

# Draft Scoping Report

Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended the Environmental Impact Assessment Regulations, Nov 2014.

## PROPOSED CONSTRUCTION OF AGRICULTURAL AREAS, PIPELINES AND ASSOCIATED INFRASTRUCTURE ON FARM 1726, RENOSTERKOP, FARM 1290 AND FARM 1537, AUGRABIES, NORTHERN CAPE



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## EXECUTIVE SUMMARY

### Locality:

The proposed properties on which the expansion of agricultural activities, pipelines and associated infrastructure will take place are situated on Farm 1726, Renosterkop, Farm 1537 and Farm 1290, Augrabies. The farms are situated on the right side of the R64 approximately 2km before you enter the small town of Augrabies in the Northern Cape Province, see Figure 1. The site lies north of the R64 (MR 359) and south and west of Renosterkop Peak, a prominent inselberg in an otherwise flat landscape, and south of the Orange/Gariep River. Small ephemeral streams cross the site. See Figure 2. Accesses to the farms are via existing gravel roads that gain access off the R64. The property is currently zoned Agriculture. The owner of the properties is Oseiland Eiendomme (PTY) Ltd/Burger Du Plessis Familie Trust and has appointed PBPS as the independent consultant to undertake the EIA process.

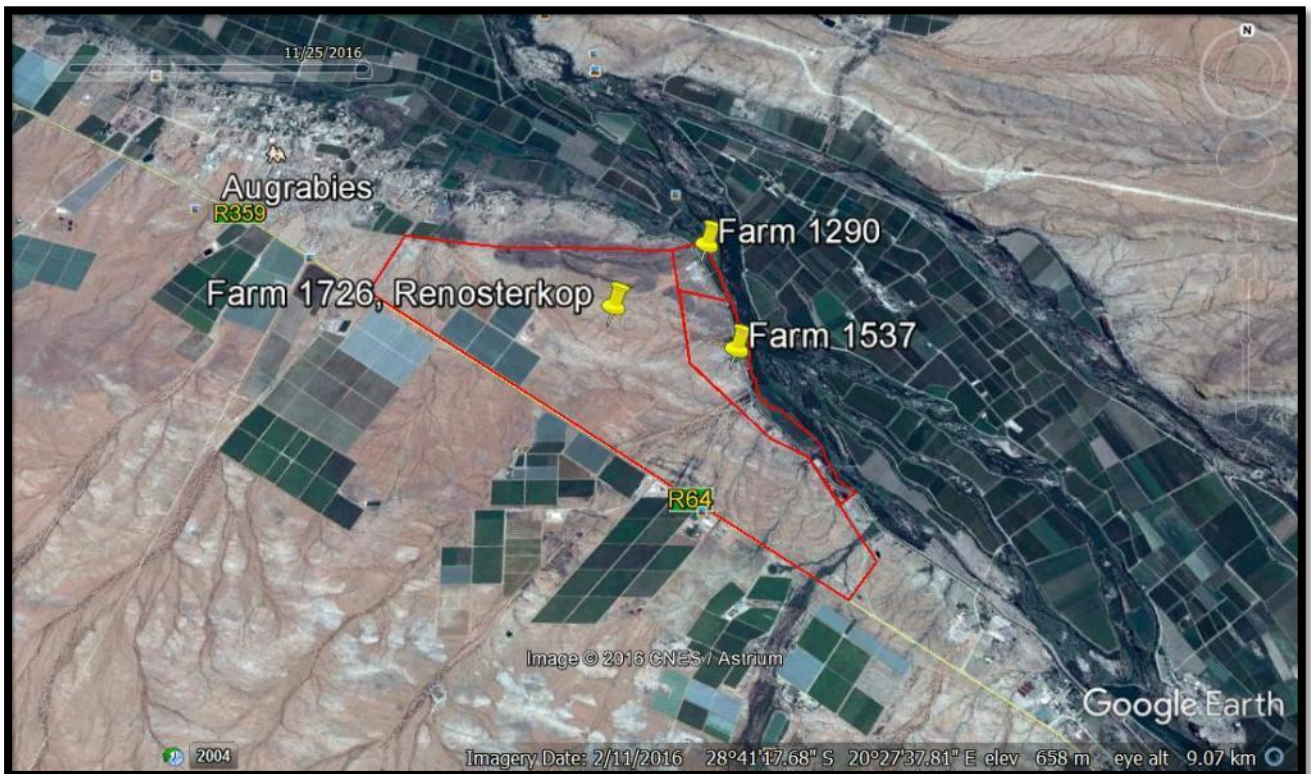


Figure 1: Locality



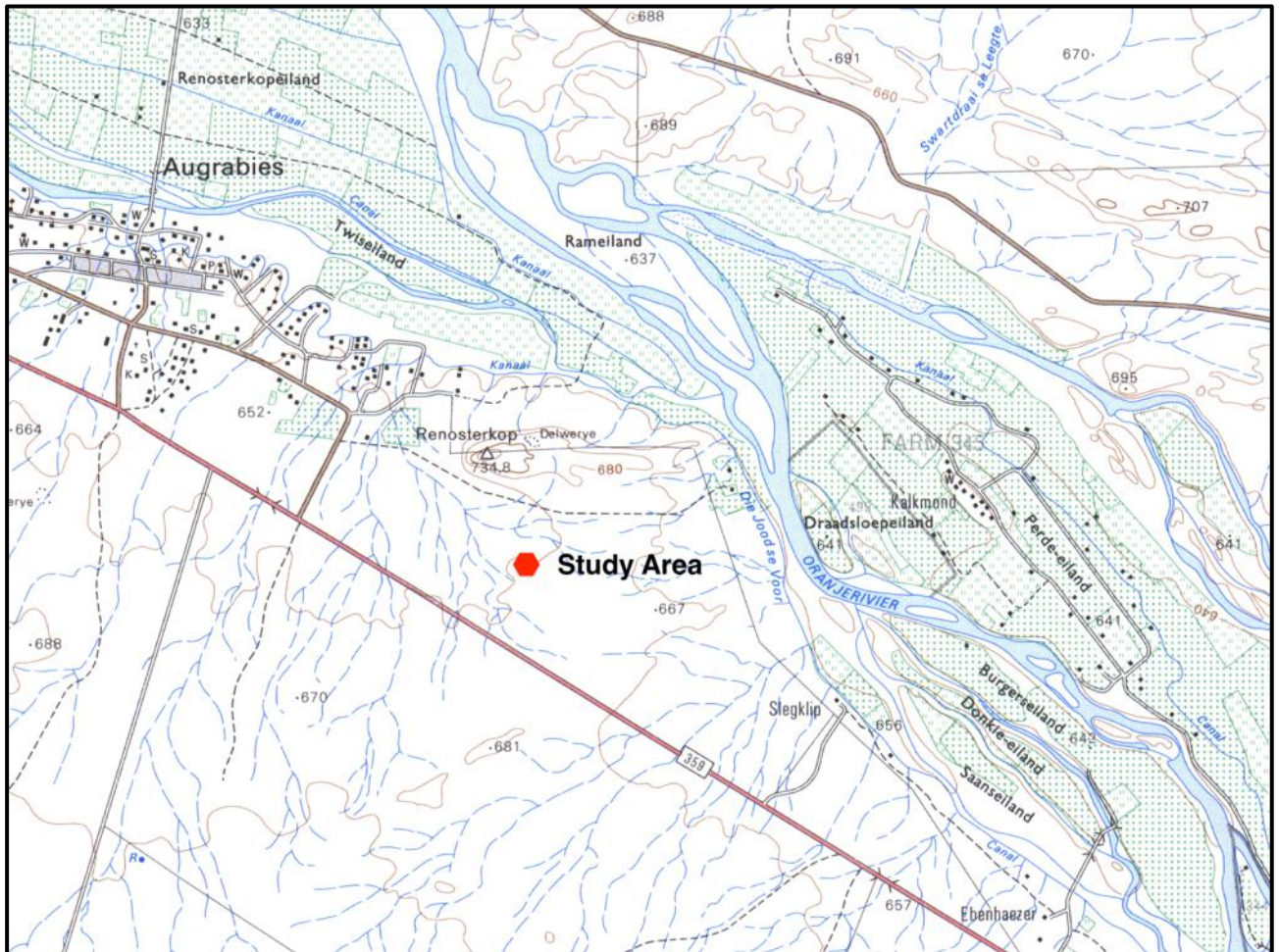


Figure 2: 1:50 000 Topographical Map.

### Proposed development:

The proposed development is to establish additional agricultural areas for the cultivation of vineyards and orchards on areas with indigenous vegetation and across small streams. It is also proposed to construct additional pipelines, that will cross streams and to construct a new intake from the canal as well as a small pumping station adjacent to the Orange/Gariep River for taking, water out of the stream during periods where the canal will be closed for repairs. All proposed cultivation areas have existing access. The farm is also approximately 1km from the Orange/Gariep River. The proposed agricultural areas and pipelines are shown in the Figure 3.

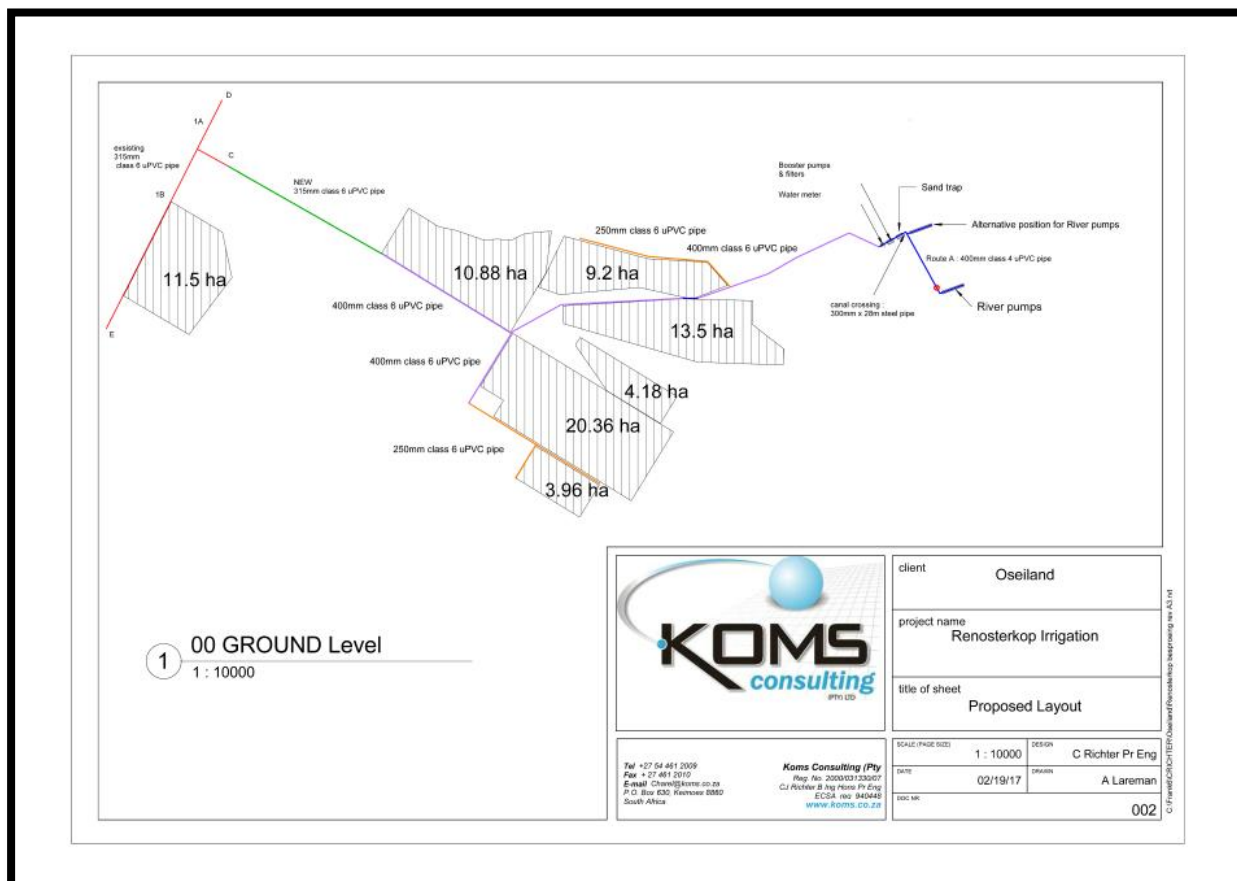


Figure 3: Proposed Agricultural areas.

As per the above Figure 3, the proposed development is for the following:

1. Transformation of approximately 77ha of indigenous vegetation to vineyards,
2. Construction of app. 3km of new pipelines,
3. Construction of a pumping station adjacent to the Canal, approximately 0.1ha in size,
4. A small intake structure within the Orange/Gariep River and
5. Construction of two pipeline crossings over the Canal.

## Baseline information

- Vegetation:

The proposed development area will falls within the Nama Karoo Biome, see summary below:

“The Nama Karoo Biome covers an extensive area from the north-west through the central part of South Africa to the south and southeast of the country. It is an arid zone and is subdivided into three bioregions, the Upper Karoo Bioregion, Lower Karoo Bioregion and Bushmanland Bioregion. The Augrabies study area is located in the Bushmanland Bioregion at a north-central location (Rutherford & Westfall, 1994; Rutherford et al. 2006; Mucina et al. 2006 in Mucina & Rutherford, 2006).

Critical Biodiversity Areas (CBAs) were delimited for the Namaqua District Municipality (NDM) by Desmet & Marsh (2008). The maps they compiled did not include the Augrabies area. However, more recently critical biodiversity areas and ecological support areas have been mapped for the whole of the Northern Cape Province including the Kai Garieb Municipality.

The available CBA shape files (Enrico Oosthuysen pers comm.) for the Northern Cape Province were overlaid on Google Earth™, which allowed for determining the classification of the area around Augrabies including Renosterkop (the peak). The farm Renosterkop 1726



is located in an area classified as CBA2 (Figure 5.7). The Renosterkop study area is not near any focus area of the National Protected Area Expansion Strategy nor is it close to any mountain catchment area. It is separated from the Augrabies National Park by numerous other farms. “

An assessment report will however form part of the EIA phase of this development, with more detail on the vegetation types and possible impacts, however no significant impacts are expected.

- Heritage, Archaeology and Palaeontology

A Heritage/Archaeological specialist Dr Jonathan Kaplan was appointed to conduct an assessment of the site and an application will be lodge to SAHRA. It is highly probable that a Phase 1 Heritage Impact Assessment (HIA) will have to be compiled for the EIA phase. It was however outlined by the specialist that no significant impacts are expected.

- Socio-Economic Environment.

Socio:

The farm Renosterkop as part of the Oseiland Eiendomme PTY Ltd/Bruger Du Plessis Familie Trust is a highly commercial agricultural (farming) unit, which is currently being farmed on a commercial basis. The farms are situated within an area surrounded by other farms and farming communities.

The closest town to the farm is the town of Kakamas. A very competent and motivated workforce manages the other properties as part of company. It has many success stories, which contributes positively to the local economy and the provision of job opportunities in the region and the Northern Cape Province.

It is envisaged that Oseiland will need to create some new permanent and a number of new seasonal employee positions in the near future should the new development be approved. The entity also plans to convert some of the current seasonal positions to permanent positions should this application be successful.

As mentioned before, table grape production is very labour-intensive, even more so if packed as well. It creates around 4 new employment positions per hectare if also packed on the farm. Citrus production plus the raisin plant creates another 1 position per hectare.

The new development will therefore create an immediate need to appoint more workers and supervisors.

The new development will lead to the expansion of the farming operation, and will create a demand for new staff and new skills, eg.

- Skilled agricultural labourers
- Specific knowledge of vineyards and citrus fruit production will be needed
- Specific knowledge of fruit packing will be needed
- Support staff will be needed: Admin, forklift drivers, tractor operators and Code 14 drivers.

Preference will be given to black/coloured people for these positions, and more specific black/coloured women where possible.

Existing employees with experience on the farm, plus the potential to be leaders, will in the first place be identified for new supervisory positions.

Economic:

In a rural area such as this with a high unemployment rate, any new employment positions have a huge impact on the immediate and extended families of such new workers. Add then also the impact of more people with proper housing, undergoing skills training and going to church, sport, etc. and children going to school, to understand the positive impact on this rural community. Even seasonal work opportunities has the advantage of extra income plus the

opportunity to gain skills that can in future be used to gain permanent employment on the farm or elsewhere.

Not only are the new employment opportunities important, but also the fact that:

1. Existing jobs can be secured: Enough water and farming development will directly secure existing and new job opportunities.
2. More sustainable development will immediately create the opportunity to proceed with the expensive exercise to plant new varieties that can spread the preparation, pruning, harvesting and packing seasons over longer periods. This will support the entity in their efforts to convert as much as possible seasonal job opportunities into permanent job opportunities. Especially black females from the farm and neighbouring towns will benefit here. The positive impact on their lives will even be more as more of them will now also be promoted to supervisor level to help manage the increased production as well as the increase in value-adding volume.
3. The increase in production of export produce will bring more foreign capital to South Africa which is much needed to strengthen our economy and as such fully supported by Government.

The Agri-BEE report will be included in the EIA phase of the development.

- Electricity

The development falls within the capacity of Eskom. Note that additional electrical capacity is necessary for the development of the pump station, however no additional capacity necessary for the agricultural areas as existing usage is sufficient. An application was submitted to Eskom for the additional capacity, see correspondence with ESKOM in section 12.3.

- Water Use License Application

An application for a license in terms of the National Water Act, 1998 is made by the developer, Oseiland Boerderye PTY Ltd/ Burger Du Plessis Familie Trust for the transfer water rights, taking of water from the Orange River, the water usages is summarised as the follows:

<i>(a) taking water from a water resource;</i>	Transfer of water rights
<i>(c) impeding or diverting the flow of water in a watercourse</i>	Impeding flow
<i>(i): altering the bed, banks, course or characteristics of a watercourse;</i>	Altering the banks of a water course

- Alternative energy and optimisation

The proposed development of the vineyards will in effect result in the following measures to reduce energy and water usage:

- Use water sparingly and the latest irrigation technology and scheduling methods are always implemented.
- Best practices to reduce water consumption and lowest possible electricity consumption.

## **Alternatives:**

The development layout was developed using an opportunities and constraints analysis which included on the constraints side, mainly the suitability of the agricultural areas on the particular position from a design perspective as well as possible impacts on natural vegetation

and drainage areas, this is clearly outlined in Alternative 1 (preferred alternative). From a technology perspective the suitability of the proposed agricultural activities to be established on the property, this is outlined in alternative 1 and 2. For the Scoping Process the following were considered, Alternative 1 (preferred alternative), Alternative 2 the agricultural activities alternative, Alternative 3 location alternative for the intake at the Orange/Gariiep River and Alternative 4 the No-Go Option.

No site alternative was considered as this is the applicants property, no other properties available and this site has close access to the Canal and the Orange River. No site alternatives available. Also no technology alternatives available)

The alternatives considered for the development are described below:

**Alternative 1 (preferred location/design and technology alternative):**

This option will consist of agricultural land to be established, clearly outlined according to:

1. Transformation of approximately 77ha of indigenous vegetation to vineyards,
2. Construction of app. 3km of new pipelines,
3. Construction of a pumping station adjacent to the Canal, approximately 0.1ha in size,
4. A small intake structure within the Orange River and
5. Construction of two pipeline crossings over the Canal.

The layout is shown below in Figure 4.

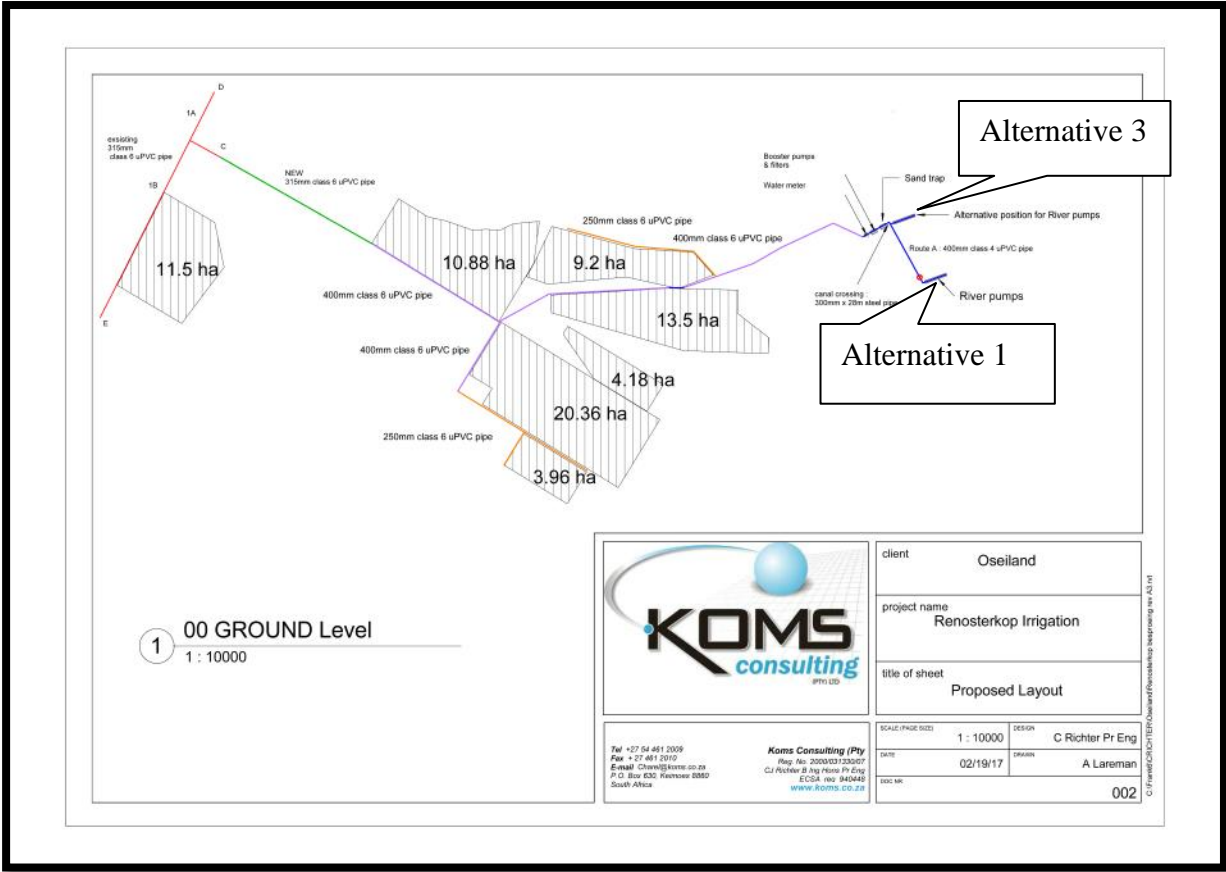


Figure 4: Alternative 1 – All proposed development areas

This alternative is considered as preferred for the following reasons:

- From a design perspective this alternative was the best option. It took into consideration design measures by establishing agricultural areas as far as possible on areas that have already been disturbed.
- From a fresh water feature perspective it took into consideration the ephemeral streams, the development was located as far as possible from the streams. Also the



entire eastern section of the farm will be kept natural. The eastern section has low potential agricultural land, with high concentrations of ephemeral streams.

- This alternative also located the pump station on an area already disturbed and the intake from the Orange/Gariep River is also on an area already disturbed.
- From a financial perspective this alternative was the best option. This development will contribute to the local and international market.
- From a vegetation perspective this alternative will have a low negative impact on vegetation.
- From a heritage/archaeological perspective this alternative will not have a significant impact, most probably a low impact with mitigation measures.
- This alternative will also fully utilise the farms agricultural potential according to existing water use rights and additional rights to be transferred.
- This alternative will also contribute socially to the upliftment of the existing workers through additional job opportunities.

It is clear therefore that this alternative meets the requirements of the socio-economic, vegetation, fresh water ecology and design considerations and was deemed preferred.

#### **Alternative 2 (location/design alternative):**

This option will consist of agricultural land to be established, clearly outlined according to:

1. Location – Farm 1726, Renosterkop, Farm 1290 and Farm 1537
2. Size – approximately 78.7ha
3. Proposed agricultural activity – vineyards
4. Pump station of app ha
5. Pipelines of approximately 3.2km
6. Off take at the Orange River
7. Off take at the Canal

The layout is shown below in Figure 5.

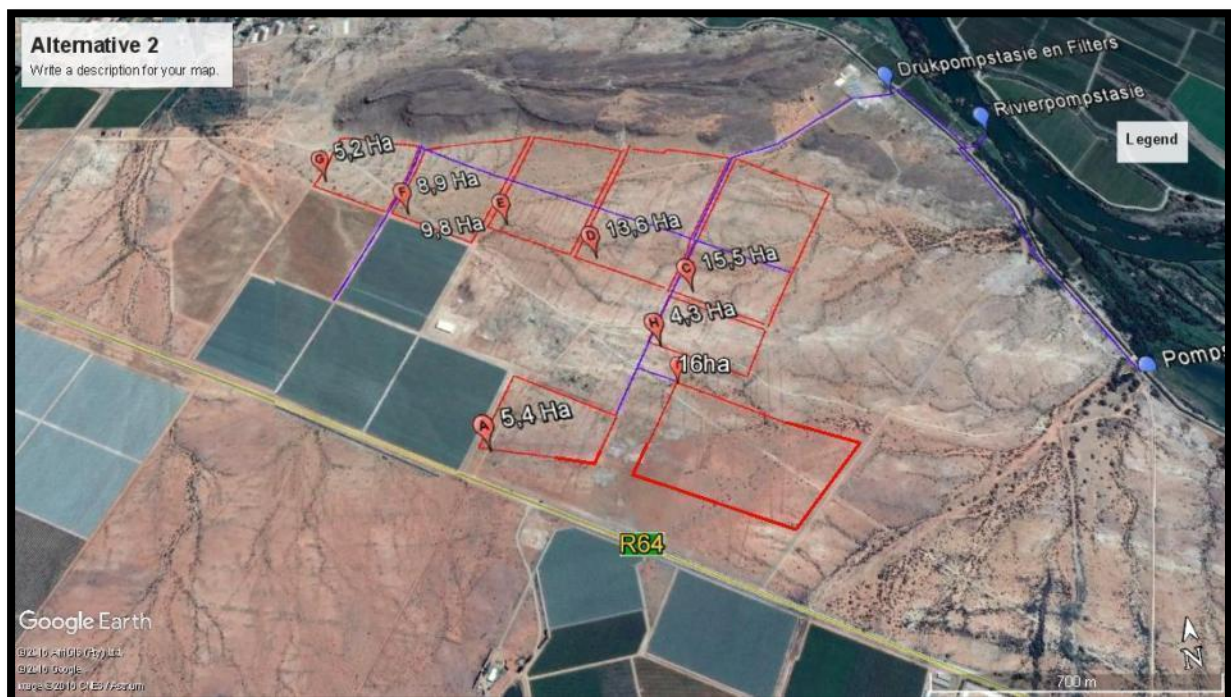


Figure 5: Alternative 2

This alternative is not considered as preferred for the following reasons:

- From a design perspective this alternative was not the best option. It did not take into consideration design measures by not establishing agricultural areas as far as possible on areas that have already been disturbed.
- From a fresh water feature perspective it did not take into consideration the ephemeral streams, the development was located over the streams.

This alternative is therefore not deemed preferred and not better suited than that of alternative 1.

### **Alternative 3: (location/design alternative)**

This option will consist of a different site for the establishment of the pumpstation in the Oragne/Gariep River. The different locations are shown in Figure 4.

This alternative is not deemed preferred as it is located on a site with a higher bank edge and with more potential to impede and divert flow, see Figure 6.



Figure 6: Alternative 3

### **Alternative 4: No-go Option**

This is not seen as preferred for the following reason:

- The current agricultural activities on the property are not being utilised to full potential. For this to take place additional agricultural areas would have to be established.



- From a botanical perspective the No Go alternative would be no further development of vineyards at Renosterkop 1726. The natural veld would remain as it is and there would be minimal change over time but with some low-level impacts due to human activity. The result would be a Very Low Negative impact.
- No social upliftment of existing workers and no additional job opportunities.

Therefore, this alternative is not seen as preferred as the expansion of agricultural activities will contribute to the agricultural potential of the property and if this does not take place the expansion of the farm to its full potential cannot take place. No upliftment and economical contribution can take place.

Alternatives that will be considered

Following from the section above it is clear that Alternative 1 addresses the key concerns raised.

In conclusion, taking into consideration that Alternative 2 and 3 is not viable from a design, fresh water ecology or vegetation perspective and the fact that Alternative 1 took into consideration inputs from relevant specialists and inputs during public participation, this development of alternative 1 is seen as preferred.

Alternative 1 as the preferred option and Alternative 4 the No-go Option, will be brought forward into the EIA phase of the development.

## **Public participation included the following:**

Public participation included the following:

- **Registration and advertisement**

An advertisement was placed in the Gemsbok on the 17 March 2017. This advertisement served as a notice for registration as an Interested and Affected Parties and to provide comment on the dSR as part of the public participation. The registration/comment period was from Friday 17 March 2017 until Monday 17 April 2017.

- **Notice Board**

Notice Boards were displayed at the entrance of the farm from Wednesday 15 March 2017.

- **Information and reporting for formal process**

A notice that included the Executive Summary and draft Scoping Report was made available and distributed by registered post to all registered I&APs and neighbours for the 30 day commenting period, from (Friday 17 March 2017 until Monday 17 April 2017). The notice also informed all I&AP's of the availability of the Scoping Report which could be obtained from the EAP. Comments received will be included in the final Scoping Report. The actual comments received on the Executive Summary and Scoping Report, as part of the pre-application public participation, will be included in the final Scoping Report. Digital copies were made available on the website [www.pbpscon.co.za](http://www.pbpscon.co.za) and distributed to all I&AP's.

Hard copies of the report were also sent to the following Authorities: DENC, DWS, Dept. of Agriculture, SAHRA and Kai! Garib Municipality.

- **I&AP database**

The I&AP database was developed from registered and listed I&. The database will be updated to include new I&AP's that have submitted comments on the Scoping Report.

All comments received will be addressed in the Comments and Response sheet.



## Issues identified for EIA phase:

The purpose of scoping is to identify issues for further study in the EIA. A summary of the main identified issues is shown in Table 2. Two types of reports will be compiled.

1. A report on a specific technical subject.
2. Final specialist environmental impact reports, included in this scoping report to be further assessed in the EIA phase, as outlined in Table 2.

