

Project Name:

**ENVIRONMENTAL MANAGEMENT PLAN  
FOR THE AMENDMENT AND RENEWAL OF THE  
ENVIRONMENTAL CLEARANCE TO FINALISE THE  
TOWN PLANNING PROCEDURES FOR THE  
DEVELOPMENT OF 43 PORTIONS AND THE  
REMAINDER (STREET) ON THE REMAINDER OF  
FARM KUPFERBERG NO. 33, WINDHOEK,  
KHOMAS REGION**

The Proponent:

**Albida Development Trust  
P O Box 11588  
WINDHOEK**

Prepared by:



1<sup>st</sup> floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia  
PO Box 6871, Ausspannplatz, Windhoek

Release Date:

May 2026

Consultant:

**C. Du Toit  
C. Van Der Walt  
Cell: 081 127 3145**

**Email: [charlie@greenearthnamibia.com](mailto:charlie@greenearthnamibia.com)**

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# 1. INTRODUCTION

According to the Environmental Management Act (2007), the finalization of the Town Planning procedures for the development of 43 portions and the Remainder (Street) on the Remainder of Farm Kupferberg No. 33, Windhoek, Khomas Region are part of the listed activities for which an Environmental Impact Assessment (EIA) has to be conducted and which needs an Environmental Clearance (EC) from the Ministry of Environment, Forestry and Tourism (MEFT) before implementation of the project. The MEFT indicated that they would consider the Environmental Clearance upon the submission of an Environmental Management Plan (EMP).

In accordance with the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007) the activities listed below, which form part of the planning, construction and operation of the project, may not be undertaken without an Environmental Clearance:

## *ENERGY GENERATION, TRANSMISSION AND STORAGE ACTIVITIES*

1. *The construction of facilities for -*
  - (b) *the transmission and supply of electricity;*

## *WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES*

- 2.1 *The construction of facilities for waste sites, treatment of waste and disposal of waste.*
- 2.2 *Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance, 1976.*
- 2.3 *The import, processing, use and recycling, temporary storage, transit or export of waste.*

## *LANDUSE AND DEVELOPMENT ACTIVITIES*

- 5.2 *the establishment of land resettlement schemes.*

## *WATER RESOURCE DEVELOPMENTS*

- 8.6 *Construction of industrial and domestic wastewater treatment plants and related pipeline systems.*

## *INFRASTRUCTURE*

- 10.1 *The construction of-*
  - (a) *oil, water, gas and petrochemical and other bulk supply pipelines;*
  - (b) *public roads;*
- 10.2 *The route determination of roads and design of associated physical infrastructure where -*
  - (a) *it is a public road;*
  - (b) *the road reserve is wider than 30 meters; or*
  - (c) *the road caters for more than one lane of traffic in both directions.*

COW previously (30/09/2020) approved the subdivision of the Remainder of Farm Kupferberg into ±185 residential portions, a street portion and the Remainder. Due to various

considerations like the availability of water, the topography of the site as well as surrounding uses, the COW recommended that the proposed development be scaled down to only 43 residential portions and a street portion which will allow access to the newly created residential portions. This means that the ECC obtained on 13 August 2022 must be amended and renewed to align with COW's latest approval.

The proponent (Albida Development Trust) appointed *Green Earth Environmental Consultants* to prepare an Environmental Management Plan (EMP) to guide the operations of the proposed project. The EMP was prepared from information gathered from the proponent (Albida Development Trust) and knowledge of the site (based upon several site visits) as well as from experience with EIA's and EMP's conducted for other similar operations. The assessment concluded that the project will not pose any long term or irreversible threats to the receiving or surrounding environment if the operations are conducted along the guidelines of this EMP.

The EMP included in this document contains practical measures that should be taken and maintained by the developer and manager of the proposed project in order to prevent potentially negative impacts on the environment, both from the ecological and social perspective. The EMP assigns rules, regulations and responsibilities and can be used by the MEFT and other relevant authorities as checklist to monitor compliance at the site. The idea is to minimize any negative impacts or to completely avoid it if possible, in the operation of the proposed project.

The actions stated in this document (EMP) should be diligently followed to maintain a safe and healthy sustainable environment for future generations residing on the land and immediate environment. The proponent is responsible for overseeing that the EMP is implemented and adhered to at all time. MEFT is kindly requested to consider and approve the EMP below and to issue a Clearance Certificate.

## 2. BACKGROUND AND SITE INFORMATION

### Project location and description:

The following information was obtained from Willie Schutz Town and Regional Planning Consultants:

The project site, the Remainder of Farm Kupferberg No. 33, is located approximately 12 kilometres to the southwest of Windhoek on the C26 (M49) road leading from Windhoek to Walvis Bay. The site is 5 497.2 hectares in extent. The site is located in the Windhoek Town and Townlands north of Regenstein Development and is situated just outside the Aris Town Planning Scheme area and is therefore not zoned and deemed to be "undetermined". The owner intends to subdivide the site into Portion A and the Remainder of Farm Kupferberg No. 33 and to further subdivide Portion A into 43 portions  $\geq 5\text{ha}$  and a street portion of  $\pm 26\text{ha}$  which will provide access to the newly created portions.

The development on Portion A will allow residents to be near amenities such as churches, schools, sports facilities while at the same time in reach of possible work opportunities inside and around the City of Windhoek.

#### Development Proposal:

The Remainder of Farm Kupferberg No. 33 will be subdivided into Portion A ( $\pm 279$ ha) and the Remainder of Farm Kupferberg No. 33 ( $\pm 8218.2$ ha), Portion A will be further subdivided into 43 Portions and the Remainder (Street). The intention is to create the following Portions:

- 42 x “Rural Residential” Portions with densities of not less than 5ha.
- 1x “Tourist Establishment” Portion.
- “Streets” the internal streets are 20m and 15m wide while a 20 meter collector runs east to west through the development. As the Portions will only be 43 in number and the terrain is very hilly making wide streets extremely expensive and unpractical, the collector provided for is only 20m wide and not 30m as requested. The section of the C26 from the bridge to the entrance will also not be tarred as the cost compared to 43 portions is not economically viable.
- This will cater for the need for Rural Residential portions. The area is very hilly and can only accommodate a low density development. The total development will be a green development with the provision of water from 2 x on-site production boreholes, solar power and on-site sewer systems. Portion A is approximately 279 ha in extent featuring mountains and valleys which will make the servicing of erven extremely expensive.

#### The proposed development and layout description:

As indicated, the layout proposes a rural residential development with portions of not smaller than 5ha by the COW and because of the rocky terrain. The proposed development can however not be seen as a stand-alone development as it is interconnected with the City of Windhoek where functions such as schools, hospitals, shopping Centres are provided in a sufficient quantity. As a need was identified to provide for a tourist establishment to complement the existing development, a very scenic portion, Portion one (1) was provided for.

#### Description of the layout:

The layout is influenced by the longitudinal shape of Portion A, main road C26 to the south of the development and the mountainous nature of the landscape rendering only a limited percentage of the land developable. The land use distribution is depicted in *Table 1* and discussed underneath.

Table 1: Land Use Table

Land Use	Total Area (ha)	Number of Erven	Erf Numbers	AVG Erf Size (ha)	% of Area	Density
Rural Residential	232	42	2 to 43	6	83.23%	1:5ha
Tourist Establishment	22	1	1	22	7.99%	N/A
Street	25	1	Remainder	25	8.78%	N/A
Total	279	44			100.00%	

The main objective of the development is to provide low density Rural Residential portions that cater for the medium to high income groups. The layout therefore proposes 42 (forty-two) Rural Residential portions and 1(one) Tourist Establishment portion. To further this goal, the rural residential portion sizes are ranging from 5ha to 9ha with an average erf size of 6ha. The minimum density of the rural residential portions will be 1:5ha. Portion sizes are mostly determined by the slope as the area is very mountainous. One (1) Tourist Establishment erf are provided to cater for a hotel/lodge and related tourist facilities. The site can be accessed from main road M26 (Access approved by Roads Authority) via a 20m collector street. Internal streets are 15m and 20m wide.



