 491 includes the following:

11.1 Consent use for Additional Dwellings *(Refer Plan 3)*

The application area is currently zoned as "Agriculture Zone I" in terms of the Section 8 Scheme Regulations. An additional dwelling units is defined as: *"...dwelling units that may be erected with the consent of the Council on a land unit in agricultural zone I or residential zone I; provided that the units shall remain on the same cadastral unit as the primary unit; provided further that in residential zone I the unit shall be smaller than the primary unit and that in agricultural zone I one additional unit in all cases and further units with a density of one unit per 10ha up to a maximum of five additional units per land unit may be allowed and that no such unit shall be erected within 1 km of the high – water mark of the sea..."*

The size of the property is 166 ha in extent; therefore the property qualifies for a maximum of five additional units. The owner envisages clustering a farm manager's house and the five units together on previously transformed area, which was used as a sand quarry by DENRON civil. By clustering the units, services could be provided in a more economical manner and no valuable agricultural land is removed.

The floor area of the proposed additional dwellings will be approximately 200m². The disturbance area that is earmarked for the proposed dwelling units (including roads and landscaping is

approximately 1767m² in extent. Visiting family and friends of the owners of the property will reside in the additional dwellings on a temporary basis. It is also proposed to provide accommodation for students and lectures attending the proposed organic farming teaching centre.

Application is therefore made for a consent use to allow five additional dwellings on Portion 4 of the Farm No 491. It should be noted that although five new residential dwellings will be built on the application area, the land use on the property will remain agriculture, and no change of land use on the farm is envisaged. If one refers to Plan 3 one will see that the proposed additional dwellings are located in around the quarry in on disturbed soil. This area is unusable for agricultural purposes due the topography and that it has been disturbed before. It should be noted that the proposed dwelling units will be located on non-productive agricultural land.

FIGURE 13: AREA OF PROPOSED ADDITIONAL DWELLINGS

11.2 Consent Use for (Tourist) Education Facility

As mentioned before, it is proposed to build an organic farming teaching centre with lecture rooms to facilitate interaction on the farm. As mentioned in Section A (1), tourists already visit the farm to neutralize their carbon footprint by rehabilitating the forest. Plan 3 illustrates that it is proposed to

construct this facility on the island which the sand mining had created. At this stage no plans have been drawn up for the proposed facility, but it is intended to create an organic, low impact structure. This will strengthen the tourist and education element of the facility.

The Section 8 Zoning Scheme Regulations defines a "tourist facility": as: *"...amenities for tourists such as lecture rooms, restaurants, gift shops and restrooms permitted by the Council as a consent use, but does not include overnight accommodation ..."* . It is our considered opinion that the organic farming teaching centre could be regarded as "rest rooms and lecture rooms".

11.3 Rezoning

According to the Section 8 Zoning Scheme Regulations, the processing of agricultural products is regarded as an "agricultural industry" and such uses are only allowed within an "Agriculture Zone II" zoning. An "Agricultural Industry" is defined as: *"...an enterprise or concern for the processing of agricultural products on a farming unit owing to the nature, perishableness and fragility of such agricultural products and includes, inter alia, wineries and farm pack stores, but does not include service trades..."*

As mentioned before, Portion 4 of the Farm No 491 not only has agricultural land use activities on the farm but the owners also manufacture timber furniture from mostly alien timber (black wood) found on the farm. In order to legalise this facility it is recommended to rezone the portion on which this facility is located to 'Agricultural zone II'. Hence the proposal requires the rezoning of a portion of the site ± 800m² to "Agricultural Zone II".

It should be noted that the facility is existent and was previously used as an agricultural shed. The building is located near the south western boundary of the farm out of valuable agricultural soil, but easy accessible throughout the farm. The building is also located close the main house as well as intense agricultural activities such as the organic vegetable patches. As an existing barn is used no new facility will have to be constructed. Activities on the farm and in the facility are of such a sustainable nature, that the saw dust created by the furniture making is ploughed back into the organic vegetable patches.

SECTION D: MOTIVATION

12. MOTIVATION

The Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985) states in Section 36 that the reasons for refusing an application may only be considered on the basis of the "lack of desirability" of the proposed land use. The following points must be taken into account when evaluating the desirability of this application:

12.1. Consistency with Spatial Policy Directives

This development application is consistent with the spatial policy framework applicable to this area.

It should also be noted that the Section 8 Zoning Scheme Regulations provides for 5 additional houses per 10 ha of the property size, limited to a maximum of 5. Application is made for 5 additional units.

It is therefore the considered opinion that the proposal could be regarded as being consistent with the existing spatial policy directives.

12.2. Agricultural Activities

As discussed before, Silver Falcon Trading 96 (Proprietary) Limited have been successful in utilizing the full agricultural potential of Portion 4 of the Farm No 491, Plettenberg Bay. Below one can see the many agricultural activities that were introduced on the farm since the mining activities were decommissioned and the new owners took occupation of the farm. These activities include ongoing alien eradication; rehabilitation of the indigenous forest, growing and planting of indigenous trees, manufacturing of furniture from timber on the farm, horse farming, vineyards and organic vegetable farming.

As described in Par 11.1 of this report, the property has mostly a low agricultural potential. The proposed land uses will therefore diversity the income of the farm, without impacting on the agricultural potential of the farm. The proposed uses will rather support the agricultural activities on the farm.

See ***figure 9*** below.

FIGURE 14: AGRICULTURAL ACTIVITY FOUND ON THE PROPERTY

12.3. Consistency of the Development with the Character of the Surrounding Area

The areas surrounding the application area is characterised by agricultural and rural residential uses. The proposed additional units; tourist facility and agricultural industry will fit in with the character of the area and will not impact on the character of the area.

The fact that the application area abuts the Bitou River, contributes to the tourism amenity of the property.

12.4. Visual Impact

The units will be located in and around a valley which is due to the mining for sand by DENRON civil. It is argued that given the fact that the proposed units will not be located on a ridgeline of prominent skyline; the proposed additional dwelling units will not have any visual impact whatsoever. The architectural style of the cottages will compliment the rural character of the area. The existing agricultural production facility is located near the southern boundary of the farm. Due to natural vegetation it is difficult for the public to see the facility when not on the farm. However any property located on a high contour level as the application site will be able to see activity on the farm, this is not possible to avoid.

12.5. Availability of Services

No municipal services are provided in this area.

12.5.1. Water supply

The proposed water supply system replicates the system used for the existing house, viz. harvesting rainwater for potable water, and using borehole water for other requirements.

Rainwater is an excellent source of good quality water that can be collected and stored (Red Book, 1994). Based upon the Red Book (1994), and the successful use of rainwater at most farms throughout the country, including the existing farm house at Portion 3 of the Farm Wittedrift No 306, potable water from rainwater is proposed for the intended improvements.

12.5.2. Sewerage

Sewage will be provided with an environmentally friendly system such as “Biolytix” of “Clear Edge”.

12.5.3. Storm Water

The roofs and paving for the intended improvements add increased impervious surfaces. Additional storm water will soak into the ground rather than forming surface channels and erosion. If the area to be surfaced was substantially higher, there would be no problems with respect to increased runoff, erosion, or pollution.

12.6. No Environmental Impact

At the current stage alien timber is removed from the farm and used to create furniture. It is proposed to use “raw product” obtained by on-site alien eradication, in the construction phase of the project. All the activities will occur on transformed and disturbed areas. Positioning of Additional units will “celebrate” rehabilitation of former quarry.

It must be noted that the Plan 3 indicates certain bridges shown in brown; these bridge were constructed by DenRon civil and are pre-existing. These bridges will be used to move west to east across the dams. Thus no additional earth works are necessary.

12.7. Access and Accessibility

Access and regress area from Stofpad Road, also known as DR01791. From DR01791 one still has to follow a gravel road for 780m before one the entrance to Portion4 of the Farm 491 is reached. Internal movement on the farm is via existing internal farm roads, no new roads are proposed. Lastly it should be taken into account that the nature of the activities on the farm does not attract high volumes of traffic.

12.8. Socio Economic Impact

Agricultural industry provides jobs; tourist facilities (training centre) will support mental and physical well being of visitors; additional dwellings will provide on-site accommodation for students and lecturers residing on the farm. As a result the agricultural activities will be stimulated; people will be educated as well as indirect economic opportunities will be created.

12.9. No impact on Existing Rights

Given the fact that the proposal is consistent with spatial planning policy, and the small scale of the "development" on such a large property, it is the considered opinion that the proposed additional dwelling units, tourist facility and rezoning will not impact on any of the existing land use rights.

13. ASSESSMENT OF APPLICATIONS

Section 36 of the Land Use Planning Ordinance, 1985 (no 15 of 1985) clearly indicates the basis of refusal of any application as follows:

- On the basis of a lack of desirability of the contemplated **utilization of land** concerned,
- On the basis of **effecting on existing rights**,
- On the basis of **effecting the safety and welfare of members of the community** concerned, and
- On the basis of **effecting the conservation of the natural and developed environment.**

It is clear that the application for consent uses and rezoning for the property will in no way have any negative impact on the above mentioned criteria. It is for this reason that there should be no valid reason why this proposal could not be supported and subsequently be approved by the Local Authority.

14. CONCLUSION

In light of this motivation, it is clear from the foregoing report that the application for the rezoning of a portion of the property for an agricultural production and the consent use for additional dwellings and a tourist facility is desirable.

It is therefore recommended that the application for the proposed rezoning and consent use be supported by the relevant departments and expeditiously approved by Council.

MARIKE VREKEN TRP CC
MARCH 2011

ANNEXURE A:

Company Resolution & Power of Attorney

ANNEXURE B:

Application Forms

BITOU MUNICIPALITY

APPLICATION FOR:

X REZONING

◘ DEPARTURE

◘ REZONING & SUBDIVISION

◘ SUBDIVISION

ERF / FARM NO:

Portion 4 of the Farm No 491, BITOU MUNICIPALITY

……

……

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SECTION A

PARTICULARS OF APPLICANT

1. FULL NAMES

Leo-Heyns Nel

2. COMPANY /FIRM (*where applicable, eg. ABC CONSULTANTS)*

Marike Vreken Town Planners CC

3. POSTAL ADDRESS

PO Box 2180
Knysna
6570

4. TELEPHONE NO. **044-382-0420**

5. FAX NO: **044-382-0438**

6. BOND DETAILS

6.1 Is the property encumbered by a bond?

~~**YES**~~	**NO**

6.2 Is the Bondholder's consent attached?

An application for the bond holder's written permission was lodged and the financial institution's written consent will be provided in due course

YES	**NO**	**N/A**

NOTE:
If the property is encumbered by a bond, the consent of the bondholder to make this application must be attached.

SECTION B

PARTICULARS OF REGISTERED OWNER

NOTE: *Where more than one property is involved in the application, this section should be completed separately for each property.*

1. FULL NAME/S OF REGISTERED OWNER/S:

ilver Falcon Trading 96 (Proprietary) Limited No 2004/004511/07

2. IS THE APPLICANT THE [ONLY] REGISTERED OWNER OF THE PROPERTY CONCERNED?

~~YES~~	NO

3. POWER OF ATTORNEY OF REGISTERED OWNERS ATTACHED?

~~YES~~	NO	N/A

NOTE: ***[(i)****If the application is not made and signed by the registered owner, the power of attorney of the owner must be attached to this application.*
(ii)*This is also applicable if the person who is applying is still in the process of obtaining the land unit.*

4. IS THE REGISTERED OWNER A COMPANY OR SIMILAR BODY?

~~YES~~	NO

5. CERTIFIED COPY OF EMPOWERING RESOLUTION ATTACHED?

~~YES~~	NO	N/A

6. A COPY OF THE MOST RECENT TITLE DEED IN RESPECT OF THE PROPERTY CONCERNED,

OR

A CONVERYANCER'S CERTIFICATE CONFIRMING THAT THERE ARE NO RESTRICTIVE TITLE CONDITIONS WHICH MAY AFFECT THE PROPOSAL IS ATTACHED

~~YES~~	NO

NOTE: *A copy of either one or the other of the above must be attached.*

SECTION C

DETAILS OF LAND UNIT

NOTE: ***Where more than one property is involved in the application, this section should be completed separately for each such property.***

1.	**ERF NO.**	**Portion 4 of the Farm No 491**
2.	**EXTENT OF PROPERTY**	**166.1036 Hectares**
3.	**STREET NAME:**	**N/|A**

4. TOWNSHIP (*eg.Plettenberg Bay, New Horizons, etc.)*

Wittedrift

5. ARE THERE ANY SERVITUDES REGISTERED ON THE PROPERTY WHICH MAY AFFECT THE APPLICATION?

YES	**~~NO~~**

6. IF THERE ARE ANY SUCH SERVITUDES, PROVIDE A <u>BRIEF</u> DESCRIPTION THEREOF:

N/A

7. IS IT PROPOSED THAT ANY NEW SERVITUDES BE REGISTERED AS PART OF THE APPLICATION?

YES	**~~NO~~**

8. IF ANY SUCH SERVITUDES ARE PROPOSED, PROVIDE A <u>BRIEF</u> DESCRIPTION THEREOF:

N/A

SECTION D

DETAILS OF APPLICATION

1. BRIEF AND ACCURATE SUMMARY [NOT MOTIVATION] OF PROPOSAL:

See Attached Motivation Report

2. DOES THE APPLICATION ALSO INVOLVE A SIMULTANEOUS:-

2.1 Consolidation [combination] of more than one property?

YES	~~NO~~

If "YES" briefly explain:

N/A

2.2 Application of a Departure [deviation] from the development restrictions [heights, building lines, coverage, etc.] which would normally be applicable to the property/ies concerned:

YES	~~NO~~

If "YES" briefly explain:

N/A

2.3 Application for removal /amendment of restrictive conditions of title applicable to the property/ies?

YES	~~NO~~	UNCERTAIN

If "YES" or "UNCERTAIN" briefly explain:

N/A

2.3.1 Has, in the case of a simultaneous application in accordance with 2.3 above, the application form prescribed by the Provincial Administration: Western Cape for removal/amendment of restrictive conditions of title been completed and forwarded to both the Provincial authorities as well as the Plettenberg Bay Municipality?