Table 2: Identified issues, EIA studies and reports

Main issues identified	Comments addressed in section 3 following availability of Scoping Report	Reports	Final EIA studies
Heritage/Archaeology			X
Socio-Economic		X	
Vegetation			X
EMP		X	
Water Use License Application		X	

## Conclusion:

Taking into account that the purpose of scoping is “*must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process*” it can be concluded that the process has been successful because a number of issues have been identified for further study and a preferred alternative has been identified.

The proposed development has been identified and the layout designed according to the findings of the baseline studies to ensure minimal impact on the environment. Alternative 1 addresses the key concerns with regards to design and the inputs from the specialists through the following:

- No constraints were identified from a botanical perspective that would prevent the agricultural development from proceeding as long as suitable mitigation is implemented.
- No significant impact expected on heritage/archaeology, dependant on the outcome of the application lodge to SAHRA.
- Determined the best suitable alternative through assessing the impacts on the environment, preferred alternative 1 was determined.
- Low impact on the ephemeral streams and the conservation of the eastern section.
- The farm can be utilised to its full agricultural potential.
- It will also result in the social upliftment of the existing workers and create additional job opportunities.
- Financially contribute to the local and international market.

The detailed impacts and mitigation measures for Alternative 1 can, however, only be investigated during the EIA phase as per the Plan of Study for EIA as in section 11.5.

Note that the “**do nothing option**”, has been investigated as Alternative 4 and when taking into consideration that the current agricultural potential of the property is not utilising to its full potential, thus keeping the site as is, is not deemed as preferred.

Thus Alternative 1 and Alternative 4: No-Go Option will be brought forward and investigated in the EIA Phase.

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### List of abbreviations

<b>CA</b>	Competent Authority
<b>DENC:NC</b>	Department of Environment and Nature Conservation: Northern Cape
<b>DEAT</b>	Department of Environmental Affairs and Tourism
<b>dSR</b>	Draft Scoping Report
<b>fSR</b>	Final Scoping Report
<b>DWS</b>	Department of Water and Sanitation
<b>EA</b>	Environmental Authorisation
<b>EAP</b>	Environmental Assessment Practitioner
<b>EIA</b>	Environmental Impact Assessment and the process to be followed in terms of the National Environmental Management Act, Act 107 of 1998
<b>EIR</b>	Environmental Impact Report
<b>EMF</b>	Environmental Management Framework
<b>EMP</b>	Environmental Management Programme
<b>I&amp;AP</b>	Interested and Affected Party
<b>IAIAsa</b>	International Association for Impact Assessment for South Africa
<b>NEMA</b>	National Environmental Management Act, Act 107 of 1998
<b>NID</b>	Notice of Intent to Develop
<b>PoSfEIA</b>	Plan of Study for EIA
<b>ROD</b>	Record of Decision
<b>SDF</b>	Spatial Development Framework
<b>SR</b>	Scoping Report
<b>TOR</b>	Terms of Reference

# 1 Introduction

## 1.1 Contents of the scoping report

### 1.1.1 Report content tracking

**Table 1: Report tracking**

Requirements of process	Status
<b>Objectives of Scoping report</b>	
(a) identify the relevant policies and legislation relevant to the activity;	See section 1 and sections 2.2 and 3.
(b) motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;	See section 4.
(c) identify and confirm the preferred activity and technology alternative through an impact and risk assessment and ranking process;	See section 6.
(d) identify and confirm the preferred site, through a detailed site selection process, which includes an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment;	See sections 5 and 6.
(e) identify the key issues to be addressed in the assessment phase;	See section 9.
(f) agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required as well as the extent of further consultation to be undertaken to determine the impacts and risks the activity will impose on the preferred site through the life of the activity, including the nature, significance, consequence, extent, duration and probability of the impacts to inform the location of the development footprint within the preferred site; and	See section 9.
(g) identify suitable measures to avoid, manage or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored.	See section 9.
<b>Content of Scoping Report</b>	
A scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must include-	
(a) details of- (i) the EAP who prepared the report; and (ii) the expertise of the EAP, including a curriculum vitae;	See section 1.3.
(b) the location of the activity, including- (i) the 21 digit Surveyor General code of each cadastral land parcel; (ii) where available, the physical address and farm name; (iii) where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties;	See section 1.2.
(c) a plan which locates the proposed activity or activities applied for at an appropriate scale, or, if it is- (i) a linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or (ii) on land where the property has not been defined, the coordinates within which the activity is to be undertaken;	See section 2.
(d) a description of the scope of the proposed activity, including- (i) all listed and specified activities triggered; (ii) a description of the activities to be undertaken, including associated	See section 2.

structures and infrastructure;	
(e) a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process;	See section 3.
(f) a motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location;	See section 4.
(h) a full description of the process followed to reach the proposed preferred activity, site and location within the site, including - (i) details of all the alternatives considered; (ii) details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs; (iii) a summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them; (iv) the environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; (v) the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts- (aa) can be reversed; (bb) may cause irreplaceable loss of resources; and (cc) can be avoided, managed or mitigated; (vi) the methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives; (vii) positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; (viii) the possible mitigation measures that could be applied and level of residual risk; (ix) the outcome of the site selection matrix; (x) if no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such and (xi) a concluding statement indicating the preferred alternatives, including preferred location of the activity;	See sections 5, 6, 7, 8 and 10.
(i) a description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity; (ii) a description of the aspects to be assessed as part of the environmental impact assessment process; (iii) aspects to be assessed by specialists; (iv) a description of the proposed method of assessing the environmental aspects, including a description of the proposed method of assessing the environmental aspects including aspects to be assessed by specialists; (v) a description of the proposed method of assessing duration and significance; (vi) an indication of the stages at which the competent authority will be consulted; (vii) particulars of the public participation process that will be conducted during the environmental impact assessment process; and (viii) a description of the tasks that will be undertaken as part of the environmental impact assessment process; (ix) identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.	See sections 6, 7, 8, 9 and 11.5.
j) an undertaking under oath or affirmation by the EAP in relation to- (i) the correctness of the information provided in the report;	See sections 12 and 11.1.



(ii) the inclusion of comments and inputs from stakeholders and interested and affected parties; and (iii) any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties;	
(k) an undertaking under oath or affirmation by the EAP in relation to the level of agreement between the EAP and interested and affected parties on the plan of study for undertaking the environmental impact assessment;	See section 11.5.
(l) where applicable, any specific information required by the competent authority; and	See section 12.
(m) any other matter required in terms of section 24(4)(a) and (b) of the Act.	See section 12

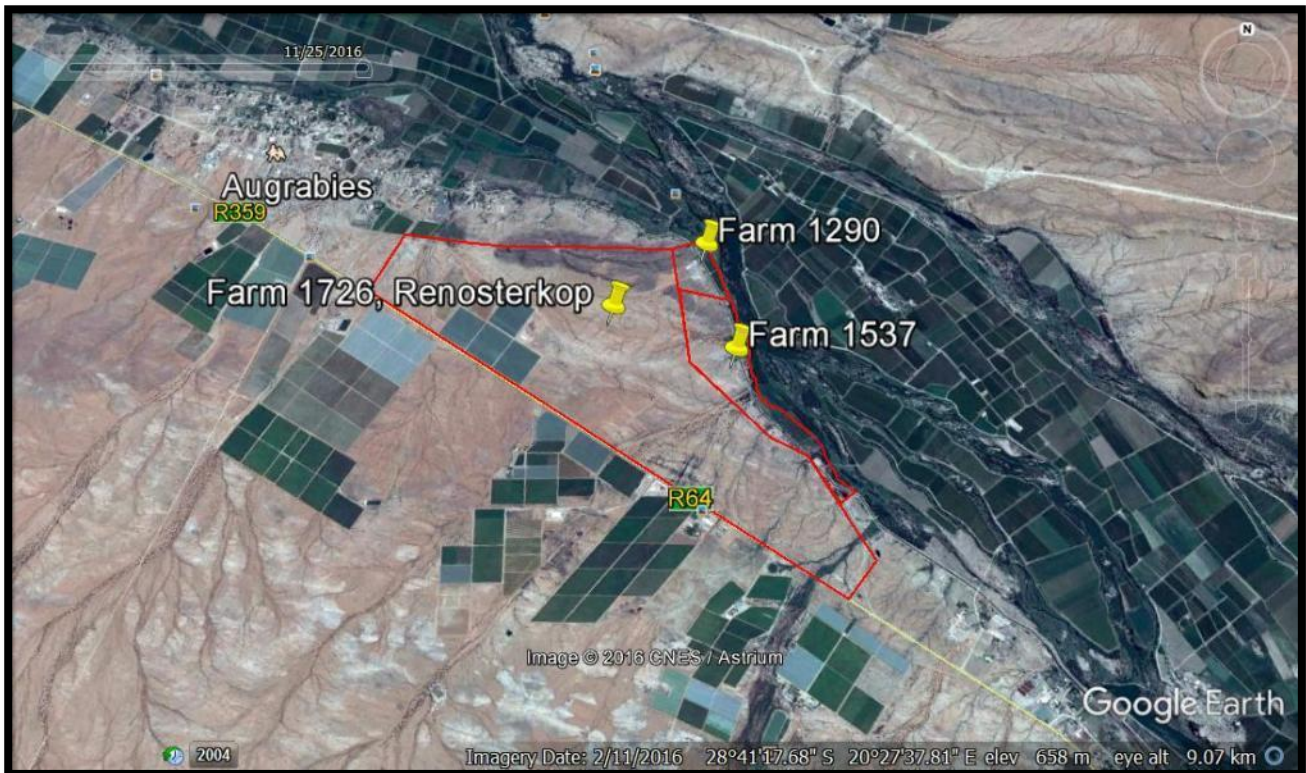
### 1.1.2 Report lay-out

Section 2 of the report describes the scope of the proposed activities and section 3 provides policies and legislative context. Section 4 provides the needs and desirability. Section 5 shows a description of the environment and baseline information. Section 6 lists the alternatives with identified issues in section 7. Section 8 provides the public participation undertaken and Section 9 shows the details of the EIA phase. The conclusions are shown in section 10. The appendices are shown in section 11. Section 12 provides other additional information.

The EIA process is shown in section 3.1. Currently the project is in the Scoping phase and the EIA phase will follow after acceptance of the Scoping Report by DENC:NC.

## 1.2 Property Location and Description

The proposed properties on which the expansion of agricultural activities, pipelines and associated infrastructure will take place are situated on Farm 1726, Renosterkop, Farm 1537 and Farm 1290, Augrabies. The farms are situated on the right side of the R64 approximately 2km before you enter the small town of Augrabies in the Northern Cape Province, see Figure 1.1. The site lies north of the R64 (MR 359) and south and west of Renosterkop Peak, a prominent inselberg in an otherwise flat landscape, and south of the Orange/Gariiep River. Small ephemeral streams cross the site. See Figure 1.2. Access to the farms are via existing gravel roads that gain access off the R64. The property is currently zoned Agriculture. The owner of the properties is Oseiland Eiendomme (PTY) Ltd/Burger Du Plessis Familie Trust and has appointed PBPS as the independent consultant to undertake the EIA process.



*Figure 1.1: Locality*

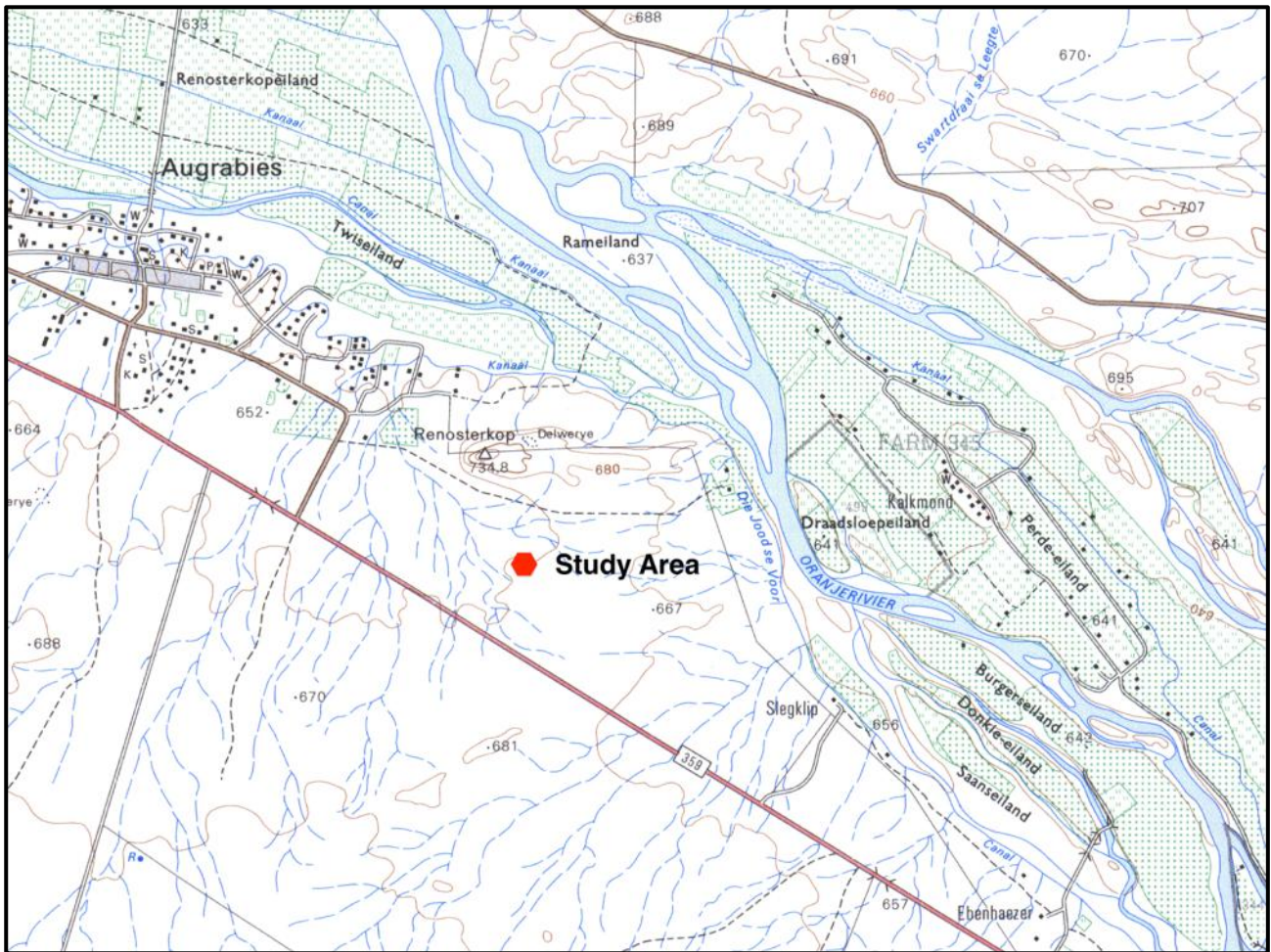


Figure 1.2: 1:50 000 Topographical Map.

### 1.3 EAP experience

The requirements for a Scoping Report state that the details of the EAP and relevant experience for scoping procedures must be provided:

#### 1.3.1 Details of the EAP

Elanie Kuhn

Pieter Badenhorst Professional Services

P. O. Box 1058

Wellington

7654

Cell: 076 584 0822

Fax: 0866721916

Website: [www.pbpscon.co.za](http://www.pbpscon.co.za)



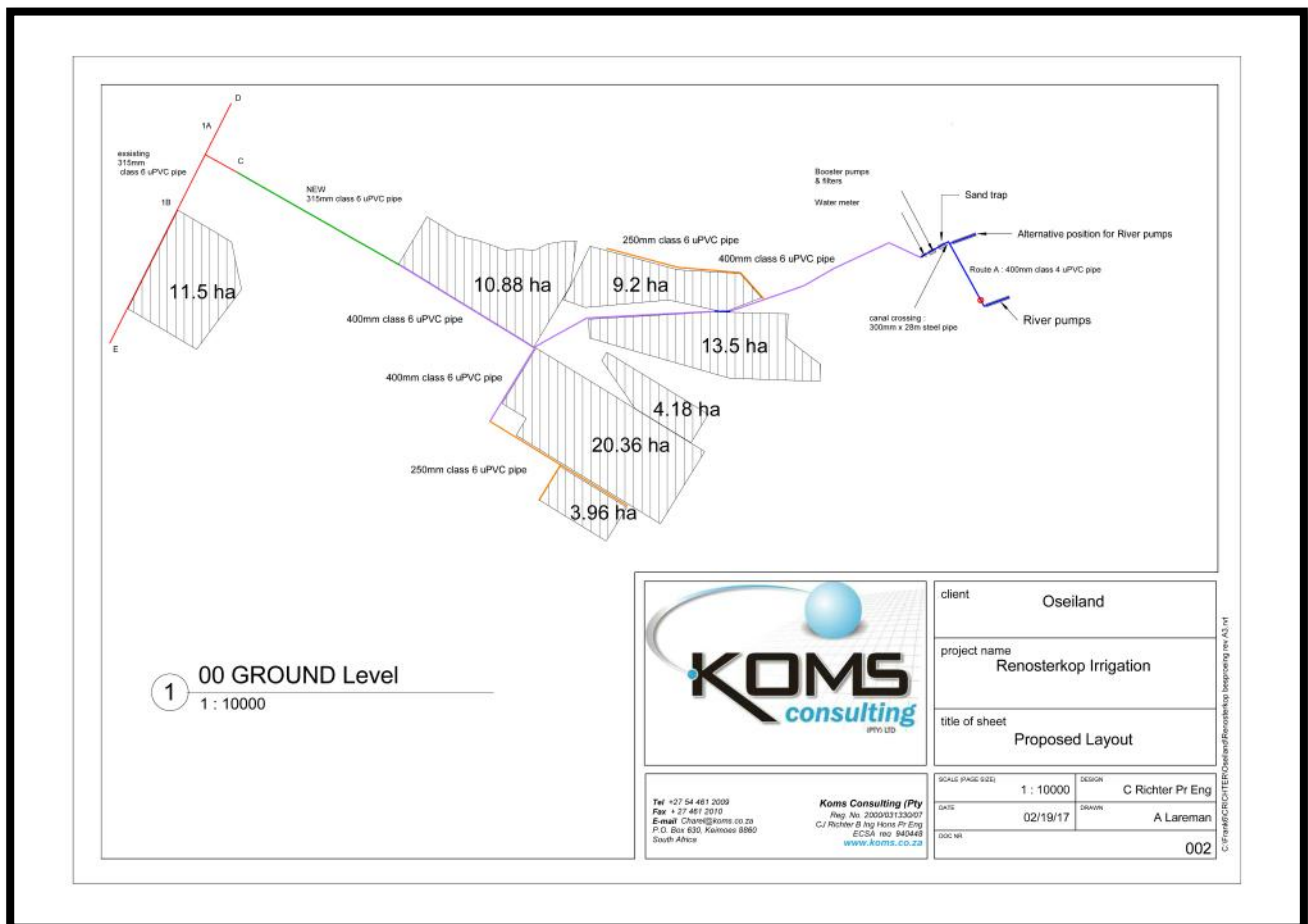


## 2 Description of scope of proposed activity

### 2.1 Project description

#### Proposed development:

The proposed development is to establish additional agricultural areas for the cultivation of vineyards on areas with indigenous vegetation and across small streams. It is also proposed to construct additional pipelines, that will cross streams and to construct a new intake from the canal as well as a small pumping station adjacent to the Orange/Gariep River for taking water out of the stream during periods where the canal will be closed for repairs. All proposed cultivation areas have existing access. The farm is also approximately 1km from the Orange/Gariep River. The proposed agricultural areas and pipelines are shown in the Figure 2.2 (A3 version in Section 11.4).



**Figure 2.1: Proposed Agricultural areas.**

As per the above Figure 2.1 the proposed development is for the following:

1. Transformation of approximately 77ha of indigenous vegetation to vineyards,
2. Construction of app. 3m of new pipelines,
3. Construction of a pumping station adjacent to the Canal, approximately 0.1ha in size,
4. A small intake structure within the Orange/Gariep River and
5. Construction of two pipeline crossings over the Canal.



The following is a more detailed summary of the proposed development (All design layouts also included in 11.4.2 as A3's):

1. New cultivation areas:

It is proposed to construct approximately 77ha of new vineyards. Some of these sections have been previously cultivated, however the vegetation has re-established on site, see Figure 2.2. Eight blocks were designed on the property, see Figure 2.3. The design of the blocks took into consideration the natural constraints such as vegetation and the streams.



Figure 2.2: Proposed cultivation site

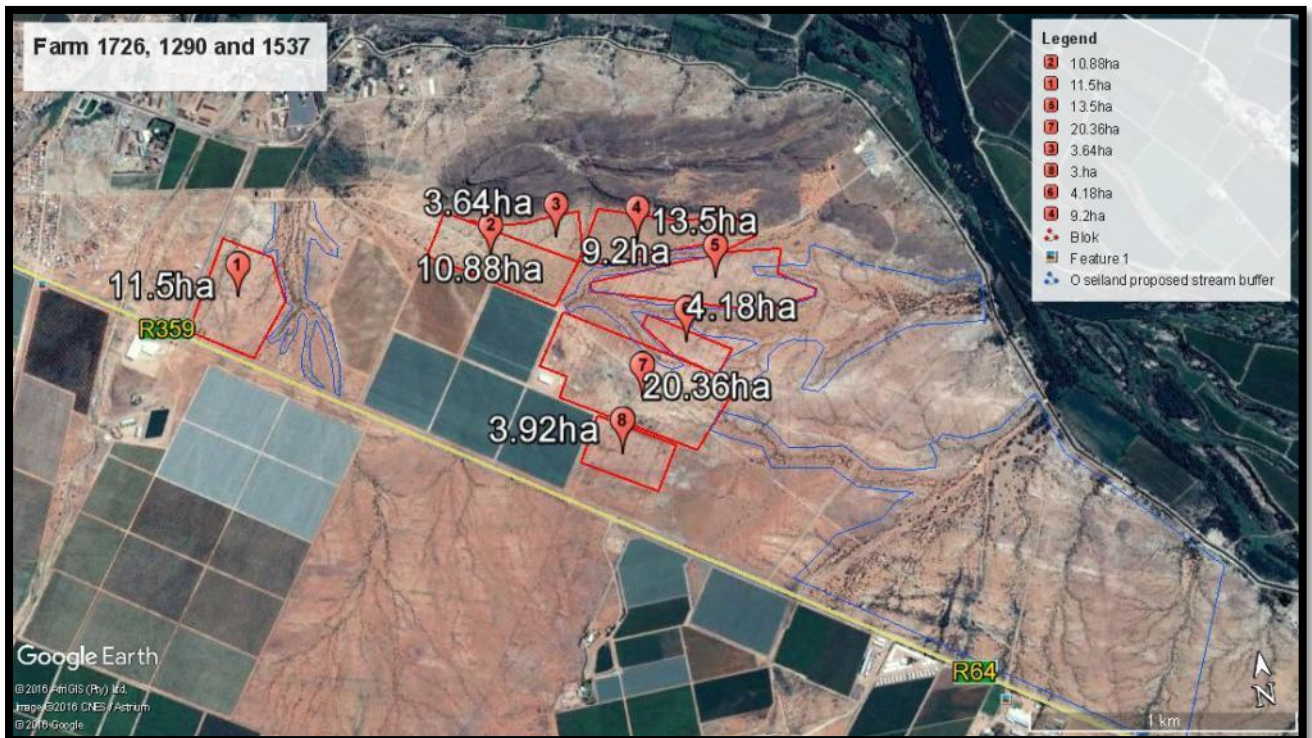
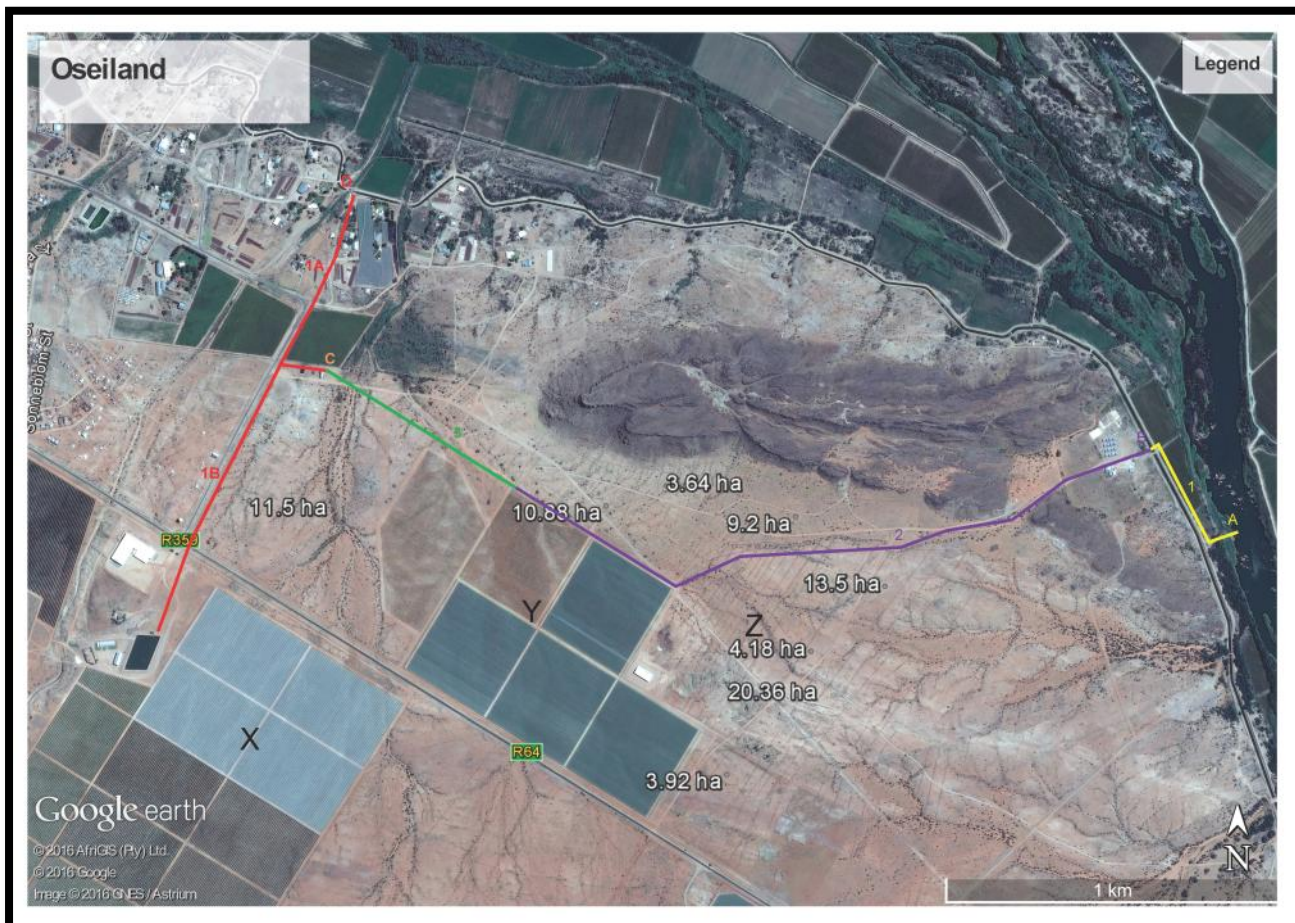


Figure 2.3: Block layout



## 2. Pipelines:

It is proposed to construct approximately 3km of pipelines. The pipeline material will vary from small sections of galvanised steel and mostly uPVC. The pipelines will also vary in size from 250mm to 400mm in diameter. As shown in Figure 2.4 the pipelines will cross small sections of the streams, however will as far as possible be located within the existing gravel road footprint. Note the green and red lines are existing pipelines and the purple and yellow lines the new proposed pipelines.



**Figure 2.4: Pipelines**

## 3. Pump station:

It is proposed to construct a pump station on a site that is adjacent to the Canal. The site is heavily disturbed and adjacent existing labour housing and existing outbuildings, see Figure 2.5. The proposal and design for the pump house (station) is shown in Figure 2.6.



Figure 2.5: Site for the proposed pump station

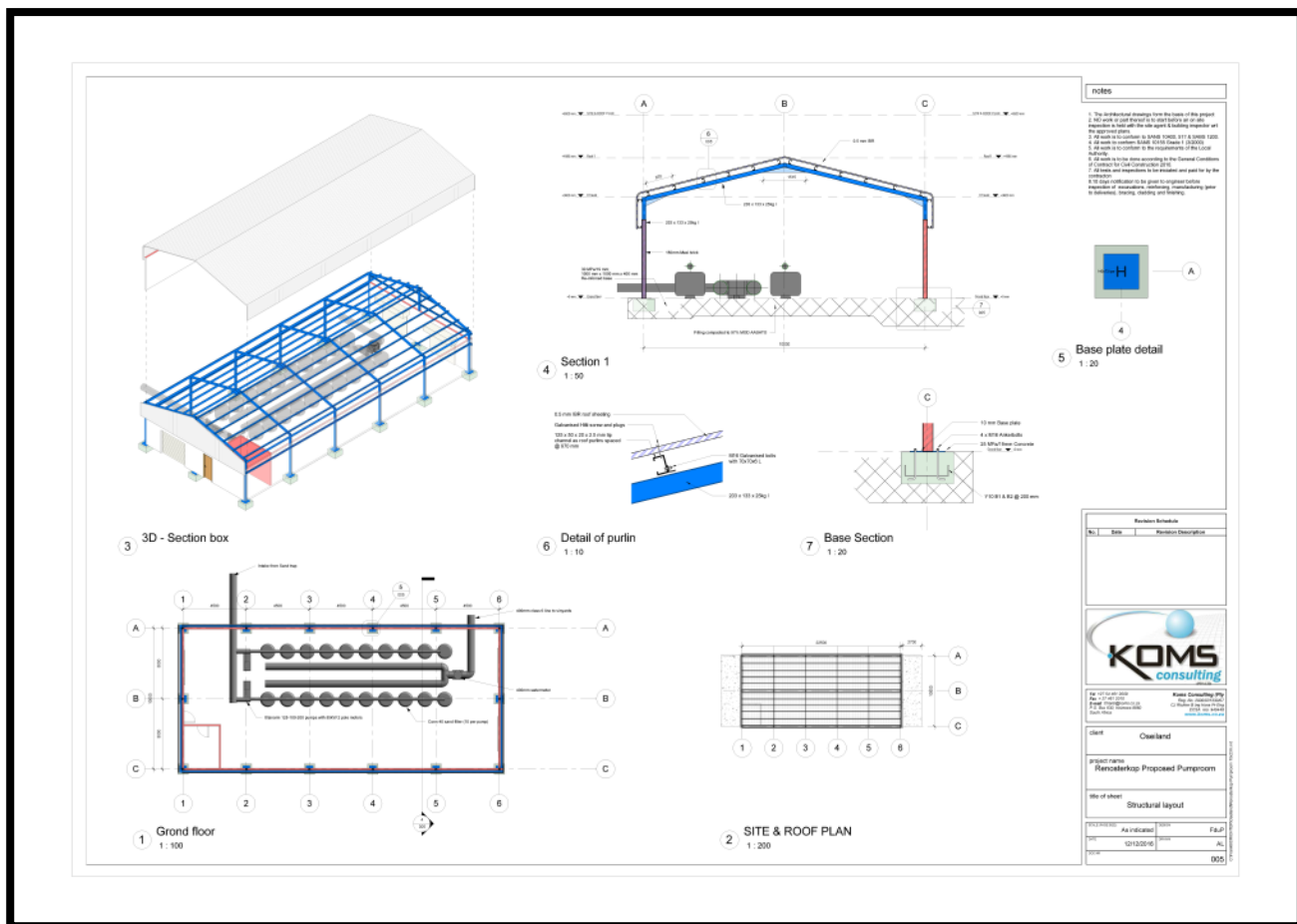


Figure 2.6: Design for pump station

#### 4. Intake structure at Orange River:

The proposal also includes the construction of a trolley system structure on the bank of the Orange/Gariep River. The structure will be located at a section of the Orange/Gariep River that is already heavily disturbed, see Figure 2.7. This structure will only be used during the periods that the Canal is closed. See Figure 2.8 for the design of the structure. It is proposed to construct a gabion mattress, from the edge/bank of the River into the riverbed. The mattress will support the tracks on which the trolley will move up and down as the river levels vary. Located on the trolley is the pumps that will take the water from the Orange/Gariep River to the pumping station.