Figure 1: Project Site

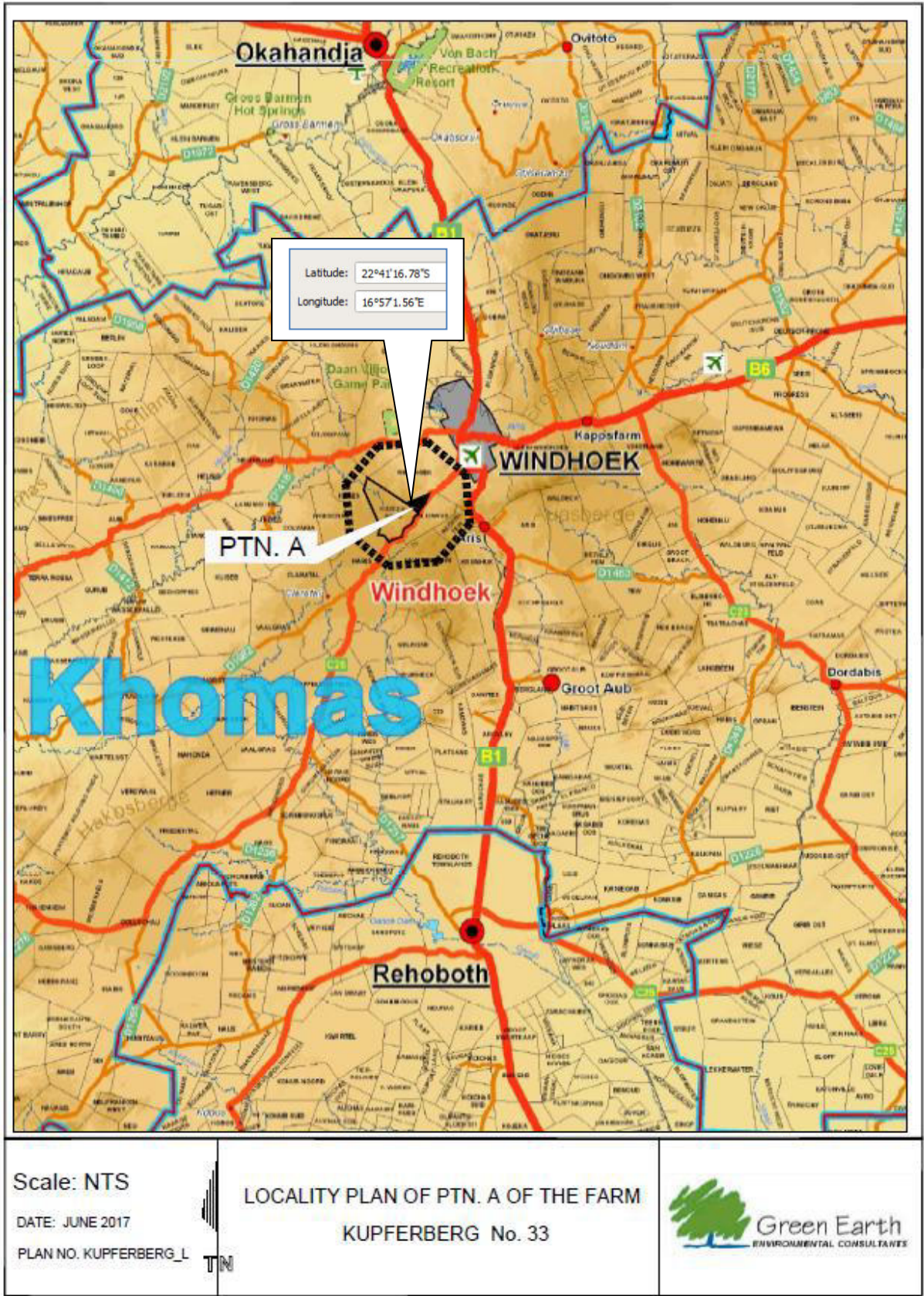


Figure 2: Project Site Locality

## LOCALITY: REMAINDER OF THE FARM KUPFERBERG 33

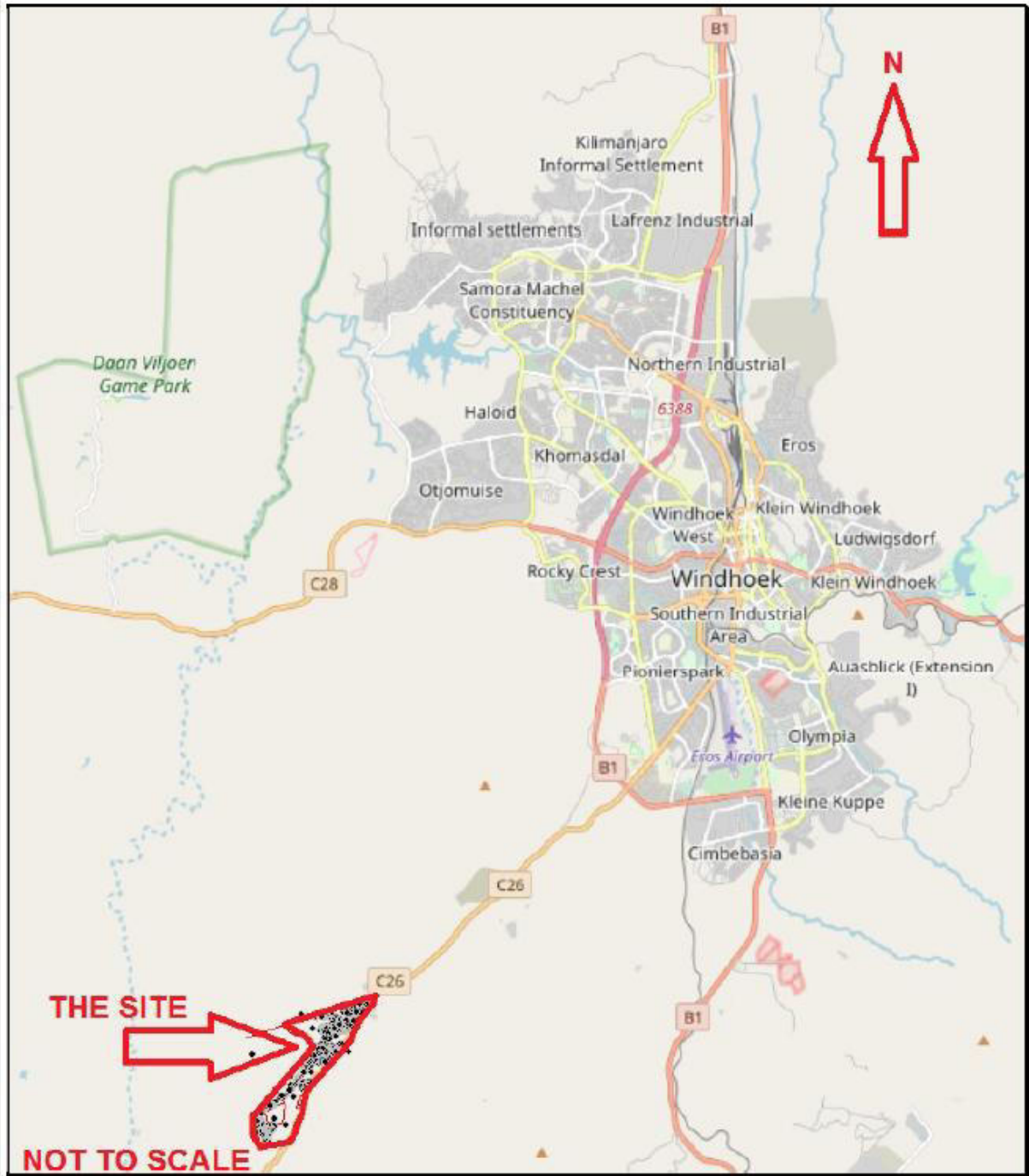


Figure 3: Locality of Project Site with relation to Windhoek (Willie Schutz Town and Regional Planning Consultants)