YES	NO

2.4 Application for subdivision of the property/ies concerned?

YES	~~NO~~

2.5 Does the proposed rezoning involve any of the following activities?

1. The construction or upgrading of:
(e) a marina, harbour, or structure below the high water mark
(i) diversion of normal flow of water in a river or stream
(j) dams, levees or weirs affecting the flow of a river or stream
(k) reservoir for water supply
(m) public or private resort and associated infrastructure
(n) sewerage treatment plants and associated infrastructure
2. The change in the use of land from:
(c agriculture or undermined to any other land use
(d) use for grazing to any other form of agricultural use
(e) use for nature conservation or zoned open space to any other land use.

YES	~~NO~~

If "YES" stipulate the activity(s) (i.e 1 (e) 2 (b), etc.) _____
NOTE: The abovementioned activities are subject to regulations promulgated in terms of the Environment Conservation Act. 1989 (Act 73 of 1989)

2.6 If the anser to 2.5 above is "YES" has an application for authorisation in terms of Act 73 of 1989 been submitted to the Provincial Department of Environment Affairs and Culture?

YES	NO

If "**YES"** *indicate the date of submission, as well as the specified office (and responsible person) to which/whom it has been submitted:* _____

3. **MOTIVATION FOR PROPOSAL:**

(1) NOTE: *Even if a full report is submitted separately, an executive summary should still be provided here: The potential effect of the proposed new land use on the general environment and nearby properties and/or residents should be specifically addressed.*

(2) Rezoning from undermined or agriculture to any other use requires an Environmental Impact Assessment (EIA) in terms of Section 21 of the Environmental Conservation Act 73 of 1989. Where this is applicable an EIA must be done – including scoping procedures and authorisation from Department of Environmental Affairs must first be obtained prior to Council considering this application.

See attached motivation report

SECTION E

1. WERE ANY PROFESSIONAL CONSULTANTS INVOLVED IN THE PREPARATION OF THIS APPLICATION?

YES	~~NO~~

Note: *Where applicable this section should be completed separately for each consultant:*

2. **FULL NAME OF CONSULTANT**

3. **NAME OF COMPANY/FIRM (***Where applicable eg. ABC Consultants)*

CURRENT POSITION IN COMPANY / FIRM:

QUALIFICATIONS / RELEVANT FIELDS OF EXPERIENCE/ PROFESSIONAL AFFILIATIONS, ETC.

CONTRIBUTION OF THE STUDY:

4. LOCALITY PLAN ATTACHED

~~YES~~	NO

NOTE: *A locality plan, a zoning plan and a land use plan must be attached to this application, and should clearly identify the property/ies in respect of which the application is being made as well as the cadastral boundaries and Erf numbers of all other registered properties in the general area concerned.*

5. **ZONING PLAN ATTACHED?**

YES	NO

NOTE: *The zoning plan should clearly reflect the current zonings of all properties in the general area concerned.*

6. LAND USE PLAN ATTACHED?

YES	NO

NOTE: *The land use plan should clearly reflect the actual land use all properties in the general area concerned.*

7. PROPOSED SITE DEVELOPMENT PLAN ATTACHED?

~~YES~~	NO

NOTE: *A site development plan, clearly indicating all existing and proposed structures on the property/ies under consideration, proposed parking, landscaping, elevational treatment of buildings, etc. will facilitate consideration of the application, and may in certain cases, depending on the scale and nature of the proposed rezoning even be a compulsory requirement.*

8. **ARE THERE ANY EXISTING MUNICIPAL SERVICES (WATER, STORMWATER OR SEWERAGE, ELECTRICITY CABLES, ETC.) WHICH ARE NOT CURRENTLY PROTECTED BY SERVITUDES ON THE PROPERTY/IES CONCERNED?**

YES	~~NO~~

If "YES" briefly explain:

N/A

9. **ARE THERE ANY PORTIONS OF THE PROPERTY/IES INVOLVED, STEEPER THAN A GRADIENT OF 25% (1:4)?**

YES	NO

There is some steep land to the north of the property but this will not be developed or transformed in any way

10. HAS A CONTOUR PLAN BEEN SUBMITTED?

YES	~~NO~~

NOTE: *If any portion is steeper than 25 % a contour analysis, clearly indicating those areas steeper than 1:4 must be attached to this application.*

11. ARE ANY PORTIONS OF THE PROPERY/IES INVOLVED

-	SITUATED BELOW THE 1/50 YEAR FLOOD LINES?	**YES**	~~**NO**~~
-	SUBJECT TO FLOODING?	**YES**	~~**NO**~~
-	SITUATED IN A NATURAL DRAINAGE COURSE**?**	**YES**	~~**NO**~~
-	SITUATED IN WETLAND AREA?	**YES**	~~**NO**~~

12. IF THE ANSWER TO ANY OF THE QUESTIONS IN 11 ABOVE IS "YES" PROVIDE BRIEF DETAILS ON THIS REGARD, AND AN ENGINEER'S REPORT ON 1/50 AND 1/100 YEAR FLOOD LINES WHICH MUST BE INDICATED ON THE PLANS (WATER ACT REQUIREMENT)

13. ARE THERE ANY PROTECTED TREE SPECIES ON THE PROPERTY/IES CONCERNED?

YES	~~**NO**~~

NOTE: *If there are, the location of these trees must be clearly indicated on the site development plan.*

14. WILL DEVELOPMENT, INCLUDING INSTALLATION OF SERVICES OR CONSTRUCTION WORK, AS A RESULT OF THE PROPOSED REZONING REQUIRE SUBSTANTIAL EARTHWORKS AND/OR REMOVAL /DISTURBANCE OF INDIGENOUS VEGETATION?

YES	~~**NO**~~

If "YES" briefly explain and include mitigating measurers to be implemented, if any:

15. IS/ARE THE PROPERTY/IES SITUATED ALONG A MAIN ROAD OR ANY OTHER PROCLAIMED ROADS?

YES	~~NO~~

If "YES" indicate clearly on relevant plan/s.

16. IS/ARE THE PROPERTY/IES CONCERNED SITUATED IN A SENSITIVE NATURAL ENVIRONMENT (OCCURRENCE OF INDIGENOUS FAUNA AND/OR FLORA, VISUAL SENSITIVITY, ETC)? HAS A LETTER OF COMMENT OR AUTHORISATION BEEN OBTAINED FROM DEPARTMENT OF ENVIRONMENTAL AFFAIRS?

~~YES~~	NO

If "YES" explain briefly:

The undisturbed / areas of indigenous vegetation (indigenous forest area to the
north and east of the property) on the site will not be developed.
These areas have been rehabilitated and indigenous trees are propagated on the
property in order to replace those alien trees that have been removed.
See attached motivation report for more information.

17. IS/ARE THE PROPERTY/IES CONCERNED, OR ANY STRUCTURE/S SITUATED ON IT/THEM?

- DECLARED AS A NATIONAL MONUMENT, OR LISTED IN TERMS OF THE NATIONAL HERITAGE RESOURCES ACT?

YES	~~NO~~

- DECLARED AS A NATURAL HERITAGE SITE?

YES	~~NO~~

OR

IS/ARE ANY STRUCTURE'S OR PORTION/S THEREOF ON THE PROPERTY/IES CONCERNED IN EXCESS OF 60 YEARS OF AGE?

YES	~~NO~~

18. IF THE ANSWER TO ANY OF THE QUESTIONS IN 17 ABOVE IS "YES" PROVIDE BRIEF DETAILS IN THIS REGARD, AND INDICATE ON THE SITE DEVELOPMENT PLAN, WHERE APPROPIATE.

19. FURNISH A BRIEF DESCRIPTION OF THE MANNER IN WHICH THE FOLLOWING MUNICIPAL SERVICES WILL BE PROVIDED

NOTE: Even if a full engineering report is submitted separately, an executive summary should still be provided here.

20.1 **WATER**

The proposed water supply system replicates the system used for the existing house,
viz. harvesting rainwater for potable water, and using borehole water for other
requirements.

20.2 SEWERAGE:

Environmentally friendly systems such as “Biolytix” or “Clear Edge”.

20.3 ELECTRICITY

The electrical supply to the application area is directly from Eskom. The electrical
supply to the proposed additional units will be from Eskom or alternative supplies
such as solar energy

20.4 STORMWATER

There will be no significant increase in the area of impermeable surfaces on the site.
storm water will continue to soak into the ground rather than forming surface
channels and/or erosion

20.5 REFUSE REMOVAL

Organic refuse will be re-cycled and used as part of the organic farming on the site.
Inorganic waste will be taken by car into Plettenberg Bay and disposed of at the
municipal waste centre.

SECTION F

DETAILS OF CONSULTATION AND/OR SCOPING PROCESS

1. HAS THIS APPLICATION BEEN DISCUSSED WITH ANY REPRESENTATIVE OR RESPONSIBLE OFFICIAL OF THE PLETTENBERG BAY MUNICIPALITY OR ANY OTHER AUTHORITY PRIOR TO SUBMISSION THEROF?

YES	~~NO~~

2. IF IT HAS BEEN DISCUSSED PROVIDE A SEPARATE SCHEDULE BRIEF DETAILS IN THIS REGARD UNDER THE FOLLOWING HEADINGS:

Name of Official: _____
Rank/position: _____
Authority/Organisation: _____
Manner of discussion: **(telephonic/meeting/correspondence etc.)**
Issues raised and discussed:

3. HAS A COPY OF THIS APPLICATION BEEN MADE AVAILABLE TO ANY AUTHORITY OTHER THAN THE PLETTENBERG BAY MUNICIPALITY?

YES	~~NO~~

If "YES" provide the name and address of such authority/ies and the date of submission to it/them.

Name of Authority	*Date Submitted*

NOTE: Proof of submission to this Authority (Registered Postal notice or acknowledgement of receipt by the Authority), as well as a copy of the covering letter to this Authority, must be attached to this application.

4. WAS IT A STIPULATION OF ANY OTHER AUTHORITY THAT THE APPLICATION SHOULD BE ADVERTISED FOR COMMENT IN TERMS OF ANY OTHER LEGISLATION?

YES	~~**NO**~~

5. HAS THE PROPOSAL BEEN DISCUSSED WITH ANY INTERESTED /AFFECTED PROPERTY OWNERS/TENANTS OR INTERESTED/ AFFECTED COMMUNITY ORGANISATIONS (eg. Ratepayers Organisations, Street Committees, Wildlife Society, etc.)

YES	~~**NO**~~

If "no" briefly explain why not?

If "YES" provide details (in separate schedule if necessary) of the persons, and/or organisations involved and summarise the outcome of the discussion (attach written comments of such person/organisations where possible):

SECTION G

DECLARATION

I, _____
(FULL NAMES AND SURNAME OF APPLICANT)

HEREBY CERTIFY AS FOLLOWS:

- THAT THE INFORMATION APPEARING IN THIS FORM IS CORRECT AND ACCURATE.
- THAT THE INFORMATION APPEARING IN THE ANNEXURES TO THIS FORM IS CORRECT AND ACCURATE.
- THAT I UNDERSTAND THE APPLICATION

SIGNATURE OF APPLICANT:

DATE:

For Official Use	Ref number	

APPLICATION FOR CONSENT USE

IN TERMS OF SECTION 2.5.5 OF THE PLETTENBERG BAY ZONING SCHEME REGULATIONS

DESCRIPTION OF LAND: **Remainder Portion 4 of the Farm No 491, situate in the Bitou Municipality, Division of Knysna, Province of the Western Cape**

ERF NO: **Portion 4 of the Farm No 491, BITOU MUNICIPALITY**

ADDRESS:

REGISTERED OWNER: **Silver Falcon Trading 96 (Proprietary) Limited**

APPLICANT: **Marike Vreken Town Planners CC**

Section 8

1. **PERSONAL PARTICULARS OF APPLICANT**

1.1 Name of company to which correspondence should be addressed:

Address: PO Box 2180, Knysna
Postal Code: 6570
Reference No: Pr1022
Telephone No: 044-382-0420

1.2 Is the Applicant the only registered owner of the property concerned?

yes

1.3 Name of registered owner?

Silver Falcon Trading 96 (Proprietary) Limited (Nr. 2004/004511/07)

(i) if the applicant is not made and signed by the registered owner, the power of attorney of the owner must be attached to this application.