Figure 2.7: Locality of the intake structure

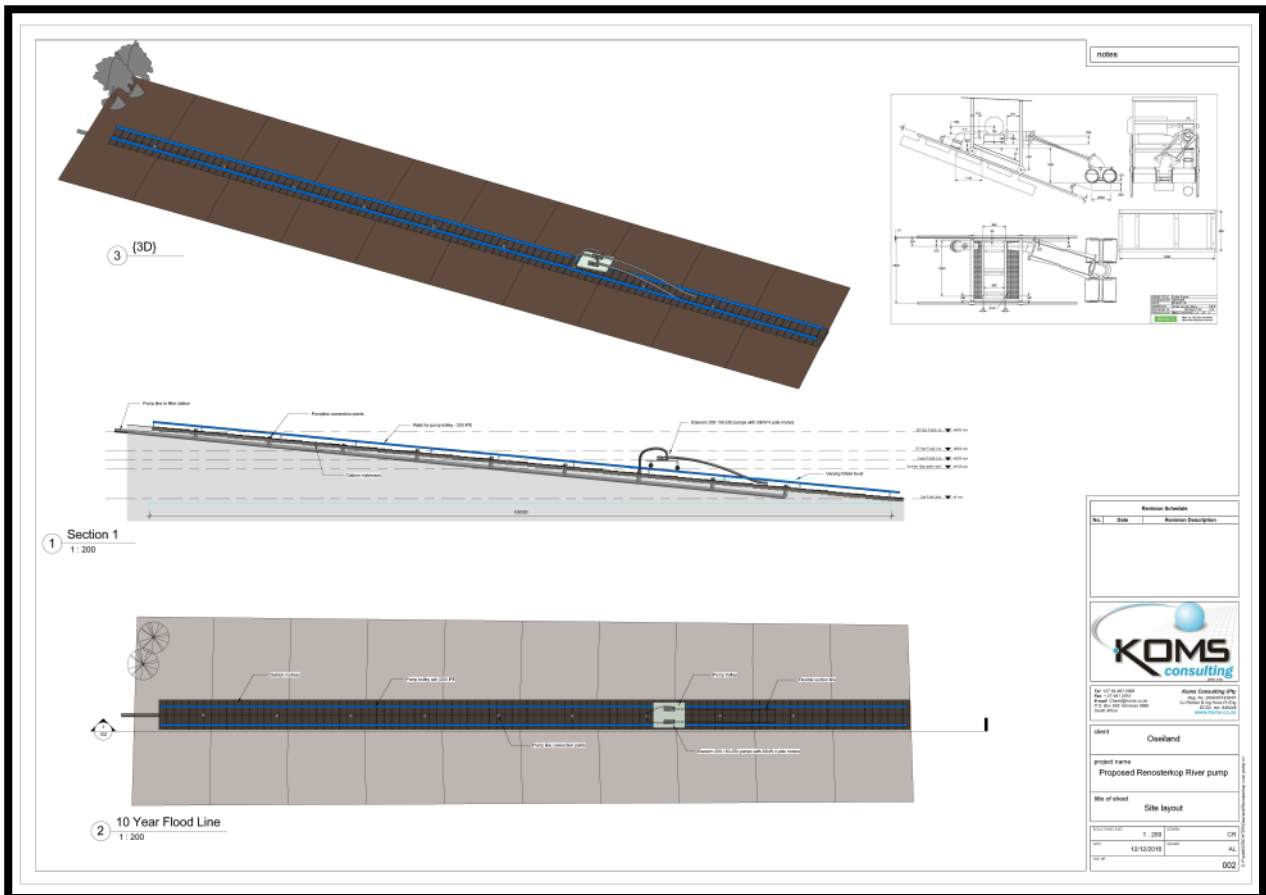


Figure 2.8: Proposed design of the intake structure

5. Intake structure at Canal and Canal crossings:

This section covers the new intake from the Canal as well as the crossings over the Canal, see Figure 2.9. The pipelines will cross the Canal at existing small bridges and therefore will have no impact on the Canal. As shown in Figure 2.12 the pipeline will be constructed across the bridge. The new pump station with the intake off the Canal is situated just adjacent the Canal, see Figure 2.10 and 2.11.



*Figure 2.9: Canal crossing*



*Figure 2.10: Site for intake off the Canal and proposed pump station*



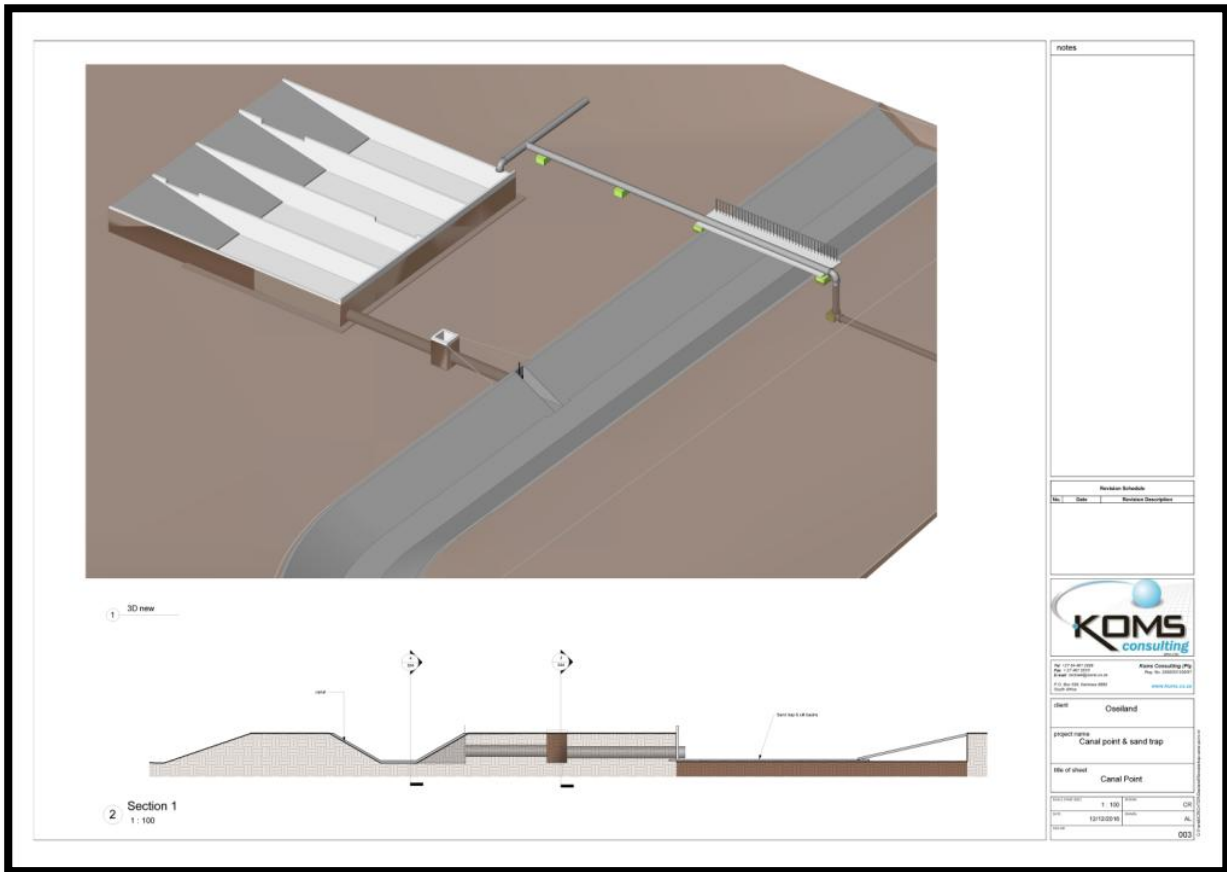


Figure 2.11: Proposed pumping station and intake structure at the canal

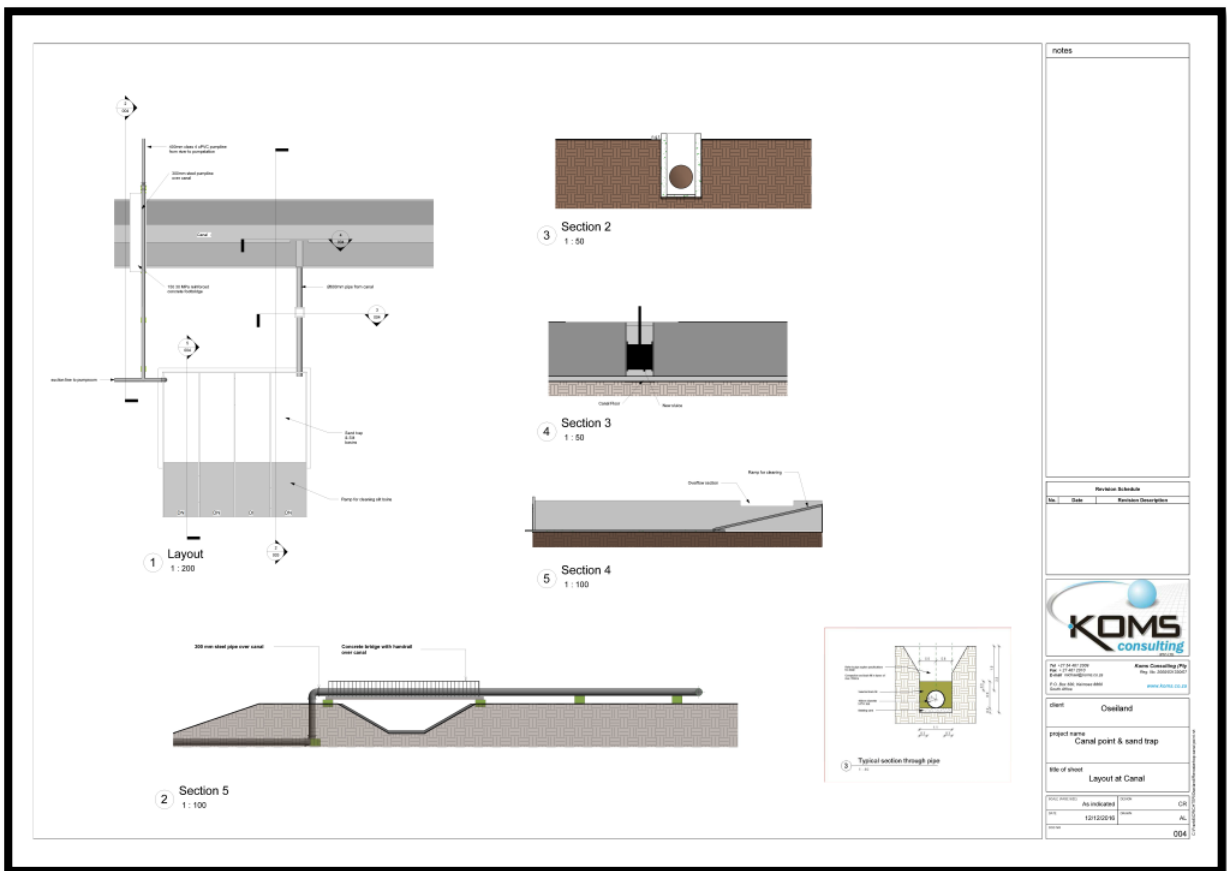


Figure 2.12: Canal crossing and intake design

## 2.2 Statutory requirements

According to National Environmental Management Act, 1998 (Act No. 107 of 1998), Environmental Impact Assessment Regulations, December 2014.

Highlighted sections are the applicable listed activities.

**Table 3: Listed activities**

Government Notice R983 Activity No(s):	Describe the relevant <b>Basic Assessment Activity(ies)</b> in writing as per <b>Listing Notice 1</b> (GN No. R983)	Describe the portion of the development as per the project description that relates to the applicable listed activity
9.	<p><b>The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water—</b></p> <p><b>(i) with an internal diameter of 0,36 metres or more; or</b></p> <p><b>(ii) with a peak throughput of 120 litres per second or more;</b></p> <p><b>excluding where—</b></p> <p><b>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve; or</b></p> <p><b>(b) where such development will occur within an urban area.</b></p>	<p><b>For the construction of approximately 3.2km pipeline, with sections of 400mm uPVC pipelines for the bulk transportation of water.</b></p>
12.	<p><b>The development of—</b></p> <p><b>(i) canals exceeding 100 square metres in size;</b></p> <p><b>(ii) channels exceeding 100 square metres in size;</b></p> <p><b>(iii) bridges exceeding 100 square metres in size;</b></p> <p><b>(iv) dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size;</b></p> <p><b>(v) weirs, where the weir, including infrastructure and water surface area, exceeds 100 square metres in size;</b></p> <p><b>(vi) bulk storm water outlet structures exceeding 100 square metres in size;</b></p> <p><b>(vii) marinas exceeding 100 square metres in size;</b></p> <p><b>(viii) jetties exceeding 100 square metres in size;</b></p> <p><b>(ix) slipways exceeding 100 square metres in size;</b></p> <p><b>(x) buildings exceeding 100 square metres in size;</b></p> <p><b>(xi) boardwalks exceeding 100 square metres in size; or</b></p> <p><b>(xii) infrastructure or structures with a physical footprint of 100 square metres or more;</b></p> <p><b>where such development occurs—</b></p> <p><b>(a) within a watercourse;</b></p> <p><b>(b) in front of a development setback; or</b></p> <p><b>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; —</b></p> <p><b>excluding—</b></p> <p><b>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</b></p> <p><b>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</b></p> <p><b>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</b></p> <p><b>(dd) where such development occurs within an urban area; or</b></p>	<p><b>For the construction of an off take structure in the Orange River, as well as for the construction of pipelines more than 32m from the Orange River.</b></p>

	(ee) where such development occurs within existing roads or road reserves.	
19	<p>The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—</p> <p>(i) a watercourse;</p> <p>(ii) the seashore; or</p> <p>(iii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater—</p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</p> <p>(a) will occur behind a development setback;</p> <p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan; or</p> <p>falls within the ambit of activity 21 in this Notice, in which case that activity applies.</p>	For the infilling of ephemeral streams/drainage areas.
Government Notice R985 Activity No(s):	Describe the relevant <b>Basic Assessment Activity(ies)</b> in writing as per <b>Listing Notice 3</b> (GN No. R985)	Describe the portion of the development as per the project description that relates to the applicable listed activity
12	<p><b>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</b></p> <p><b>In Northern Cape:</b></p> <p>(i) <i>Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i></p> <p>(ii) <b>Within critical biodiversity areas identified in bioregional plans;</b></p> <p>(iii) <i>Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuary, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; or</i></p> <p>(iv) <i>On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.</i></p>	As indicated by the Botanical Specialist the proposed development lies within two CBA's and therefore this activities is triggered for the removal of 300 square meters or more of vegetation within a CBA.
14	<p>The development of—</p> <p>(i) canals exceeding 10 square metres in size ;</p> <p>(ii) channels exceeding 10 square metres in size;</p> <p>(iii) bridges exceeding 10 square metres in size;</p> <p>(iv) dams, where the dam, including infrastructure and water surface area exceeds 10 square metres in size;</p> <p>(v) weirs, where the weir, including infrastructure and water surface area exceeds 10 square metres in size;</p> <p>(vi) <b>bulk storm water outlet structures exceeding 10 square metres in size;</b></p> <p>(vii) marinas exceeding 10 square metres in size;</p> <p>(viii) jetties exceeding 10 square metres in size;</p> <p>(ix) <b>slipways exceeding 10 square metres in size;</b></p> <p>(x) buildings exceeding 10 square metres in size;</p>	As indicated by the Botanical Specialist the proposed development lies within two CBA's and therefore this activities is triggered for the development off bulk storm water structures, slipways and infrastructure within 32m of the Orange River outside urban areas within a CBA.

	<p>(xi) boardwalks exceeding 10 square metres in size; or  (xii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs—</p> <p>(a) within a watercourse;  (b) in front of a development setback; or  (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</p> <p>(a) In Free State, Limpopo, Mpumalanga and Northern Cape:</p> <p>i. In an estuary;  ii. Outside urban areas, in:</p> <p>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;  (bb) National Protected Area Expansion Strategy Focus areas;  (cc) World Heritage Sites;  (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;  (ee) Sites or areas identified in terms of an International Convention;  (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;  (gg) Core areas in biosphere reserves;  (hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;  (ii) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or</p> <p>iii. In urban areas:</p> <p>(aa) Areas zoned for use as public open space;  (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose; or</p> <p>Areas seawards of the development setback line.</p>	
<p>Government Notice R984  Activity No(s):</p>	<p>Describe the relevant <b>Scoping and EIA Activity (ies)</b> in writing as per <b>Listing Notice 2</b> (GN No. R984)</p>	<p>Describe the portion of the development as per the project description that relates to the applicable listed activity</p>
<p>15</p>	<p><b>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for—</b>  <i>(i) the undertaking of a linear activity; or</i>  <i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</i></p>	<p>For the clearance of areas in total more than 20 hectares for the development of agricultural areas.</p>
<p><b>Please note:</b> Only those activities for which the applicant applies will be considered for authorisation. The onus is on the applicant to ensure that all the applicable listed activities are included in the application. Failure to do so may invalidate the application.</p>		

## 3 Policies and legislative context

### 3.1 Environmental regulations and acts

#### 3.1.1 Scoping regulations

#### REGULATIONS IN TERMS OF CHAPTER 4 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998

#### Environmental Impact Assessment Regulations, 2014

The Minister of Environmental Affairs and Tourism has in terms of section 21 and 22 read with Appendix 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), Environmental Impact Assessment Regulations, 2014 made the regulations set out in the schedule hereto.

The following is an extract from the above document and explains the Scoping Process and content of a Scoping Report. The number refers to the section of the regulations.

#### **Steps to be taken after submission of application**

21. (1) *If S&EIR must be applied to an application, the applicant must, within 44 days of receipt of the application by the competent authority, submit to the competent authority a scoping report which has been subjected to a public participation process of at least 30 days and which reflects the incorporation of comments received, including any comments of the competent authority.*
- (2) *Subject to regulation 46, and if the findings of the scoping report is still valid and the environmental context has not changed, the submission of a scoping report as contemplated in subregulation (1) need not be complied with-*
- (a) in cases where a scoping report was accepted as part of a previous application for environmental authorisation and the application was refused because of insufficient information;*
- (b) on condition that regulation 16 is complied with and that such application is accompanied by proof that registered interested and affected parties, who participated in the public participation process conducted as part of the previous application, have been notified of this intended resubmission of the application prior to submission of such application;*
- (c) if the application contemplated in paragraph*
- (b) is submitted by the same applicant for the same development, as applied for and refused as contemplated in paragraph (a); and*
- (d) if an environmental impact assessment report inclusive of specialist reports and an EMPr, which must have been subjected to a public participation process of at least 30 days and which reflects the incorporation of comments received, including any comments of the competent authority, is submitted within a period of two years from the date of the acceptance of the scoping report contemplated in paragraph (a).*



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- (3) *A scoping report must contain all information set out in Appendix 2 to these Regulations.*

## **APPENDIX 2**

### **Content of the scoping report**

2. *A scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must include-*
- (a) *details of-*
- (i) the EAP who prepared the report; and (ii) the expertise of the EAP, including a curriculum vitae;*
- (b) *the location of the activity, including-*
- (i) the 21 digit Surveyor General code of each cadastral land parcel;*
  - (ii) where available, the physical address and farm name;*
  - (iii) where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties;*
- (c) *a plan which locates the proposed activity or activities applied for at an appropriate scale, or, if it is-*
- (i) a linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or*
  - (ii) on land where the property has not been defined, the coordinates within which the activity is to be undertaken;*
- (d) *a description of the scope of the proposed activity, including-*
- (i) all listed and specified activities triggered;*
  - (ii) a description of the activities to be undertaken, including associated structures and infrastructure;*
- (e) *a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process;*
- (f) *a motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location;*
- (h) *a full description of the process followed to reach the proposed preferred activity, site and location within the site, including -*
- (i) details of all the alternatives considered;*
  - (ii) details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs;*



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- (viii) a description of the tasks that will be undertaken as part of the environmental impact assessment process;
  - (ix) identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.
- (j) an undertaking under oath or affirmation by the EAP in relation to-
- (i) the correctness of the information provided in the report;
  - (ii) the inclusion of comments and inputs from stakeholders and interested and affected parties; and
  - (iii) any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties;
- (k) an undertaking under oath or affirmation by the EAP in relation to the level of agreement between the EAP and interested and affected parties on the plan of study for undertaking the environmental impact assessment;
- (l) where applicable, any specific information required by the competent authority; and
- (m) any other matter required in terms of section 24(4)(a) and (b) of the Act.

### **Consideration of scoping report**

22. The competent authority must, within 43 days of receipt of a scoping report-

- (a) accept the scoping report, with or without conditions, and advise the applicant to proceed or continue with the tasks contemplated in the plan of study for environmental impact assessment; or
- (b) refuse environmental authorisation if the proposed activity is in conflict with a prohibition contained in legislation; or if the scoping report does not substantially comply with Appendix 2 to these Regulations and the applicant is unwilling or unable to ensure compliance with these requirements within the prescribed timeframe.

### 3.1.2 Environmental process

The environmental process is shown graphically in Figure 3.1. At this stage the current process is as outlined in the Figure 3.1 below.

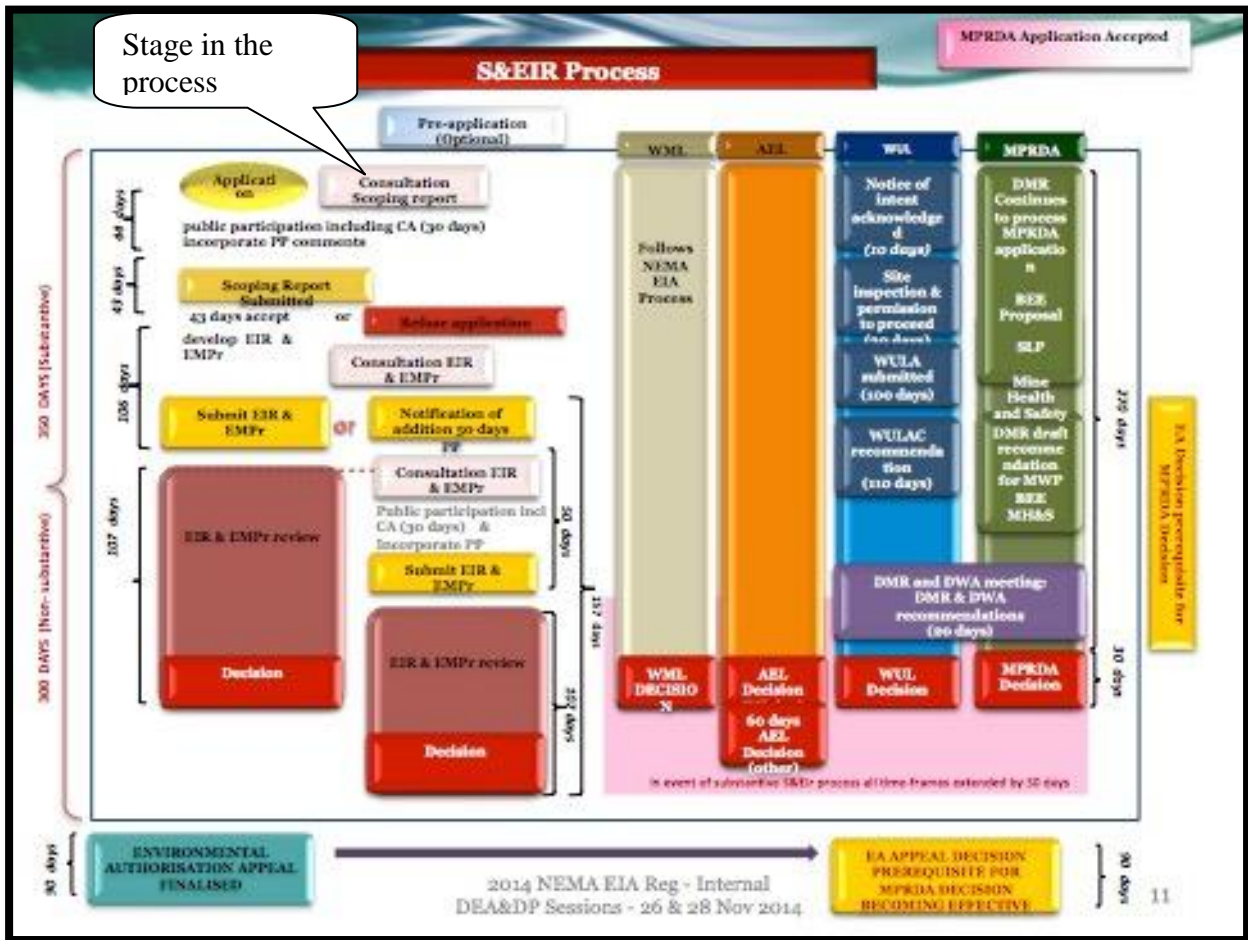


Figure 3.1: Environmental application procedure

### 3.1.3 NEMA

The purpose of NEMA (Chapter 1) is outlined below:

#### Purpose of Regulations

2. The purpose of these Regulations is to regulate the procedure and criteria as contemplated in Chapter 5 of the Act relating to the preparation, evaluation, submission, processing and consideration of, and decision on, applications for environmental authorisations for the commencement of activities, subjected to environmental impact assessment, in order to avoid or mitigate detrimental impacts on the environment, and to optimise positive environmental impacts, and for matters pertaining thereto.

## 3.2 Other applicable legislation

### 3.2.1 National Water Act, 1998.

The purpose of the National Water Act is to provide a framework for the equitable allocation and sustainable management of water resources. Both surface and groundwater sources are redefined by the Act as national resources which cannot be owned by any individual, and rights to which are not automatically coupled to land rights, but for which prospective users must apply for authorisation and register as users. The National Water Act also provides for measures to prevent, control and remedy the pollution of surface and groundwater sources.

An application for a license in terms of the National Water Act, 1998 is made by the developer, Oseiland Boerderye for the transfer water rights, taking of water from the Orange River, the water usages is summarised as the follows:

<i>(a) taking water from a water resource;</i>	Transfer of water rights
<i>(c) impeding or diverting the flow of water in a watercourse</i>	Impeding flow
<i>(i): altering the bed, banks, course or characteristics of a watercourse;</i>	Altering the banks of a water course

All the necessary information will be included in the WULA as part of the EIA phase of the application.

### 3.2.2 Heritage Resources Act, 1999.

The National Heritage Resources Act (NHRA) No. 25 of 1999 protects a variety of heritage resources as follows:

- Section 34: structures older than 60 years;
- Section 35: palaeontological, prehistoric and historical material (including ruins) more than 100 years old;
- Section 36: graves and human remains older than 60 years and located outside of a formal cemetery administered by a local authority; and
- Section 37: public monuments and memorials.

Following Section 2, the definitions applicable to the above protections are as follows:

- Structures: “any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith”;
- Palaeontological material: “any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace”;
- Archaeological material: a) “material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures”; b) “rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation”; c) “wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of



1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation”; and d) “features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found”;

- Grave: “means a place of interment and includes the contents, headstone or other marker of such a place and any other structure on or associated with such place”; and
- Public monuments and memorials: “all monuments and memorials a) “erected on land belonging to any branch of central, provincial or local government, or on land belonging to any organisation funded by or established in terms of the legislation of such a branch of government”; or b) “which were paid for by public subscription, government funds, or a public-spirited or military organisation, and are on land belonging to any private individual.”

While landscapes with cultural significance do not have a dedicated Section in the NHRA, they are protected under the definition of the National Estate (Section 3). Section 3(2)(c) and (d) list “historical settlements and townscapes” and “landscapes and natural features of cultural significance” as part of the National Estate. Furthermore, Section 3(3) describes the reasons a place or object may have cultural heritage value.

Section 38 (2a) states that if there is reason to believe that heritage resources will be affected then an impact assessment report must be submitted.

For this proposed development the following is applicable:

#### 1. Legal requirements

In terms of Section 38 (1) (c) (iii) of the National Heritage Resources Act 1999 (Act 25 of 1999), a Heritage Impact Assessment (HIA) of the proposed project is required if the footprint area of the proposed development is more than 5000m<sup>2</sup> in extent.

Section 38 (1) (a) of the Act also indicates that any person constructing a powerline, pipeline or road, or similar linear development or barrier exceeding 300m in length is required to notify the responsible heritage resources authority, who will in turn advise whether an impact assessment report is needed before development can take place.

#### 2. Aim of the AIA

The overall purpose of the AIA is to assess the sensitivity of archaeological resources in the affected areas, to determine the potential impacts on such resources, and to avoid and/or minimize such impacts by means of management and/or mitigation measures.