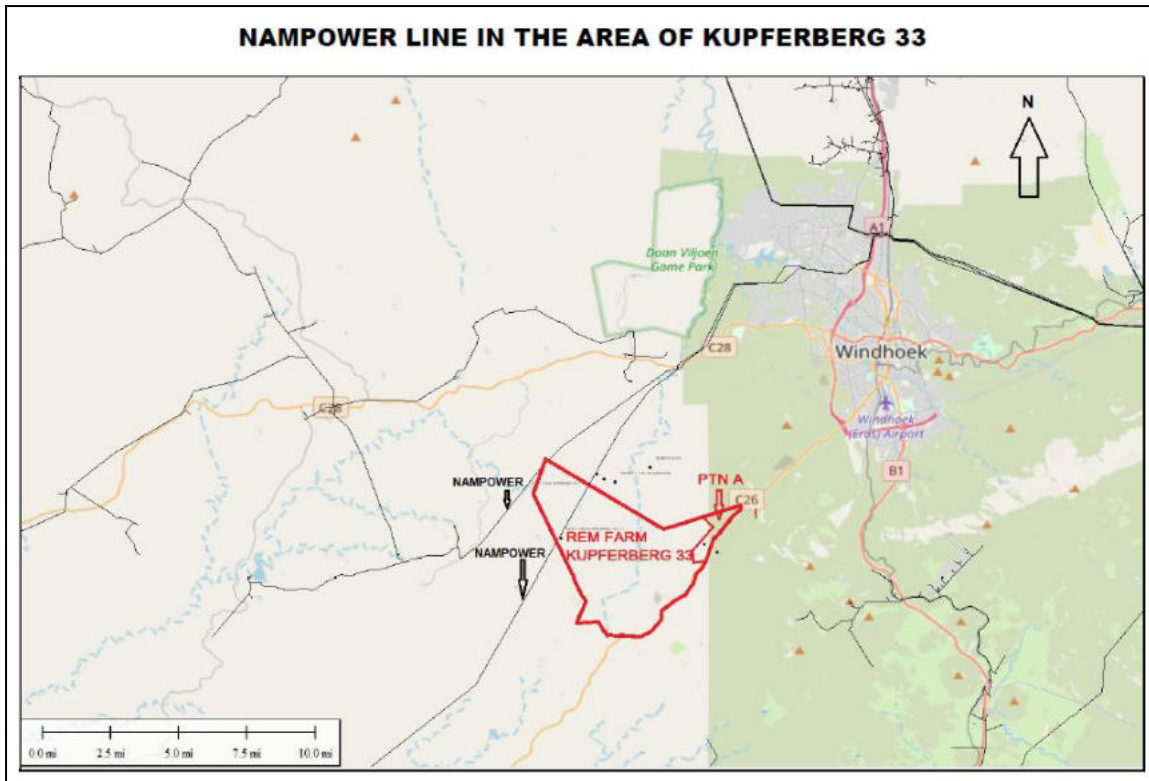


Figure 4: NamPower Line in the area (Willie Schutz Town and Regional Planning Consultants)

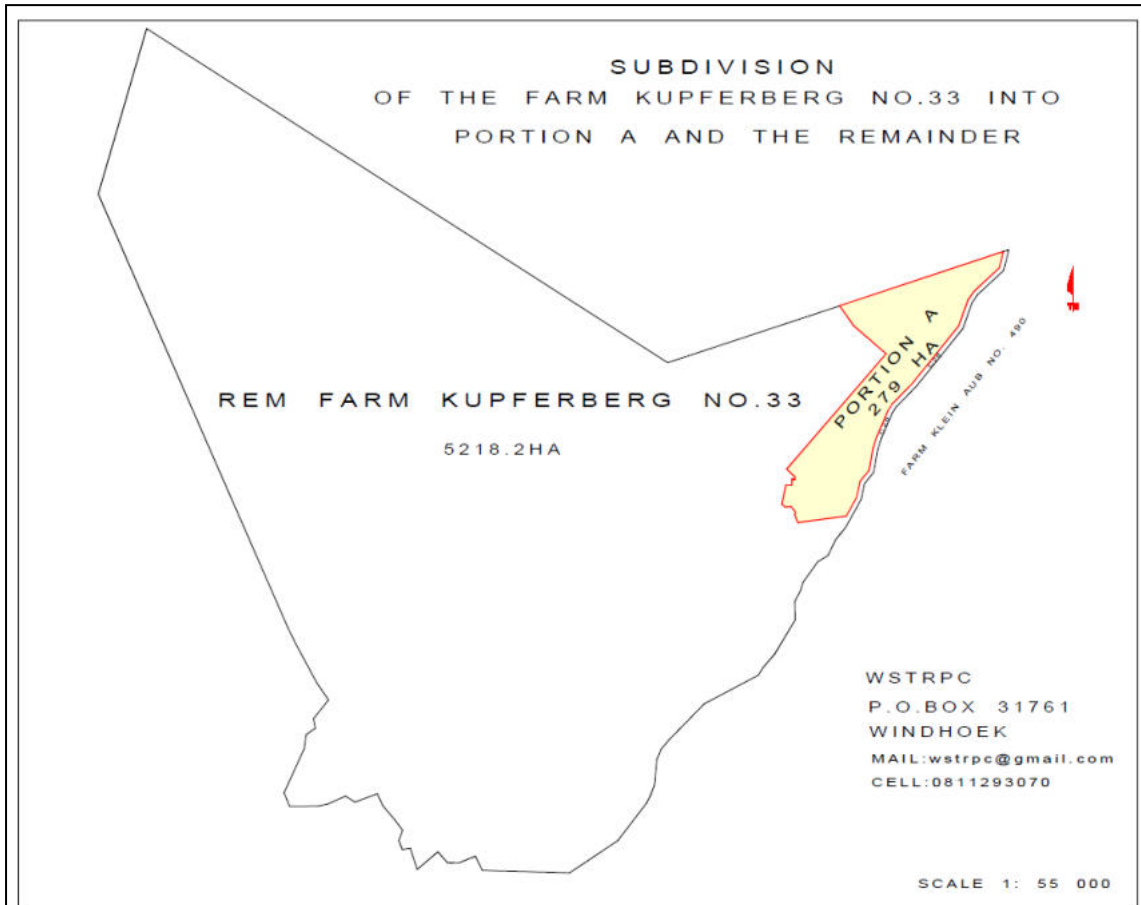


Figure 5: Subdivision of Farm (Willie Schutz Town and Regional Planning Consultants)