(ii) This is also applicable if the person who is applying is still in the process of obtaining the land unit.

1.4 A copy of the most recent Title Deed in respect of the property concerned, or A conveyer's certificate confirming that there are no restrictive title conditions which may affect the proposal is attached.

~~YES~~	NO

- Please mark the appropriate box with X.

1.5 Is the property encumbered by a bond?

Yes - An application for the bond holder's written permission was lodged and the financial institution's written consent will be provided in due course.

If so, attach the authorization of the Mortgage to the Applicant.

2. DETAILS OF THE LAND UNIT

2.1 Registered description of the property as shown on the title deed:

Remainder Portion 4 of the Farm No 491, situate in the Bitou Municipality, Division of Knysna, Province of the Western Cape

Surface area: (m²) / extent of property.

166, 1036 (One Hundred and Sixty Six Comma One Zero Three Six) Hectares

2.2 What is the present zoning of the land unit?

Agriculture Zone I

2.3 Are any departure applicable to the land unit in terms of Section 15 of the Ordinance?

no

If so, give full explanation:

2.4 Are there any developments on the land unit?

The improvements on the farm consist of the existing main dwelling house, manager's house and associated outbuildings, as well as a facility which is used to make furniture from the timer currently growing on the farm.

If so, what are the nature and condition of these improvements?

2.5 Are there any servitudes registered on the property which may affect the application?

No

2.6 If there are any such servitudes, provide a brief description thereof:

2.7 Is it proposed that any new servitudes be registered as part of the application?

YES	~~NO~~

3. DETAILS OF APPLICATION:

3.1 Describe the development in detail:

Please attach motivation report

4. RESTRICTING FACTORS:

4.1 Are there any restrictions in the title deed in respect of the land unit, which may have an affect on this Application and which should be lifted in terms of the Removal of Restrictions Act, 1967 (Act 84/1967)?

No

If so, furnish details below:

4.2 Is any portion of the land unit subject to or situated in a natural drainage course, or in wetland area?

No

4.3 Are there any protected tree species on the property/ies concerned?

YES	~~NO~~

NOTE: It there are, the location of these trees must be clearly indicated on the site development plan.

4.4 Will development, including installation of services or construction work, as a result of the proposed rezoning require substantial earthworks and/or removal/disturbance of indigenous vegetation?

YES	~~NO~~

If "YES" briefly explain and include mitigating measures to be implemented, if any: (e.g.) has an OSCA Permit been issued).

4.5 Is/are the property/ies situated along a main road or any other proclaimed roads?

YES	~~NO~~

If "YES" indicate clearly on relevant plan/s.

4.6 Is/are the property concerned situated in a sensitive natural environment (occurrence of indigenous fauna and /or flora, visual sensitivity, etc)? Has a letter of comment or authorization been obtained from Department of Environmental affairs?

YES	NO

6. DECLARATION

I, the undersigned, certify that the information appearing in this section of the form and the information in the annexures is correct and complete, and that I understand the Application fully.

SIGNATURE: _____

FULL NAME: _____ DATE: _____

DATE OF WHICH APPLICATION WAS SUBMITTED: _____

Council reserves the right to acquire additional information should it be deemed necessary.

The applicant's attention is brought to the following:

1. Advertising procedures

To prevent unnecessary appeal, developers are encouraged to negotiate with objectors, try to accommodate points of objections. The applicant may act on the approval only when the period during which the appeal may be made has elapsed and after the applicant has ascertained that an appeal has not been submitted to the administrator.

ANNEXURE C:

Title Deed

GOLDBERG & DE VILLIERS
1 MEEDING STREET
PLETTENBERG BAY
6600

MEYER DE WAAL
CTN. 224

Prepared by me

CONVEYANCER
L BURGER

FL

R..1200,00.....

VERBIND MORTGAGED

VIR
FOR R 1 200 000,00

B 002427/10

29 JAN 2010

REGISTRATEUR/REGISTRAR

OM VERDERE ENDOSSEMENTE SIEB
FOR FURTHER ENDORSEMENTS SEE

T004233/10

DEED OF TRANSFER

BE IT HEREBY MADE KNOWN THAT

LEANA BURGER

appeared before me, REGISTRAR OF DEEDS at Cape Town, the said appearer being duly authorised thereto by a Power of Attorney which said Power of Attorney was signed at PLETTENBERG BAY on 25th January 2008 granted to him by

The Trustees for the time being of TRUTER TRUST
Registration Number 1308/94

DATA / VERIFY
4 - FEB 2010
GONCALVES-B

DATA / CAPTURE
03 FEB 2010

VERBIND MORTGAGED

VIR
POR R 3000 000.00

B C13765/10

19 MAY 2010

REGISTRATEUR/REGISTRAR

And the appearer declared that his said principal had, on 11 May 2006, truly and legally sold by Private Treaty, and that he, the said Appearer, in his capacity aforesaid, did, by virtue of these presents, cede and transfer to and on behalf of:

SILVER FALCON TRADING 96 (PROPRIETARY) LIMITED
Registration Number 2004/004511/07

or its Successors in Title or assigns, in full and free property

PORTION 4 OF THE FARM NO 491
SITUATE IN THE BITOU MUNICIPALITY
DIVISION OF KNYSNA
PROVINCE OF THE WESTERN CAPE;

IN EXTENT 166,1036 (ONE HUNDRED AND SIXTY SIX COMMA ONE ZERO THREE SIX) HECTARES

As will appear from annexed Diagram SG No. 4923/2004 and held by Deed of Transfer No. T11754/1997;

A. As regards the figure J A B C middle of the river c x on annexed Diagram SG No. 4923/2004

SUBJECT TO the conditions referred to in Deed of Transfer No. T5953/1985 dated 15th October 1895

B. As regards the figure H J x middle of river D E FG on annexed Diagram SG No. 4923/2004

SUBJECT TO the conditions referred to in Deed of Transfer No. T10173/1907 dated 24th December 1907.

As regards the whole of the property:

C. By virtue of Deed of Transfer No. T59299/1993 the within mentioned property is **SUBJECT** to a servitude of right of way in favour of

PORTION 1 OF THE FARM NO. 491, IN THE ADMINISTRATIVE DISTRICT OF KNYSNA, PROVINCE OF THE WESTERN CAPE;

MEASURING 26,6334 (TWENTY SIX COMMA SIX THREE THREE FOUR) HECTARES;

HELD BY DEED OF TRANSFER NO. T 59299/1993

D. By virtue of Notarial Deed of Servitude No.K931/2008 dated 13 November the within mentioned property is **SUBJECT** to the following servitude viz:

- To extract water from the Bitou River in terms of the permit issued by the Department of Water Affairs;
- To pump the water from a pump site on the river bank , by means of a underground pipeline thereover, 1(one) metre wide to Portion 13/221 and:
- To way leave for an electricty powerline/cable from the nearest Eskom connection point to the pump site

In favour of:

- PORTION 13 OF THE FARM DOUKAMMA NO. 221,
- REMAINDER OF PORTION 10 OF THE FARM DOUKAMMA NO.221,
- REMAINDER OF PORTION 5 OF THE DOUKAMMA NO 221

As will more fully appear from the said notarial deed.

E. **SUBJECT** to the following conditions contained in the Letter dated 3rd February 2004 imposed by the Eden District Municipality as conditions of subdivision and approved by the Controlling Authority in terms of Act 21 of 1940:

1.1. That no new access be made without the consent of the relevant local authority;

1.2. That no advertisement/road signs be erected without the written approval of the relevant authorities

F. **ENTITLED** to a road servitude SIX (6) metres wide on the route depicted by the figure xy on Diagram SG No. 4924/2004 over:

THE FARM NO. 501
SITUATE IN THE BITOU MUNICIPALITY
DIVISION OF KNYSNA
PROVINCE OF THE WESTERN CAPE;

MEASURING 84,9499 EIGHTY FOUR COMMA NINE FOUR NINE NINE) HECTARES

HELD BY THE TRANSFEROR UNDER DEED OF TRANSFER NO. T 11756/1997

provided the owner of the property hereby transferred and its successors in title shall be responsible for the maintenance of the said road.

G. ENTITLED to water allocation from the Bitou River of no less than ONE HUNDRED THOUSAND CUBIC METRES (100 000m^3) on 10 hectares of irrigation per annum and as such is:

Entitled to a servitude to withdraw water from the Bitou River with a minimum water entitlement of ONE HUNDRED THOUSAND CUBIC METRES (100 000m^3) from date of transfer of this property, which shall be deemed a surrender by the

REMAINDER OF FARM NO.491
SITUATE IN THE BITOU MUNICIPALITY
DIVISION OF KNYSNA
PROVINCE OF THE WESTERN CAPE;
Measuring 187,9537 (ONE EIGHT SEVEN COMMA NINE FIVE THREE SEVEN) hectares;

held by the Transferor by Deed of Transfer T11754/1997 of its water entitlement in favour of the above property;

WHEREFORE the said Appearer, renouncing all right and title which the said

The Trustees for the time being of TRUTER TRUST
Registration Number 1308/94

heretofore had to the premises, did in consequence also acknowledge them to be entirely dispossessed of, and disentitled to the same, and that by virtue of these presents, the said

SILVER FALCON TRADING 96 (PROPRIETARY) LIMITED
Registration Number 2004/004511/07

or its Successors in Title or assigns, now is and henceforth shall be entitled thereto, conformably to local custom, the State, however reserving its rights, and finally acknowledging the purchase price to be the sum of R5 236 000,00 (FIVE MILLION TWO HUNDRED AND THIRTY SIX THOUSAND RAND).

IN WITNESS WHEREOF, I the said Registrar, together with the Appearer, have subscribed to these presents, and have caused the Seal of Office to be affixed thereto.

THUS DONE and EXECUTED at the Office of the REGISTRAR OF DEEDS at Cape Town on 2010 -01- 29

q.q.

In my presence

REGISTRAR OF DEEDS

T4233/2010

b

ENDORSEMENT

By virtue of Notarial deed of Servitude No. K [illegible] Dated .....

The within property is entitled to a servitude of road 6 metres wide the route is represented by the figures XY on diagram 2492/au over the remainder of Portion 3 of the farm Witteklipfontein No. 306 measuring 152.6911 ha and held by T104641/97

As will more fully appear from said Notarial Deed.

DEEDS OFFICE
CAPE TOWN

REGISTRAR OF DEEDS

VIR ENDOSSEMENTE KYK BLADSY 7
FOR ENDORSEMENTS SEE PAGE

ANNEXURE D:

S G Diagram

S.J.McMillan
Professional Land Surveyor

OFFICE COPY

SIDES Metres		ANGLES OF DIRECTION		CO-ORDINATES Y System WG 23°x		
		Constants			± 0,00	+3700000,00
AB	2336,24	20 49 45	A	- 30111,88		+61196,19
BC	204,80	14 44 20	B	- 29281,15		+63379,74
CD	474,72	108 26 00	C	- 29229,05		+63577,80
DE	49,93	139 46 30	D	- 28778,69		+63427,69
EF	130,48	201 05 50	E	- 28746,44		+63389,56
FG	96,95	127 03 00	F	- 28793,41		+63267,83
GH	1974,08	192 52 56	G	- 28716,03		+63209,42
HJ	417,88	271 55 20	H	- 29156,15		+61285,02
JA	547,84	259 10 40	J	- 29573,79		+61299,04
Cc		14 44 20				
		(121) Knys 65	△	- 30417,96		+62255,58
		(124) Knys 68	△	- 27373,33		+60341.61

S.G. No.
4923/2004
Approved
for Surveyor-General
2004.11.09

SHEET 1 OF 2 SHEETS

THIS PORTION IS SUBJECT TO CONDITIONS REFERRED TO IN SECT. 11 (6) OF ACT 21/1940.