The significance of archaeological resources was assessed in terms of their content and context. Attributes considered in determining significance include artefact and/or ecofact types, rarity of finds, exceptional items, organic preservation, potential for future research, density of finds and the context in which archaeological traces occur

Under the National Environmental Management Act (No. 107 of 1998; NEMA), as amended, the project is subject to an EIA. Ngwao-Boswa Ya Kapa Bokoni (Heritage Northern Cape; for built environment and cultural landscapes) and the South African Heritage Resources Agency (SAHRA for archaeology and palaeontology) are required to provide comment on the proposed project in order to facilitate final decision making by the Northern Cape Department of Environment and Nature Conservation.

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### **3.2.3 Northern Cape Nature Conservation Act, 2009 (Act No. 9 of 2009) and Regulations (2011)**

The following should be noted, should any Botanical constraints be determined the following should be done:

*“The assessment takes careful note of the general requirements and recommendations of the Department of Environment and Nature Conservation (Northern Cape) and the Botanical Society of South Africa for proactive assessment of biodiversity of proposed development sites and follows published guidelines for evaluating potential impacts on the natural vegetation in an area earmarked for some form of development (Brownlie 2005).”*

### **3.2.4 Other policies, plans or guidelines**

Other policies, municipal plans or guideline documents that are relevant to the project:

- Guidelines published in terms of NEMA EIA Regulations
- Conservation of Agricultural Resources Act (Act 43 of 1983)

## 4 Needs and Desirability

As stated in the NEMA 2014 Guidelines on Needs and Desirability “...the need for and desirability of an proposed activity must specifically and explicitly be addressed throughout the EIA process (screening, "scoping", and assessment) when dealing with individual impacts and specifically in the overall impact summary by taking into account the answers to inter alia the following questions...”

“it is therefore assume that for Scoping Phase, Needs and Desirability was adequately addressed within the table below which includes all the questions outlined in the Guidelines.

**Table 4: Questions and answers pertaining to Needs and Desirability.**

Question	Answer
<p>1. How will this development (and its separate elements/aspects) impact on the ecological integrity of the area?</p> <p>1.1. How were the following ecological integrity considerations taken into account?:</p> <p>1.1.1.Threatened Ecosystems,</p> <p>1.1.2.Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure,</p> <p>1.1.3.Critical Biodiversity Areas ("CBAs") and Ecological Support Areas ("ESAs"),</p> <p>1.1.4.Conservation targets,</p> <p>1.1.5. Ecological drivers of the ecosystem,</p> <p>1.1.6.Environmental Management Framework,</p> <p>1.1.7.Spatial Development Framework, and</p> <p>1.1.8.Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.).</p>	<p>The proposed development will not significantly impact on the ecological integrity of the area. Although the proposed development of the agricultural areas will be in a CBA. The farm Renosterkop 1726 is located in an area classified as CBA2. The Renosterkop study area is not near any focus area of the National Protected Area Expansion Strategy nor is it close to any mountain catchment area. It is separated from the Augrabies National Park by numerous other farms. The ‘Eastern Area’ is proposed for conservation in perpetuity.</p> <p>The expected impact on the ‘open plains’ Bushmanland Arid Grassland would be Low Negative without mitigation and Very Low Negative with mitigation. The impact on the seasonal watercourses would be High Negative without mitigation and Medium Negative with mitigation.</p>
<p>1.2. How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity? What measures were explored to firstly avoid these negative impacts, and where these negative impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?</p>	<p>These areas were chosen due to their location within property. The ‘Eastern Area’ is proposed for conservation in perpetuity. Areas with larger connecting ephemeral streams were excluded from the proposed agricultural development. The structure in the River is a mattress from the riverbanks to the riverbed. Caution will be taken to not detrimentally impact on the ecosystem or biological diversity.</p>
<p>1.3. How will this development pollute and/or degrade the biophysical environment? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?</p>	<p>This development will not pollute or degrade the biophysical environment. Care will be taken during construction to prevent any pollution or degradation.</p>
<p>1.4. What waste will be generated by this development? What measures were explored to firstly avoid waste, and where waste could not be avoided altogether, what measures were explored to minimise, reuse and/or recycle the waste? What measures have been explored to safely treat and/or dispose of unavoidable waste?</p>	<p>It is an agricultural activity and no waste will be generated.</p>
<p>1.5. How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what</p>	<p>The planned development is situated within a purely agricultural area with no other land uses in close proximity. The proposed development will therefore have no impact on any of the</p>

<p>measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?</p>	<p>urrounding land uses in the area.</p> <p>With reference to:</p> <p>Cultural/Heritage/Archaeologically: Overall, the results of the study indicate that the proposed activity (i. e. a vineyard development), including associated activities (i. e. pump station &amp; water pipeline), will not have an impact of great significance on the archaeological heritage, as these are expected to be limited. While a relatively large number of tools were documented, the majority occur in a disturbed context (or ex-situ), while many of the more coherent scatters fall outside the revised development footprint. The study has captured a good record of the archaeological heritage present on the proposed development site. Indications are that, in terms of archaeological heritage, the receiving environment is not a very sensitive or threatened landscape. The impact significance of the proposed development on important archaeological heritage is therefore assessed as LOW.</p>
<p>1.6. How will this development use and/or impact on non-renewable natural resources? What measures were explored to ensure responsible and equitable use of the resources? How have the consequences of the depletion of the non-renewable natural resources been considered? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?</p>	<p>The only non-renewable natural resource to be used is water. This resource will be used for irrigational purposes and therefore contributes to the economy. It is therefore not a negative impact as it will be used sparingly/water wise to its full potential. Note existing water rights will be used for the establishment of these areas. A water use license application was submitted to transfer the rights from other properties owned by the applicant.</p> <p>A small amount of electricity will be used for irrigation within the existing system. This will however be further assessed and if an application to ESKOM is necessary will be included as part of the EIA phase.</p>
<p>1.7. How will this development use and/or impact on renewable natural resources and the ecosystem of which they are part? Will the use of the resources and/or impact on the ecosystem jeopardise the integrity of the resource and/or system taking into account carrying capacity restrictions, limits of acceptable change, and thresholds?</p> <p>What measures were explored to firstly avoid the use of resources, or if avoidance is not possible, to minimise the use of resources? What measures were taken to ensure responsible and equitable use of the resources? What measures were explored to enhance positive impacts?</p> <p>1.7.1. Does the proposed development exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency (i.e. de-materialised growth)? (note: sustainability requires that settlements reduce their ecological footprint by using less material and energy demands and reduce the amount of waste they generate, without compromising their quest to improve their quality of life)</p>	<p>The proposed development of expansion of agricultural activities in itself is a renewable resource. Therefore, this development will have a positive impact on the resource and will not negatively impact or jeopardise the integrity of the existing resources. The proposed development will make use of an existing resource (water) however, it will reduce the resource dependency by making use of water wise technology. It is also a great use of the resource as it will provide a new resource (food) and contribute to the economy as well as food security.</p>

<p>1.7.2. Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more important priorities for which the resources should be used (i.e. what are the opportunity costs of using these resources for the proposed development alternative?)</p> <p>1.7.3. Do the proposed location, type and scale of development promote a reduced dependency on resources?</p>	
<p>1.8. How were a risk-averse and cautious approach applied in terms of ecological impacts?:</p> <p>1.8.1. What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)?</p> <p>1.8.2. What is the level of risk associated with the limits of current knowledge?</p> <p>1.8.3. Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?</p>	<p><u>Gaps, uncertainties and assumptions:</u></p> <p><u>Botanical:</u></p> <p>The environment was extremely dry at the time of the site visit so many of the herbaceous plants were not in a condition that allowed for positive identification. However, apart from grasses most herbaceous plant species do not make up a significant component of the composition of the plant communities. The indicator species are mainly shrubs or small trees that were easily identified even with the prevailing dry conditions.</p> <p><u>Cultural/Heritage/Archaeologically:</u></p> <p>Access to the site was easy and archaeological visibility was very good.</p> <p>It is important to note that the layout of the proposed vineyard development was changed since the field assessment was done in August 2016. An 11.4ha area of land alongside the R359 (i. e. Block 1) was not searched for archaeological remains. However, given the overall results of the study, and the disturbed context in which most of the archaeological resources were recorded, indications are that the affected piece of land is not likely to be a sensitive archaeological landscape. The possibility that a grave(s) may occur on the proposed site cannot be discounted. However, this is considered to be unlikely as the soils here are made up of extremely hard gravels and not conducive for internment of bodies.</p>
<p>1.9. How will the ecological impacts resulting from this development impact on people's environmental right in terms following:</p> <p>1.9.1. Negative impacts: e.g. access to resources, opportunity costs, loss of amenity (e.g. open space), air and water quality impacts, nuisance (noise, odour, etc.), health impacts, visual impacts, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts?</p> <p>1.9.2. Positive impacts: e.g. improved access to resources, improved amenity, improved air or water quality, etc. What measures were taken to enhance?</p>	<p>The proposed development will not impact on the rights of other people.</p> <p>The proposed development might have a small impact on air quality as during construction of the agricultural areas dust may be generated. This will, however, be mitigated.</p> <p>Visually there is no impact on surrounding land owners because the activity is similar to neighbouring developments.</p> <p>Positive impacts can be access to renewable resources such as agricultural lands, food, socio-economically providing additional job opportunities.</p>
<p>1.10. Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological</p>	<p>The proposed development will not negatively impact on livelihoods or heritage sites, a pre-colonial grave was found on site, however</p>



impacts will result in socio-economic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.)?	appropriate mitigation measures will be provided to not impact on the site. It will, however, provide additional job opportunities for local workers.
1.11. Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area?	Overall the proposed development will have a low negative impact on vegetation after mitigation. The impact significance of the proposed development on important archaeological heritage is assessed as low. The development will have a positive impact from a socio-economic perspective through job creations and contributions to the economy.
1.12. Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the "best practicable environmental option" in terms of ecological considerations?	The preferred alternative has a low negative impact on vegetation, low impact negative on heritage/archaeological indicators and has a positive impact from a socio-economic perspective through job creations and contributions to the economy, best location, most accessible to existing infrastructure and best technology alternative.
1.13. Describe the positive and negative cumulative ecological/biophysical impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and existing and other planned developments in the area?	Positive economic impact with the enlargement of the agricultural produce to be exported. Impact due to additional water resource; this is, however, an existing use, positive impact due to enhancement of production of agricultural produce.
2.1. What is the socio-economic context of the area, based on, amongst other considerations, the following considerations?: 2.1.1. The IDP (and its sector plans' vision, objectives, strategies, indicators and targets) and any other strategic plans, frameworks of policies applicable to the area, 2.1.2. Spatial priorities and desired spatial patterns (e.g. need for integrated or segregated communities, need to upgrade informal settlements, need for densification, etc.), 2.1.3. Spatial characteristics (e.g. existing land uses, planned land uses, cultural landscapes, etc.), and 2.1.4. Municipal Economic Development Strategy ("LED Strategy").	The farm Renosterkop as part of Oseiland Boerderye PTY Ltd, is a highly commercial agricultural (farming) unit in the area and is being surrounded by other similar farms and communities. The proposed development does not fall within an urban area, however, does fall within the boundaries of the Kai! Garib Municipality. The closest communities are that of Augrabies and Marchand. The farm is situated approximately 1km outside of Augrabies. People working on the farm will be sourced locally. Portions of this farm will be developed intensively as indicated in this application but some large areas will at present remain undeveloped. The proposed development will contribute positively to the local economy and the provision of job opportunities in the region and the Northern Cape Province. The planned development is situated within a purely agricultural area with no other land uses in close proximity. The proposed development will therefore have no impact on any surrounding land uses in the area.
2.2. Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area? 2.2.1. Will the development complement the local socio-economic initiatives (such as local economic development (LED) initiatives), or skills development programs?	It is envisaged that Oseiland will need to create some new permanent and a number of new seasonal employee positions in the near future should the new water use be allocated. The entity also plans to convert some of the current seasonal positions to permanent positions should this water licence use application be successful.

	<p>As mentioned before, table grape production is very labour-intensive, even more so if packed as well. It creates around 4 new employment positions per hectare if also packed on the farm. Citrus production plus the raisin plant creates another 1 position per hectare.</p> <p>The new water use licence will therefore create an immediate need to appoint more workers and supervisors.</p> <p>The new water use licence will lead to the expansion of the farming operation, and will create a demand for new staff and new skills, eg.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Skilled agricultural labourers</li> <li><input type="checkbox"/> Specific knowledge of vineyards and citrus fruit production will be needed</li> <li><input type="checkbox"/> Specific knowledge of fruit packing will be needed</li> <li><input type="checkbox"/> Support staff will be needed: Admin, forklift drivers, tractor operators and Code 14 drivers.</li> </ul> <p>Preference will be given to black/coloured people for these positions, and more specific black/coloured women where possible.</p> <p>Existing employees with experience on the farm, plus the potential to be leaders, will in the first place be identified for new supervisory positions.</p>
<p>2.3. How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities?</p>	<p>The proposed development will greatly and positively impact on skills development as part of the company's BEE initiatives.</p> <p>In a rural area such as this with a high unemployment rate, any new employment positions have a huge impact on the immediate and extended families of such new workers. Add then also the impact of more people with proper housing, undergoing skills training and going to church, sport, etc. and children going to school, to understand the positive impact on this rural community. Even seasonal work opportunities has the advantage of extra income plus the opportunity to gain skills that can in future be used to gain permanent employment on the farm or elsewhere.</p> <p>Not only are the new employment opportunities important, but also the fact that:</p> <ol style="list-style-type: none"> <li>1. Existing jobs can be secured: Enough water will directly secure existing and new job opportunities.</li> <li>2. More sustainable water will immediately create the opportunity to proceed with the expensive exercise to plant new varieties that can spread the preparation, pruning, harvesting and packing seasons over longer periods. This will support the entity in their efforts to convert as much as possible seasonal job opportunities into permanent job opportunities. Especially black females from the</li> </ol>

	<p>farm and neighbouring towns will benefit here. The positive impact on their lives will even be more as more of them will now also be promoted to supervisor level to help manage the increased production as well as the increase in value-adding volume.</p> <p>3. The increase in production of export produce will bring more foreign capital to South Africa which is much needed to strengthen our economy and as such fully supported by Government.</p> <p>The Agri-BEE report will be included in the EIA phase of the development.</p> <p><b>SOCIAL PROVISION</b></p> <p>1 Measures to address housing and living conditions:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Most permanent employees live on the farm in subsidised housing with subsidised water and electricity.</li> <li><input type="checkbox"/> Workers not living on the farm and seasonal workers live in the nearby town and are transported daily to and from work.</li> <li><input type="checkbox"/> To increase the income of households, spouses of farm workers are used whenever possible for extra temporary and/or seasonal work on the farm.</li> <li><input type="checkbox"/> Workers are encouraged to establish vegetable gardens at their homes.</li> </ul> <p>2 Measures to provide medical assistance:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> All employees have easy access to medical clinic services. There is a permanent clinic on the farm and the farm has contracted a qualified nurse to visit this clinic every week.</li> <li><input type="checkbox"/> If more medical attention is needed than the clinic can supply, employees are taken to doctor/hospital. Oseiland subsidises medical cost by paying the service provider upfront and the workers can then pay back interest free.</li> <li><input type="checkbox"/> HIV/Aids and TB are a problem in the community, so regular information and training sessions are held on the farm by the nurse as a preventative measure.</li> </ul> <p>3 Measures to address educational facilities and opportunities</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Children have easy access to a crèche on the farm.</li> <li><input type="checkbox"/> There are two Primary Schools in the nearby town Augrabies. Augrabies is only 5km from the farm and a Government subsidised bus transport primary school children from the farm on a daily basis to and from school.</li> <li><input type="checkbox"/> The nearest High school is in Kakamas, about 30km from the farm. A subsidised bus service also transport these high school learners on a daily basis to and from school.</li> </ul>
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<p>2.4. Will the development result in equitable (intra- and inter-generational) impact distribution, in the short- and long-term? Will the impact be socially and economically sustainable in the short- and long-term?</p>	<p>Yes.</p>
<p>2.5. In terms of location, describe how the placement of the proposed development will:</p> <p>2.5.1. result in the creation of residential and employment opportunities in close proximity to or integrated with each other,</p> <p>2.5.2. reduce the need for transport of people and goods,</p> <p>2.5.3. result in access to public transport or enable non-motorised and pedestrian transport (e.g. will the development result in densification and the achievement of thresholds in terms public transport),</p> <p>2.5.4. compliment other uses in the area,</p> <p>2.5.5. be in line with the planning for the area,</p> <p>2.5.6. for urban related development, make use of underutilised land available with the urban edge,</p> <p>2.5.7. optimise the use of existing resources and infrastructure,</p> <p>2.5.8. opportunity costs in terms of bulk infrastructure expansions in non-priority areas (e.g. not aligned with the bulk infrastructure planning for the settlement that reflects the spatial reconstruction priorities of the settlement),</p> <p>2.5.9. discourage "urban sprawl" and contribute to compaction/densification,</p> <p>2.5.10. contribute to the correction of the historically distorted spatial patterns of settlements and to the optimum use of existing infrastructure in excess of current needs,</p> <p>2.5.11. encourage environmentally sustainable land development practices and processes,</p> <p>2.5.12. take into account special locational factors that might favour the specific location (e.g. the location of a strategic mineral resource, access to the port, access to rail, etc.),</p> <p>2.5.13. the investment in the settlement or area in question will generate the highest socio-economic returns (i.e. an area with high economic potential),</p> <p>2.5.14. impact on the sense of history, sense of place and heritage of the area and the socio-cultural and cultural-historic characteristics and sensitivities of the area, and</p> <p>2.5.15. in terms of the nature, scale and location of the development promote or act as a catalyst to create a more integrated settlement?</p>	<p>Workers not residing on the property will be provided with transport to and from the site. Not in close proximity to public transport. No bulk services infrastructure will be required. The development took into consideration favourable spatial factors as the property has access to water. The development will not negatively affect the sense of history or heritage/archaeological indicators.</p>
<p>2.6. How were a risk-averse and cautious approach applied in terms of socio-economic impacts?:</p> <p>2.6.1. What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)?</p> <p>2.6.2. What is the level of risk (note: related to inequality, social fabric, livelihoods, vulnerable communities, critical resources, economic vulnerability and sustainability) associated with the limits of current knowledge?</p> <p>2.6.3. Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?</p>	<p>Gaps, uncertainties and assumptions:</p> <p><u>Botanical:</u></p> <p>The environment was extremely dry at the time of the site visit so many of the herbaceous plants were not in a condition that allowed for positive identification. However, apart from grasses most herbaceous plant species do not make up a significant component of the composition of the plant communities. The indicator species are mainly shrubs or small trees that were easily identified even with the prevailing dry conditions.</p> <p><u>Cultural/Heritage/Archaeologically:</u></p> <p>Access to the site was easy and archaeological visibility was very good.</p> <p>It is important to note that the layout of the</p>



	<p>proposed vineyard development was changed since the field assessment was done in August 2016. An 11.4ha area of land alongside the R359 (i. e. Block 1) was not searched for archaeological remains. However, given the overall results of the study, and the disturbed context in which most of the archaeological resources were recorded, indications are that the affected piece of land is not likely to be a sensitive archaeological landscape. The possibility that a grave(s) may occur on the proposed site cannot be discounted. However, this is considered to be unlikely as the soils here are made up of extremely hard gravels and not conducive for internment of bodies.</p>
<p>2.7.How will the socio-economic impacts resulting from this development impact on people's environmental right in terms following:  2.7.1. Negative impacts: e.g. health (e.g. HIV-Aids), safety, social ills, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts?  2.7.2. Positive impacts. What measures were taken to enhance positive impacts?</p>	<p>Table grape production is very labour-intensive, even more so if packed as well. It creates around 4 new employment positions per hectare if also packed on the farm. Citrus production plus the raisin plant creates another 1 position per hectare.</p> <p>The new water use licence will therefore create an immediate need to appoint more workers and supervisors.</p> <p>The new water use licence will lead to the expansion of the farming operation, and will create a demand for new staff and new skills, eg.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Skilled agricultural labourers</li> <li><input type="checkbox"/> Specific knowledge of vineyards and citrus fruit production will be needed</li> <li><input type="checkbox"/> Specific knowledge of fruit packing will be needed</li> <li><input type="checkbox"/> Support staff will be needed: Admin, forklift drivers, tractor operators and Code 14 drivers.</li> </ul> <p>Preference will be given to black/coloured people for these positions, and more specific black/coloured women where possible.</p> <p>Existing employees with experience on the farm, plus the potential to be leaders, will in the first place be identified for new supervisory positions.</p>
<p>2.8.Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socio-economic impacts will result in ecological impacts (e.g. over utilisation of natural resources, etc.)?</p>	<p>The proposed development is for agricultural development in an area not sensitive to ecological impacts with positive socio economic impacts on the local community.</p>
<p>2.9.What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?</p>	<p>Design, comments, location, technology alternatives were considered to determine the best option.</p>
<p>2.10. What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons (who are the beneficiaries and is the development located appropriately)? Considering the need for social equity and justice, do the alternatives identified, allow the "best practicable environmental option" to be selected, or is there a need for other alternatives to be considered?</p>	<p>The project is expansion of an existing farm with existing water. No discrimination will therefore takes place.</p>

<p>2.11. What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?</p>	<p>The proposed development will occur according to the specific needs of the site and the contractor will have to make use of trained staff.</p>
<p>2.12. What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?</p>	<p>Where local communities are employed, it will be the responsibility of the applicant to ensure their safety and to provide the relevant training for the execution of their tasks.</p>
<p>2.13. What measures were taken to:</p> <p>2.13.1. ensure the participation of all interested and affected parties,</p> <p>2.13.2. provide all people with an opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation,</p> <p>2.13.3. ensure participation by vulnerable and disadvantaged persons,</p> <p>2.13.4. promote community wellbeing and empowerment through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means,</p> <p>2.13.5. ensure openness and transparency, and access to information in terms of the process,</p> <p>2.13.6. ensure that the interests, needs and values of all interested and affected parties were taken into account, and that adequate recognition were given to all forms of knowledge, including traditional and ordinary knowledge, and</p> <p>2.13.7. ensure that the vital role of women and youth in environmental management and development were recognised and their full participation therein were be promoted?</p>	<p>Public participation was done in accordance to the NEMA 2014 Regulations specifications.</p> <p>Skills development will be done for staff.</p>
<p>2.14. Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community (e.g. a mixture of low-, middle-, and high-income housing opportunities) that is consistent with the priority needs of the local area (or that is proportional to the needs of an area)?</p>	<p>The proposed development will provide job opportunities for low and middle income groups and will provide foreign capital for high-income groups.</p>
<p>2.15. What measures have been taken to ensure that current and/or future workers will be informed of work that potentially might be harmful to human health or the environment or of dangers associated with the work, and what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected?</p>	<p>Where local communities are employed, it will be the responsibility of the applicant to ensure their safety and to provide the relevant training for the execution of their tasks.</p>
<p>2.16. Describe how the development will impact on job creation in terms of, amongst other aspects:</p> <p>2.16.1. the number of temporary versus permanent jobs that will be created,</p> <p>2.16.2. whether the labour available in the area will be able to take up the job opportunities (i.e. do the required skills match the skills available in the area),</p> <p>2.16.3. the distance from where labourers will have to travel,</p> <p>2.16.4. the location of jobs opportunities versus the location of impacts (i.e. equitable distribution of costs and benefits), and</p> <p>2.16.5. the opportunity costs in terms of job creation (e.g. a mine might create 100 jobs, but impact on 1000 agricultural jobs, etc.).</p>	<p>Table grape production is very labour-intensive, even more so if packed as well. It creates around 4 new employment positions per hectare if also packed on the farm. Citrus production plus the raisin plant creates another 1 position per hectare.</p> <p>The new water use licence will therefore create an immediate need to appoint more workers and supervisors.</p> <p>The new water use licence will lead to the expansion of the farming operation, and will create a demand for new staff and new skills, eg.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Skilled agricultural labourers</li> <li><input type="checkbox"/> Specific knowledge of vineyards and citrus fruit production will be needed</li> <li><input type="checkbox"/> Specific knowledge of fruit packing will be</li> </ul>

	<p>needed</p> <p><input type="checkbox"/> Support staff will be needed: Admin, forklift drivers, tractor operators and Code 14 drivers.</p> <p>Preference will be given to black/coloured people for these positions, and more specific black/coloured women where possible. Existing employees with experience on the farm, plus the potential to be leaders, will in the first place be identified for new supervisory positions.</p> <p>As already stated the proposed development is approximately 2km from Augrabies and Marchand and approximately 30km from Kakamas.</p>
<p>2.17. What measures were taken to ensure:</p> <p>2.17.1. that there were intergovernmental coordination and harmonisation of policies, legislation and actions relating to the environment, and</p> <p>2.17.2. that actual or potential conflicts of interest between organs of state were resolved through conflict resolution procedures?</p>	<p>All policies and legislation were taken into account; all relevant governmental institutions applicable to the applications were requested to comment on the process.</p>
<p>2.18. What measures were taken to ensure that the environment will be held in public trust for the people, that the beneficial use of environmental resources will serve the public interest, and that the environment will be protected as the people's common heritage?</p>	<p>Various mitigation measures to be implemented as part of the EA issued.</p>
<p>2.19. Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left?</p>	<p>The mitigation measures will be provided by specialists during the EIA phase and will therefore be realistic.</p>
<p>2.20. What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects will be paid for by those responsible for harming the environment?</p>	<p>The development is agricultural in nature similar to the present usage of the farm.</p>
<p>2.21. Considering the need to secure ecological integrity and a healthy, bio-physical, environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the best practicable environmental option in terms of socio-economic considerations?</p>	<p>In a rural area such as this with a high unemployment rate, any new employment positions have a huge impact on the immediate and extended families of such new workers. Add then also the impact of more people with proper housing, undergoing skills training and going to church, sport, etc. and children going to school, to understand the positive impact on this rural community. Even seasonal work opportunities has the advantage of extra income plus the opportunity to gain skills that can in future be used to gain permanent employment on the farm or elsewhere.</p> <p>Not only are the new employment opportunities important, but also the fact that:</p> <ol style="list-style-type: none"> <li>1. Existing jobs can be secured: Enough water will directly secure existing and new job opportunities.</li> <li>2. More sustainable water will immediately create the opportunity to proceed with the expensive exercise to plant new varieties that can spread the preparation, pruning, harvesting and packing seasons over longer periods. This will support the entity in their</li> </ol>

	<p>efforts to convert as much as possible seasonal job opportunities into permanent job opportunities. Especially black females from the farm and neighbouring towns will benefit here. The positive impact on their lives will even be more as more of them will now also be promoted to supervisor level to help manage the increased production as well as the increase in value-adding volume.</p> <p>3. The increase in production of export produce will bring more foreign capital to South Africa which is much needed to strengthen our economy and as such fully supported by Government.</p> <p>The Agri-BEE report will be included in the EIA phase of the development.</p>
<p>2.22. Describe the positive and negative cumulative socio-economic impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and other planned developments in the area?</p>	<p>Only a positive cumulative socio-economic impact in the form of job creation and foreign capital.</p>

## 5 Description of the environment and baseline conditions

### 5.1 Property description

#### 5.1.1 Location in landscape

The characteristic of the area is typical of a farm being used for the cultivation of table grapes. The area where the proposed development will take place consists mainly of natural veld with the remains of previous livestock farming and cultivation, see Figure 5.1. Small ephemeral streams cross the site. The proposed new pump station will be developed on a site close to existing old outbuildings/labour housing and with no natural vegetation on site, see Figure 5.2. There is existing infrastructure at the proposed development areas and all areas have existing roads and infrastructure to link into. Therefore, no new roads would have to be constructed. The pipelines and linkages will be within the road reserves until it connects with the Orange River. The trolley system that will lower the pumps into the River at the new off take will be at an existing disturbed section of the River, see below in Figure 5.3.



*Figure 5.1: Natural veld*



*Figure 5.2: Pump station site*

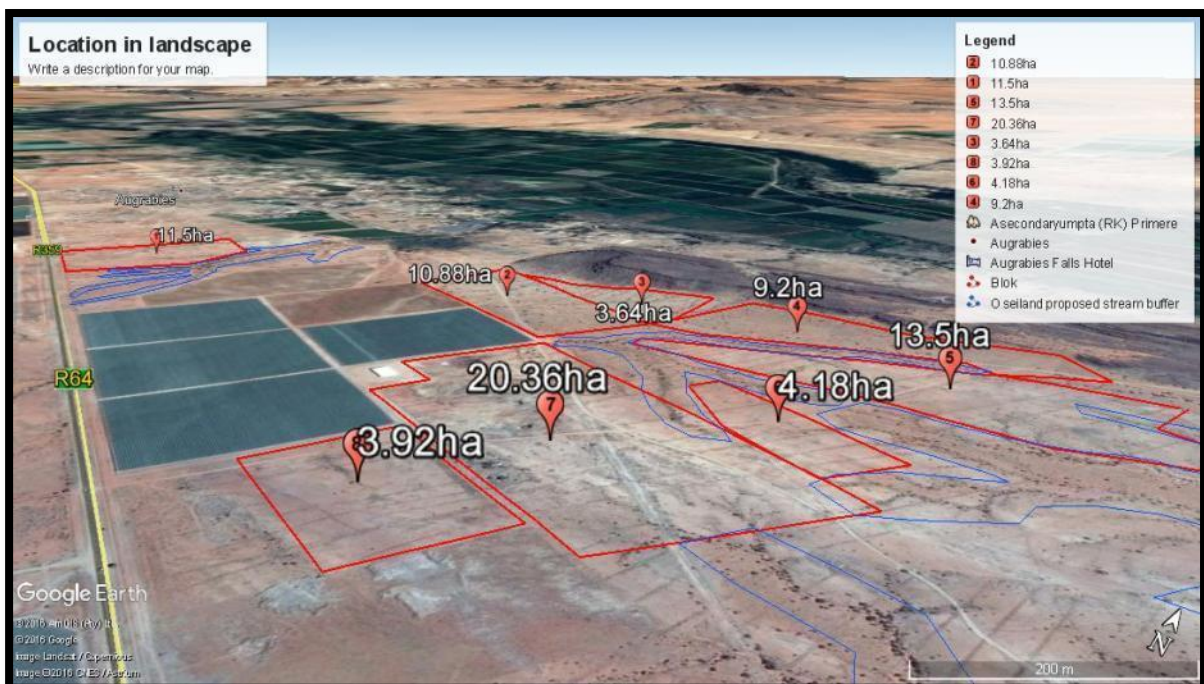




**Figure 5.3: Orange River Intake**

The application area is situated on land with a relatively even surface except for some individual rocky areas and small ephemeral streams. The area where the development will take place is therefore suitable for a development of this nature, see Figure 5.1 and 5.4.