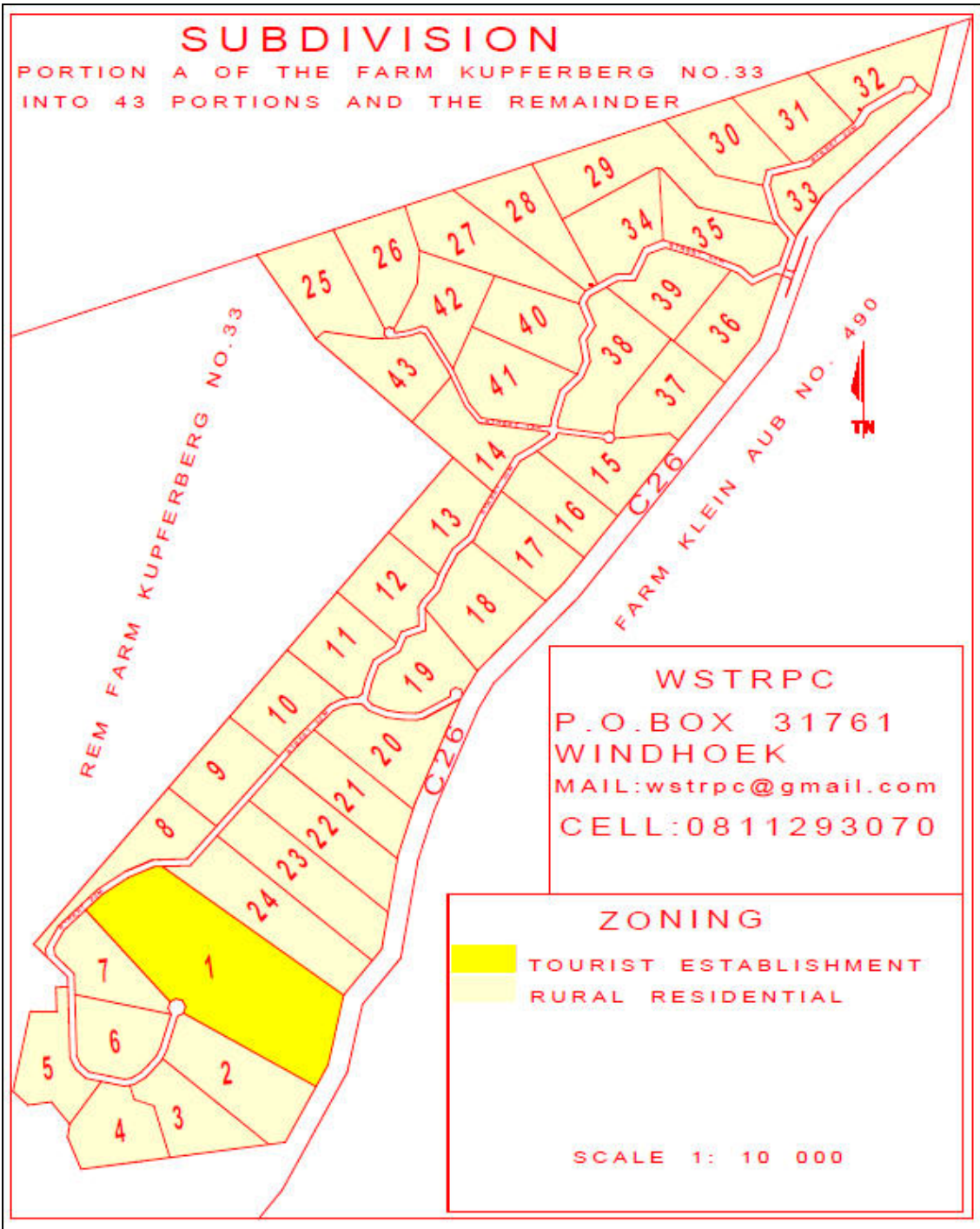


Figure 6: Subdivision of Farm into Portions (Willie Schutz Town and Regional Planning Consultants)

**CONTOUR MAP: SUBDIVISION OF PTN A/33 INTO 43 PORTIONS AND  
REMAINDER (STREET)**

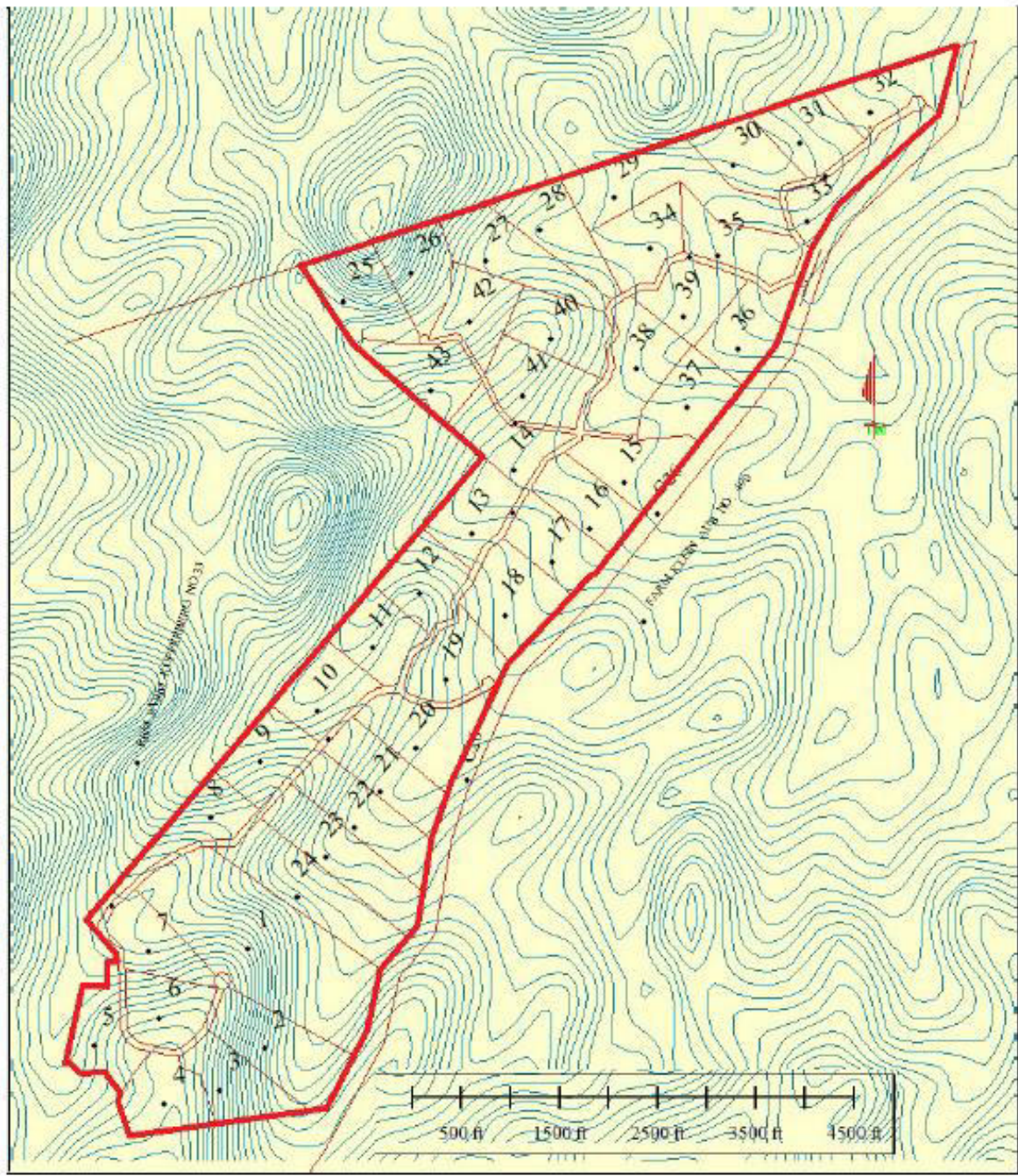


Figure 7: Contour Map (Willie Schutz Town and Regional Planning Consultants)

PORTION AREAS: REMAINDER OF THE FARM KUPFERBERG NO. 33					
Erf Number	Area (HA)	Zoning	Erf Number	Area (HA)	Zoning
1	22.3	Tourist Establishment	23	7.9	Rural Residential
2	8.1	Rural Residential	24	9.0	Rural Residential
3	5.4	Rural Residential	25	6.7	Rural Residential
4	5.3	Rural Residential	26	5.4	Rural Residential
5	5.0	Rural Residential	27	7.0	Rural Residential
6	5.1	Rural Residential	28	5.8	Rural Residential
7	5.0	Rural Residential	29	9.5	Rural Residential
8	5.1	Rural Residential	30	5.0	Rural Residential
9	5.1	Rural Residential	31	5.1	Rural Residential
10	5.1	Rural Residential	32	5.1	Rural Residential
11	5.1	Rural Residential	33	5.0	Rural Residential
12	5.1	Rural Residential	34	5.8	Rural Residential
13	5.1	Rural Residential	35	5.4	Rural Residential
14	5.0	Rural Residential	36	5.5	Rural Residential
15	5.3	Rural Residential	37	5.5	Rural Residential
16	5.0	Rural Residential	38	7.0	Rural Residential
17	5.1	Rural Residential	39	5.0	Rural Residential
18	6.9	Rural Residential	40	5.6	Rural Residential
19	5.3	Rural Residential	41	6.4	Rural Residential
20	6.5	Rural Residential	42	5.1	Rural Residential
21	5.8	Rural Residential	43	5.4	Rural Residential
22	6.8	Rural Residential	Remainder	24.5	Street

Figure 8: Portion area and sizes (Willie Schutz Town and Regional Planning Consultants)

### 3. BULK SERVICES AND INFRASTRUCTURE

The provision of all infrastructure will be done as per the standards set by the COW (Willie Schutz Town and Regional Planning Consultants).

#### 3.1. Access

Access to the proposed development will be obtained from C26 road. The relevant approval for access has been obtained from the Roads Authority.

Internal roads will be surfaced and shaped according to storm water requirements. The construction will be done in line with the requirements of the City of Windhoek (Willie Schutz Town and Regional Planning Consultants).