APPROVED IN TERMS OF SECT. 4 OF ACT 70/1970
REF 21/1/2/491
DATE 17/11/2003

APPROVED IN TERMS OF SECT. 25 OF ORD. 15/1985
REF T/21/2/491 (D00/2958)
DATE 28/07/2004

Beacon Description

A	*Iron standard alongside planted stone*
B	*Planted stone 5x19cm flush with ground*
C	*Iron standard*
D, E	*No beacon*
F, G	*Planted stone*
H	*20mm iron peg*
J	*Planted stone 22x22x34cm high*

The figure A B c *middle of Bitou river* D E F G H J

represents *166,1036 hectares* of land, being

PORTION 4 OF THE FARM No. 491

situate in
Bitou Municipality
Administrative District of KNYSNA
Province of the Western Cape

Surveyed in May - September 2004
by me

S.J. McMillan 0910
Professional Land Surveyor

This diagram is annexed to	The original diagram is	File No. Knys. 491
No. T 4233/2010	No. 1278/92 annexed to	S.R.No. E 2209/2004
dated	Transfer	Comp. ~~AM-1BA (3605)~~ BM-7D (4181)
i.f.o.	No. 46378/92	LPI C0390000
Registrar of Deeds		

FARM Knysna 491/4

OFFICE COPY

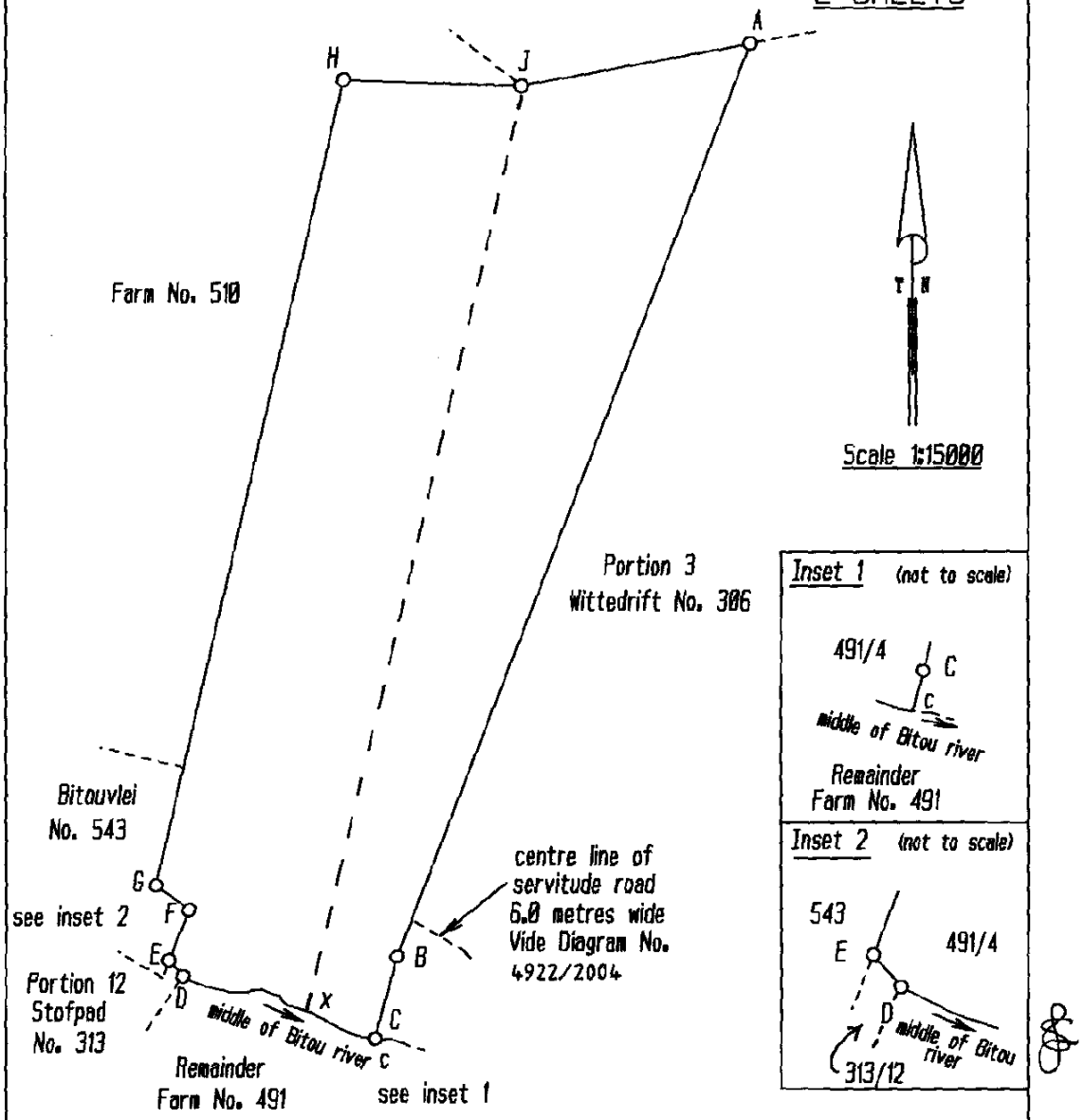
S.J.McMillan
Professional Land Surveyor

Portion 4 of the Farm No. 491

situate in
Bitou Municipality
Administrative District of Knysna
Province of the Western Cape

S.G. No.
4923/2004
Approved
for Surveyor-General
2004 . 11 . 09

SHEET 2 of 2 SHEETS



Inset 1 (not to scale)

Inset 2 (not to scale)

Surveyed in May - September 2004
by me

S.J.McMillan
Professional Land Surveyor 0910

FARM Knysna 491/4

ANNEXURE E:

Application for Closure of Sand Quarry

DOCUMENTATION REQUIRED TO ACCOMPANY THE CLOSURE APPLICATION (in terms of para 9 of the application form)

List of Photos:

List of Figures

List of Annexures:

Annexure A: I & A P Participation
Annexure B: Letters of Closure of Helderwater Operations (6 July 1998 and 14 July 1999)

Abbreviations:

EMP	Environmental Management Program
EPA	Environmental Performance Assessment
FRD	Fine Residue Dumps / Dam
MPRDA	Mineral and Petroleum Resources Development Act
SPC	Site Plan Consulting

INTRODUCTION

BACKGROUND

Although mining had been conducted at Helderwater Quarry for some 30 years until rehabilitation was conducted in accordance with the specifications set by Mr Briers of DME's 1998 letter dated 6 July 1998 and subsequent letter dd 14 July 1998 as attached in Annexure B. As such closure only concerned the excavation areas while the closure of the plant area was held over until end of quarrying at Funda as the plant would serve the 5-10 year lifespan of Funda as per letter of 14 July 1998.

The quarrying of the alluvial material of the Funda Valley floor was undertaken for a specified limited period to fill the gap in Denron's supply of materials between the depletion of the reserves of the adjacent Helderwater Quarry 1km south and the licensing of a hard rock quarry in the Plettenberg Bay area. While a suitable hard rock site, the so-called Kwela Quarry had been found in the first 5-year period of Funda operation, its licence had not yet been granted and mining at Funda was consequently extended for a further 5-year period (2004-2009).

During the life of Funda the Funda site served only as excavation with material being hauled to the retained fixed quarry plant and logistics site of Helderwater Quarry. The closure of such Helderwater Quarry "plant site" is being made in parallel with closure of Funda under separate application but to be read in parallel with this closure of Funda.

This report forms part of an application for closure certificate from the Department of Minerals and Energy. At Funda the closure application relates to sand and stone mining activities which took place on Portions of Farm 491 and 306 in the Magisterial District of Knysna approximately 8km north-west of Plettenberg Bay and 2km west of Wittedrift village.

Mining has been in operation for 10 years under licence held by Derby Concrete cc. Given that the period of mining as agreed with the surrounding agricultural community, had expired, and activities were accordingly terminated on 30 April 2009 which coincided with the termination of the Mining Licence, the Licence holders have decided to lodge a closure application for the site. In terms of the application form for closure certificate, such closure application must consist of the **following reports**:

- **Closure plan** (compiled in terms of Reg 62 of the Minerals and Petroleum Resources Development Act 28 of 2002 (MPRDA)) (see enclosed part 9A)
- **Environmental Performance Assessment** compiled in terms of Regulation 55 of the MPRDA) (see enclosed part 9B)
- **Environmental Risk Report** compiled in terms of Regulation 60 of the MPRDA (see enclosed Part 9D)

Note that in terms of the "principles for mine closure" in Regulation 56, the first principle states that the closure of a mining operation is a process which must start at the commencement of mining and continue throughout the life of the operation. As the Funda EMPR specified continued rehabilitation in tandem with mining over the past 10 years (refer Photos A1-A9) which reflect such operational rehabilitation this closure application has been written post-cessation of activities and very close to full rehabilitation of the site having been achieved. As such, we believe that the **first principle of Regulation 56 has been met**; therefore most of the items required in terms of the content requirement (in terms of regulation 60) are applicable. As the **Environmental Monitoring Committee has been actively involved during the life of the mine** we believe that the closure rehabilitation conducted will meet the regulations and it is noted that the principals and sketches of the draft closure plan have been referred to

surrounding owners, identified I&AP's and earlier members of the EMC and riparian owners concerned with water-flow in the Bitou, but must still be referred to:

- the relevant State Departments and parastatals for their comment to DMR.

As the main concern detected during the closure period (April – October 2009) lies in the creation of limited depth detention ponds with low overflows or lower level release culverts, as opposed to a continuous gradient floor without detention ponds, it is noted that the provision of walls for the ponds to act as detention ponds was embodied in the EMPR (para 4.1 last bullet) and the walls and ponds were further discussed and sanctioned by the Environmental Monitoring Committee (EMC) (refer detail in Technical Annexure L-1) and such ponds were also a request of the landowner. Some detail decommissioning finishes to the pond slopes and overflows still have to take place. The document has however, as far as possible been written so as to highlight the mitigation measures which did take place to resolve any applicable impacts which may have occurred during the life of the mine as well as take into account the risks which may occur.

Mining has now been completed on the site and decommissioning activities have been largely completed (with some detail infill planting and trimming still taking place as described later in this text) and the applicants wish to apply for closure certificate in terms of the newly promulgated MPRDA.

Given the closure of Funda and Helderwater activities the Denron Group eagerly await the outcome of the Appeal currently delaying the granting of a Mining Right for Kwela Quarry in the name of Kwela Quarries (Pty) Ltd. Derby Concrete cc is a wholly owned subsidiary of the Denron Group.

As the Denron Group have numerous quarries in the Knysna Plettenberg Bay area, they have both the manpower, equipment and finance to complete the closure works at Funda and to monitor the rehabilitation and take care of any post-closure remedial work which may be required.

Mining has taken place on this site for the last 10 years. In that time approximately 290 000m³ of saleable product has been removed and between R5 000 & R10 000/month has been spent on ongoing operational rehabilitation, in planning, surveying, progressively shaping, topsoiling and revegetating the site.

The only rehabilitation put forward at this stage is some localized reduction of slope angles in the upper NW Excavation and infill grassing of the excavation slopes in the northern excavations.

The landowner of Funda, Mr Lelo Inceniario of Quarrylake Estate (Farm 491), has issued a faxed letter expressing his satisfaction with the level of rehabilitaiton (refer landowner's letter in Annexure A of this report) while the landowner of Portion 3 of the Helderwater plant section, Farm 306, Mr Rikus Truter has issued his letter of approval dd 19 November 2009.

Paragraph 9A requirement:
CLOSURE PLAN (in terms of Reg 62) for Funda

a. Existing Site Description/Condition

Refer Photos A5-A11 and Figure F-2 : Current Status.