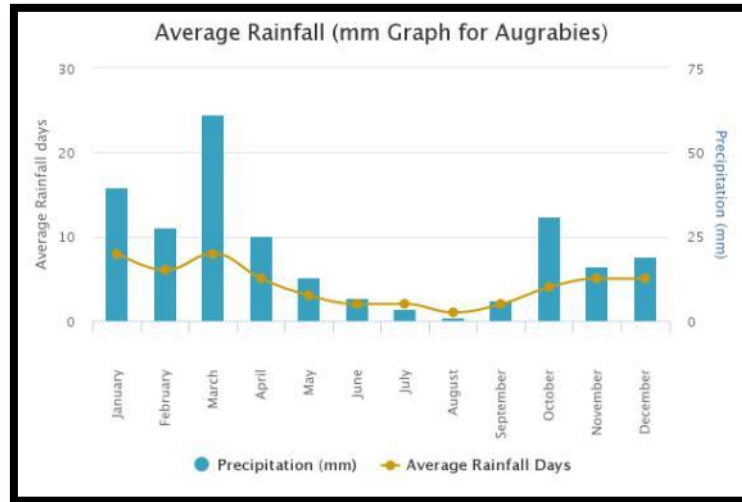
As outlined in the SANBI (BGIS Maps), see Figure 5.7, the site is situated in an area outlined as a Critical Biodiversity Area 2. Note, however, that these areas were previously used for live stock farming and other cultivation.



**Figure 5.4: Location in the landscape**

## 5.1.2 Climate

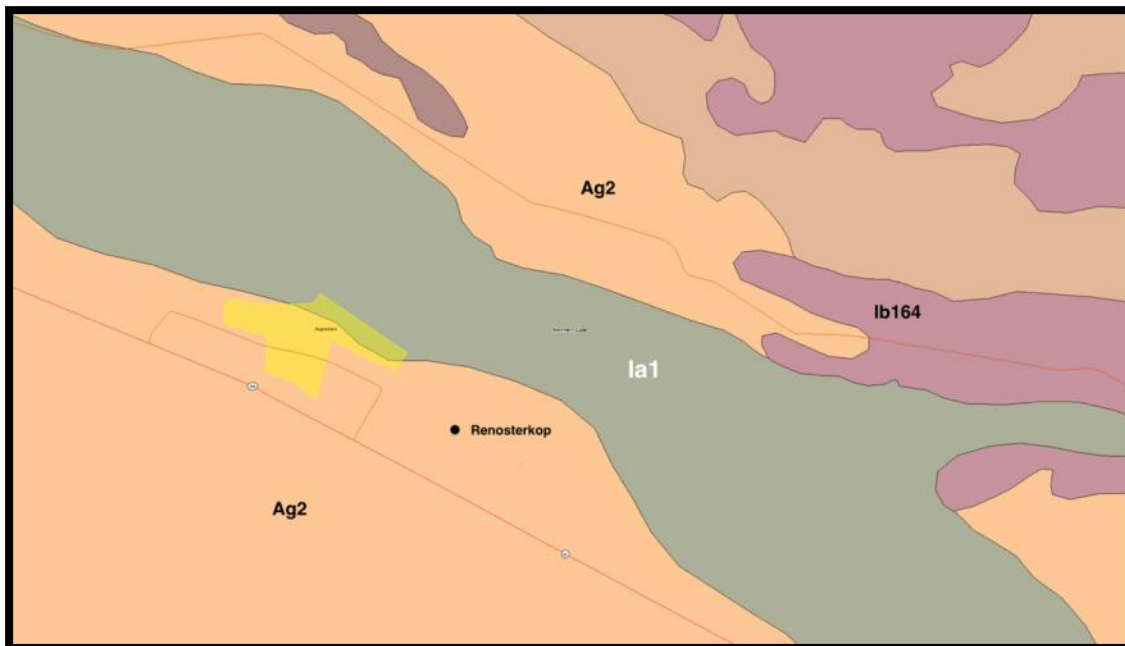
Renosterkop 1726 falls within the Nama-Karoo Biome and has an arid climate. Rainfall peaks in March (autumn) with 10 mm or more occurring in January, February, March, April and October. Augrabies, the nearest town with measured rainfall and temperatures has a mean annual rainfall of 251 mm (Figure 5.5), mean summer daytime temperature (October to March) of 35 °C and mean winter night temperature (April to September) of 5 °C.



*Figure 5.5: Average rainfall.*

## 5.1.3 Topography, Geology and Soils

The terrain studied is on the lowlands south and south-east of Renosterkop. The elevation is approximately 640 m above mean seal level. The landscape is generally flat but is dissected by numerous dendritic drainage lines over most of the site. Soils generally consist of red sandy topsoil with dense weathered granite-gneiss subsoils across the whole site. The land-type is classified as Ag2 for the whole property, described as, "Migmatite, gneiss and granite predominantly; small outcrops of ultrametamorphic rocks in places (Namaqualand Metamorphic Complex). Occasional small seif dunes; dorbank at many places; very dense subdendritic drainage and dissection pattern; occasional lime nodules and calcrete." (Figure 5.6) (Land Type Survey Staff, 1972-2006).



**Figure 5.6: Land type map showing that the study area (Renosterkop) is all within the Ag2 land type (Source: <http://www.agis.agric.za/agisweb/viewer.htm/pn=2015>).**

#### **5.1.4 Vegetation**

The proposed development area will fall within the Nama Karoo Biome, see summary below:

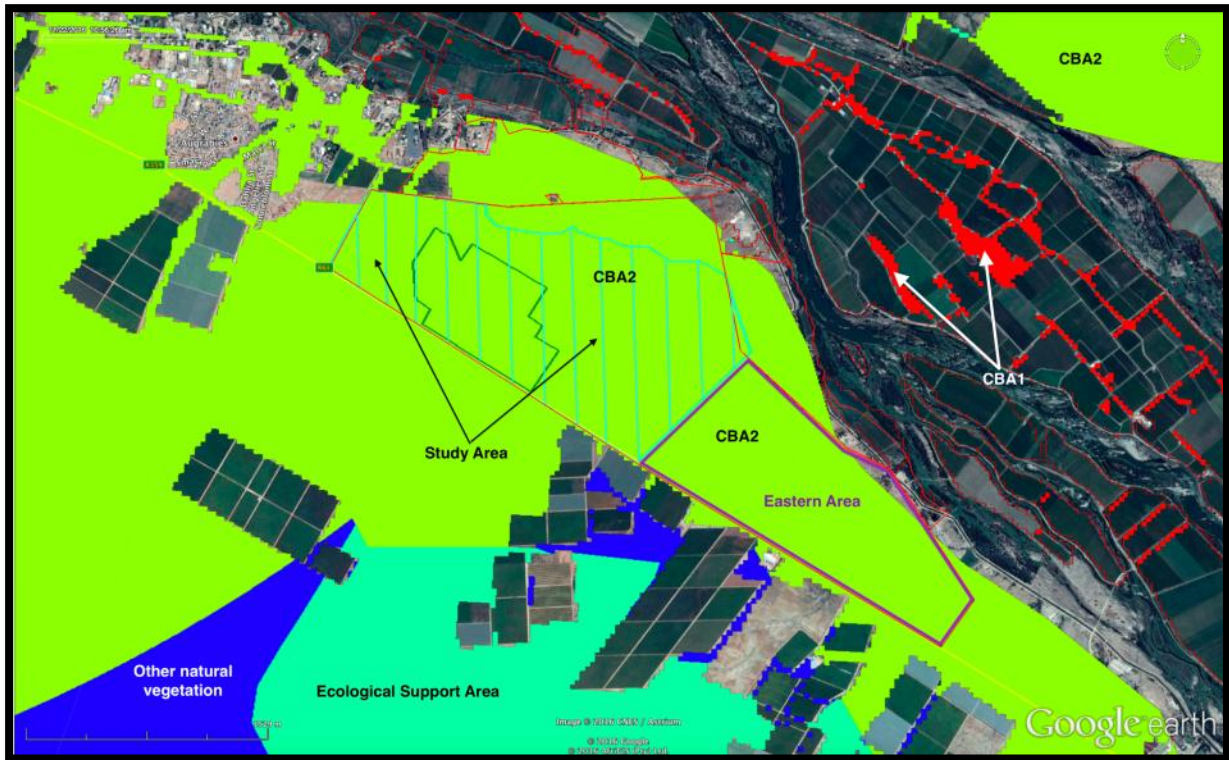
“The Nama Karoo Biome covers an extensive area from the north-west through the central part of South Africa to the south and southeast of the country. It is an arid zone and is subdivided into three bioregions, the Upper Karoo Bioregion, Lower Karoo Bioregion and Bushmanland Bioregion. The Augrabies study area is located in the Bushmanland Bioregion at a north-central location (Rutherford & Westfall, 1994; Rutherford et al. 2006; Mucina et al. 2006 in Mucina & Rutherford, 2006).

Critical Biodiversity Areas (CBAs) were delimited for the Namaqua District Municipality (NDM) by Desmet & Marsh (2008). The maps they compiled did not include the Augrabies area. However, more recently critical biodiversity areas and ecological support areas have been mapped for the whole of the Northern Cape Province including the Kai Garib Municipality.

The available CBA shapefiles (Enrico Oosthuysen pers comm.) for the Northern Cape Province were overlaid on Google Earth™, which allowed for determining the classification of the area around Augrabies including Renosterkop (the peak). The farm Renosterkop 1726 is located in an area classified as CBA2 (Figure 5.7). The Renosterkop study area is not near any focus area of the National Protected Area Expansion Strategy nor is it close to any mountain catchment area. It is separated from the Augrabies National Park by numerous other farms. “

An assessment report will however form part of the EIA phase of this development, with more detail on the vegetation types and possible impacts, however no significant impacts are expected.





**Figure 5.7:** *Portion of the Critical Biodiversity Areas map for the Northern Cape Province showing indicating that the Renosterkop 1726 study area falls within a CBA2. The ‘Eastern Area’ is proposed for conservation in perpetuity.*

The entire Renosterkop study area was mapped by Mucina et al. (2005) and SANBI (2012) as Bushmanland Arid Grassland, see Figure 5.8. The section of the pipelines along the Orange River, and the proposed pump station site falls within the Lower Gariep Alluvial vegetation. It should however be noted that the pipeline will run within the road reserve and the pump station will be developed on an area already cleared and disturbed surrounded by existing outbuildings and labour accommodation.



**Figure 5.8:** *Typical Bushmanland Arid Grassland*

### 5.1.5 Fresh Water Features

The drainage lines for most of the year are dry and sandy and flow for short periods after relatively heavy rains. They are mostly ephemeral streams. The flow of water along the main drainage lines should not be impeded and prevention of erosion should be a high priority if the area is to be developed, see Figure 5.9 (dark blue lines).

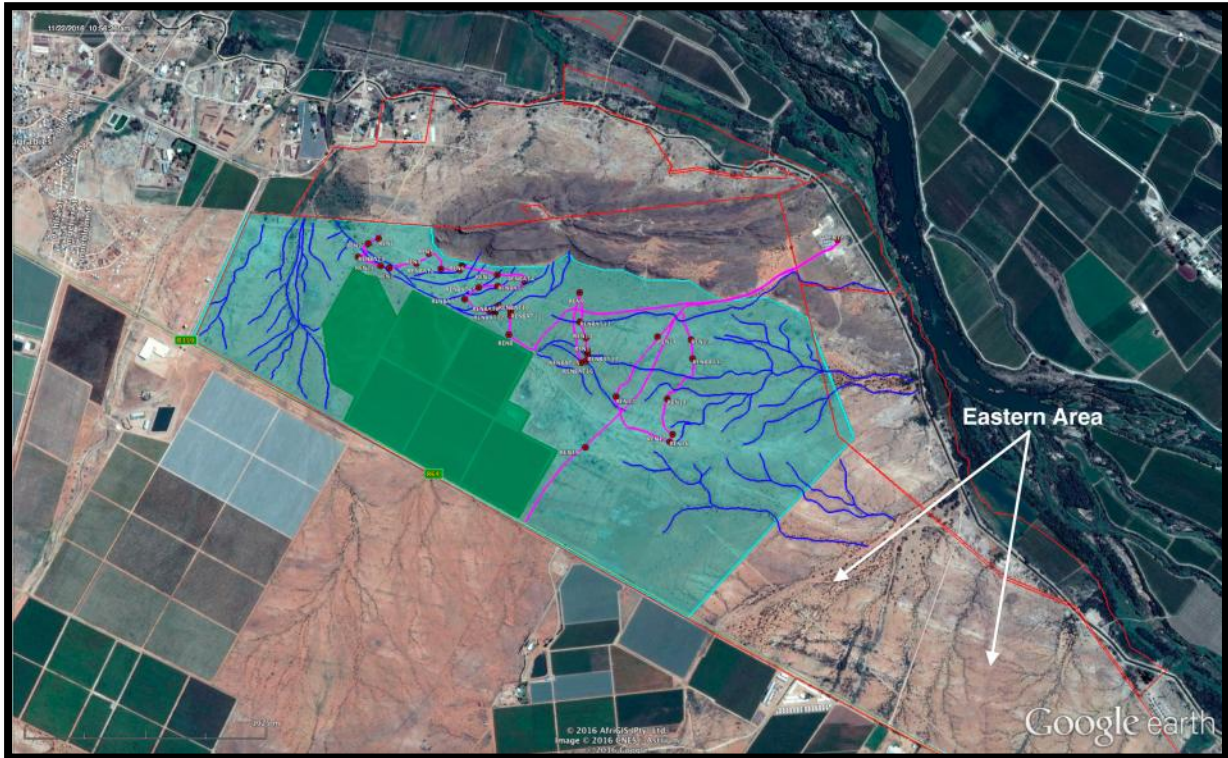


Figure 5.9: Drainage areas

## 5.2 Baseline information

### 5.2.1 Vegetation

As outlined above in section 5.1.4 all the vegetation types are of least threatened status and therefore it can be outlined that the impact on these vegetation types is of low significance. In summary, the impact can be outlined as a low negative impact.

An assessment report will be compiled as part of the EIA phase, a specialist (Dr Dave McDonald) has already been appointed.

### 5.2.2 Heritage, Archaeology and Palaeontology

A Heritage/Archaeological specialist Dr Jonathan Kaplan was appointed to conduct an assessment of the site and an application will be lodge to SAHRA. It is highly probable that a Phase 1 Heritage Impact Assessment(HIA) will have to be compiled for the EIA phase. It was however outlined by the specialist that no significant impacts are expected.

### 5.2.3 Socio-Economic Environment.

Socio:





3. The increase in production of export produce will bring more foreign capital to South Africa which is much needed to strengthen our economy and as such fully supported by Government.

The Agri-BEE report will be included in the EIA phase of the development.

### 5.2.4 Electricity

The development falls within the capacity of Eskom. Note that additional electrical capacity is necessary for the development of the pump station, however no additional capacity necessary for the agricultural areas as existing usage is sufficient. An application was submitted to Eskom for the additional capacity, see correspondence with ESKOM in section 12.3.

### 5.2.5 Water Use License Application

An application for a license in terms of the National Water Act, 1998 is made by the developer, Oseiland Boerderye for the transfer water rights, taking of water from the Orange River, the water usages is summarised as the follows:

<i>(a) taking water from a water resource;</i>	Transfer of water rights
<i>(c) impeding or diverting the flow of water in a watercourse</i>	Impeding flow
<i>(i): altering the bed, banks, course or characteristics of a watercourse;</i>	Altering the banks of a water course

### 5.2.6 Alternative energy and optimisation

The proposed development of the vineyards will in effect result in the following measures to reduce energy and water usage:

- Use water sparingly and the latest irrigation technology and scheduling methods are always implemented.
- Best practices to reduce water consumption and lowest possible electricity consumption.

## 6 Alternatives

### 6.1 Alternative development

The development layout was developed using an opportunities and constraints analysis which included on the constraints side, mainly the suitability of the agricultural areas on the particular position from a design perspective as well as possible impacts on natural vegetation and drainage areas, this is clearly outlined in Alternative 1 (preferred alternative). From a technology perspective the suitability of the proposed agricultural activities to be established on the property, this is outlined in alternative 1 and 2. For the Scoping Process the following were considered, Alternative 1 (preferred alternative), Alternative 2 the agricultural activities alternative, Alternative 3 location alternative for the intake at the Orange/Gariep River and Alternative 4 the No-Go Option.

For A3 Layouts see section 11.4.1.

No site alternative was considered as this is the applicants property, no other properties available and this site has close access to the Canal and the Orange River. No site alternatives available. Also no technology alternatives available.

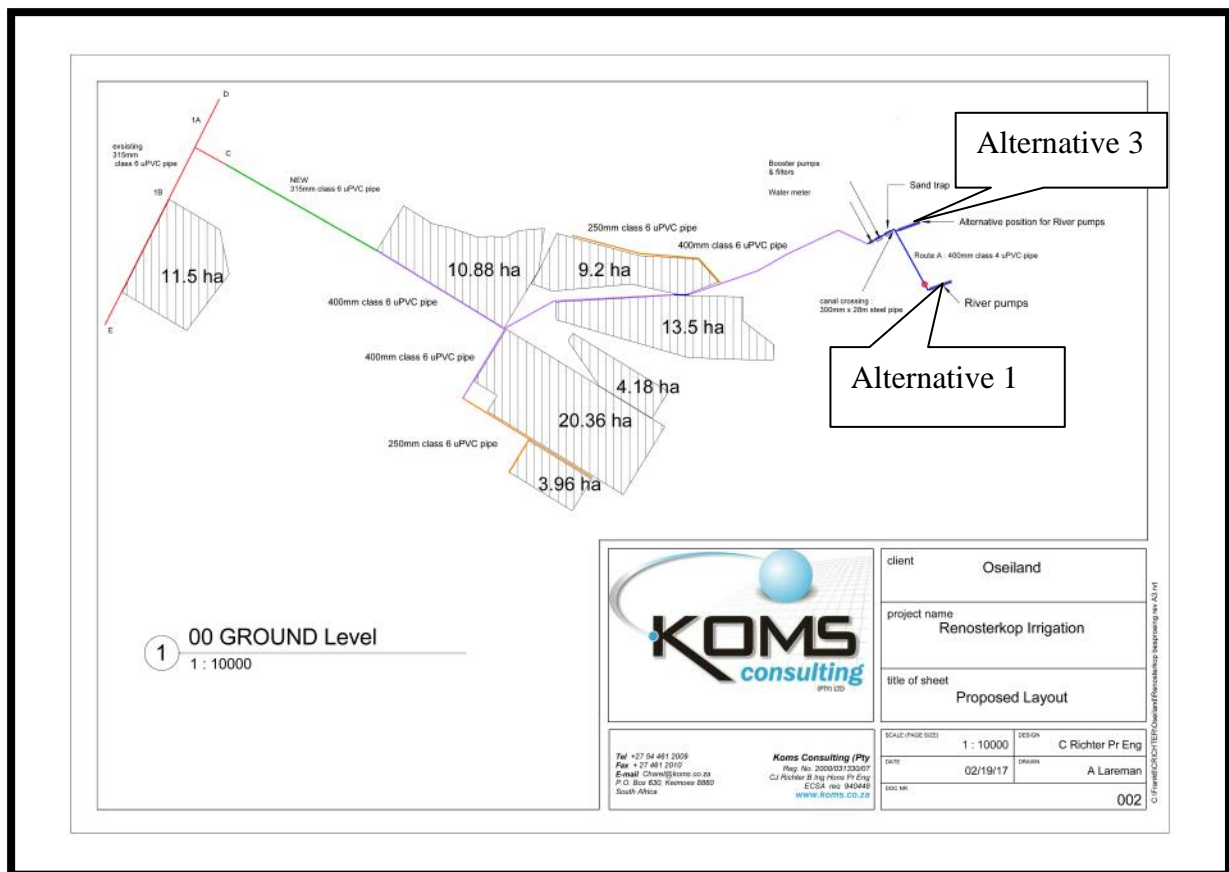
The alternatives considered for the development are described below:

#### **Alternative 1 (preferred location/design and technology alternative):**

This option will consist of agricultural land to be established, clearly outlined according to:

6. Transformation of approximately 77ha of indigenous vegetation to vineyards,
7. Construction of app. 3km of new pipelines,
8. Construction of a pumping station adjacent to the Canal, approximately 0.1ha in size,
9. A small intake structure within the Orange River and
10. Construction of two pipeline crossings over the Canal.

The layout is shown below in Figure 6.1 (A3 version included in Appendice 11.4.1).



**Figure 6.1: Alternative 1 – All proposed development areas**

This alternative is considered as preferred for the following reasons:

- From a design perspective this alternative was the best option. It took into consideration design measures by establishing agricultural areas as far as possible on areas that have already been disturbed.
- From a fresh water feature perspective it took into consideration the ephemeral streams, the development was located as far as possible from the streams. Also the entire eastern section of the farm will be kept natural. The eastern section has low potential agricultural land, with high concentrations of ephemeral streams.
- This alternative also located the pump station on an area already disturbed and the intake from the Orange/Gariep River is also on an area already disturbed.
- From a financial perspective this alternative was the best option. This development will contribute to the local and international market.
- From a vegetation perspective this alternative will have a low negative impact on vegetation.
- From a heritage/archaeological perspective this alternative will not have a significant impact, most probably a low impact with mitigation measures.
- This alternative will also fully utilise the farms agricultural potential according to existing water use rights and additional rights to be transferred.
- This alternative will also contribute socially to the upliftment of the existing workers through additional job opportunities.

It is clear therefore that this alternative meets the requirements of the socio-economic, vegetation, fresh water ecology and design considerations and was deemed preferred.

**Alternative 2 (location/design alternative):**

This option will consist of agricultural land to be established, clearly outlined according to:

8. Location – Farm 1726, Renosterkop, Farm 1290 and Farm 1537
9. Size – approximately 78.7ha
10. Proposed agricultural activity – vineyards
11. Pump station of app 1ha
12. Pipelines of approximately 3.2km
13. Off take at the Orange River
14. Off take at the Canal

The layout is shown below in Figure 6.2.



**Figure 6.2: Alternative 2**

This alternative is not considered as preferred for the following reasons:

- From a design perspective this alternative was not the best option. It did not take into consideration design measures by not establishing agricultural areas as far as possible on areas that have already been disturbed.
- From a fresh water feature perspective it did not take into consideration the ephemeral streams, the development was located over the streams.

This alternative is therefore not deemed preferred and not better suited than that of alternative 1.



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### **Alternative 3: (location/design alternative)**

This option will consist of a different site for the establishment of the pumpstation in the Orange/Gariep River. The different locations are shown in Figure 6.1.

This alternative is not deemed preferred as it is located on a site with a higher bank edge and with more potential to impede and divert flow, see Figure 6.3.



*Figure 6.3: Alternative 3*

### **Alternative 4: No-go Option**

This is not seen as preferred for the following reason:

- The current agricultural activities on the property are not being utilised to full potential. For this to take place additional agricultural areas would have to be established.
- From a botanical perspective the No Go alternative would be no further development of vineyards at Renosterkop 1726. The natural veld would remain as it is and there would be minimal change over time but with some low-level impacts due to human activity. The result would be a Very Low Negative impact.
- No social upliftment of existing workers and no additional job opportunities.

Therefore, this alternative is not seen as preferred as the expansion of agricultural activities will contribute to the agricultural potential of the property and if this does not take place the

expansion of the farm to its full potential cannot take place. No upliftment and economical contribution can take place.

## 6.2 **Alternatives that will be considered**

Following from section 4.1 it is clear that Alternative 1 addresses the key concerns raised.

In conclusion, taking into consideration that Alternative 2 and 3 is not viable from a design, fresh water ecology or vegetation perspective and the fact that Alternative 1 took into consideration inputs from relevant specialists and inputs during public participation, this development of alternative 1 is seen as preferred.

Alternative 1 as the preferred option and Alternative 4 the No-go Option, will be brought forward into the EIA phase of the development.

## 7 Issues identified

The purpose of scoping is to identify issues for further study in the EIA. A summary of the main identified issues is shown in Table 7. Two types of reports will be compiled.

1. A report on a specific technical subject – identified by shading and an X under “Reports” in Table 7.
2. Final specialist environmental impact reports, included in Scoping to be further assessed in the EIA phase, as outlined in Table 7.

**Table 7: Identified issues, EIA studies and reports**

Main issues identified	Comments addressed in section 3 following availability of Scoping Report	Reports	Final EIA studies
Heritage/Archaeology			X
Socio-Economic		X	
Vegetation			X
EMP		X	
WULA		X	

### 7.1 Identified environmental issues

#### 7.1.1 Heritage and Archaeology

A Heritage/Archaeological specialist Dr Jonathan Kaplan was appointed to conduct an assessment of the site and an application will be lodge to SAHRA. It is highly probable that a Phase 1 Heritage Impact Assessment (HIA) will have to be compiled for the EIA phase. It was however outlined by the specialist that the impact of significance of the proposed development on important archaeological heritage is therefore assessed as LOW.

Mitigation:

If any archaeological material or human burials are uncovered during the course of development then work in the immediate area should be halted. The find would need to be reported to the heritage authorities and may require inspection by an archaeologist. Such heritage is the property of the state and may require excavation and curation in an approved institution. A buffer of 10m must be established around the recorded grave (Pre-colonial grace). Alternatively, the grave must be fenced off prior to development commencing.

#### 7.1.2 Vegetation

As outlined in section 5.2.1 a summary report will be compiled by a specialist. However, the vegetation types found on site is of low botanical sensitivity, however the proposed development will probably have low negative impact on the vegetation if the appropriate mitigation measures are implemented.

## **Mitigation:**

Mitigation during the planning, construction and operation phases of this proposed development are as follows:

*“Very little scope is available for mitigation measures to compensate for the loss of natural or near natural habitat in the study area itself since, wherever there would be future cultivation, the vegetation and habitat would be lost. Recommended mitigation for the loss, particularly of seasonal watercourses, would be the conservation of the ‘eastern area’ of the farm outside the area targeted for agriculture. The ‘eastern area’ is rocky and has very little agricultural potential while also having many seasonal drainage lines. Conservation of the eastern area would ensure that a significant population of protected trees and viable habitat is formally protected and would offset the loss of equivalent habitat in the area targeted for agriculture.”*

### **7.1.3 Fauna**

Although not observed during the site visit, it is expected that small game such as klipspringer, steenbok, porcupines, baboons and dassies will be found in the area. Some bird species were also found. Yellow mongoose (*Cynictis penicillata*), an inhabitant of the open plains and the seasonal watercourses at Renosterkop 1726. However, it is not anticipated that the proposed development will have a significant negative impact on these species.

Habitat destruction and the possible genetic contamination of species are however all factors that can negatively impact on vertebrate species, but can be minimized through applying the following mitigation measures:

#### **Mitigation**

- Regular maintenance of the water network will minimize the damage done by porcupines.
- No hunting of small game with dogs will be allowed.
- In order to ensure that all fauna will be able to relocate to the adjacent veld, openings should be made in the fences surrounding the proposed development area before any construction work may commence
- To ensure environmentally friendly farming practices, the site manager will have to adhere to the requirements and prescriptions which will be included in the environmental management plan to be included as part of the EIA process. This plan will also deal with issues such as the prohibition of the hunting of small game etc.

### **7.1.4 Land uses**

The planned development is situated within a purely agricultural area with no other land uses in close proximity. The proposed development will therefore have no impact on any surrounding land uses in the area.

### **7.1.5 Plough certificate**

A plough certificate has already been obtained and included as part of Appendix D in the WULA included in the EIA phase of the development.

### 7.1.6 Water

An application for a license in terms of the National Water Act, 1998 is made by the developer, Oseiland Boerderye for the transfer water rights, taking of water from the Orange River, the water usages is summarised as the follows:

<i>(a) taking water from a water resource;</i>	Transfer of water rights
<i>(c) impeding or diverting the flow of water in a watercourse</i>	Impeding flow
<i>(i): altering the bed, banks, course or characteristics of a watercourse;</i>	Altering the banks of a water course

The WULA will be included in the EIA phase.

#### Mitigation

- Measures should be implemented to reduce water use within the proposed development, such as the use of tension meters to avoid over irrigation of the soils.
- Environmental education programs for workers will ensure that they will be sensitive to the environment and report incidents such as leaking taps, broken irrigation systems, hunting of small game etc.

### 7.1.7 Sewage disposal

Chemical toilets will be provided for the workers in the vineyard/ agricultural land. These toilets will be emptied on a daily basis in the sewage tank system at the households and at the packing sheds.

#### Mitigation

With regard to the development work at the site it must be ensured that the applicant/ contractor provide sufficient sanitation facilities for the use of his employees during the actual construction period. The applicant/ contractor will be solely responsible for the proper use and maintenance thereof in conditions, which are to the satisfaction of both the contractor and the applicant. All facilities must be positioned within walking distance from wherever employees or labourers are at work.

Other specifications to be adhered to are, amongst others, the following:

- All facilities provided at the site must comply with the requirements of the Local Municipality.
- No sewerage facility may be erected within a radius of 100m from a water source.
- The applicant/ contractor must be held responsible for the cleaning of the sanitary facilities to prevent health hazards for the duration of the contract.
- Sanitary facilities must be provided at a ratio of one (1) facility for every fifteen (15) persons.
- All sanitation facilities must be sited, in terms of the specifications of the National Water Act no. 36 of 1998, in such a way that they do not cause water- or other pollution.



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### **7.1.8 Solid waste disposal**

The application area is located within the municipal area of Kai! Garieb Municipality. No household waste will be generated as part of this application.

All facilities in use during the construction phase must be utilized and maintained in a manner that prevents pollution of any groundwater sources. No waste of any kind may be disposed of in the surrounding environment.

#### **Mitigation**

A no-nonsense approach with regard to littering on the farm exists and the neatness of the workplace as well as the residential areas is all high priorities for the management.

Sufficient provision should be made for rubbish bins on the farm to prevent workers from littering. These rubbish bins should be clearly marked and be visible.

### **7.1.9 Air and noise pollution**

#### **Air Pollution**

During the construction phase, and due to the nature of the project, a small amount of smoke (from machines) and dust could be generated. Dust pollution may have an impact on the operational workers.

#### **Mitigation**

In order to minimize the effect of dust pollution, the construction area should be kept wet as far as possible and the workers must wear the necessary safety clothing. The applicant is referred to section 19 of the National Water Act no. 36 of 1998 with regard to the prevention of, and remedies for, the effects of pollution. In terms of this section of the Act, the person who owns controls, occupies or uses the land in question is responsible for taking measures to prevent pollution of water resources and property.

#### **Noise Pollution**

During the construction phase there may be minimal and sporadic incidents of air and noise pollution due to the construction activities such as dust and noise as a result of earthworks. Due to the fact that the area is situated within an agricultural environment, the impact is not expected to be severe.