#### 3.2. Water supply

Bulk water supply will be from two existing production boreholes on site. The total daily demand of 863/day can be supplied by the mentioned boreholes. Adequate storage capacity will be provided in the form of storage tanks and/or reservoirs. 48 Hours of storage will be supplied to ensure security of supply during routine and unforeseen maintenance on supply infrastructure. Fire water and domestic water will be served from the same reticulation network (Willie Schutz Town and Regional Planning Consultants).

### **3.3. Stormwater**

Internal roads and channels will serve as conduits during storm events to convey runoff into formalised water courses. Concrete pipes and rectangular culverts will be utilised where necessary to facilitate drainage and to allow roads to cross storm water courses (*Willie Schutz Town and Regional Planning Consultants*).

### **3.4. Electricity reticulation**

Electricity will be supplied by means of solar power to be installed by individual property owners (*Willie Schutz Town and Regional Planning Consultants*).

### **3.5. Sewage disposal**

Treatment of sewage effluent will be done on site by means of a package treatment plant. The treated effluent will comply with special standards. Internal sewer reticulation will be done by means of class 34 PVC-U sewer pipes (*Willie Schutz Town and Regional Planning Consultants*).

### **3.6. Solid waste disposal**

Solid waste disposal will be done in accordance with regulations. The provision of solid waste disposal services in the area will be undertaken by the local authority or by private designated service providers in the area.

## 4. APPROVALS OBTAINED

### 4.1. City of Windhoek approval

The previous COW approval and ECC were for the development of ±185 residential portions, a street portion and the remainder on the Remainder of Farm Kupferberg No. 33, Windhoek. COW has, however, recommended that the development proposal be scaled down to the creation of 43 residential portions and a street portion to provide access to the newly created residential portions. See below the COW Approval letter dated 27/03/2025 recommending the new approval:

## DEPARTMENT OF URBAN AND TRANSPORT PLANNING

☒ 59

80 Independence Avenue  
WINDHOEK, NAMIBIA

Tel: (+264) 61 290 2482

e-mail: UTP@windhoekcc.org.na

www.cityofwindhoek.org.na



**ENQ:** Ms. M Kuhanga  
**DATE:** 27/03/2025

**TEL:** +264 61 290 2099  
**REF:** Portion A of Remainder of the  
Farm Kupferberg No. 33

Willie Schutz Town and Regional Planning Consultants  
P O Box 31761  
WINDHOEK

Dear Sir/Madam,

**RE: THE SUBDIVISION OF THE REMAINDER OF THE FARM KUPFERBERG NO. 33 INTO PORTION A AND THE REMAINDER (APPROVED CR 302/09/2020); THE SUBDIVISION OF PORTION A OF THE FARM KUPERBERG NO. 33 INTO 42 PORTIONS (5HA AND LARGER) AND THE REMAINDER.**

In accordance with the delegation of authority applicable to the subdivision of Erven (as resolved per Council Resolution No. 283/11/2017 the following is approved for submission to Urban and Regional Planning Board subject to the following conditions:

2. That the Municipal Council of Windhoek reaffirms its decision to recommend the approval for subdivision of the Remainder of the Farm Kupferberg No. 33 into Portion A and the Remainder as per Council Resolution No. 302/09/2020.
3. That the subdivision of Portion A of the Remainder of the Farm Kupferberg No. 33 into Portions 1 to 42 and Remainder be recommended for approval to the Urban and Regional Planning Board in terms of Section 109(2)(a) of the Urban and Regional Planning Act (Act No. 5 of 2018), subject to the following conditions:
4. That the following condition be included and registered in the title deeds of Portions 1 to 42 (Portions of Portion A) and the Remainder of the Farm Kupferberg No. 33 in favour of the local authority:

*3.1 That the land may only be used for rural residential purposes.*

*3.2 That the Right of Way Servitude be registered against Portions 6-15, 19, 27-32, 34-35, 41-40 and the Remainder of Portion A of the Remainder of the Farm Kupferberg No. 33 in favour of Portions 1-42 and the Remainder of Portion A of the Remainder of the Farm Kupferberg No. 33, as generally shown of WSTRPC plan number KUPFER 33/23.*

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*All official correspondence must be addressed to the Chief Executive Officer*

5. That once Portion A of the Remainder of the Farm Kupferberg No. 33 and/or Portions 1 to 42 and Remainder of Portion A of the Farm Kupferberg No. 33 are incorporated into the Windhoek Zoning Scheme, the applicant must apply to the Municipal Council of Windhoek for the rezoning of Portions 1 to 42 and Remainder of Portion A of the Farm Kupferberg No. 33 to applicable zonings in accordance with the Windhoek Zoning Scheme and the Urban and Regional Planning Act (Act No. 5 of 2018) at his/ her own cost.
6. That access to Portion A from the C26 road (Windhoek – Walvis Bay) is provided as per Roads Authority approval letter dated 28 September 2017.
7. That the building line for properties along the C26 road (Windhoek – Walvis Bay) should be 100m from centre line of the C26 road.
8. That provision should be made to prevent accessing the C26 road (Windhoek – Walvis Bay) from any position than the authorized access point.
9. That speedhumps should be provided to improve road safety around erven 11 to 13, 36 and 38 to 41.
10. That a development agreement must be signed whereby an Engineer or Engineering firm is appointed to design and supervise construction of all infrastructures. All erven must be serviced before they are transferred over to a third party.
11. That all internal streets are to be upgraded to municipal requirements, be constructed to bitumen standards and to municipal requirements, even though the City is not taking over such road.
12. That since the City has no capacity presently to take over the roads located outside the serviced perimeter, a homeowner's association must be established for the maintaining and development of internal streets.
13. That the applicant appoints a registered professional Engineer to compile a detailed 50-year flood report of the rivers, stormwater courses and earth dams to own cost and risk.
14. That the applicant applies the conditions as stipulated in the detailed 50-year flood report.
15. That the applicant accepts the outcome of the detailed 50-year flood report, and if allowed by the flood report, appoints a registered Professional Engineer to submit detailed Engineering Plans as to how the proposed Portions is to be protected against any potential flood damage.
16. That no adjacent or opposite property be negatively affected by the proposed development along the river, stormwater courses and earth dams.
17. That no development be allowed within the 50-year flood level of any river, stormwater courses or earth dam.
18. That no development be allowed onto or over any stormwater system or structure.
19. That any stormwater or river crossing be accommodative of at least a 50-year flood, and that any stormwater crossing be designed by a registered professional Engineer.

20. That the applicant through the detailed flood report, verify the extent of private open spaces to accommodate the required stormwater flow.
21. That surface storm water runoff be accommodated according to Clause 35 of the Town Planning Scheme (see Info 35 of the Town Planning Scheme) stating:
22. That no stormwater drainage pipe, canal, work or obstruction (except stormwater drainpipes, canal or works which have been authorized in writing by the local authority or which have been or may be built, laid or erected in terms of any law) may be constructed on or over the property or located in such a way that – the flow of stormwater from higher lying property to lower lying property is impeded or obstructed and through which any property is or may be endangered; or the flow of a natural watercourse (in which the local authority allows flood water to run off, be discharged or to be canalized) is or can be changed, canalized or impeded.
23. That the maintenance of such stormwater pipe, channel or work shall be the responsibility of the owner of the concerned property.
24. That prior approval must be obtained from the Chief Engineer: Planning, Design & Traffic Flow if the accommodation of the stormwater on the proposed portion is contemplated.
25. That engineering drawings on how the stormwater would be accommodated to the satisfaction of the Chief Engineer, Planning, Design & Traffic Flow be submitted for approval simultaneously with the building plans.
26. That all existing stormwater pipes, outlets and inlets or any other stormwater system be clearly indicated on all building plans submitted prior to the approval thereof.
27. That no building plan will be approved until the above stormwater conditions are met.
28. That a condition be included into the title deed whereby selling to a third party may only take place once the proposed stormwater conditions had been addressed by the owner.
29. That roads and stormwater be planned, designed and constructed to municipal standards.
30. That it be recommended that erven: 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 1, 2, 3, 4, 5, 6, 7, 37, 38, 39, 40, 41, 42, 43, 32, 31, 30, 33, 29, 34, 28, 27, 26, 25, 36 and 35 as well as any other erf affected by stormwater, be sold with relevant stormwater conditions.
31. That the applicant's professional Engineer needs to take note of the steep slopes along some proposed road reserves where roads may exceed the maximum slope requirements for gravel and surfaced roads.
32. That a condition be included into the title deed whereby selling to a third party may only take place once the proposed stormwater conditions had been addressed by the owner.
33. That should any works requires to be taken over by the City, a development agreement be signed.
34. That all roads with a turning circle be accommodative of at least a 28.0-meter-wide road reserve diameter.
35. That it be noted that no existing bulk Water and Sewer Services are available.