The site consists/consisted of the following mining related infrastructure and disturbances as a result of the mining on the site:

- There never was nor is any crushing plant on site as all crushing, screening, stockpiling and logistical services such as workshops, servicing of plant was conducted at nearby Helderwater Quarry Plant Site. (Refer Figure F-1 & H-1).
- The Funda Quarry consisted only of a number of connected shallow (max 4m deep) excavations in alluvial material.
- There were 5 connected excavations (to max 3-4m deep).
- No overburden dumps existed as such material has been spread on the floor of the excavations prior to topsoiling (it was simply low pebble content sand).
- Shaping of the floors and side slopes to EMPR specification has taken place over the life-of-mine as seen in Photos A-1 and A-4.
- Today the quarry appears (refer Photos A-5 to A-9) as a series of shallow depressions with shaped and largely revegetated sides with final trimming to specified slope and final quarry rehabilitation is in progress including the most recent (Figure F-2 northern pits A/B & E) while those of entire pits C & D are complete
- As seen in Photos A-7 & A-8 the pits have been provided with low walls and overflows to act as detention ponds retaining a maximum of 2m water depth.
  Note on detention ponds: regarding their status in the 2000 EMPR and further sanction by the EMC, authorities and land owners.
    - **Extract page 17 of May 2000 EMPR, *"the unlikely possibility of flash floods does exist. In such event the side-streams could flow into the excavation which will act as a series of major retention ponds largely avoiding the risk of a high silt load being introduced into the Bitou Estuary"***
    - **Extract Closure Status letter paragraph (c) dd 29 July 2009 to DME, *"while the 1999 EMPR did not envisage detention ponds but a continuous reedbed area, the May 2000 EMPR paragraph 4.1 above as compiled jointly with Dr Brian Allanson and Kathy Avierinos paragraph 4.1 as above did make provision for ponds while the October 2004 EPA final item on page 3 thereof, wherein it was noted that the use of ponds was requested by the earlier landowner and sanctioned by the Monitoring Committee."***
    - **Furthermore regarding detention ponds the following is noted:**
        - **The detention ponds as built are well within the EMPR residual impact specification as having no excavation deeper than 5m.**
        - **Furthermore, a letter from the owner of Farm 491, attached in Annexure A, confirms that all rehabilitation conducted on site thus far is to his complete satisfaction and that a site visit was conducted by Environmental Affairs during which meeting they inspected the detention ponds and state that "*they are in agreement as these are vital to avoid silting up the Bitou River catchment area*".**

For a technical assessment of the impact of such temporary ponding on flow of the Bitou River and the Keurbooms Estuary flow refer para I and Technical Appendix L-1.

- The paragraphs and table below reflect the detail status of rehabilitation of the various pits with referral to photo
- Sections D1, D2 and D3 (west) were not mined at all – see Photo A-11, which also shows the face-brick entrance gate structure to the landowner's property development project which focuses on the quarry ponds from its elevated area on the hill west of the quarry site.
- Sections D4, C1, C2 and C3 were not mined at all given expiry of the Licence and undertaking to the community that mining would be conducted for a maximum of 5 years following 2004.

Table 1 – Mine Sections and Rehabilitated Ponds

Mining Sections	Photo	Mining Status	Rehabilitation Status	Nov 2009 Actions
B1, B2 (B) As upper west detention pond	A-8	Mining completed early 2009	Shaped and 80% topsoiled	20% to be reshaped by reduced batter and topsoiled and grass seeded
B3 (D) (developed as integral part of A3)	A-2	Mining completed 2006	Shaped and west slope revegetated	Remove heap (photo 6) and spread using topsoil in B2
A1 (D) Completed prior to 2004 EPA	A-4	Mining completed 2003	Floor and perimeters shaped, topsoiled and revegetated	Connect to D1 east by piped culvert
A2, A3 (C) Was mined and partially rehabilitated before October 2004	A-5	Final pond area mined in 2007	East slope (refer photo 4) revegetation of last 50m required	Complete east slope grassing and slope pond edges for pond safety
A4 (A) Most north eastern section (could have extended upstream but mining terminated at end of 5-year Mining Licence	A-6	Completed 2007/ 2008	Floor being topsoiled, ready for grass planting (no pond formation)	Complete floor rehabilitation and trim (grade) perimeter road to drain away from pond to eliminate road run-off eroding slope down to floor
D1, D2, D3 (east) (E) Mine Section in one paddock east of access road	A-7	Mining completed 2008	Perimeters trimmed and stable, currently revegetating	Connect to A1 with culvert as above and do final trimming of west slope and remove heap in west

Note: (E) Mining section numbers in brackets denote numbered ponds in Figure 2 while D1, D2 etc. refer to mining sections in EMPR Figure 6.

b. Description of closure objectives.

While the EMPR did specify **"end use",** its Figure 4 shows the rehabilitation to result in "areas which are smoothed and grassed", while the EMPR's para 4.1 final bullet provides for them to serve as **detention ponds during flood episodes**.

The **closure objectives** in the Part ii to the Environmental Impact Assessment EMPR Report no 2137/R4 May 2000 were as follows:

" § *Rehabilitation to be conducted by strip mining method as attached diagram A on an on-going operational basis.*

§ *Pit closure impact rehabilitation will be restricted to:*

- *alien vegetation control.*
- *erosion control (effective ground cover).*
- *access road rehabilitation to provide for future farm use.*

Residual impact restricted to:

(i) loss of ±10 000 m³ of short-term water storage potential of the sponge (i.e. above the 0,5m sub-surface flow level).
(300 000m³ @ 10% water = 30 000m³ x 30% of depth = 10 000 m³ of free water).
(ii) changed topography of valley floor by lowering it by 5m."

c. Plan as contemplated in Regulation 2(2) of the regulations:

Refer Figure 1.

d. Summary of regulatory requirements & conditions for closure:

In DMR letter dd 30 April 2004 setting out the "**conditions to the five-year extension of Mining Licence"** and notably "**conditions for Closure"** these have been assessed as follows:
DME para a):
Rehabilitation shall be conducted as defined in the above-mentioned programme and changes to the programme may only be made with the approval of the Director: Mineral Development.
Response:
All deviations from the extent and method were communicated to DMR via the EMC minutes and EPA conducted.

DME para b):
Noise levels on the perimeter of the property and at the nearest residences must be monitored on a bi-annual basis and the results thereof must be forwarded to this office.
Response:
Noise from Funda was never a problem but noise from the Helderwater crusher was regularly reported by residents and assessed in response with the required measures taken.

DME para c):
The outer boundary of the excavation must be clearly demarcated with semi permanent markers.
Response:
This was done by professional surveyor with beacon positions now plotted by SPC in Figure F-3 showing concurrence with the delineated area after the earlier forest intrusion incident.

DME para d):
Before you commence with mining of a new phase, the boundary of such a phase must be clearly demarcated.
Response:
This was done progressively to the satisfaction of the EMC.

DME para e):
A layer of pebbles of at least 0.6 metre deep must be left on top of the underlying less permeable substrate. The topsoil and subsoil must be replaced on top of this layers.
DME para f):
After the soil layers is replaced, the layer of material on top of the underlying less permeable substrate must be at least 1 metre deep.

Response to para e & f:
As mining took place to a general depth of 3-4m while the trial-pitting prior to mining set the mining limit to 5m as being the general thickness of the alluvial fan, mining did not mine onto an impermeable floor in general, well in excess of the specified 0.5m of remnant alluvial fan material has been retained in the floor specifically as a drainage layer. In any event as the floor consists of Enon conglomerate, as does the majority of the Bitou catchment it is most likely that below the alluvial fan deposit, in-situ materials are as permeable as the fan material. The "soil" replaced on the floor also simply consists of sand and fine pebbles which were not coarse enough for crushing and this layer too has a suitable permeability as evidenced by the rapid drainage of water from the ponds following rainfall episodes (pond inundation has never been long enough to kill the grasses growing on their floors).

DME para g):
The ground water-table must be measured by installing at least four pizometres to a depth of at least 1.5-metres below the intended final level of the mine.
DME para h):
The ground water-table must be monitored bi-weekly during the wet season and the information furnished annually.
DME para i):
Mining is not allowed below the level of the ground water table and after topsoil replacement the layer of soil on top of the ground water table, must be at least 500mm deep.
Response to para g, h & i:
There is no record of pizometers having been placed or records of water level but this would appear to have become unnecessary as none of the excavations in the normal mining activity encountered groundwater.

The existing deep pond (pond C as seen in Photo A-6) which has purposely been dug into the water moving through the alluvial fan as a water source for the landowner at his request, reveals that the water-table is generally greater than 600mm from the floor at that point and the photo also shows the pebble nature of the banks of the pond revealing the highly permeable nature of the surrounding excavation floor material.

DME para j):
Eradicate and control new growth of all alien invasive trees from the entire mine site. Follow-up control of alien trees will be essential.
Response:
As seen in Photo A-4-1, an alien vegetation clearing programme is in place inclusive of slashing and poisoning saplings but as agreed by all persons at the January 2010 I&AP meeting, alien eradication per farm is not sustainable unless a comprehensive programme for the catchment is undertaken with assistance from the authorities.

DME para k):
Regulations 5.17 and 5.18 require monitoring and performance assessments. An audit and monitoring report shall be submitted to the Department of Minerals and Energy annually in May each year. In order to comply with these regulations at least the following information must be included in the report.

- *The area mined.*
- *The areas reshaped and prepared for topsoil replacement.*
- *The area covered with soil.*
- *The area rehabilitated.*

- *The level of the ground water table.*
- *Depth of the soil material on top of the winter ground water level.*
- *Depth of the soil and the pebble material layer on top of the underlying less permeable material, measured at intervals of at least 50x50-metres in the mined and rehabilitated area.*
- *Invader trees present.*

Response:
EPA's were not submitted annually with the last EPA being submitted in October 2004 and all interim assessments being limited to reporting by the Environmental Monitoring Committee Minutes.

DME para l):
A monitoring committee must be established to ensure that the mine operates according to the EMP. The mine must convene this committee at least annually and the minutes of the meeting furnished to this office.
Response:
A monitoring committee was established and reported its minutes to DMR and on occasion met for special purposes such as following the forest intrusion with the committee having met monthly thereafter until it was satisfied with the forest rehabilitation measures undertaken.

e. *Summary of results of the environmental risk report:*

The environmental risk report is included in PART 9D. It shows that no significant risks remain post-completed decommissioning and post-closure, provided that:

(i) The final trimming of side slopes which were too steep in the November assessment are trimmed back to 1:1½ as instructed and grass seeded with:
   - Kikuyu grass given its success in stabilization and given its support by all landowners which attended the January 2010 meeting of I&AP's, with the Conservation forums at the meeting agreeing that Kikuyu be used rather than considering an alien. In the interim the trimmed slopes had been seeded with:
   - Rhodes Grass 2kg/ha, and
   - Kweek (Cynadon dactylon 5kg/ha) have not been effective

   (**Note:** While Kikuyu grass is not indigenous its prevalence in the Valley forces acceptance of it in the rehabilitation process and it is not dealt with as an invasive alien species in this closure).

(ii) The seeding programme is conducted and showing success in the mining programme to stabilize the banks and floor.

(iii) The reduced elevation of overflow sections in the pond walls are cut and trimmed to a rounded cross-section profile and the surfaces of such overflow sections are well as planted with kikuyu to counter erosion of the overflow.

(iv) Post decommissioning monitoring and aftercare takes places to ensure the re-growth of natural vegetation on the disturbed areas.
   (The landowner noted in the January 2010 meeting that during the 2008/9 floods no erosion of these slopes covered in Kikuyu took place)

Given that the Bitou Valley is significantly invaded by:
- Black Wattle
- Sesbania
- Camphor Oil Seed; and
- Blackwood.

the applicant will only be able to ensure that the disturbed mining area is free of alien plants at closure and in the monitoring period but thereafter, such alien vegetation control will revert to the landowner with inevitable ingress of aliens from outside the property. In the I&AP meeting of January 2010 all surrounding owners agreed that successful and sustainable alien control will only be achieved if tackled in a co-ordinated programme for the Bitou catchment.

f. Summary of results of progressive rehabilitation undertaken:

Derby Concrete cc (Denron Group) Ltd have shown a commitment to operational rehabilitation during mining. In that time they have focused their efforts on the rehabilitation of the site primarily through shaping, overburden spreading, topsoiling and revegetation of the excavations to final closure configuration.

In the past 6 months since cessation of operations, the applicants have spent some R100 000 to fund shaping, install stormwater management, removal of loose heaps and revegetation.

Primarily the EMC has been instrumental over the life-of-mining in assisting/ensuring that by and large the specifications of the EMP have been met. The foregoing table 1 in Part B reflects the history and progressive rehabilitation of the excavation.

As a result of the progressive operational rehabilitation that has taken place on the site, decommissioning (post cessation of activities – April 2009) have been limited to:

- Formalization of overflows (current) November 2009 as seen in Photos A7 and A8
- Trimming of side slopes of Area B in Figure 1 and touching-up of east slope in Area E
- Completion of seeding and sod planting with Kikuyu

The applicants are planning to complete these items before shut-down in December 2009 (such final closure activities are conducted from their Head Office and workshop in Bitou 7km east of the site).

g. Methods employed to decommission each mining component and the mitigation to avoid residual or latent impacts:

The Funda Quarry consisted of shallow excavations and internal un-surfaced roadways.