#### **Mitigation**

The contractor should make adequate provision to prevent or minimize the possible effects of air and noise pollution. Should the noise from the construction work be found to cause problems, (which is not anticipated to be the case) work hours in these areas may be restricted between 06:00 and 20:00, or as otherwise agreed between the parties involved. Strict measures should therefore be enforced, especially in terms of the contract specifications, to prevent any negative impacts in this regard.

## 8 Public Participation

Public participation included the following:

- **Registration and advertisement**

An advertisement was placed in the Gemsbok on the 17 March 2017. This advertisement served as a notice for registration as an Interested and Affected Parties and to provide comment on the dSR as part of the public participation. The registration/comment period was from Friday 17 March 2017 until Monday 17 April 2017.

- **Notice Board**

Notice Boards were displayed at the entrance of the farm from Wednesday 15 March 2017. (See section 11.1.3)

- **Information and reporting for formal process**

A notice that included the Executive Summary and draft Scoping Report was made available and distributed by registered post to all registered I&APs and neighbours for the 30 day commenting period, from (Friday 17 March 2017 until Monday 17 April 2017). The notice also informed all I&AP's of the availability of the Scoping Report which could be obtained from the EAP. Comments received will be included in the final Scoping Report. The actual comments received on the Executive Summary and Scoping Report, as part of the public participation, will be included in the final Scoping Report as shown in section 11.1.5. Digital copies were made available on the website [www.pbpscon.co.za](http://www.pbpscon.co.za) and distributed to all I&AP's.

Hard copies of the report were also sent to the following Authorities: DENC, DWS, Dept. of Agriculture, SAHRA, Kai! Garib Municipality and Nature Conservation.

- **I&AP database**

The I&AP database was developed from registered and listed I&APs shown in section 11.1.1. The database will be updated to include new I&AP's that have submitted comments on the Scoping Report.

All comments received were addressed in the Comments and Response sheet, in Appendix 11.1.6.

## 9 EIA Phase

### 9.1 Public participation

On completion of the EIR all I&APs on the database will be informed about the availability thereof. The various authorities will be approached directly to finalise their comments. The authorities will include DENC, DWS, Dept of Agriculture, SAHRA, Kai! Garib Municipality and Nature Conservation. DENC will be consulted regularly and informed about progress during the EIA phase.

## 9.2 TOR for EIA studies

According to NEMA 2014 Regulations, Appendix 6 the following should be included in the specialist reports:

*“Specialist reports:*

*1. (1) A specialist report prepared in terms of these Regulations must contain-*

*(a) details of-*

*(i) the specialist who prepared the report; and*

*(ii) the expertise of that specialist to compile a specialist report including a curriculum vitae;*

*(b) a declaration that the specialist is independent in a form as may be specified by the competent authority;*

*(c) an indication of the scope of, and the purpose for which, the report was prepared;*

*(d) the date and season of the site investigation and the relevance of the season to the outcome of the assessment;*

*(e) a description of the methodology adopted in preparing the report or carrying out the specialised process; the specific identified sensitivity of the site related to the activity and its associated structures and infrastructure;*

*(g) an identification of any areas to be avoided, including buffers;*

*(h) a map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers;*

*(i) a description of any assumptions made and any uncertainties or gaps in knowledge;*

*(j) a description of the findings and potential implications of such findings on the impact of the proposed activity, including identified alternatives on the environment;*

*(k) any mitigation measures for inclusion in the EMPr;*

*(l) any conditions for inclusion in the environmental authorisation;*

*(m) any monitoring requirements for inclusion in the EMPr or environmental authorisation;*

*(n) a reasoned opinion-*

*(i) as to whether the proposed activity or portions thereof should be authorised;and*

*(ii)if the opinion is that the proposed activity or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan;*

*(o) a description of any consultation process that was undertaken during the course of preparing the specialist report;*

*(p) a summary and copies of any comments received during any consultation process and where applicable all responses thereto; and*

*(q) any other information requested by the competent authority.”*

A full Plan of Study for EIA with TOR for each study is shown in section 11.5.

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### 9.3    **Activities during the EIA Phase**

On acceptance of the Final Scoping Report the applicant will develop the final layout for Alternative 1. EIA studies as listed in Section 9, using the TOR in section 11.5, will be undertaken and reports compiled. At the same time the Reports, as also listed in Section 9, will be finalised. The EIA Reports and other Reports will be made available to the various specialists to identify cumulative impacts and the various reports will be updated and finalised. The authorities as listed in section 11.1.1 will be consulted to obtain comments or approvals, as relevant.

When all information is available, the EIR will be compiled where after the public participation process will commence as outlined in section 9.

## 10 Conclusions

### 10.1 General

Taking into account that the purpose of scoping is “*must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process*” it can be concluded that the process has been successful because a number of issues have been identified for further study and a preferred alternative has been identified.

The proposed development has been identified and the layout designed according to the findings of the baseline studies to ensure minimal impact on the environment. Alternative 1 addresses the key concerns with regards to design and the inputs from the specialists through the following:

- No constraints were identified from a botanical perspective that would prevent the agricultural development from proceeding as long as suitable mitigation is implemented.
- No significant impact expected on heritage/archaeology, dependant on the outcome of the application lodged to SAHRA.
- Determined the best suitable alternative through assessing the impacts on the environment, preferred alternative 1 was determined.
- Low impact on the ephemeral streams and the conservation of the eastern section.
- The farm can be utilised to its full agricultural potential.
- It will also result in the social upliftment of the existing workers and create additional job opportunities.
- Financially contribute to the local and international market.

The detailed impacts and mitigation measures for Alternative 1 can, however, only be investigated during the EIA phase as per the Plan of Study for EIA as in section 11.5.

Note that the “**do nothing option**”, has been investigated as Alternative 4 and when taking into consideration that the current agricultural potential of the property is not utilising to its full potential, thus keeping the site as is, is not deemed as preferred.

Thus Alternative 1 and Alternative 4: No-Go Option will be brought forward and investigated in the EIA Phase.





## 11.1 Public participation

### 11.1.1 I&AP database

#### AUTHORITIES AND I&AP's

	Erf no	Surname	Initials	Representing	Tel	Fax	email	Post Box	Town	Code	Reg
1		Lategan	J.G.	Kai Garib Municipality: Municipal Manager	054 431 6328	054 461 6401	mm@kaigarib.gov.za	Private Bag X6	Kakamas	8870	L
2		Snyers	A.C.	Kai Garib Municipality: Ward Councillor Ward 2	054 431 6328	054 461 6401	mm@kaigarib.gov.za	Private Bag X6	Kakamas	8870	L
3		October	L	Department of Agriculture and Land Reform	054 461 6700	054 461 6401		P. O. Box 18	Springbok	8240	L
4		Towell	J	Department of Water Affairs	082 887 8866/ 054 338 5819		TowellJ@dws.gov.za	Private Bag X5912	Upington	8800	L
5		Tsimakwane	T	DENC: NC – 24G	0538077300	0538077328	ttsimakwane@ncpg.gov.za	Sasko Building, 90 Long street	Kimberley	8300	L
6		Geldenhuis	C	Nature Conservation Unit	027 718 9906	027 718 9907	The unit indicated comments will be requested by the case officer.				L
7		Motsisi	L	ESKOM: Transmission	011 8005734		MotsisL@eskom.co.za	P. O. Box 1091	Johannesburg	2001	L
8		De Bruin	R	Eskom Distribution FOU	0514042467/ 0825769184		dBruinER@eskom.co.za	P. O. Box 356	Bloemfontein	9300	L
9		Abrahams	N	Department of Transport: Environmental Coordinator	021 957 4602	021 910 1699	Abrahamsn@nra.co.za	Private Bag X19, Sanlamhof	Belville	7535	L
10		Ceo		Kakamas Water Users Association	054 431 0725/6	054 431 0348	kakamaswgv@isat.co.za	Private Bag X4	Kakamas	8870	L
11		Burger Du Plessis Familie Trust	Jan du Plessis	Erf 1726 (Application Property) Erf 1288, 1279, 1290, 1537, 2092	082 925 0977			P. O. Box 45	Augrabies	8874	L
12		Flying Falcon Prop 12 Cc		Erf 1280				P. O. Box 21	Augrabies	8874	L
13		Itzibitz Pty Ltd		Erf 1776, 2382				P. O. Box 813	Kakamas	8870	L
14		Vroeëson Familie Trust	Gerrit Visser	Erf 1772, 2381	082 444 3155			P. O. Box 813	Kakamas	8870	L

	<b>Erf no</b>	<b>Surname</b>	<b>Initials</b>	<b>Representing</b>	<b>Tel</b>	<b>Fax</b>	<b>email</b>	<b>Post Box</b>	<b>Town</b>	<b>Code</b>	<b>Reg</b>
15		Superlane 124 Pty Ltd	Johan de Kok	Erf 1857	082 925 2120			P. O. Box 57	AuGrabies	8874	L
16		Sonvrucht Farming Pty Ltd	Tokka van den Heever	Erf 1858, Erf 2160	082 571 6472			P. O. Box 182	AuGrabies	8874	L
17		Eternal Flame Inv 104 Pty Ltd	Jan du Plessis	Erf 2094	082 925 0977			P.O. Box105	AuGrabies	8874	L
18		Sonland Boerdery Pty Ltd	Hanno Wiese	Erf 2193, 2185	082 470 3721			P. O. Box 110472, Harrison Park	Kimberley	8300	L
19		Kakamas Weiveldeenheid Nommer Een Ltd	Francois Conradie	Erf 1177	082 578 1586			P. O. Box 1	AuGrabies	8874	L
20		P J Dippenaar & Seuns Boerdery Pty Ltd	Paul Dippenaar	Erf 2192	082 379 9770			P. O. Box 43	Kakamas	8870	L

# 11.1.2 Advertisements

## 11.1.2.1 Proof of advertisements.

# Wit vir kankerbewusmaking

GEMSBOK-UPINGTON: Verskeie plaaslike instansies en skole het onlangs ter bewusmaking van kanker vir die dag wit gedra.



Hier is Westerkim se leerkrigte ook almal in wit.

**MUNISIPALITEIT KAI IGARIB KENNISGEWING NO. K06/2017**

**DOOPAAN LESKEMA VOORGESTELDE AFWYKINGVAN DIE PLAAS N° 147, KENHARDT RD, O.L.L.E. BINN. DIE MUNISIPALITEIT KAI IGARIB**

Kenne gebied ingevolge die bevoegdighede van die Functionele Bevoegdighede van die Grondwettige Bestuur Wet 16 van 2015, dat die Grondwettige Munisipale Afsaaiing van die Grondwettige Bevoegdighede (Functional competence of the independent office of the municipal council)

1. Oorsakegebied: Plaas N° 147, Kenhardt RD, Kai IGarib Munisipaliteit
11. Aansoek beskrywing: Voorgestelde afwyking op die Plaas N° 147, Kenhardt RD, Kai IGarib Munisipaliteit
12. Beskrywing van eiendoms: Plaas N° 147, Kenhardt RD, Kai IGarib Munisipaliteit
2. Ligging: Die aansoek Farm N° 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000
3. Oppervlakte: Macroplan (Len J Fouche)
4. Aansoek: Plaas N° 147, Kenhardt RD, Kai IGarib Munisipaliteit
5. Gesoekterde Eiensaar: Gemeente
6. Huidige grondbesitser: Gemeente
7. Voorgestelde gebruiksaansoek: (Industriële Sone B)
8. Doel van aansoek: Die doel van hierdie aansoek is om aansoek te doen om 'n afwyking ten einde te maak om die plaas te gebruik vir 'n laerskool (grondgebied op 'n 3000 m<sup>2</sup> gedeelte van die betrokke eiendom in te stel)

Nadere besonderhede oor die aansoek is beskikbaar by die Munisipale Bestuurder, Kaizer Maritzburg, 10000, 10001, 10002, 10003, 10004, 10005, 10006, 10007, 10008, 10009, 10010, 10011, 10012, 10013, 10014, 10015, 10016, 10017, 10018, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10036, 10037, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10045, 10046, 10047, 10048, 10049, 10050, 10051, 10052, 10053, 10054, 10055, 10056, 10057, 10058, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10067, 10068, 10069, 10070, 10071, 10072, 10073, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10083, 10084, 10085, 10086, 10087, 10088, 10089, 10090, 10091, 10092, 10093, 10094, 10095, 10096, 10097, 10098, 10099, 10100, 10101, 10102, 10103, 10104, 10105, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10117, 10118, 10119, 10120, 10121, 10122, 10123, 10124, 10125, 10126, 10127, 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10986, 10987, 10988, 10989, 10990, 10991, 10992, 10993, 10994, 109

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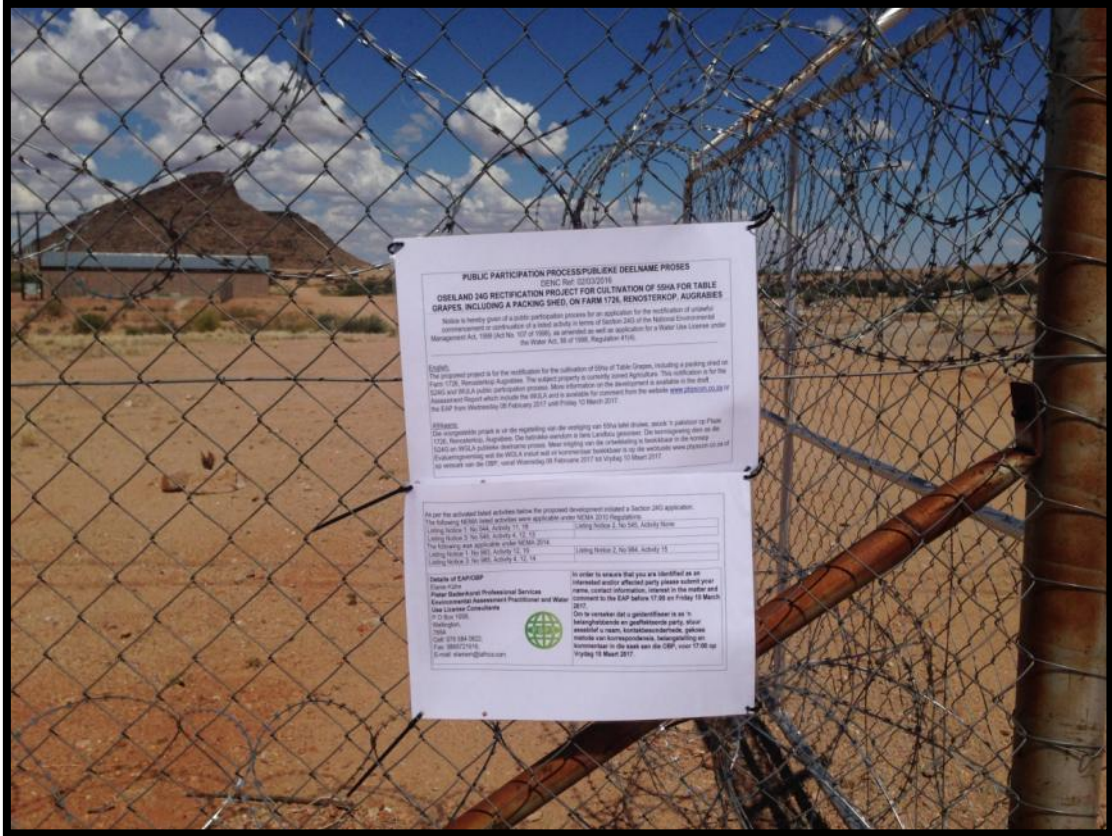
### **11.1.3 Notice Boards**

#### **11.1.3.1 Text for the site notice**

Same as for the advertisement in section 11.1.2.2, for initial notices.



11.1.3.2 Proof of Notice Boards



Site Notice 2 –close up



Site Notice 1 – Showing entrance





Site Notice 2 – Showing entrance



Position of site notices

## 11.1.4 Proof of notices

### 11.1.4.1 Proof of notices for SR

<p>J.G.Lategan Kai Garib Municipality: Municipal Manager Private Bag X6 Kakamas 8870</p>	<p>A.C.Snyers Kai Garib Municipality: Ward Councillor Ward 2 Private Bag X6 Kakamas 8870</p>	<p>LOctober Department of Agriculture and Land Reform P. O. Box 18 Springbok 8240</p>
<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 432 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 446 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 450 ZA CUSTOMER COPY 301016</p>
<p>CWhite Department of Water Affairs Private Bag X5912 Upington 8800</p>	<p>TTsimakwane DENC: NC-24G Sasko Building, 90 Long street Kimberley 8300</p>	<p>LMotsisi ESKOM: Transmission P. O. Box 1091 Johannesburg 2001</p>
<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 477 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 485 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 463 ZA CUSTOMER COPY 301016</p>
<p>RDe Bruin Eskom Distribution FOU P. O. Box 356 Bloemfontein 9300</p>	<p>NAbrahams Department of Transport: Environmental Coordinator Private Bag X19, Sanlamhof Belville 7535</p>	<p>Ceo Kakamas Water Users Association Private Bag X4 Kakamas 8870</p>
<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 503 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 517 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 494 ZA CUSTOMER COPY 301016</p>
<p>Jan du PlessisBurger Du Plessis Familie Trust Erf 1726 (Application Property) Erf 1288, 1279, 1290, 1537, 2092 P. O. Box 45 Aurgrabies 8874</p>	<p>Flying Falcon Prop 12 Cc Erf 1280 P. O. Box 21 Aurgrabies 8874</p>	<p>Itzibitz Pty Ltd Erf 1776, 2382 P. O. Box 813 Kakamas 8870</p>
<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 534 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 548 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 525 ZA CUSTOMER COPY 301016</p>
<p>Gerrit VisserVroeëson Familie Trust Erf 1772, 2381 P. O. Box 813 Kakamas 8870</p>	<p>Johan de KokSuperlane 124 Pty Ltd Erf 1857 P. O. Box 57 Aurgrabies 8874</p>	<p>Tokka van den HeeverSonvrucht Farming Pty Ltd Erf 1858, Erf 2160 P. O. Box 182 Aurgrabies 8874</p>
<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 579 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 565 ZA CUSTOMER COPY 301016</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 582 ZA CUSTOMER COPY 301016</p>
<p>Jan du PlessisEternal Flame Inv 104 Pty Ltd Erf 2094 P.O. Box105 Aurgrabies 8874</p>	<p>Hanno WieseSonland Boerdery Pty Ltd Erf 2193, 2185 P. O. Box 110472, Harrison P... Kimberley 8300</p>	<p>Francois ConradieKakamas Weiveldeenheid Nummer Een Ltd Erf 1177 P. O. Box 1 Aurgrabies 8874</p>
<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 431 000 ZA CUSTOMER COPY 301016</p>	<p>T. Mkaudi DENC Sasko Building, 90 Longstreet Kimberley 8300 Customer Copy</p>	<p><b>ORDINARY PARCEL</b> ShareCall 0860 111 502 www.sapo.co.za PE 891 430 551 ZA CUSTOMER COPY 301016</p>
<p>Paul DippenaarP J Dippenaar &amp; Seuns Boerdery Pty Ltd Erf 2192 P. O. Box 43 Kakamas 8870</p>	<p>(20) 2017-03-14 (17) Key PBPS P.O. Box 1058 WELLINGTON 7654</p>	

\* Courier



SENDER'S COPY  
SPEED SERVICES COURIERS

The Shortest Distance Between Two Points

**DOMESTIC CASH WAYBILL** 0800 025 133  
24 - HOUR CUSTOMER HELPLINE

Speed Services Couriers Head Office Reg No. 1991/05477/06  
21 Wrench Road, Isando, Private Bag 14, Johannesburg International 1627  
Tel (+27) 11 961-3400 Fax 0865 588 053  
A Division of the South African Post Office Ltd

TC236566756ZA

<p><b>FROM (SENDER)</b> SENDER / COMPANY NAME: PBPS ADDRESS: P.O. Box 1058, Wellington, POSTCODE 7654 CONTACT PERSON: E. Kuhn PHONE / CELL NO.: 076 584 0822</p>	<p><b>TO (RECEIVER)</b> RECEIVER / COMPANY NAME: Dep. Environment &amp; Nature Conservation ADDRESS: 90 Longstreet, Sastot Building, Kimberley, POSTCODE 8300 CONTACT PERSON: T. Makaudi PHONE / CELL NO.: 053 807 7300</p>
--	---

**SELECT FROM THE OPTIONS**

COUNTER to:  COUNTER  DOOR

Post Office Counter:  P.O. Box / Private Bag  Door Delivery

DO YOU WANT TO TAKE OUT INSURANCE? YES  NO  R

Sender's Signature: *E. Kuhn* DATE: 14/07/17

DIMENSIONS OF PARCEL IN CM's		MASS
LENGTH		1 KG
WIDTH		
HEIGHT		20 GRAM

\*ADVISE RECEIVER TO COLLECT FROM COUNTER

POST OFFICE NAME	POSTAL CODE

Customer/Sender: I was advised on the insurance options:  
Signature: *E. Kuhn* Date: 14/07/17

Teller: I have advised the Sender on the insurance options:  
Signature: *T. Makaudi* Date: 14/3/17

**PACKAGE DETAILS**

TYPE OF GOODS	CONTENTS DESCRIPTION
Documents <input checked="" type="checkbox"/>	
Non Documents	
Dangerous Goods	
Fragile Goods	
Valuable Goods	
Other	

CHARGES FOR THIS SHIPMENT FEE (INCL VAT): R 1530 TIME 14:30 DATE 14/03/17

TELLER'S NAME: PRINTED FOR OFFICE USE ONLY SIGNATURE: FOR OFFICE USE ONLY

**POST OFFICE DATE STAMP**  
17-03-17

**NB: IMPORTANT INFORMATION:** This package/shipment is accepted subject to Speed Services Couriers Terms & Conditions and by tendering this package/shipment, the Sender acknowledges to have read from the back of this page, understood and accepted them.

---

**DOMESTIC CASH WAYBILL** 0860 023 133  
24 - HOUR CUSTOMER HELPLINE

Speed Services Couriers Head Office Reg No. 1991/05477/06  
21 Wrench Road, Isando, Private Bag 14, Johannesburg International 1627  
Tel (+27) 11 961-3400 Fax 0865 588 053  
A Division of the South African Post Office Ltd

TC236566760ZA

<p><b>FROM (SENDER)</b> SENDER / COMPANY NAME: PBPS ADDRESS: P.O. Box 1058, Wellington, POSTCODE 7654 CONTACT PERSON: E. Kuhn PHONE / CELL NO.: 076 584 0822</p>	<p><b>TO (RECEIVER)</b> RECEIVER / COMPANY NAME: Department Water &amp; Sanitation ADDRESS: Louisvale Road, Upington, POSTCODE 8800 CONTACT PERSON: C. White PHONE / CELL NO.: 054 338 5800</p>
--	---

**SELECT FROM THE OPTIONS**

COUNTER to:  COUNTER  DOOR

Post Office Counter:  P.O. Box / Private Bag  Door Delivery

DO YOU WANT TO TAKE OUT INSURANCE? YES  NO  R

Sender's Signature: *E. Kuhn* DATE: 14/03/17

DIMENSIONS OF PARCEL IN CM's		MASS
LENGTH		1.00 AM
WIDTH		
HEIGHT		

\*ADVISE RECEIVER TO COLLECT FROM COUNTER

POST OFFICE NAME	POSTAL CODE

Customer/Sender: I was advised on the insurance options:  
Signature: *E. Kuhn* Date: 14/03/17

Teller: I have advised the Sender on the insurance options:  
Signature: *C. White* Date: 14/3/17

**PACKAGE DETAILS**

TYPE OF GOODS	CONTENTS DESCRIPTION
Documents <input checked="" type="checkbox"/>	
Non Documents	
Dangerous Goods	
Fragile Goods	
Valuable Goods	
Other	

CHARGES FOR THIS SHIPMENT FEE (INCL VAT): R 1530 TIME 15:30 DATE 14/03/17

TELLER'S NAME: PRINTED FOR OFFICE USE ONLY SIGNATURE: FOR OFFICE USE ONLY

**POST OFFICE DATE STAMP**  
17-03-17

**NB: THE SENDER MAY NOTIFY THE RECEIVER TO EXPECT THE**

**SPEED SERVICES COURIER**

**DOMESTIC CASH WAYBILL** 0860 023 133  
Speed Services Couriers Head Office Reg No. 1991/05477/06  
 21 Wrench Road, Isando, Private Bag 14, Johannesburg International 1627  
 Tel (+27)11 961-3400 Fax 0865 588 093  
 A division of the South African Post Office Ltd 24-HOUR CUSTOMER HELPLINE

TC236566773ZA

**FROM (SENDER)**  
 SENDER / COMPANY NAME: PBPS  
 ADDRESS: P.O. Box 1058 Wellington POSTCODE 7654  
 CONTACT PERSON: E. Luhn  
 PHONE / CELL NO.: 076 584 0822

**TO (RECEIVER)**  
 RECEIVER / COMPANY NAME: DENC: Section 249  
 ADDRESS: 90 Long Street, Sasolco Building Kimberley POSTCODE 8300  
 CONTACT PERSON: T. Tsimkowane  
 PHONE / CELL NO.: 053 807 7300

**SELECT FROM THE OPTIONS**  
 COUNTER to: [ ] DOOR [X]  
 Post Office Counter [ ] P.O Box / Private Bag [X] Door Delivery [X]

DO YOU WANT TO TAKE OUT INSURANCE? YES [ ] NO [X] R [ ]  
 Sender's Signature: [Signature] DATE: 14/03/17

**PACKAGE DETAILS**  
 TYPE OF GOODS: Documents [X], Non Documents [ ], Dangerous Goods [ ], Fragile Goods [ ], Valuable Goods [ ], Other [ ]  
 CONTENTS DESCRIPTION: [ ]  
 CHARGES FOR THIS SHIPMENT FEE (INCL VAT): R [ ] TIME: 15:30 DATE: 14/03/17  
 TELLER'S NAME: PRINTED FOR OFFICIAL USE: [ ] SIGNATURE: [Signature] DATE: 14/3/17

**POST OFFICE DATE STAMP**  
 14/03/17

**DIMENSIONS OF PARCEL IN CM'S**  
 LENGTH: [ ] WIDTH: [ ] HEIGHT: [ ] MASS: 700 GRAM

\*ADVISE RECEIVER TO COLLECT FROM COUNTER  
 POST OFFICE NAME: [ ] POSTAL CODE: [ ]

Customer/Sender: I was advised on the insurance options:  
 Signature: [Signature] Date: 14/03/17  
 Teller: I have advised the Sender on the insurance options:  
 Signature: [Signature] Date: 14/3/17

**NB: IMPORTANT INFORMATION:** This package/shipment is accepted subject to Speed Services Couriers Terms & Conditions and by tendering this package/shipment, the Sender acknowledges to have read from the back of this page, understood and accepted them.

**NB: THE SENDER MAY NOTIFY THE RECEIVER TO EXPECT THE PACKAGE/SHIPMENT**

CAT No. CON 060014

The Shortest Distance Between Two Points



## 11.1.5 Notices

### 11.1.5.1 Notices sent to I&APs and Authorities for SR



## PIETER BADENHORST PROFESSIONAL SERVICES CC

PO Box 1058  
Wellington, 7654

DATE:

14-03-2017

REF:

Dear Interested and Affected Party, landowner (occupants) and Authority

**PROPOSED CONSTRUCTION OF AGRICULTURAL AREAS, PIPELINES AND  
ASSOCIATED INFRASTRUCTURE ON FARM 1726, RENOSTERKOP AND FARM  
1290 AND FARM 1537**

This letter serves as notification that the Scoping Report is available for comment. Please note this report is part of the official public participation.

Herewith, please find a copy of the Scoping Reports for your consideration and comment. The commenting period is from Friday 17 March 2017 until Monday 17 April 2017.

An electronic copy of the Scoping Report is also available on the website [www.pbpscon.co.za](http://www.pbpscon.co.za) (Projects, Downloads, Scoping Reports).

The following listed activities are triggered: Listing Notice 1: R982: activity 9,12, 19; Listing Notice 3: R984: Activity 12 and 14 and Listing Notice 2: R983: Activity 15.

Should you have any queries please do not hesitate to contact me.

Yours sincerely

Elanie Kühn  
Pieter Badenhorst Professional Services  
Environmental Assessment Practitioner  
P. O. Box 1058  
Wellington  
7654  
Tel: 076 584 0822  
Email: [elaniem@iafrica.com](mailto:elaniem@iafrica.com)  
Website: [www.pbpscon.co.za](http://www.pbpscon.co.za)

Attached: 1 x hard copy of draft Scoping Report

Tel: 021 8737228 Fax: 0866721916 Cell: 0827763422 email: [pbps@iafrica.com](mailto:pbps@iafrica.com)

CC Owner: P Badenhorst CC Nr: 97/33840/23

## 11.1.6 Comments received

### 11.1.6.1 Comments on SR

DENC



the denc

Department:  
Environment & Nature Conservation  
NORTHERN CAPE PROVINCE  
REPUBLIC OF SOUTH AFRICA

90 Long Street  
Private Bag X6102  
Kimberley  
8300

Tel. 053-807 7300  
Fax: 053-807 7328

Enquiries :  
Dipatlisiso :  
Imibuzo : M.O Riba  
Navrae :  
Reference :  
Tshupelo :  
Isalathiso :  
Verwysing :

Date : 20 April 2017  
Letha :  
Umhla :  
Datum :

Elanie Kuhn  
P.O. Box 1058  
Wellington  
7654

**PROPOSED CONSTRUCTION OF AGRICULTURAL AREAS, PIPELINES AND ASSOCIATED INFRASTRUCTURE ON FARM 1726 RENOSTERKOP, FARM 1290 AND FARM 1537 AUGRABIES, KAI! GARIB LOCAL MUNICIPALITY: ZF MGCWU DISTRICT.**

Dear Ms Kuhn

The **Draft Scoping report** which was submitted by you in respect of the above mentioned application and received by the Department on the 16 March 2017 has been reviewed by the Department and the Department is awaiting the **Final Scoping report**.

Please draw the applicant's attention to the fact that the activity may not commence prior to an environmental authorization being granted by the Department.

Yours faithfully

Mr. M.O. Riba

Environmental Officer (ZF Mgcawu): Impact Management  
Date 20-04-2017

**11.1.7 Comments and responses sheet**

COMMENTS ON SR				
Date	Comments from	Comments received	Response from	Response received
20 April 2017	DENC – Ordain Riba	The Draft Scoping report which was submitted by you in respect of the above mentioned application and received by the Department on the 16 March 2017 has been reviewed by the Department and the Department is awaiting the Final Scoping report. Please draw the applicant's attention to the fact that the activity may not commence prior to an environmental authorization being granted by the Department.	PBPS	Noted, this report is the final Scoping Report for consideration.