36. That all costs for the provision of bulk and internal services for the development shall be borne by the Developer. And that this shall include the cost of bulk infrastructure upstream and downstream from the development.
37. That the Developer provide its own water storage (reservoir) for the development with a storage capacity of 48 hours.
38. That the City of Windhoek will not be held responsible for the provision of water if the groundwater supply deteriorates.
39. That it be noted that Portion A of the Farm Kupferberg falls within the Groundwater Protection Area.
40. That it be noted that approval for consent use in the groundwater protection area as per Windhoek Town Planning Scheme requires that land use proposal promote environmental conservation with adequate provisions that ensures no groundwater pollution will occur. Subsequently, intensive agricultural activities are not allowed to take place under groundwater protection area.
41. That it be noted that the envisaged water supply source for the proposed development is groundwater from the existing boreholes as per geohydrological studies, therefore, the developer is required to register and legalise the existing boreholes with the City of Windhoek.
42. That it be noted that groundwater abstraction from boreholes is subject to requirements set out in the geohydrological studies on installation of a monitoring system and submission of data as necessary to the City of Windhoek.
43. That any future requirements for drilling of new boreholes to expand the water supply capacity is subject to submission of an application to the Strategic Executive: Infrastructure, Water and Technical Services and prescribing processes.
44. That a condition be registered against the title deed of the property where a communal borehole is located to allow for shared use of the infrastructure prior to transferring of property to the new owners and that this be applicable to future borehole as well.
45. That it be noted that an application for sinking of boreholes from an individual will not be accepted except by a management body or association overseeing the development and further subject to the groundwater management approach and protocols of the groundwater permit administration system of the City of Windhoek.
46. That a water management plan addressing among others regular monitoring of the land use activities for compliance to pollution preventions measures, quality and quantity set out in specialist studies on geohydrology be developed and submitted to the Strategic Executive: Infrastructure, Water and Technical Services prior to the sale of the any new subdivided portions.
47. That only two residential dwellings per plot be allowed, with a plot area of minimum 5 ha.
48. That the Developer must appoint a registered professional engineer to propose an acceptable wastewater management plan, subject to the condition that no pollution of the groundwater occurs and further provide that there will be no health risks to the users and surrounding residents.

49. That it be noted that no treatment facilities are allowed within the Groundwater Protection area due to the risk of groundwater contamination.
50. That no final effluent from a treatment facility may be discharged within the Groundwater Protection area.
51. That no purified effluent for irrigation purposes may be used within the Groundwater Protection area.
52. That the issuing of the wastewater discharge permit must be subject to the adherence of all conditions pertaining to such permit.
53. That only full waterborne waste systems should be utilized, and all Windhoek service standards should apply.
54. That final effluent from any treatment facility shall comply with the Special Discharge Standards as prescribed by the Directorate of Water Affairs.
55. That no oxidation or other open pond system or holding system or french drains shall be allowed.
56. That no developments may take place within a radius of 500 meters from a Treatment Plant without odor control.
57. That the operations and maintenance of all water and sewer infrastructure will be the responsibility of the developer/Home Owner's Association/Governing Body Corporate.
58. That for the design of water and sewer-related services, the Developer is required to appoint a Professionally Registered Engineer to compile a comprehensive Design Report, which should be done in line with comments and recommendations of existing master plans if applicable.
59. That the design report must be submitted by the Applicant and approved by the Department of Infrastructure, Water & Technical Services: Engineering Services Division before submission to the Ministry of Urban and Rural Development Board.
60. That the design report should be submitted by the appointed Engineer to Infrastructure: Engineering Services Division for approval before starting with detailed water and sewer infrastructure designs.
61. That all costs involved due to the Design Report be for the Developer's account.
62. That the design report should stipulate at least the following:
  - 61.1 *The expected water demand for the development.*
  - 61.2 *Whether fire-fighting requirements will be met with the planned infrastructure.*
  - 61.3 *How access to an existing water supply source or linkage to an existing water supply network will cater for the water demand of the development.*
  - 61.4 *The minimum and maximum pressures in the reticulation under peak- and low-flow demand.*

- 61.5 The calculated design wastewater generated by the development.*
- 61.6 A wastewater management plan should be included that ensures that no pollution of the groundwater occurs and further provides that there will be no health risks to the users and surrounding residents.*
- 61.7 It should be clearly stated who will take ownership of the water and sewer infrastructure and who will be responsible for the maintenance and operations thereof.*
- 61.8 The design report to include detailed design calculations, assumptions, and clear referencing to Standards used in the calculations of water demands, sewer flows, pipe capacities, storage requirements, treatment capacities, etc.*
63. That an Environmental Impact Assessment (EIA) should be submitted along with the Design Report and should clearly confirm the following:
- 62.1 The proposed wastewater management will have no negative impact on any water sources and/or aquifers.*
- 62.2 The minimum recommended distance between the wastewater treatment facility and any water source/aquifer.*
- 62.3 A quality analysis of the water quality of the water source.*
- 62.4 A comprehensive Geo-hydrological Study that should confirm the sustainable supply of the water source. This shall include Test Pumping Data and Abstraction Rates for boreholes.*
- 62.5 An Environmental Clearance Certificate for the proposed wastewater management should be submitted along with the Design Report.*
64. That after approval of the Design Report, all final designs for water and wastewater infrastructure should be submitted by the appointed Engineer to the Strategic Executive: Infrastructure, Water and Technical Services for approval before construction commences.
65. That building plans will only be approved after the design report is approved by the Strategic Executive: Infrastructure, Water and Technical Services, and after water and sewer services are installed as per approved design report and designs.
66. That the design criteria are to be in accordance with "The Neighbourhood Planning and Design Guide" as published by the Council of Scientific and Industrial Research (CSIR) and are available online at [http://www.csir.co.za/Built\\_environment/RedBook/](http://www.csir.co.za/Built_environment/RedBook/).
67. That any water and sewer infrastructure to be transferred to the Council has to comply with the standard conditions for large subdivisions in respect of services. These conditions can be obtained from Infrastructure, Engineering Services Division.
68. That the removal of waste from the premises be done by the city or by a private contractor, however if the applicant opts to make use of a private contractor, they are still compelled to pay availability charges to the city.

69. That since the Remainder of Farm Kuperberg NO. 33 fall within the Windhoek Aquifer Protection Area, treatment facilities are not permitted, same with french drains (soakaways), oxidation or other open pond systems, holding systems.
70. That the Septic tank (without soakaways) or conservancy tank systems be more acceptable, and the following guidelines should be applied:
  - 70.1 *That construction and use of septic or conservancy tank systems are subject to a wastewater discharge permit from the Department of Water Affairs and Forestry (DWAF).*
  - 70.2 *That the developer appoints registered professional engineer to design the tank system.*
  - 70.3 *That the design includes provisions for monitoring potential leakages.*
  - 70.4 *That the design must include measures to prevent effluent from contacting the environment in the event of overflow, such as an outer tank.*
  - 70.5 *That tanks be located near a driveway to facilitate waste removal by vacuum tanker.*
  - 70.6 *That tanks be positioned downhill from wells or springs.*
  - 70.7 *The tank's retention period must be specified in the design.*
  - 70.8 *That after construction, the tank system t be tested for water tightness.*
  - 70.9 *That sludge removed from a septic tank be not reused for agricultural purposes.*
  - 70.10 *That the responsible party for emptying the tanks be clearly identified.*
71. That the private waste transporters required to be licensed with the city of Windhoek as a Waste Transporter and shall be in a possession of a valid waste transporters certificate and discs.
72. That the applicant be required to apply for containment methods in a form of 240 L wheelie bins and the skip containers, be charged according to the zoning of the area.
73. That during the development phase strict measures be taken into considerations to prevent scavengers.
74. That hazardous waste, such as paint, waste oil may not be thrown onto the ground but rather be collected and removed from the site and disposed of at hazardous cell at Kuperberg.
75. That burning, littering and burying of waste is prohibited.
76. That developers are encouraged to think of waste as a potential resource, instead of treating waste as a problem, it could be treated as an opportunity e.g. recovering material from waste stream through recycling can potentially generate revenue.
77. That as far as possible the applicant will be required to institute recycling and waste reduction initiative in order compliment city initiative on waste recycling, reduce and reuse as per Solid Waste Management regulations and the policy.
78. That recyclable waste be handed over to authorized waste collectors.
79. That all clients must register their generators with the Department of Electricity.
80. That all generators will be subject to general inspections by City Council Inspectors.
81. That generators with a capacity exceeding 500kVA must possess a generation license in accordance with the Electricity Act, 2007.