Excavations

(i) Methods employed in decommissioning to date include:

- Smoothing of any remaining overburden heaps in the floor
- Facing the edge slopes to maximum 1:1½
- Covering the floor and slopes in selected subsoil and topsoil (not always distinguishable from the alluvial fan material)
- Grass seeding & sod planting the slopes and floors
- Retaining or forming the walls between Sections/detention ponds

- Removal of all mobile equipment and the office container with chemical toilet from site
- Initiating the cutting of reduced level overflow from detention ponds and for grass matting with additional seeding thereof

(ii) Mitigation methods specifically put in place to avoid residual or latent impacts:

- Reshaping of slopes identified as being too steep during November 2009 inspection, these slopes being too steep to be suitably grassed to avoid erosion (we note that 5-year old grass slopes on 1: 1½ gradient have re-grassed satisfactorily) (Refer Photo A-6).
- Completion of the cutting of reduced pond overflows in walls to ensure maximum water depth (i.e. water retained to not exceed 50 000m³ per pond). Having avoided mining to depth allowable of 5m i.e. remaining in the alluvial material body to ensure seepage through the floor, to drain ponds in between river flow episodes.
- Grassing floor and slopes and use of multiple ponds in series to avoid siltation of the Bitou River.
- Ensuring good ground cover by end of monitoring period as dense ground cover discourages regeneration of alien tree species which will be further assisted by grazing of these grassed depressions by cattle.

Roads and Tracks

With respect to roads and tracks the following has been specified:

- The main access road from the tarred "stofpad" (Photo A-10) tarred by Denron to eliminate dust is to be retained for use by the farmer as access across the Bitou River.
- This access section of road is to be equipped with 2 or more pipe culverts away from the main streamflow in order to permit broader dispersal of flow in the drought dried reedbed. Previously, additional pipes had been installed when such additional culverts had been proposed by the Chairperson of the Plettenberg Bay Community Environmental Forum.
- The internal spine road will be retained for monitoring access and later for access by the landowner.
- All other internal roads have been scarified and suitably grass seeded. As it was brought to the applicant's attention that run-off from the road is causing erosion of the grassed slopes SPC has instructed Denron to grade this internal road with a camber to the east so as not to permit drainage over the edge.

h. Any long term management / maintenance expected:

Actions Required in Monitoring and Maintenance Period of Two Years

Despite final trimming, cambering of the spine road and grass cover establishment on overflows, erosion of the slopes could occur and this may require maintenance but if well maintained over a two-year period should reach stability with no further long term maintenance. While alien vegetation control within the rehabilitated areas can be slowed significantly through grass establishment its re-occurrence after maintenance and monitoring cannot be precluded given the vast seed source in the surrounding area.

As a large flood may not occur within the two-year monitoring period to test erosion stability during large flood episode, this is an element which may simply have to resort with the landowner following closure.

During the two-year site maintenance period the site will be visited twice per year to check erosion and divert future re-occurrence or concentrated run-off, repair any damage done by erosion to topsoil and revegetation and will eradicate all alien vegetation within the rehabilitated area.

i. Details of closure cost & provision:

(a) Funda

The applicant has spent some R100 000 since April 2009 in addition to the amount of ±R600 000 spent over the 10 years in operational rehabilitation. At this final stage in rehabilitation the fund of R50 000 is still lodged with DME and will be ample in covering the remaining works and the 2-year monitoring programme.

The costs of further decommissioning rehabilitation activities at this site are approximately as follows, noting that these are actual costs being incurred by the applicant's team and not contractor costs:

Completion of Rehabilitation	**Costs**
Final trimming of slopes in Area B	
20 ton excavator – 16 hrs @ R400.00/hr	R6 400.00
Final overflow trimming – 10 man days @ R150.00/p/day	R3 000.00
Seeding with Cynadon dactylon – 1ha @ R5 000.00 Plus 5 man days in seed raking	R5 000.00 R1 500.00
Final alien removal of saplings – 10 man days	R3 000.00
Grading of road surface to east camber – allow R2 000.00	R2 000.00
Allow for end 2009 and January / February 2010 **Sub Total**	**R20 900.00**
I & A P Consultation	
Allow R12 000.00 for invitations and meeting attendance	R12 000.00
Sub Total	**R12 000.00**
Aftercare Maintenance for 2 Years	
Allow for 2-man team to conduct maintenance and alien control for 5 days every 6 months for 2 years	
10 man days x 5 episodes = 50 man days @ R150.00/d	R7 500.00
Plus digger-loader for 2 days over 2 years @ R300.00/hr x 8 hours x 2 days	R4 800.00
Sub Total	**R12 300.00**
Final EPA by Consultant	**R11 000.00**
TOTAL	**R56 200.00**

The current Rehabilitation Fund in the form of a Bank Guarantee of R49 290 lodged with DMR, largely covers the expected cost to closure and maintenance and there seems little reason to raise the amount.

(b) Helderwater

Completion of Rehabilitation	Costs
Gabion wall stream stabilisation (contactor cost- Denron)	18000
20 ton excavator – 24 hrs @ R400.00/hr	9600
Remove ramp (costed in east slope and pond walls)	nil
Seeding with Cynadon dactylon and kikuyu– 1ha @ R5 000.00 Plus 5 man days in seed raking	5000 1500
Final alien removal of saplings – 10 man days	3000
Double width of tailings pond walls	16000
Remove stockpiles (all saleable)	nil
Remove heaps (inclusive in East slope and pond walls)	nil
Remove plant and footings (re-use plant)	9000
Sub Total	62100
I & A P Consultation	
Included in Funda cost	nil
Sub Total	**Nil**
Aftercare Maintenance for 2 Years	
Allow for 2-man team to conduct maintenance and alien control for 5 days every 6 months for 2 years	
10 man days x 5 episodes = 50 man days @ R150.00/d	7500
Plus digger-loader for 2 days over 2 years @ R300.00/hr x 8 hours x 2 days	4800
Sub Total	**12300**
Final EPA by Consultant (included with Funda)	**Nil**
Sub Total	**Nil**
TOTAL	**74100**

All costs include VAT

j. Sketch plan showing final and future land use proposal

Refer Figures F-4 and H-3.

k. Record of I&AP's consulted

As the ongoing life-of-mine operational rehabilitation under the periodic monitoring by the Environmental Monitoring Committee (EMC) had been conducted for the first 5 years of the mine's life the methodology and expectations were well established and known to the Derby Concrete cc and accordingly the completion of rehabilitation since the last meeting of the Monitoring Committee during late 2004 has been conducted to compliance with the expectation of the landowners.

Given this history it was the intention of this closure process to engage some or all the members of the then Environmental Monitoring Committee to assess the draft closure intention and the level of rehabilitation achieved to date and obtain their comments on post-closure monitoring and risk. SPC was in the process of preparing invites to an I&AP meeting when they were contacted by riparian farmers who had attended a meeting with DWAF regarding the Bitou River water quality and low-flow given the extended drought, which meeting was extended to include the group's consideration of the possible impact that the quarry had on reducing flow in the Bitou River. Consequently, SPC extended invitations through these contact persons to all the riparian owners who were concerned and held an information transfer meeting on 21 January 2010 in the Denron Board Room.

Attendance of the I&AP Meeting was as follows (see Annexure A for further details):

Name	Involvement	Contact Details
T Twidle	The Herald	082 259 4665
P Scheepers	Riparian Land Owner	044-533 2325
L Gericke	Bitou Municipality	044-533 6881
J Mudd	Riparian Land Owner	044-535 9166
R Truter	Quarry Property Land Owner	082 808 9636
M Wadge	Plett Environment Forum	082 825 3075
J Carlisle	Eco Vive / E-Forum / Eden to Addo	044 535 9258
P Reid	Private	044 533 0394
L Inceniario	Quarry Property Land Owner	083 425 6820
R Derbyshire	Denron Quarries	044-533 0884
L Vlok	Denron	044-533 0884
S v/d Westhuizen	Site Plan Consulting	021-854 4260

Of note is the attendance of two Environmental forums, both quarry property land owners, the Municipality and the riparian farm owners who had engaged DWAF in the 2009 inspection of the Bitou River inclusive of the quarry.

For record of matters discussed at the I&AP meeting of 21 January 2010 refer Annexure A.

I. Technical appendices:

Appendix L-1 : Detention Pond effects on surface run-off of Funda Stream and Bitou River.

In order to illustrate the level of detention pond effect on the flow of the respective streams and rivers including the Keurbooms Estuary the following table is prepared in order to deduce the Funda Stream MAR from the known MAR statistics of the Bitou and Keurbooms Rivers as given in the CSIR Estuary Research Document entitled CSIR Report #31 Estuaries of the Cape; Keurbooms / Bitou System (CMS 19) dated October 1984.

This deduction is made on a comparison of catchment area for the three catchments.

Derivation of Funda Stream MAR from its % of Catchment Size of the Bitou and Keurbooms Sytems (3.7% and 0.8% respectively)

	Keurbooms	*Bitou*	*Funda River*	*% of Bitou*	*% of Total Keurbooms*
Catchment	859 km²	237km²	9km² Δ	3.7%	0.8%
Length	70 km long	23km long	5 km long Δ		
Mean Annual Runoff	127 x 10^6 m³ +	32 x 10^6 m³ +	**1.27 x 10^6 m³** **		

** Derived proportional MAR 127+32 =159 x 0.8% = 1,270 000m³

\+ Statistics from: CSIR Report #31 Estuaries of the Cape; Keurbooms / Bitou System (CMS 19) dated October 1984

Δ SPC measurement

Retention Capacity of the Ponds

Pond	*Area*	***Volume assuming Depth 2m to overflow***
A	2,375 m³	4,750 m³
B	3,500 m³	7,000 m³
C	4,200 m³	8,400 m³
D	19,300 m³	38,600 m³
E	7,250 m³	14,500 m³
Totals	**36,625 m³**	**73,250 m³**

At a 2m average depth to detention overflow level, the 73 250m³ total capacity of the ponds represents **6.7% of MAR of the Funda Stream** (73 250 / 1 270 000 = 6.7%) . Comparative impact on the Bitou MAR is 0.22% (73 250 / 32 000 000)

However, as it is likely that the Funda stream only flows strongly in ±four main flood episodes per year, the detention impact is calculated as follows on each such seasonal flood.
73 250 / 1 270 000 / 4 = **23% retention of each quarterly flood-flow episode** of the Funda Stream**.** Comparative impact on the Bitou River seasonal flood is 0.19%.

While the ponds do have a significant effect on seasonal flood-flow of the Funda stream the water held in detention does seep through the floor and walls of the ponds (as evidenced in pond D (see Photo B-1) over the past 4 years where the grass in the floor is not killed by limited-term inundation) and such slow seepage contributes to dry period low-flow of the Bitou River in much the same way as the pre-mining boulder deposit absorbed the peak flow in its porosity and slowly released such water as important environmental low-flow.

While the ponds will have a negligible impact on flood flow reduction of the Bitou and more so the Keurbooms Estuary, the retained slow release of the water by seepage will to some extent restore in the earlier slow release by the pebble alluvial fan in dry periods.

Within this comparison the higher loss to evaporation from ponds over pebble bed storage must be accepted (assuming that the ponds will have a free-water surface after rain totalling 36 000m² and that such level may be reached and held in various periods totalling 3 months of the year, this could yield a total evaporation loss of 3/12 x 1500mm per year = 375mm/year x 3.6ha = evaporation loss of 13 500m³ of water which is sufficient to irrigate some 2ha. In any event this water would be lost to run off to the sea as it occurs during high rainfall episodes.

As evidenced from the floods which occurred during mining, it is evident that very little flow of the Funda stream was in fact restricted to the two side channels of the alluvial fan and that most run-off took place into the fan. The impact which mining has had in channelling the entire main flow (previous western channel) through the ponds is therefore a function of the relative retention by the ponds compared to the retention by the alluvial fan.

While moderate flows would likely have been largely absorbed by the alluvial fan, we have no evidence of any such flow rates and hence cannot consider the possible effect of the ponds on moderate flows vis-à-vis the comparative impact of the ponds and that of the alluvial fan on moderate flows pre-mining.

With respect to the questioned legality of the temporary ponding, the following is relevant in reflecting the fact that the creation of ponds has been part of the planning and the implementation since 2000 and is not a unilateral decision of the quarry.

The creation of ponding was intended in the 2000 EMPR paragraph 4.1 final bullet "*The unlikely possibility of flash floods does exist. In such event the side streams could flow into the excavation which will act as a series of major retention ponds largely avoiding the risk of a high silt load being introduced into the Bitou Estuary*" and further discussed during the 2004 Environmental Monitoring Committee meeting when mining had advanced to a stage where intermediate pond walls were becoming relevant in the operational rehabilitation as described in the 2004 Environmental Performance Assessment page 4 "*The stream channel to the east of Section A has been retained untouched but the channel to the west has been diverted to flow into the excavation (with full knowledge and sanction of the Monitoring Committee-D Derbyshire, October 2004). Note that the western stream channel was not a natural stream channel but was diverted to its position when the land was ploughed (D Derbyshire, October 2004)".*

Paragraph 9B requirement:
FINAL PERFORMANCE ASSESSMENT on the EMP(R)

Paragraph 9C requirement:
TRANSFER OF ENVIRONMENTAL LIABILITY

Not applicable – all rehabilitation requirements identified will be completed by Derby Concrete CC and monitoring and maintenance over the two-year period will be conducted by Derby Concrete CC in respect of both Funda and Helderwater (despite the fact that the licence of Helderwater is held by Derbyshire and Sons (Pty) Ltd).