### **11.3 Baseline studies**

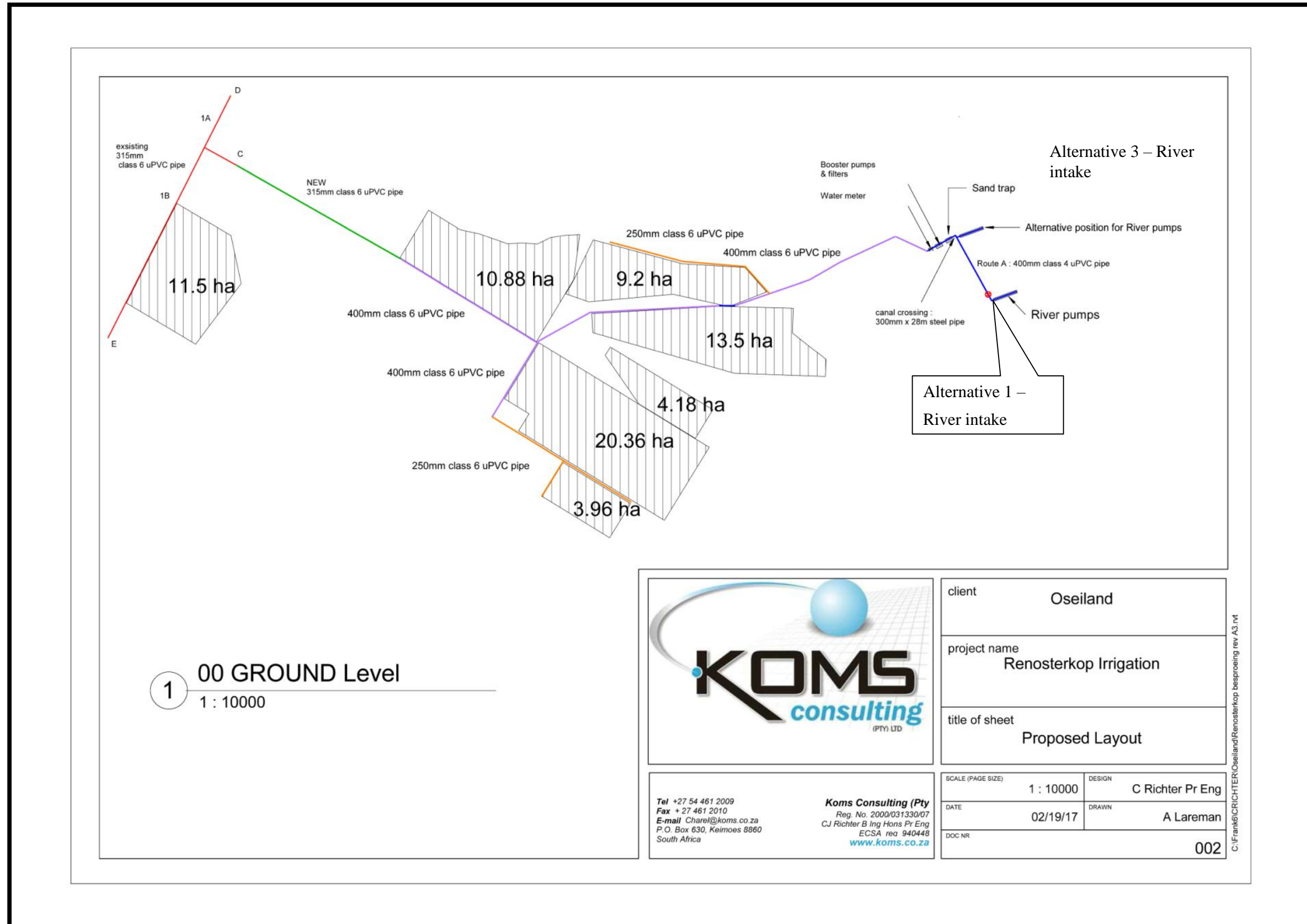
**None included for scoping phase.**



# 11.4 Alternatives

## 11.4.1 Alternative Layouts:

### 11.4.1.1 Alternative layout 1: Preferred layout



client	Oseiland
project name	Renosterkop Irrigation
title of sheet	Proposed Layout

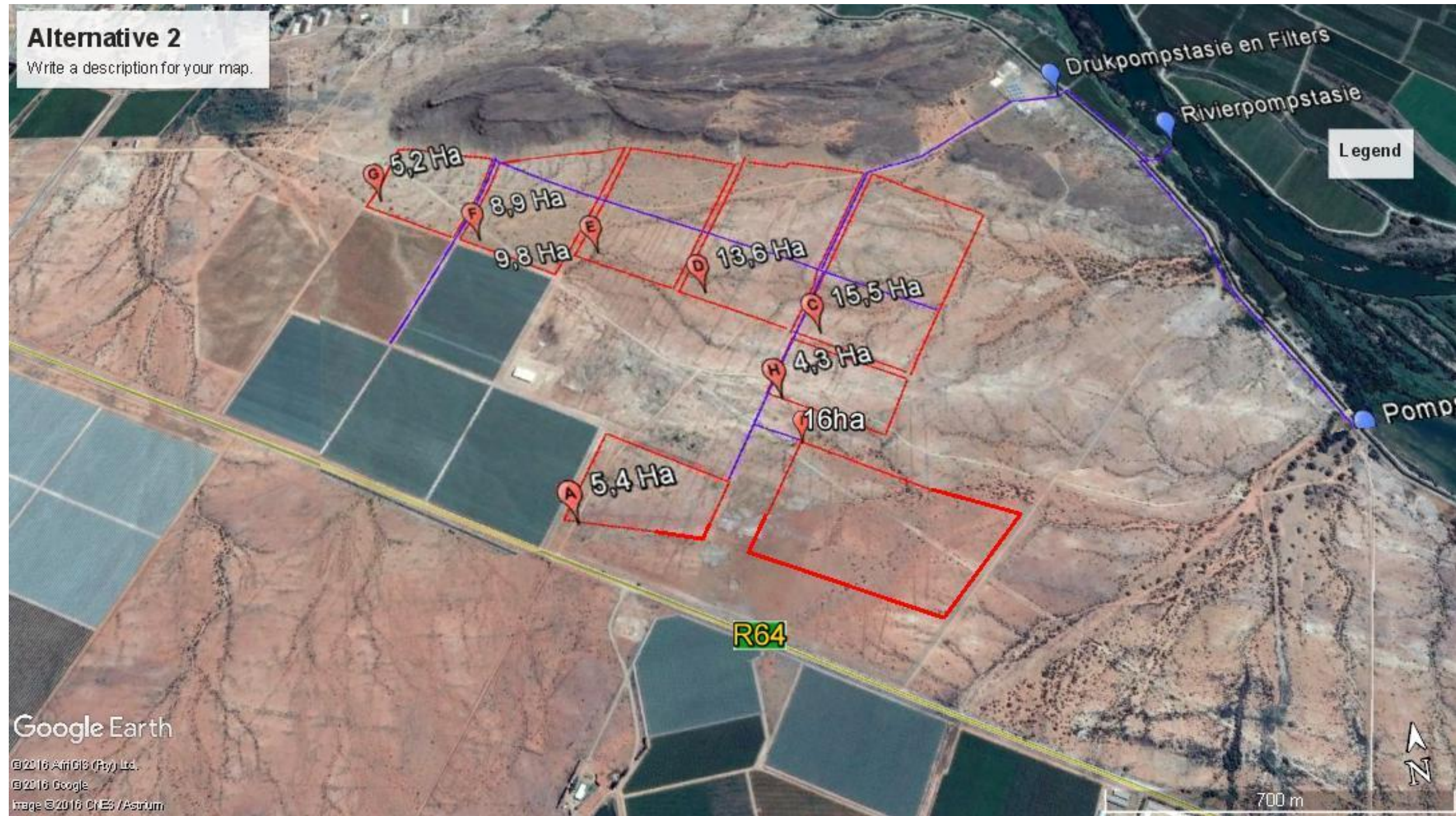
**Tel** +27 54 461 2009  
**Fax** +27 461 2010  
**E-mail** Charel@koms.co.za  
 P.O. Box 630, Keimoes 8860  
 South Africa  
**Koms Consulting (Pty)**  
 Reg. No. 2000/031330/07  
 CJ Richter B Ing Hons Pr Eng  
 ECSA rea 940448  
[www.koms.co.za](http://www.koms.co.za)

SCALE (PAGE SIZE)	1 : 10000	DESIGN	C Richter Pr Eng
DATE	02/19/17	DRAWN	A Lareman
DOC NR	002		

C:\Frank6\CRICHTER\Oseiland\Renosterkop besproeing rev A3.rvt



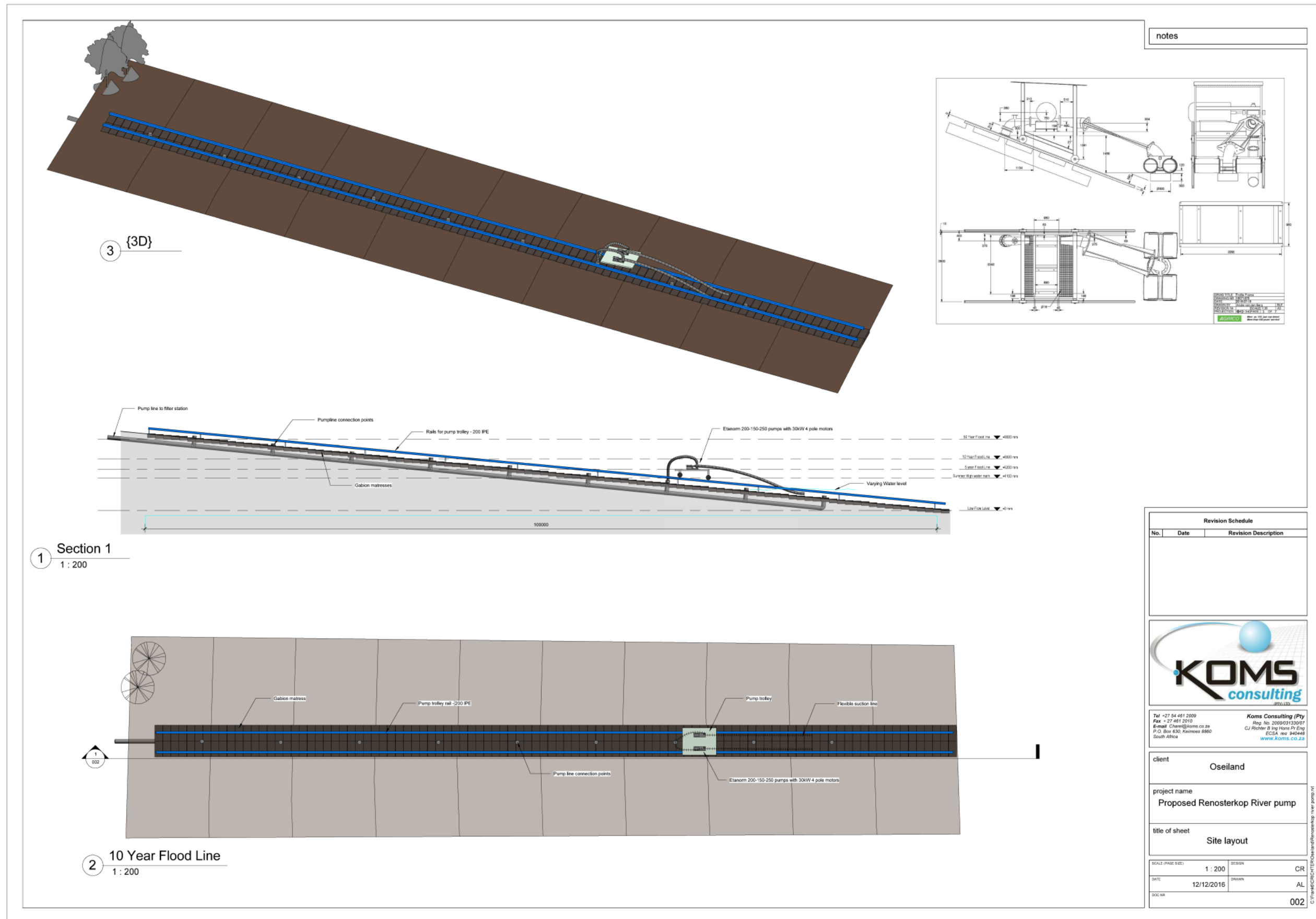
11.4.1.2 Alternative layout 2



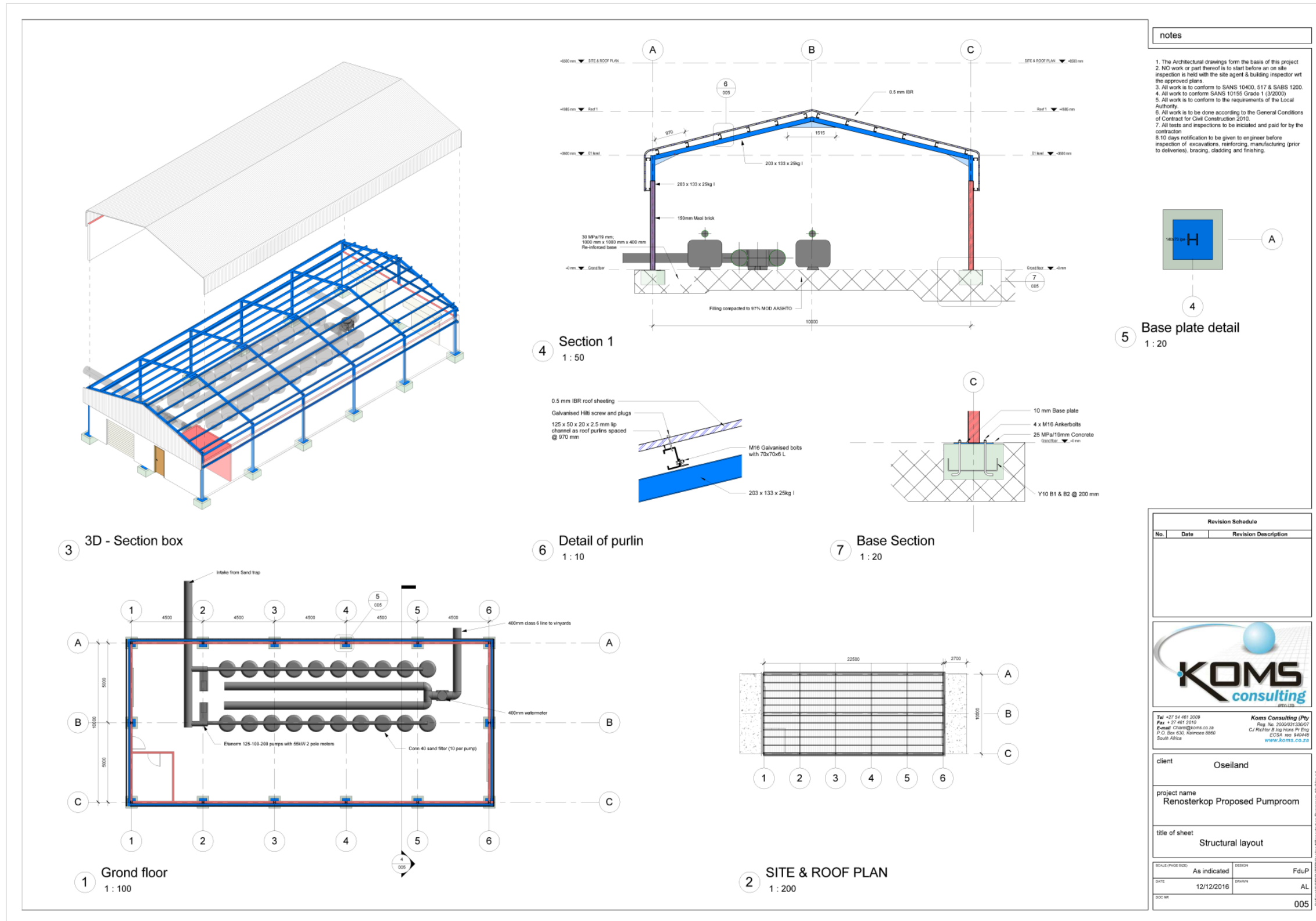


## 11.4.2 Design Layouts:

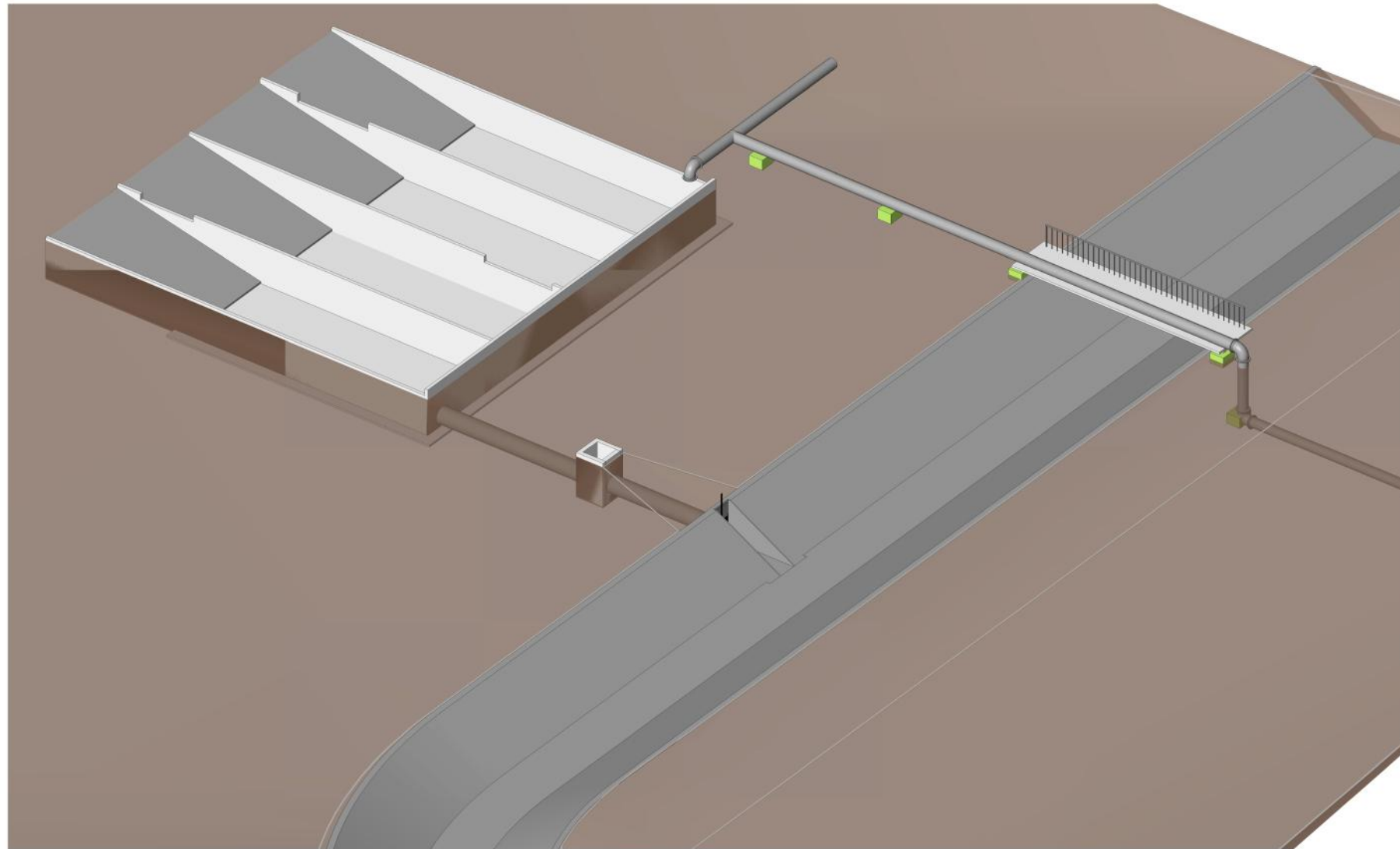
### 11.4.2.1 Proposed River pump



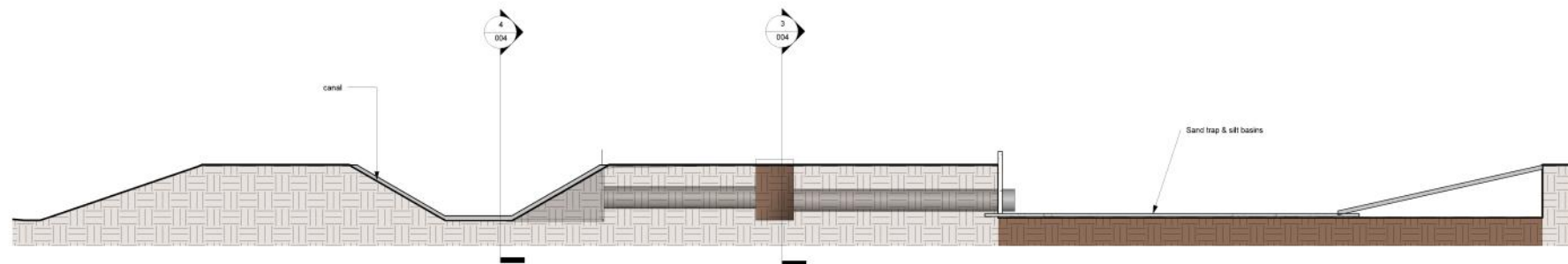
11.4.2.2 Proposed pump station



11.4.2.3 Pump station and canal intake structures



1 3D new



2 Section 1  
1 : 100

notes

Revision Schedule

No.	Date	Revision Description



Tel: +27 54 461 2009  
Fax: +27 461 2010  
E-mail: info@koms.co.za  
P.O. Box 630, Palmiet 6860  
South Africa  
www.koms.co.za

client Oseiland

project name Canal point & sand trap

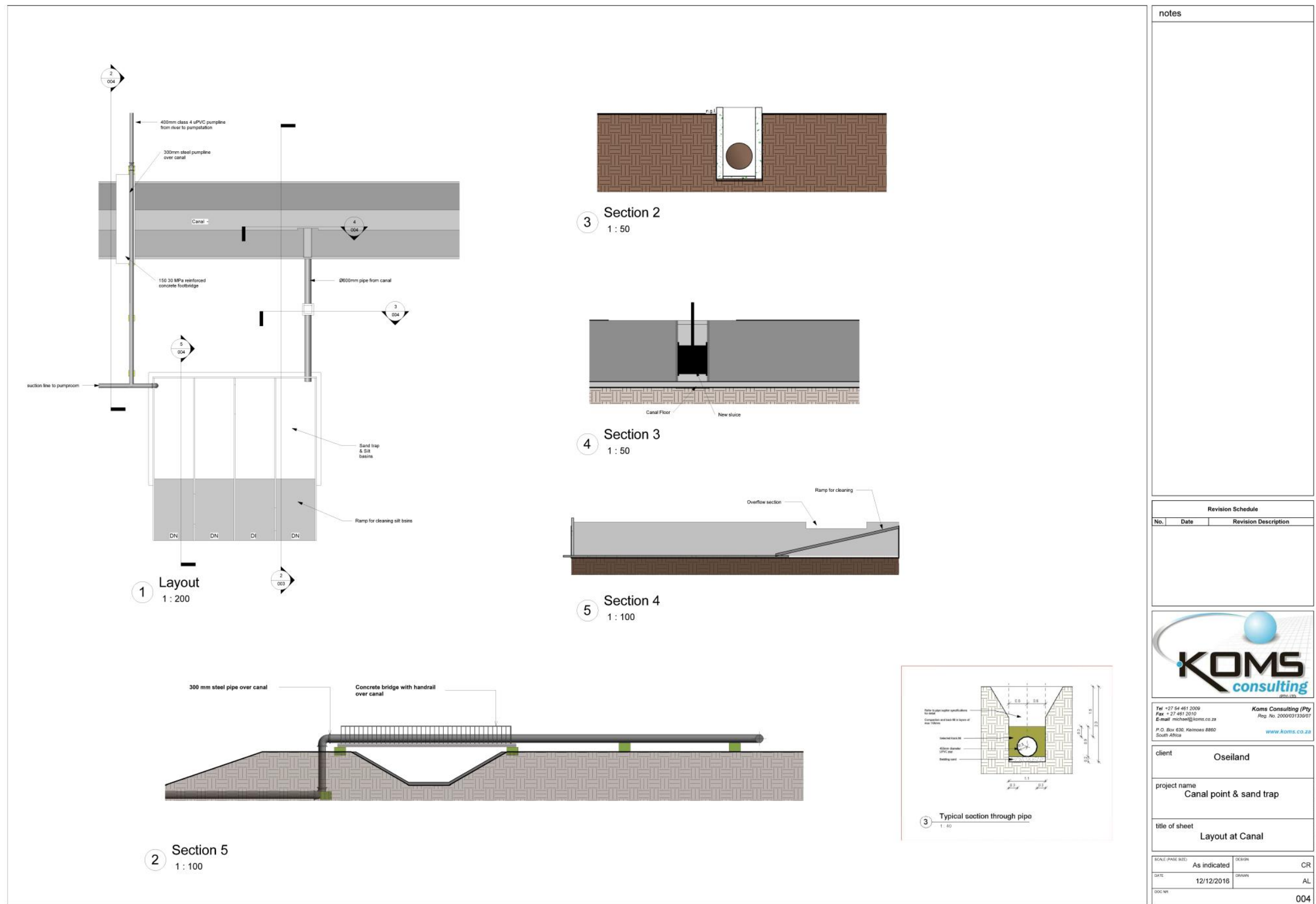
title of sheet Canal Point

SCALE (PAGE SIZE):	1 : 100	DESIGN:	CR
DATE:	12/12/2016	DRAWN:	AL
DOC-NR:			003

C:\Projects\11423\11423-Canal\11423-Canal-Point.dwg



11.4.2.4 Canal crossing structure



notes

Revision Schedule		
No.	Date	Revision Description



Tel: +27 54 461 2009  
 Fax: +27 461 2010  
 E-mail: michael@koms.co.za  
 P.O. Box 430, Kaimoes 8880, South Africa  
 Koms Consulting (Pty) Rep. No. 2000/01339/07  
 www.koms.co.za

client	Oseiland
project name	Canal point & sand trap
title of sheet	Layout at Canal
SCALE (PAGE SIZE)	As indicated
DATE	12/12/2016
DESIGN	CR
DRAWN	AL
DWG. NO.	004

## 11.5 Plan of study for EIA

**PLAN OF STUDY FOR EIA**

**PROPOSED CONSTRUCTION OF AGRICULTURAL AREAS, PIPELINES AND ASSOCIATED INFRASTRUCTURE ON FARM 1726, RENOSTERKOP, FARM 1290 AND FARM 1537, AUGRABIES, NORTHERN CAPE**

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2 Specialist studies & reports .....3

3 Response to comments from Scoping.....3

4 Report requirements.....3

5 A description of the proposed method of identifying and assessing impacts.....5

6 Description of the activity to be undertaken.....5

7 Tasks to be performed during EIA .....5

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12 Appendix D – Comments from Northern Cape Department of Environment and Nature Conservation ..... 21

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**Note:**

The regulations state that a plan of study for environmental impact assessment which sets out the proposed approach to the environmental impact assessment of the application, which must include –

*“a plan of study for undertaking the environmental impact assessment process to be undertaken, including-*

- (i) a description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity;*
- (ii) a description of the aspects to be assessed as part of the environmental impact assessment process;*
- (iii) aspects to be assessed by specialists;*
- (iv) a description of the proposed method of assessing the environmental aspects, including a description of the proposed method of assessing the environmental aspects including aspects to be assessed by specialists;*
- (v) a description of the proposed method of assessing duration and significance;*
- (vi) an indication of the stages at which the competent authority will be consulted;*
- (vii) particulars of the public participation process that will be conducted during the environmental impact assessment process; and*
- (viii) a description of the tasks that will be undertaken as part of the environmental impact assessment process;*
- (ix) identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.”*

## 1 ALTERNATIVES

Four alternatives were developed during scoping. The conclusion as reported in the Scoping Report is that the following will be investigated:

Preferred option: Alternative 1

No-Go Option: Alternative 4

As outlined in the comments and response report in the draft Scoping Report:

*“2.3The draft Scoping Report has identified various alternatives. Available information from especially the vegetation assessment, fresh water features and heritage indicators indicated that only Alternative 1 is a viable option and could therefore be investigated in the EIA phase. As required by the Regulations the No Go Option is compulsory for investigation in the EIA phase.”*

We understood Scoping to be the process in which you identify viable alternatives; this was done as indicated above. It is therefore unclear which other alternatives could be assessed.

## 2 SPECIALIST STUDIES & REPORTS

The following EIA specialist reports are required (see Appendix A in section 9 for Terms of Reference):

- Heritage/Archaeology Assessment
- Vegetation Report
- Socio-Economic summary report
- Water Use License Application

Apart from the EIA impact studies listed above the following information studies will also be undertaken (see Appendix B in section 10 for TOR):

- EMP

## 3 RESPONSE TO COMMENTS FROM SCOPING

The final comment tables from scoping (include comments on Executive Summary and draft and final Scoping Report) will be included in Appendix C in section 11. All consultants will provide responses on applicable comments in their reports.

Any comments or requirements from DENC when accepting the Scoping Report will be included in Appendix D in section 12.

## 4 REPORT REQUIREMENTS

The guidelines for EIA (Appendix 6 of NEMA 2014) reports state *inter alia* with reference to impact studies that the following must be included:

*“Specialist reports*

*(1) A specialist report prepared in terms of these Regulations must contain-*

*(a) details of-*

*(i) the specialist who prepared the report; and*

*(ii) the expertise of that specialist to compile a specialist report including a curriculum vitae;*

*(b) a declaration that the specialist is independent in a form as may be specified by the competent authority;*

*(c) an indication of the scope of, and the purpose for which, the report was prepared;*



- (d) the date and season of the site investigation and the relevance of the season to the outcome of the assessment;*
- (e) a description of the methodology adopted in preparing the report or carrying out the specialised process; the specific identified sensitivity of the site related to the activity and its associated structures and infrastructure;*
- (g) an identification of any areas to be avoided, including buffers;*
- (h) a map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers;*
- (i) a description of any assumptions made and any uncertainties or gaps in knowledge; a description of the findings and potential implications of such findings on the impact of the proposed activity, including identified alternatives on the environment;*
- (k) any mitigation measures for inclusion in the EMPr;*
- (l) any conditions for inclusion in the environmental authorisation;*
- (m) any monitoring requirements for inclusion in the EMPr or environmental authorisation;*
- (n) a reasoned opinion-*
  - (i) as to whether the proposed activity or portions thereof should be authorised; and*
  - (ii) if the opinion is that the proposed activity or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan;*
- (o) a description of any consultation process that was undertaken during the course of preparing the specialist report;*
- (p) a summary and copies of any comments received during any consultation process and where applicable all responses thereto; and any other information requested by the competent authority."*

## **5 A DESCRIPTION OF THE PROPOSED METHOD OF IDENTIFYING AND ASSESSING IMPACTS**

The requirements of each impact report are shown in the TOR in Appendix A in section 9. Apart from those requirements each impact report (botanical assessment report, socio-economic summary report and heritage impact assessment report) must include a section that covers the above (A) i to vii,(B) and (C). Examples of comparative assessment of impacts are shown below. Consultants must use similar methods in their reports.