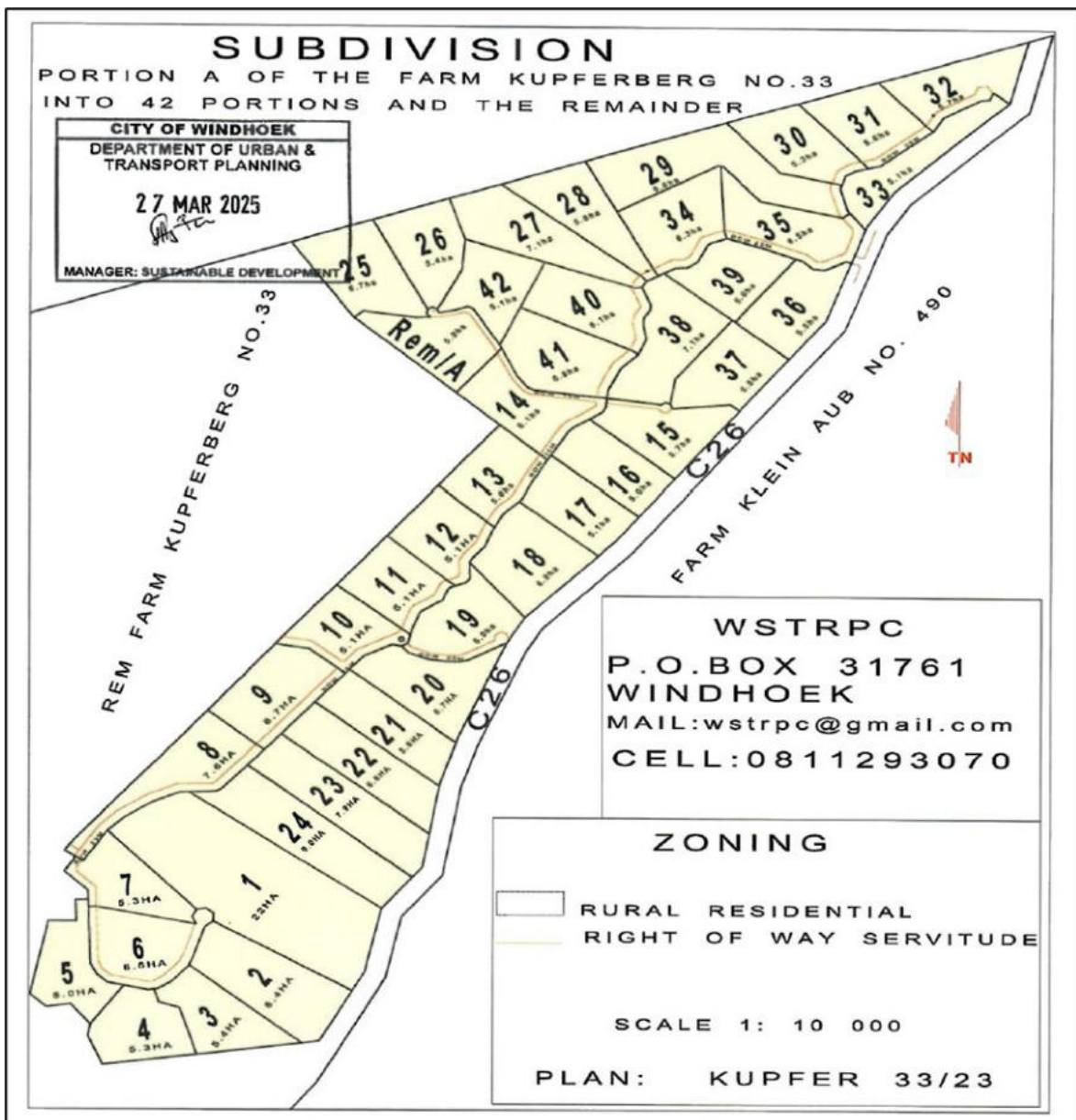
82. That it be noted that there is a Windhoek Municipal Council electrical network in close vicinity, however there is not enough capacity to cater for the additional load of the development.
83. That no individual applications for electricity connections from the existing infrastructure will be entertained.
84. That it be noted that should the need arise for a municipal connection, an official application from the homeowner's association will be required to be directed to the Strategic Executive: Electricity.
85. That for a municipal connection for the development, the following conditions apply should further be coincided:
86. That the applicant should appoint an electrical engineering consultant firm with registered professional engineers with the Engineering Council of Namibia who shall submit the internal electrical network design.
87. That a formal application shall be submitted to the Strategic Executive: Electricity for connection of the new network reticulation.
88. That should an Electrical Substation be required a servitude or subdivided Erf must be allocated where the Substation will be constructed.
89. That no electrical substations shall be installed on sidewalks.
90. That Medium and Low Voltage Cables, Streetlights and Low Voltage Distribution Units may be installed on sidewalk spaces.
91. That all electrical services design drawings, and internal reticulations must be submitted to the office of the Strategic Executive: Electricity for approval before any construction works are commenced.
92. That during project implementation, the applicant's electrical representative should at all times engage the quality monitoring official from Electricity Department for all inspections and testing required.
93. That it be note that a Connection Charge may be payable at the cost of the applicant and the applicant is advised to review the Electricity Department Connection Charge Policy, Schedule of Approved Non-Regulated Tariffs and/or to consult directly with the Electricity Department for information on Connection Charges.
94. That a complete as built drawings, including all protection if there is any and Quality Assurance Manuals to be submitted to the Strategic Executive: Electricity at completion in the latest edition of AutoCAD and PDF.
95. That the applicant acknowledges receipt of this Delegated Authority approval and accepts the conditions in writing, within 28 days of receipt of this letter.
96. That in terms of Clause 51 of the Windhoek Town Planning Scheme, any person who is aggrieved by the decision of the local authority may appeal against that decision to the Minister of Urban and Rural Development (the Minister). Notice of the appeal and the

grounds for the appeal must be lodged within 28 days from the date of this Notice to the Minister and Local Authority whose decision is the subject of the appeal.

You may now proceed with the application to the Ministry of Urban and Rural Development.