Paragraph 9D requirement:
ENVIRONMENTAL RISK REPORT

The stipulated contents of the environmental risk report are copied here (from regulation 60), to serve as background and reference.

Note that in terms of Regulation 56, the "principles for mine closure", the closure of a mining operation is a process which must start at the commencement of mining and continue throughout the life of the operation. This risk-report (part of the closure application) has been written post-cessation of activities (during decommissioning rehabilitation) and as such, the first principle of Regulation 56 cannot be met (nor can the second), therefore most of the items required in terms of the content requirement (in terms of regulation 60) are not applicable in this case.

a. The undertaking of a screening level environmental risk assessment
where-

(i) All possible environmental risks are identified, including those which appear to be insignificant;

(ii) The process is based on the input from existing data;

(iii) The risks that are considered are qualitatively ranked as –

(aa) A potential significant risk;

(bb) A uncertain risk;

(cc) An insignificant risk;

Fortunately, the applicants have been conducting decommissioning rehabilitation as part of their operational activities on the site over the life-of-mine and have in that time developed the minimum requirements from which to ensure proper rehabilitation of the site. Observation of existing rehabilitation measures as implemented shows the following very important points:

- While not as critical as at other mines topsoil replacement does foster growth of groundcover reducing the risk of erosion.
- Slopes can be flattened to only 1:1½ gradient which under Plettenberg Bay climate and soil condition is viable for stable revegetation especially with Kikuyu grass. Where grass is used as a groundcover in overflows it has significant resistance to erosion.
- Lowering the overflows from their 2008 level to a reduced level facilitating only 2m deep ponding will still maintain control over excessively fast flood run-off to the Bitou River which together with the vegetation cover of the pond floors and slopes will yield significantly lower silt run-off into the Bitou River.
- Providing a negative camber of perimeter roads will preclude concentrated runoff from the road over the excavation edge and thereby further avoid erosion of the excavation perimeter slopes
- While alien infestation control programmes are in place on the mine property, effective and sustainable control requires the collective effort of all Bitou catchment owners and agencies.

- In order to avoid the risk of the lateral fringes of the Bitou floodplain vegetation dying during a prolonged drought downstream of the causeway as a result of causeway interference with the flow in these lateral zones, two additional pipe culverts are to be installed in each of the lateral zones at appropriately selected positions which could foster water movement within the lateral zones through the causeway.

The following table summarises very briefly the potential risks which are applicable prior to the remainder of the decommissioning rehabilitation of the site, assuming that no further decommissioning rehabilitation will take.

RISK ASSESSMENT OF FUNDA

	Possible risk factor	***Qualitative risk level***	***If Insignificant, Why?***
1	*Topography (Safety & Visual):* All slopes are at low gradient.	No risk	Material cannot slump at 1:1½ and furthermore the site has no visual intrusion which in any event will be eliminated by the first season's grassing.
2	*Land Capability:* Excavation side slopes and floors stabilized with grass offer suitable grazing equivalent to earlier paddocks given extensive alien eradication by mining.	Insignificantly low	In large areas grazing has been improved by alien eradication and mining.
3	*Soil:* Topsoil was retained and re-used in revegetation of edges and slopes.	Insignificantly low	Rapid grass planting of runners and seeding to ensure retention of placed topsoil.
4	*Erosion:* While potential is high during floods this is reduced by current shaping, revegetation of the slopes and floors with all shallow overflows to be grassed covered with Kikuyu.	Uncertainty in I&AP groups who had negative comment on pond walls but landowner recalls very low levels of erosion during the past floods with the only damage done where the box culvert has not been constructed (Refer Photo A-8)	Assess site especially perimeter haul road camber discharge, erosion of pond side slopes and erosion of pond overflows and take water sample for TSS at discharge to Bitou River.
5	*Vegetation* Unsustainability of regional alien infestation is biggest threat to site's vegetation in long term despite on-site control efforts.	Potential significant risk but is not controllable in isolation	
6	*Fauna*:	Insignificant	Minimal risk given the low density of fauna and the fact that fauna moves freely upstream into the hills,
7	*Surface water*: <u>Evaporation</u>	Insignificant (fully quantified)	The same water as is now lost to evaporation is likely to have been lost to direct run-off to the sea while ponds fulfil a similar sponge origin for dry period / low flow conditions in the Bitou River.

	Possible risk factor	***Qualitative risk level***	***If Insignificant, Why?***
	Bitou water quality (siltation) Impact on Bitou water quality during a flood.	Uncertain risk, if pond walls should break rapid silt discharge would occur but the impact thereof is negated by the fact that the silt would be discharged in a flood episode.	This risk is reduced by the land owner reporting that the only damage which occurred in recent year's flooding (50-100 year cycle) only damaged the wall where the box culvert as seen in Photo A-8 is now being installed at a reduced elevation to allow the pond to have an increased flood detention capacity and an increased flow release rate by virtue of the size of the box culverts.
	Bitou stream flow As the document has quantified the impact on MAR as being insignificant against the pumping rates of riparian farmers, the risk of reduced flow is limited to the impact of the causeway on eliminating flow in the fringe areas of the Bitou floodplain below the causeway and this is dealt with above.	Insignificant	Additional culverts through the causeway have been identified for implementation.
8	*Groundwater*:	Insignificant	No impact to date.
9	*Air Quality:* No latent dust generation is expected (see photos of revegetation).	Insignificant	Isolation of site further precludes any impact in this regard
10	*Noise*	None	No activity would take place on site
11	*Visual Impact:* The shaped and revegetated excavation leaves no visual impact nor future risk.	None	
12	*Archaeology:*	No latent risk	

RISK ASSESSMENT OF HELDERWATER

	Possible risk factor	***Qualitative risk level***	***If Insignificant, Why?***
1	*Topography, Safety and Visual:* East slope identified for further sliping to be stable and support revegetation.	Slump risk insignificantly low but slump and revegetation required to reduce visual impact identify risk if not completed during rehabilitation.	
2	*Land Capability:* No risk as landowner has requested retention of the manoeuvring area and certain buildings.	Insignificantly low.	
3	*Vegetation:* As discussed in the table above sustainable natural vegetation against alien infestation can only be achieved if tackled on a catchment-wide basis.		

4	*Surface Water:* Water Quality: Risk relates to TSS levels if fine tailings reedbed pond walls of 0.5m should fail.	Insignificant after proper rehabilitation measures contemplated.	During closure rehabilitation wall width will be widened and reedbed further stabilised by cover material from ramp. Monitoring will ensure stability during 2-year period to further assess long-term risk. Any oil contamination of soils will be remedied in closure rehabilitation and monitoring period if needed.
5	*Erosion* Gabion erosion protection wall in stream meander will preclude any long-term risk of further erosion.		

b. The undertaking of a second level risk assessment on issues classified as potential significant risks

where-

(i) Appropriate sampling, data collection and monitoring be carried out;

(ii) More realistic assumptions and actual measurements be made; and

(iii) A more quantitative risk assessment is undertaken, again classifying risks as posing a potential significant risk or insignificant risk.

The table below uses the "potential significant risks" as determined in the table above and applies them to the post decommissioning rehabilitation phase. The decommissioning rehabilitation activities are described in the table below.

SECOND LEVEL RISK ASSESSMENT OF FUNDA

Possible risk factor	***2nd level risk assessment***
Erosion	During monitoring assess erosion of side slopes of excavations, pond overflows and success of revegetation in controlling erosion and take remedial steps.
Water Quality	Immediately after or during heavy flow episodes, collect sample where site water discharges into Bitou River and test for TSS (Total Suspended Solids). Following subsidence of the flood correlate observed erosion with TSS result and consider any further remedial actions.
Bitou Flow	Monitor water distribution over width of the Bitou floodplain vegetation during extended dry periods to assess contribution made by additional 2x300mm diam pipe culverts.
Vegetation	Liaise with surrounding landowners to attempt to instigate a Bitou Catchment alien vegetation control programme together with authorities.

SECOND LEVEL RISK ASSESSMENT OF HELDERWATER

Surface Water (channel stability)	During monitoring assess success of gabion wall in eliminating meander erosion but extended risk appears very low and has been reassessed since the proposal for the gabion wall was made in 2000.
Vegetation	Liaise with surrounding landowners to attempt to instigate a Bitou Catchment alien vegetation control programme together with authorities.
Water Quality	As for Funda, immediately after or during heavy flow episodes, collect sample where site water discharges into Bitou River and test for TSS (Total Suspended Solids). Following subsidence of the flood correlate observed erosion with TSS result and consider any further remedial actions.

c. An assessment of whether risks classified as posing potential significant risks are acceptable without further mitigation;

Despite the continuation / completion of decommissioning activities over the next 6 months in accordance with the prescriptions of this report, their success will still require monitoring and maintenance in the two-year monitoring and aftercare period.

Even if decommissioning rehabilitation should be completed today, then the risks identified as significant will still remain as requiring monitoring in the aftercare period.

d. Risks classified as uncertain risks be re-evaluated and re-classified as either posing potential significant risks or insignificant risks;

As the risk of flood management or drought management can only be assessed during the occurrence of these phenomena, they are both likely to be further rationalised should such episode occur during the two-year monitoring period.

e. Documenting the status of insignificant risks;

If decommissioning rehabilitation did not continue, then there would be no/insignificant impact with regard to the aspects described in the table below. However, this section of the report is written as if decommissioning rehabilitation does continue. Given that such activities take place, there is an increased temporary risk / impact in relation to the following aspects which would disappear after decommissioning rehabilitation of the site.

For Funda and Helderwater

Insignificant risk	*Present Status*
Fauna	The risk relates to roadkill on site as well as the temporary disturbance of fauna which may have developed a habitat in existing pits or dumps to be removed.
Surface Water	The possibility exists that oil/fuel leakage could occur from earthmoving equipment. But this is more an impact on soil quality given the absence of surface water flow.
Groundwater	Still none
Air quality	The earthmoving equipment and activities on site will lead to low levels of dust generation and noise at Helderwater.

f. Identifying alternative risk prevention or management strategies for potential significant risks that have been identified, quantified and qualified in the second level risk assessment;

None required. The January 2010 I&AP meeting considered options tabled in the meeting but it was decided to remain with the proposals as they stood as they appeared to have the most well-founded technical appraisal.

g. Agreeing on management measures to be implemented for the potential significant risks that must include:

(i) A description of the management measures to be applied;

Refer Closure Plan Part 9A para g: (Methods to decommission each mining component and the mitigation to avoid residual or latent impacts) of the Closure Plan.

(ii) A predicted long-term result of the applied management measures;

Should all decommissioning measures be applied successfully then apart from the risks identified associated with flood episodes no long term impacts as a result of mining activities on the site will remain.

(iii) The residual and latent impact after successful implementation of the management measures;

Unless a regional (catchment-wide) alien control programme is initiated with full participation by all landowners and authorities alien vegetation on any single property in isolation is not sustainable.

(iv) Time frames and schedule for the implementation of the management measures;

All of these activities must be completed before closure can be granted. The applicant has committed to completion of all decommissioning rehabilitation of the site within 4 months. Monitoring and aftercare will take place for a 2 year period after that to ensure the successful implementation of decommissioning rehabilitation measures and establish them against unpredictable flood and drought episodes.

(v) Responsibilities for implementation and long-term maintenance of the management measures;

Should any alien vegetation infestation occur, it must be controlled by the landowner as part of the landowner's normal alien vegetation clearing programme but he must commit to a large joint action .

(vi) Financial provision for long-term maintenance; and

Not applicable beyond the two-year maintenance and monitoring period.

(vii) Monitoring programmes to be implemented.

Monitoring and maintenance of the site will occur until closure is granted.