### **IMPACTS**

Apart from a summary in words the impacts and ratings must also be summarised in table form.

### **MITIGATION MEASURES**

Apart from a summary in words the impacts and ratings must also be summarised in table form.

**COMPARISON OF IMPACTS** – Use actual numbers wherever possible

## **6 DESCRIPTION OF THE ACTIVITY TO BE UNDERTAKEN**

A development diagram will be developed for each alternative together with a description of the activity. The specialist consultants will use these diagrams and descriptions to compile their impact assessment reports.

## **7 TASKS TO BE PERFORMED DURING EIA**

### **7.1 Advertise and meetings**

On completion of the draft EIR all I&APs on the database will be informed about the availability thereof. The various authorities will be approached directly to finalise their comments. The authorities will include DENC, DWS, Dept of Agriculture, and Kai! Garieb Municipality, and Nature Conservation.

DENC will be consulted regularly and informed about progress during the EIA phase.

## **8 STAGES AT WHICH DEA&DP WILL BE CONSULTED**

- (a) On submission of this Plan of Study for EIA.
- (b) On presentation of the draft and final EIR.
- (c) Draft EIR for comment to Authorities

Additional formal or informal consultation will be requested at other times in order to satisfy all environmental requirements and regulations.

## 9 APPENDIX A - TOR FOR SPECIALIST REPORTS

### 9.1 Heritage/Archaeology

#### INTRODUCTION

Details of the alternatives to be investigated will be made available through a layout diagram and description of each.

#### BASELINE STUDIES

No baseline study will be done.

#### LEGISLATION

Legislation would include:

The National Heritage Resources Act (NHRA) No. 25 of 1999 protects a variety of heritage resources as follows:

- Section 34: structures older than 60 years;
- Section 35: palaeontological, prehistoric and historical material (including ruins) more than 100 years old;
- Section 36: graves and human remains older than 60 years and located outside of a formal cemetery administered by a local authority; and
- Section 37: public monuments and memorials.

Following Section 2, the definitions applicable to the above protections are as follows:

- Structures: “any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith”;
- Palaeontological material: “any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace”;
- Archaeological material: a) “material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures”; b) “rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation”; c) “wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation”; and d) “features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found”;
- Grave: “means a place of interment and includes the contents, headstone or other marker of such a place and any other structure on or associated with such place”; and
- Public monuments and memorials: “all monuments and memorials a) “erected on land belonging to any branch of central, provincial or local government, or on land belonging to any organisation funded by or established in terms of the legislation of such a branch of government”; or b) “which were paid for by public subscription, government funds, or a public-spirited or military organisation, and are on land belonging to any private individual.”

While landscapes with cultural significance do not have a dedicated Section in the NHRA, they are protected under the definition of the National Estate (Section 3). Section 3(2)(c) and (d) list “historical settlements and townscapes” and “landscapes and natural features of cultural significance” as part of the National Estate. Furthermore, Section 3(3) describes the reasons a place or object may have cultural heritage value.

Section 38 (2a) states that if there is reason to believe that heritage resources will be affected then an impact assessment report must be submitted. This report fulfils that requirement.

For this proposed development the following is applicable:

#### 1. Legal requirements

In terms of Section 38 (1) (c) (iii) of the National Heritage Resources Act 1999 (Act 25 of 1999), a Heritage Impact Assessment (HIA) of the proposed project is required if the footprint area of the proposed development is more than 5000m<sup>2</sup> in extent.

Section 38 (1) (a) of the Act also indicates that any person constructing a powerline, pipeline or road, or similar linear development or barrier exceeding 300m in length is required to notify the responsible heritage resources authority, who will in turn advise whether an impact assessment report is needed before development can take place.

#### 2. Aim of the AIA

The overall purpose of the AIA is to assess the sensitivity of archaeological resources in the affected areas, to determine the potential impacts on such resources, and to avoid and/or minimize such impacts by means of management and/or mitigation measures.

The significance of archaeological resources was assessed in terms of their content and context. Attributes considered in determining significance include artefact and/or ecofact types, rarity of finds, exceptional items, organic preservation, potential for future research, density of finds and the context in which archaeological traces occur

Under the National Environmental Management Act (No. 107 of 1998; NEMA), as amended, the project is subject to an EIA. Ngwao-Boswa Ya Kapa Bokoni (Heritage Northern Cape; for built environment and cultural landscapes) and the South African Heritage Resources Agency (SAHRA for archaeology and palaeontology) are required to provide comment on the proposed project in order to facilitate final decision making by the Northern Cape Department of Environment and Nature Conservation.

## **IMPACT ASSESSMENT**

### **METHODS:**

#### Literature survey

A survey of available literature should be carried out to assess the general heritage context into which the development would be set. This literature included published material, unpublished commercial reports and online material, including reports sourced from the South African Heritage Resources Information System (SAHRIS).

#### Field survey

A field survey should be done. During the survey the positions of finds should be recorded on a hand-held GPS receiver set to the WGS84 datum. Photographs should be taken at times in order to

capture representative samples of both the affected heritage and the landscape setting of the proposed agricultural development.

### Grading

Section 7 of the NHRA provides for the grading of heritage resources into those of National (Grade 1), Provincial (Grade 2) and Local (Grade 3) significance. Grading is intended to allow for the identification of the appropriate level of management for any given heritage resource. Grade 1 and 2 resources are intended to be managed by the national and provincial heritage resources authorities, while Grade 3 resources would be managed by the relevant local planning authority. These bodies are responsible for grading, but anyone may make recommendations for grading – something that is, at times, required in HIAs.

It is intended that the various provincial authorities formulate a system for the further detailed grading of heritage resources of local significance but this is generally yet to happen. Heritage Western Cape (2012), however, uses a system in which resources of local significance are divided into Grade 3A, 3B and 3C. These approximately equate to high, medium and medium-low local significance, while sites of low or very low significance (and generally not requiring mitigation or other interventions) are referred to as ungradeable.

## TABLE OF CONTENTS

The report must be submitted in both digital and printed format and should *at least* include the following sections:

1. EXECUTIVE SUMMARY (must include at least a full summary of section 6 for transfer to the EIR)
2. INTRODUCTION AND DESCRIPTION OF STUDY
3. TERMS OF REFERENCE
4. METHODOLOGY
5. RESULTS/FINDINGS
6. ASSESSMENT OF IMPACTS
  - 6.1 Comparative analysis (use criteria for assessment as described above)
    - (i) cumulative impacts;
    - (ii) the nature of the impact;
    - (iii) the extent and duration of the impact;
    - (iv) the probability of the impact occurring;
    - (v) the degree to which the impact can be reversed;
    - (vi) the degree to which the impact may cause irreplaceable loss of resources; and
    - (vii) the degree to which the impact can be mitigated;
  - 6.2 a description of any assumptions, uncertainties and gaps in knowledge;
  - 6.3 an environmental impact statement which contains –
    - o a summary of the key findings of the environmental impact assessment; and



- a comparative assessment of the positive and negative implications of the proposed activity and identified alternatives;
- 7. DISCUSSION (including management recommendations for construction and operation phases; response to I&AP comments)
- 8. MANAGEMENT PLANS
- 9. CONCLUSIONS (must include summary tables as described in section 5 of PoSfEIA)
- 10. RECOMMENDATIONS
- 11. APPENDICES (including impact assessment tables)

<b>IMPACT</b>		
Please refer to details in Box 16		
Nature of impact		
STAGE	CONSTRUCTION PHASE	OPERATION PHASE
Extent		
Duration		
Intensity or magnitude		
Probability		
Significance		
Confidence		
Accumulative Impact		
Legal aspects		
Mitigation measures		
Level of significance after mitigation		
EMP requirements		
Discussion		

## 9.2 Botanical

### INTRODUCTION

Details of the alternatives to be investigated will be made available through a layout diagram and description of each.

### BASELINE STUDIES

The Baseline studies have been completed and should include at least the following:

- Describe the broad ecological characteristics of the site and its surrounds in terms of any mapped spatial components of ecological processes and/or patchiness, patch size, relative isolation of patches, connectivity, corridors, disturbance regimes, ecotones, buffering, viability, etc.
- In terms of biodiversity pattern, identify or describe:

#### *Community and ecosystem level*

- The main vegetation, its aerial extent and interaction with neighbouring types, soils or topography;
- The types of plant communities that occur in the vicinity of the site
- Threatened or vulnerable ecosystems (*see sources listed in box 4*).

#### *Species level*

1. Red Data Book species (give location if possible using GPS)
2. The viability of and estimated population size of the RDB species that are present (include the degree of confidence in prediction based on availability of information and specialist knowledge, i.e. High=70-100% confident, Medium 40-70% confident, low 0-40% confident)
3. The likelihood of other RDB species, or species of conservation concern, occurring in the vicinity (include degree of confidence).

#### *Other pattern issues*

- Any significant landscape features or rare or important vegetation associations such as seasonal wetlands, alluvium, seeps, quartz patches or salt marshes in the vicinity.
- The extent of alien plant cover of the site, and whether the infestation is the result of prior soil disturbance such as ploughing or quarrying (alien cover resulting from disturbance is generally more difficult to restore than infestation of undisturbed sites).
- The condition of the site in terms of current or previous land uses.
- In terms of biodiversity process, identify or describe:
  - The key ecological “drivers” of ecosystems on the site and in the vicinity, such as fire.
  - Any mapped spatial component of an ecological process that may occur at the site or in its vicinity (i.e. *corridors* such as watercourses, upland-lowland gradients, migration routes, coastal linkages or inland-trending dunes, and *vegetation boundaries* such as edaphic interfaces, upland-lowland interfaces or biome boundaries)
  - Any possible changes in key processes, e.g. increased fire frequency or drainage/artificial recharge of aquatic systems.

- Would the conservation of the site lead to greater viability of the adjacent ecosystem by securing any of the functional factors listed in the first bullet?
- Would the site or neighbouring properties potentially contribute to meeting regional conservation targets for both biodiversity pattern and ecological processes?

## LEGISLATION

Legislation would include:

<b>Box 4 :      Legislation of relevance to the biodiversity specialist<sup>10</sup></b>
<p>The particular context of the EIA, nature of the proposed project and of the receiving environment will determine which – if any – of the following are relevant.</p> <p>At an international level:</p> <ul style="list-style-type: none"> <li>▪ <i>Convention on Biological Diversity;</i></li> <li>▪ <i>The Ramsar Convention (on wetlands of international importance especially as waterfowl habitat);</i></li> <li>▪ <i>The Bonn Convention (on conservation of migratory species of wild animals);</i></li> <li>▪ <i>The World Heritage Convention;</i></li> <li>▪ <i>The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).</i></li> </ul> <p>At a regional level, the Action Plan of the Environmental Initiative of NEPAD (the New Partnership for Africa's Development), 2003, advocates sustainable development and associated conservation and wise use of biodiversity.</p>

<p>At a national level:</p> <ul style="list-style-type: none"> <li>▪ <i>The National Environmental Management (NEMA) (Act No. 107 of 1998);</i></li> <li>▪ <i>The National Environmental Management Protected Areas (Act No. 57 of 2003);</i></li> <li>▪ <i>The National Environmental Management Biodiversity (Act No. 10 of 2004);</i></li> <li>▪ <i>Environment Conservation Act (Act No. 73 of 1989) and associated EIA Regulations [to be replaced by regulations i.t.o. NEMA];</i></li> <li>▪ <i>Sea Birds and Seals Protection Act (Act No. 46 of 1973);</i></li> <li>▪ <i>Marine Living Resources Act (Act No. 18 of 1998);</i></li> <li>▪ <i>Mountain Catchment Areas Act (Act No. 63 of 1970);</i></li> <li>▪ <i>National Heritage Resources Act (Act No. 25 of 1999), and provincial regulations;</i></li> <li>▪ <i>National Water Act (Act No. 36 of 1998);</i></li> <li>▪ <i>Conservation of Agricultural Resources Act (Act No. 43 of 1983);</i></li> <li>▪ <i>National Forests Act (Act No. 84 of 1998);</i></li> <li>▪ <i>Lake Areas Development Act (Act No. 39 of 1975);</i></li> <li>▪ <i>Sea Shore Act (Act No. 21 of 1935);</i></li> <li>▪ <i>Atmospheric Pollution Prevention Act (Act No. 45 of 1965).</i></li> </ul> <p>At provincial level:</p> <ul style="list-style-type: none"> <li>▪ <i>Western Cape Nature Conservation Laws Amendment Act (Act No. 3 of 2000);</i></li> <li>▪ <i>The Provincial Spatial Development Framework (PSDF) in terms of the Municipal Systems Act (Act No. 32 of 2000);</i></li> </ul> <p><i>Spatial Development Frameworks (SDFs) at municipal level, in terms of the Municipal Systems Act 32 of 2000. The preparation of an SDF draws on bioregional planning principles.</i></p>
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## IMPACT ASSESSMENT

To determine the current status and trends in biodiversity key sources of biodiversity must be assessed. Key sources are listed below.

**Box 13 : Key sources of biodiversity information**

- The National Spatial Biodiversity Assessment<sup>36</sup> (NSBA) should be a 'first stop' reference for any biodiversity assessment, as should the NBSAP which prioritises areas for action. The NSBA gives the national ecosystem status (i.e. critically endangered, endangered, vulnerable or not currently threatened) for terrestrial, river, marine and estuarine ecosystems; wetlands are to be included in future.
- The new South African vegetation map (South African National Biodiversity Institute<sup>37</sup>). The NSBA gives the national ecosystem status of vegetation types in this map.
- The Conservation Planning Unit of CapeNature (<http://cpu.uwc.ac.za/home>), which gives information on:
  - Systematic biodiversity planning outputs, at broad and/or fine-scale spatial scales (Cape Floristic Region: CAPE, Succulent Karoo: SKEP, Subtropical Thicket: STEP, Cape Lowlands Renosterveld Project), plus guides for users<sup>38</sup>. These plans provide information on both important pattern and process corridors. Depending on their scale, they can be used as a trigger of potential biodiversity significance or, at fine-scale, to inform an EIA.
  - Regional biodiversity corridor initiatives (e.g. Greater Cederberg Biodiversity Corridor initiative, Gouritz Initiative). These corridors 'capture' both pattern and process.
- CapeNature's State of Biodiversity : 2000 report [[www.capenature.org.za/know\\_how/html/sobintro.html](http://www.capenature.org.za/know_how/html/sobintro.html)] describes critical habitats for reptiles and amphibians, birds and mammals in the Western Cape.
- Fynbos Forum's Ecosystem-specific Guidelines (Box 14).
- Information on threatened ecosystems and species held by CapeNature's Land Use Advisory Unit and regional ecologists.

- The biodiversity expertise within the Scientific Services section of CapeNature for information on specific taxa, as relevant (e.g. invertebrates, frogs, fishes, mammals, birds).
- Additional information (e.g. Protea Atlas, Frog Atlas and Bird Atlas) held by research institutions who carry out work on biodiversity, such as universities, technikons and the National Biodiversity Institute, the South African Natural History Museum in Cape Town (various specialists), the Plant Protection Research Institute in Pretoria (arthropod and fungi specialists).
- South African Red Data Books, provided that these are current (e.g. Red Data Book for Mammals, produced by the Endangered Wildlife Trust 2004), IUCN's Red List, and other protected or threatened species lists (e.g. in terms of the Biodiversity Act).
- The River Health Programme gives information on the ecological state of certain river systems [[www.csir.co.za/rivercons/related.html](http://www.csir.co.za/rivercons/related.html)].
- Provincial or local State of Environment Report.

The report must specifically address the following:

- a) Species level (Vegetation):
  - i. A comprehensive species list of each vegetation unit, with an indication of the dominant or most abundant species.
  - ii. Each vegetation unit should be assessed individually.
  - iii. The quality of each vegetation unit should also be assessed with reference to the number and type of exotic woody plants and weeds occurring in each unit. The level of disturbances, such as trampling, grazing and erosion should also be recorded.
  
- (b) Mitigation actions (Vegetation):

13



- i. Mitigate impact by reducing footprint in terms of pattern and process.
  - ii. Mitigation must be functional in terms of ecosystem processes.
- (c) The Biodiversity Impact Assessment (Vegetation) report must confirm the level of significance (low, medium or high) of the impact on:
- i. Threatened ecosystems
  - ii. Special habitats/threatened or rare species
  - iii. Habitat in the ecological corridors of vegetation boundaries
- (d) The significance rating in the Biodiversity Impact Assessment (Vegetation) report must be linked to some threshold and meaningful context.
- (e) The Biodiversity Impact Assessment (Vegetation) report must also report on gaps in information and uncertainty.

A report is required that describes and assesses the impacts of the alternatives that were identified (use table at the end of this document). The impact assessment will need to consider the potential negative as well as positive impacts that would result from the proposed development and should include mitigation measures to reduce the negative impacts as well as measures that would enhance the positive impacts. Please include in the report all aspects that will impact on the vegetation (e.g. fire management) together with future management recommendations that would be included in the Environmental Management Plan.

Together with the above also provide a response to the I&AP comments as captured in the Scoping Report.

## **CRITERIA FOR ASSESSMENT**

The criteria for assessment of impacts are as follows (NEMA Regulations 32(k))

- (i) cumulative impacts;
- (ii) the nature of the impact;
- (iii) the extent and duration of the impact;
- (iv) the probability of the impact occurring;
- (v) the degree to which the impact can be reversed;
- (vi) the degree to which the impact may cause irreplaceable loss of resources; and
- (vii) the degree to which the impact can be mitigated;

The following can be used as a guide when assessing impacts.

The criteria in the box below must be used for the assessment of impacts. Although not listed, legal aspects must be added.

**Box 16: Criteria used for the assessment of impacts**

**Nature of the impact** – A description of positive or negative effect of the project on the affected environment, or *vice versa*. This description should include who or what would be affected, and how.

**Extent** - the impact could:

- be site – specific;
- be limited to the site and its immediate surroundings;
- have an impact on the *region* (e.g. if communities rely on biodiversity);
- have an impact on a *national* scale (e.g. national biodiversity conservation targets);
- have an impact across *international* borders (e.g. where catchments cross international border, international conventions are concerned, or migratory species).

**Duration** – It is important to indicate whether or not the lifetime of the impact will be:

- *short term* (e.g. during the construction phase);
- *medium term* (e.g. during part or all of the operational phase);
- *long term* (e.g. beyond the operational phase, but not permanently);
- *permanent* (where the impact is for all intents and purposes irreversible. An irreversible negative impact may also result in irreplaceable loss of natural capital or biodiversity, if it were to result in extinction or loss of a species or ecosystem); or
- *discontinuous or intermittent* (where the impact may only occur during specific climatic conditions or during a particular season of the year).

**Intensity or magnitude** – The size of the impact (if positive) or its severity (if negative):

- *low*, where biodiversity is negligibly affected or where the impact is so low that remedial action is not required;
- *medium*, where biodiversity pattern, process and/or ecosystem services are altered, but not severely affected, and the impact can be remedied successfully; and
- *high*, where pattern, process and/or ecosystem services would be substantially (i.e. to a very large degree) affected. If a negative impact, could lead to irreplaceable loss of biodiversity and/or unacceptable consequences for human wellbeing.

**Probability** – Should describe the likelihood of the impact actually occurring indicated as:

- *improbable*, where the possibility of the impact is very low either because of design or historic experience;
- *probable*, where there is a distinct possibility that the impact will occur;
- *highly probable*, where it is most likely that the impact will occur; or
- *definite*, where the impact will occur regardless of any prevention measures.

**Significance** – The significance of impacts can be determined through a synthesis of the assessment criteria. Significance can be described as:

- *low*, where it would have negligible effect on biodiversity, and on the decision;
- *medium*, where it would have a moderate effect on biodiversity, and should influence the decision;
- *high*, where it would have, or there would be a high risk of, a large effect on biodiversity. These impacts should have a major influence on the decision;
- *very high*, where it would have, or there would be a high risk of, an irreversible negative impact on biodiversity and irreplaceable loss of natural capital or a major positive effect. Impacts of very high significance should be a central factor in decision-making.

**Confidence** – The level of confidence in predicting the impact can be described as:

- *low*, where there is little confidence in the prediction, due to inherent uncertainty about the likely

response of the receiving ecosystem, or inadequate information;

- *medium*, where there is a moderate level of confidence in the prediction; or
- *high*, where the impact can be predicted with a high level of confidence.

*Source: Adapted from criteria used by the Department of Environmental Affairs and Tourism, 1998.*

## TABLE OF CONTENTS

The report must be submitted in both digital and printed format and should *at least* include the following sections:

12. EXECUTIVE SUMMARY (must include at least a full summary of section 6 for transfer to the EIR)
13. INTRODUCTION AND DESCRIPTION OF STUDY
14. TERMS OF REFERENCE
15. METHODOLOGY
16. RESULTS/FINDINGS
17. ASSESSMENT OF IMPACTS
  - 6.1 Comparative analysis (use criteria for assessment as described above)
    - (i) cumulative impacts;
    - (ii) the nature of the impact;
    - (iii) the extent and duration of the impact;
    - (iv) the probability of the impact occurring;
    - (v) the degree to which the impact can be reversed;
    - (vi) the degree to which the impact may cause irreplaceable loss of resources; and
    - (vii) the degree to which the impact can be mitigated;
  - 6.2 a description of any assumptions, uncertainties and gaps in knowledge;
  - 6.3 an environmental impact statement which contains –
    - o a summary of the key findings of the environmental impact assessment; and
    - o a comparative assessment of the positive and negative implications of the proposed activity and identified alternatives;
18. DISCUSSION (including management recommendations for construction and operation phases; response to I&AP comments)
19. CONSERVATION MANAGEMENT PLANS AND PLANT LISTS
20. CONCLUSIONS (must include summary tables as described in section 5 of PoSfEIA)
21. RECOMMENDATIONS
22. APPENDICES (including impact assessment tables)

<b>IMPACT</b>		
Please refer to details in Box 16		
Nature of impact		
<b>STAGE</b>	<b>CONSTRUCTION PHASE</b>	<b>OPERATION PHASE</b>
Extent		
Duration		
Intensity or magnitude		
Probability		
Significance		
Confidence		
Accumulative Impact		
Legal aspects		
Mitigation measures		
Level of significance after mitigation		
EMP requirements		
Discussion		

### 9.3 Water Use License Application

The purpose of the National Water Act is to provide a framework for the equitable allocation and sustainable management of water resources. Both surface and groundwater sources are redefined by the Act as national resources which cannot be owned by any individual, and rights to which are not automatically coupled to land rights, but for which prospective users must apply for authorisation and register as users. The National Water Act also provides for measures to prevent, control and remedy the pollution of surface and groundwater sources.

An application for a license in terms of the National Water Act, 1998 is made by the developer, Oseiland Boerderye for the transfer water rights, taking of water from the Orange River, the water usages is summarised as the follows:

<i>(a) taking water from a water resource;</i>	Transfer of water rights
<i>(c) impeding or diverting the flow of water in a watercourse</i>	Impeding flow
<i>(i): altering the bed, banks, course or characteristics of a watercourse;</i>	Altering the banks of a water course

All the necessary information will be included in the WULA as part of the EIA phase of the application.



## 10 TOR FOR REPORTS

Reports, other than impact studies, that will complete the suite of reports required for the EIR are:

Note: Each report must include a section with response(s) to relevant comments (see Appendix 11).

The following EIA specialist reports are required (see Appendix A in section 9 for Terms of Reference):

### Specialist reports

- Heritage/archaeology assessment
- Vegetation Report
- Socio-Economic summary report
- Water Use License Application

### Other reports

- EMP

## 11 APPENDIX C – COMMENTS FROM SCOPING

As per the Final Scoping Report, see section 12.3.

## 12 APPENDIX D – COMMENTS FROM NORTHERN CAPE DEPARTMENT OF ENVIRONMENT AND NATURE CONSERVATION

Will be inserted when available

# 12 Other

## 12.1 Curriculum Vitae

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Wellington 7654

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Cell: 076 584 0822  
Fax: 0866721916  
E-mail: elaniem@africa.com

### Elanie Kühn

<b>Nationality</b>	South African		
<b>Date of birth</b>	20 February 1983		
<b>Qualifications</b>	B.Sc. Degree (Zoology & Physiology) B Sc. Hons.(Environmental Management)	North West University – Potchefstroom North West University – Potchefstroom	2004 2005
<b>Special courses</b>	None additional to the above.		
<b>Professional membership</b>	None		
<b>Career</b>	2010 - current 2006 - 2009 2005	Pieter Badenhorst Professional Services - Wellington Doug Jeffrey Environmental Consultants - Paarl DERA Environmental Consultancy - Klerksdorp	
<b>Current position</b>	Environmental Consultant at Pieter Badenhorst Professional Services cc. As a private consultant now provide consultancy services in Environmental Management, Public Participation and Project Management.		
<b>Professional experience</b>	9 years experience in environmental studies and management. Produced various Basic Assessment, Scoping and Environmental Impact Reports, Environmental Management Plans and as an Environmental Control Officer for many developments.		
<b>Publications/ Contracts</b> (A full list is available on request)	<ul style="list-style-type: none"> <li>● Basic Assessment Reports</li> <li>● Scoping and Environmental Impact reports.</li> <li>● Environmental Management Plans –construction and operation.</li> <li>● S24G Applications</li> <li>● Waste License Applications</li> <li>● Water Use License Applications</li> <li>● Quarry applications/EMPRs</li> <li>● Mining Rights and Prospecting Rights applications</li> <li>● Environmental Control Officer (ECO)</li> <li>● Auditing Reports</li> </ul>		

## 12.2 EAP declaration

This was included as part of the application form.



### 12.3 **Additional information**

Correspondence with ESKOM for application for additional capacity for pump station.

**From:** [Charel](#)  
**To:** [Elanie \(office\)](#)  
**Subject:** Fw: ref no: 200125568  
**Date:** Wednesday, 26 April 2017 9:26:55 AM  
**Attachments:** [image001.png](#)

---

----- Original Message -----

**From:** [Elphia Baard](#)  
**To:** 'Charel'  
**Sent:** Thursday, March 30, 2017 3:01 PM  
**Subject:** FW: ref no: 200125568



Vriendelike groete,  
Elphia Baard

Koms Raadgewend (Edms) Bpk  
Posbus 630  
Keimoes  
8860  
(T)0544612009  
(F)0544612010  
0721051939  
BTW No 4800164214

---

**From:** Suzette Van Schalkwyk [<mailto:vSchalkS@eskom.co.za>]  
**Sent:** 30 March 2017 02:51 PM  
**To:** Elphia Baard  
**Subject:** RE: ref no: 200125568

Hi

Nee ongelukkig nie, julle sal bietjie geduldig moet wees, ons het geen advisor in ons area nie en is afhanlik van ander areas se advisors.

Suzette

---

**From:** Elphia Baard [<mailto:elphia@koms.co.za>]  
**Sent:** 30 March 2017 12:06 PM  
**To:** Suzette Van Schalkwyk  
**Cc:** Ewert Steyn  
**Subject:** ref no: 200125568

Goeiedag,

Ek volg sommer net op of daar dalk al 'n kwotasie is vir die Oseiland projek? ref no: 200125568



Vriendelike groete,  
Elphia Baard

Koms Raadgewend (Edms) Bpk  
Posbus 630  
Keimoes  
8860  
(T)0544612009  
(F)0544612010  
07 21051939  
BTW No 4800164214

---

**From:** Suzette Van Schalkwyk [<mailto:vschalks@eskom.co.za>]  
**Sent:** 14 March 2017 01:58 PM  
**To:** Elphia Baard  
**Subject:** RE: Aansoekvorm

Hi

Ek het aansoek ontvang en op stelsel gelaai, ref no: 200125568

Baie dankie

Suzette

---

**From:** Elphia Baard [<mailto:elphia@koms.co.za>]  
**Sent:** 13 March 2017 03:50 PM  
**To:** Ewert Steyn  
**Cc:** Suzette Van Schalkwyk; [charel@koms.co.za](mailto:charel@koms.co.za)  
**Subject:** RE: Aansoekvorm

Goeiedag,

Vind aangeheg besonderhede van Oseiland vir kwotasie doeleindes.

Dankie,



Vriendelike groete,  
Elphia Baard

Koms Raadgewend (Edms) Bpk  
Posbus 630  
Keimoes  
8860  
(T)0544612009  
(F)0544612010  
0721051939  
BTW No 4800164214

---

**From:** Ewert Steyn [<mailto:SteynEP@eskom.co.za>]  
**Sent:** 06 March 2017 12:14 PM  
**To:** [elphia@koms.co.za](mailto:elphia@koms.co.za)  
**Cc:** Suzette Van Schalkwyk  
**Subject:** Aansoekvorm

Hi Elphia

Aangeheg is die aansoekvorm wat voltooi moet word deur Oseiland. Stuur asb die voltooide aansoek na Suzette Van Schalkwyk (gecopy) by ons kantoor op Kakamas sodat die aansoek op ons stelsel gelaai kan word waarna die formele kwotasie voorberei sal word.

Groete.

*Ewert Steyn*

Customer Executive  
Group Customer Service  
Uppington  
PO Box 500 Uppington 8800  
Tel: +27 (0)54 337 4951 PAX 8074 4951  
Cell: +27 (0)82 494 1713  
Fax to e-mail: +27 (0)86 539 0068  
E-Mail: [ewert.steyn@eskom.co.za](mailto:ewert.steyn@eskom.co.za)



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\_\_\_\_\_ Information from ESET Smart Security, version of malware database  
15178 (20170331) \_\_\_\_\_

The message was checked by ESET Smart Security.

<http://www.eset.com>

\_\_\_\_\_ Information from ESET Smart Security, version of malware database  
15315 (20170426) \_\_\_\_\_

The message was checked by ESET Smart Security.

<http://www.eset.com>