(a) Programmed

Such monitoring will entail the measurement of the success of:

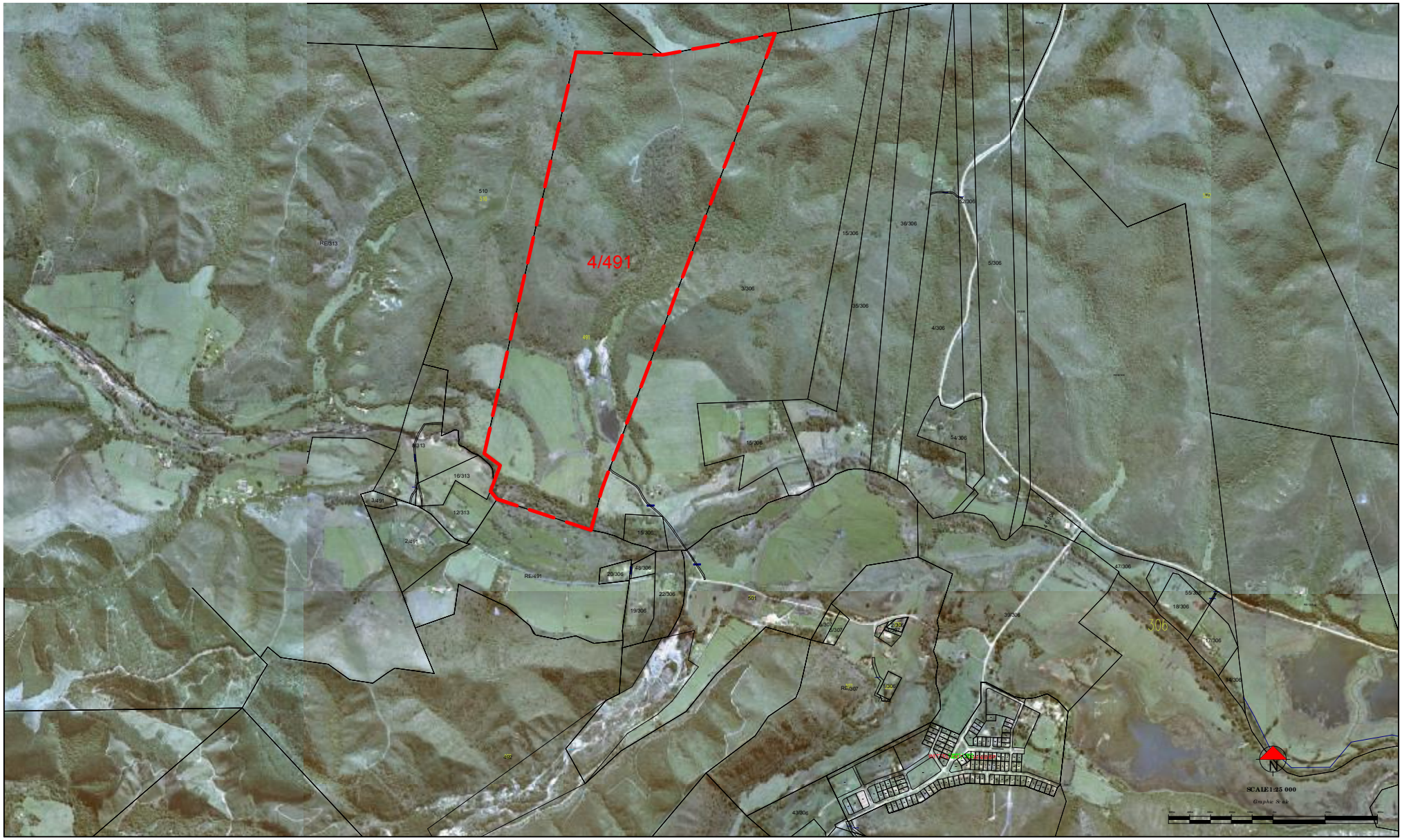
(i) Revegetation of the site, slopes and overflows
(ii) The inspection for the presence of alien species in the previously disturbed and rehabilitated areas.
(iii) The inspection of perimeter roads to ensure negative camber is not concentrating stormwater over the edges of the excavation.
(iv) The success of the gabion wall in controlling meander erosion at Helderwater.
(v) The stability of the berm in protecting the stream channel of Helderwater against runoff from the manoeuvring area which is to be retained as such.
(vi) The stability of the eastern slope at Helderwater where backfilling of its toe is advocated.

Such inspections must take place at least twice per year and at least one of those inspections must take place with an environmental officer from the DME.

(b) Non-scheduled Inspections (i.e. during and after high-rainfall episodes and during prolonged dry periods) to determine:
    (i) The success of the ponds in acting as detention in slowing down flood-flow release.
    (ii) Sampling the release water where it leaves the each of the Funda and Helderwater sites into the Bitou River for TSS and considering the results against observed erosions caused by the flood to the sites and prescribing further remediation measures.
    (iii) The success of the overflows in terms of achieving successful retention to maintain low TSS water quality release.
    (iv) The grassing of the excavation side slopes and floors.
    (v) The pond detention life in terms of its ability to allow its 2m retention water to slowly seep through its floor and walls in ±3 weeks to leave the floor-grass and lower side slope grasses unaffected by short-term inundation.

PLAN 1:

Locality Plan



PLAN 1

LOCALITY PLAN

PORTION 4 OF THE FARM WITTEDRIFT NO 491, KNYSNA

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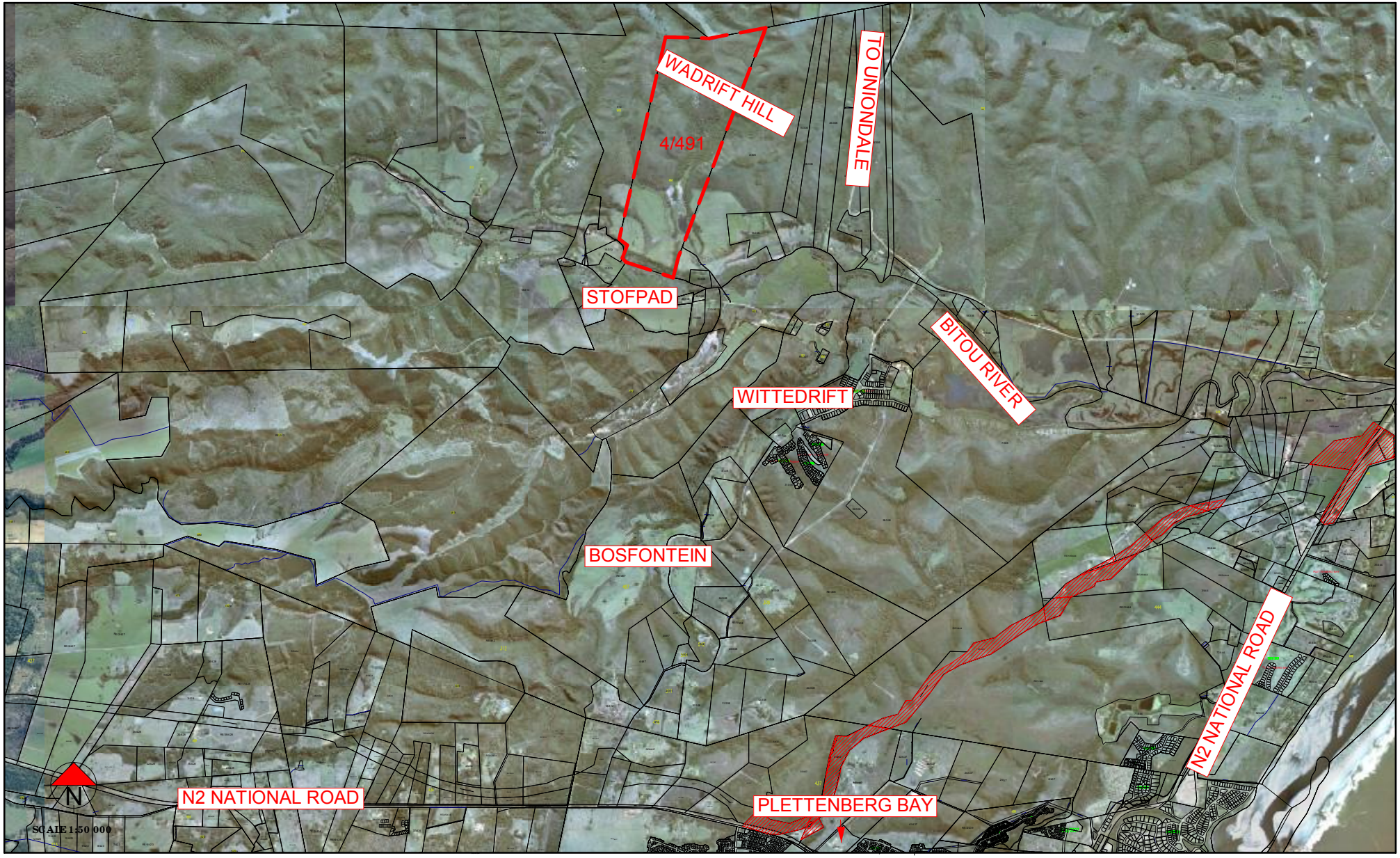
PLAN 2:

Character of the Area



PLAN 2

CHARACTER OF THE AREA

PORTION 4 OF THE FARM WITTEDRIFT NO 491, DIVISION KNYSNA

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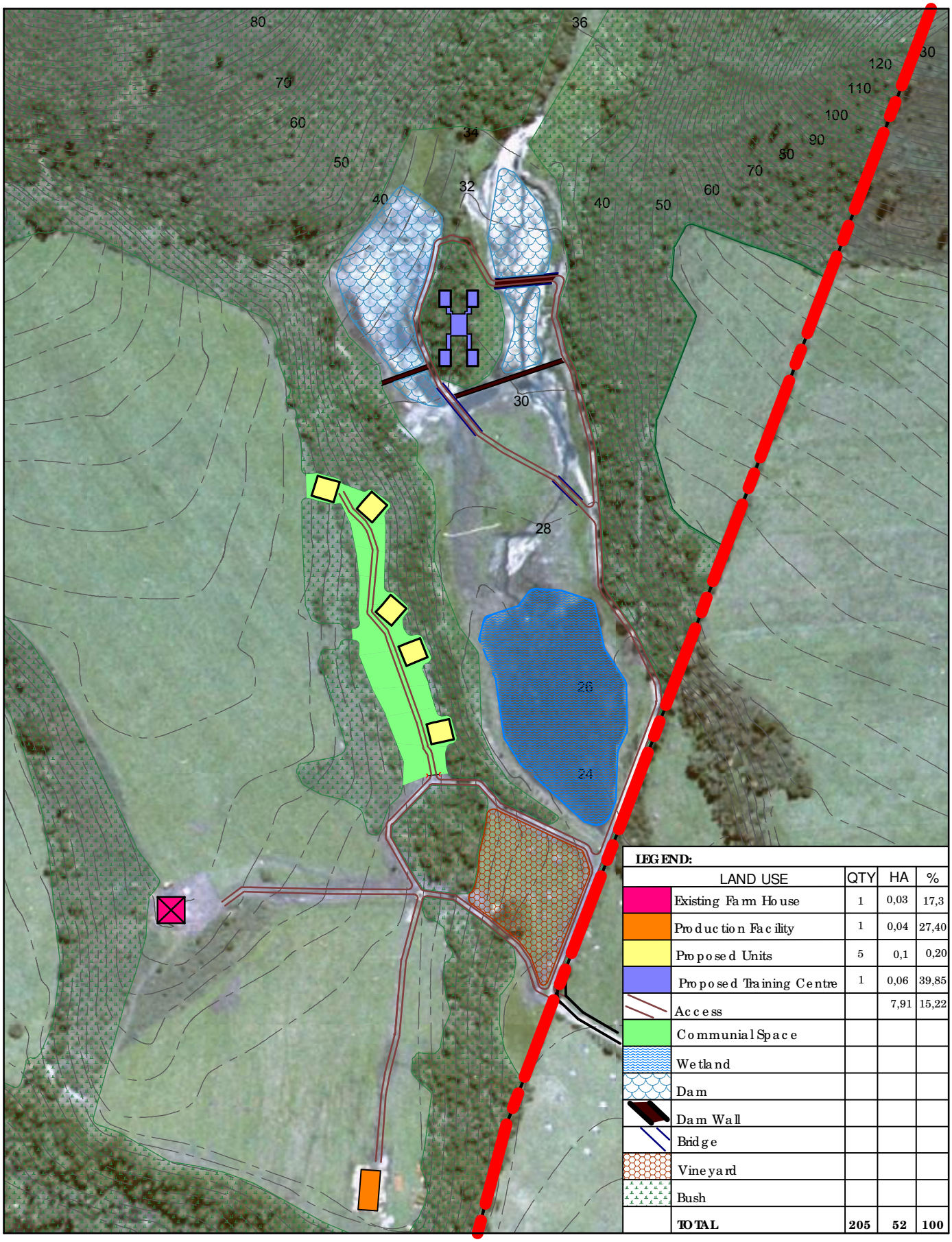
PLAN 3:

Site Development Plan



LEGEND:

LAND USE	QTY	HA	%
Existing Farm House	1	0,03	17,3
Production Facility	1	0,04	27,40
Proposed Units	5	0,1	0,20
Proposed Training Centre	1	0,06	39,85
Access		7,91	15,22
Communial Space			
Wetland			
Dam			
Dam Wall			
Bridge			
Vineyard			
Bush			
TOTAL	**205**	**52**	**100**

PLAN 3:
SITE DEVELOPMENT PLAN

WITTEDRIFT 491 PORTION 4

N

SCALE 1:3750

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