Yours Faithfully

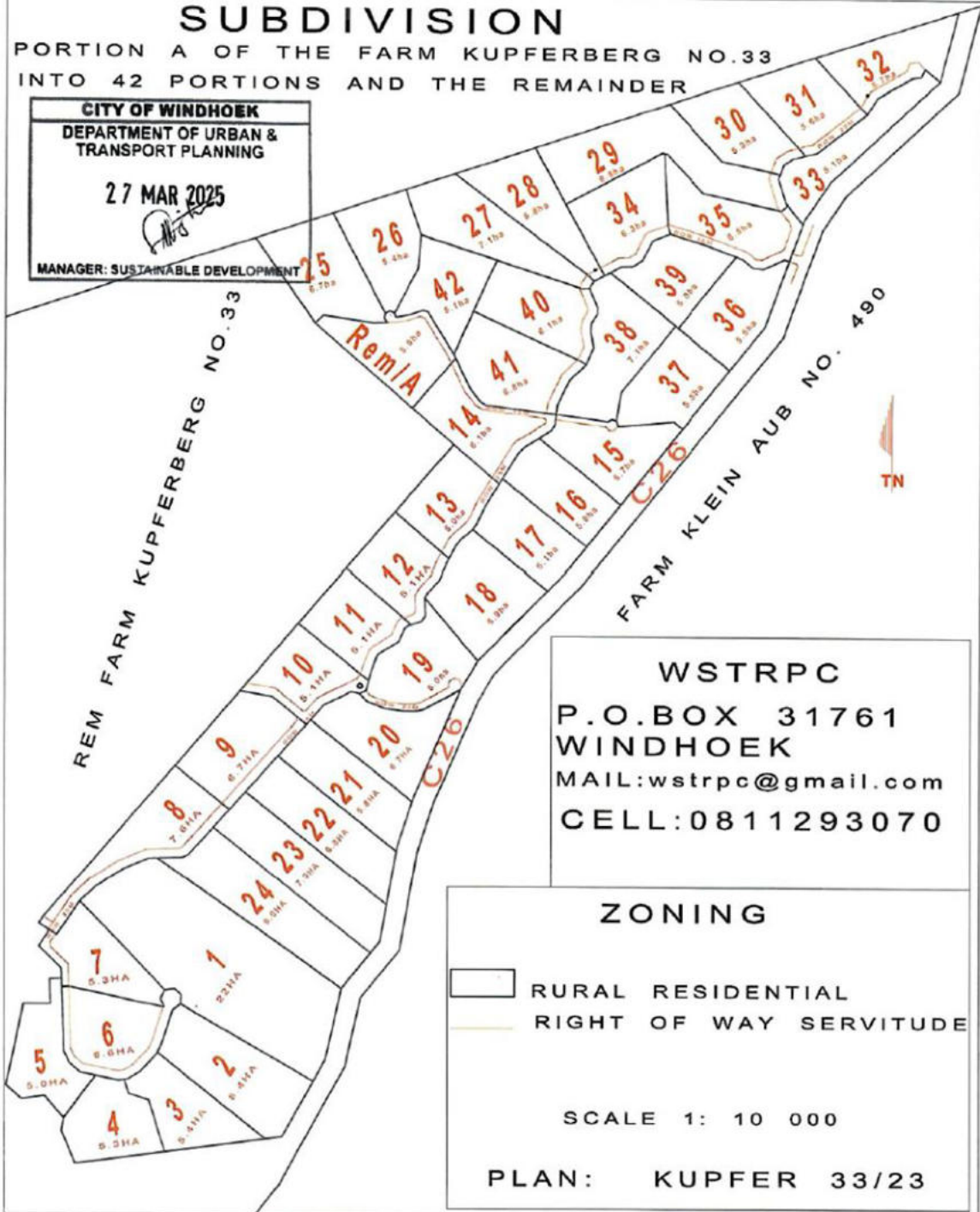
  
Mr P van der Merwe -03-27  
STRATEGIC EXECUTIVE: URBAN AND  
TRANSPORT PLANNING  

# SUBDIVISION

PORTION A OF THE FARM KUPFERBERG NO.33  
INTO 42 PORTIONS AND THE REMAINDER

**CITY OF WINDHOEK**  
**DEPARTMENT OF URBAN & TRANSPORT PLANNING**  
  
27 MAR 2025  
  
MANAGER: SUSTAINABLE DEVELOPMENT



**WSTRPC**  
P.O.BOX 31761  
WINDHOEK  
MAIL:wstrpc@gmail.com  
CELL:0811293070

**ZONING**

□ RURAL RESIDENTIAL  
— RIGHT OF WAY SERVITUDE

SCALE 1: 10 000

PLAN: KUPFER 33/23

**PORTION AREAS: DEVELOPMENT OF THE FARM KUPFERBERG NO. 33**

PTN Number	Area (HA)	Zoning	Ptn Number	Area (HA)	Zoning
1	22.0	Rural Residential	23	7.9	Rural Residential
2	8.4	Rural Residential	24	9.0	Rural Residential
3	5.4	Rural Residential	25	6.7	Rural Residential
4	5.3	Rural Residential	26	5.4	Rural Residential
5	5.0	Rural Residential	27	7.1	Rural Residential
6	6.6	Rural Residential	28	5.8	Rural Residential
7	5.3	Rural Residential	29	9.8	Rural Residential
8	7.6	Rural Residential	30	5.3	Rural Residential
9	6.7	Rural Residential	31	5.6	Rural Residential
10	5.1	Rural Residential	32	5.7	Rural Residential
11	5.1	Rural Residential	33	5.1	Rural Residential
12	5.1	Rural Residential	34	6.3	Rural Residential
13	5.0	Rural Residential	35	6.5	Rural Residential
14	6.1	Rural Residential	36	5.5	Rural Residential
15	5.7	Rural Residential	37	5.5	Rural Residential
16	5.0	Rural Residential	38	7.1	Rural Residential
17	5.1	Rural Residential	39	5.0	Rural Residential
18	6.9	Rural Residential	40	6.1	Rural Residential
19	6.0	Rural Residential	41	6.8	Rural Residential
20	6.7	Rural Residential	42	5.1	Rural Residential
21	5.8	Rural Residential	Remainder	5.0	Rural Residential
22	6.8	Rural Residential	Total	279.0	

**CITY OF WINDHOEK**  
 DEPARTMENT OF URBAN &  
 TRANSPORT PLANNING  
  
 27 MAR 2025  
  
 MANAGER: SUSTAINABLE DEVELOPMENT

#### 4.2. Environmental Clearance

An Environmental Clearance Certificate was obtained on 13 August 2022 from the Ministry of Environment, Forestry and Tourism for the original development of ±185 residential portions, a street portion and the remainder. This ECC expired on 13 August 2025 and is no longer relevant due to the amendment required by COW.

See below a copy of the previous ECC:

ECC – 0087 Serial: Bqmrhw87



**REPUBLIC OF NAMIBIA**  
**MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM**  
OFFICE OF THE ENVIRONMENTAL COMMISSIONER

**ENVIRONMENTAL CLEARANCE CERTIFICATE**  
ISSUED

In accordance with Section 37(2) of the Environmental  
Management Act (Act No. 7 of 2007)

TO

**Albida Development Trust**  
P. O. Box 11588, Windhoek

.....

**TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY**

**THE TOWN PLANNING PROCEDURES FOR THE DEVELOPMENT OF ±185  
RESIDENTIAL PORTIONS, A STREET PORTION AND THE REMAINDER  
ON THE REMAINDER OF FARM KUPFERBERG NO. 33, WINDHOEK,  
KHOMAS REGION.**

Issued on the date: 2022-08-13  
Expires on this date: 2025-08-13

*(See conditions printed over leaf)*

This certificate is printed without erasures or alterations.



ENVIRONMENTAL COMMISSIONER



To obtain final approval from the Urban and Regional Planning Board, an Environmental Clearance is required.

The EMP included in this document is based on the principle that the relevant authorities with the MEFT as responsible Ministry, through their Environmental Control Officer's (ECO) with the proponent of the project as responsible person, should ensure that:

- The necessary environmental authorizations and permits have been obtained and are in use.
- Open and direct communication between the proponent and Interested and Affected Parties (I&APs) with regards to environmental and ecological matters are maintained.
- Regular site inspections of constructed areas and operations are conducted to ensure compliance with the EMP of the site.
- By complying with the guidelines of the EMP, the impact on the receiving environment is kept to a minimum or avoided.
- Immediate action is taken if EMP specifications are not followed or adhered to.
- The proponent/manager of the project needs to find environmentally responsible solutions.
- All new personnel/workers should be informed on the stipulations of the EMP and that environmental awareness is regarded as a high priority.
- Level of implementation and adherence to the EMP is audited on a regular basis.

There should be a clear message to the management and staff/workforce of the project that non-adherence to or non-compliance with the EMP can lead to the withdrawal of the Environmental Clearance Certificate and might lead to the closure of the project operations. It is against this background that the EMP has been drafted.

## 5. RECOMMENDATION

The following measures are recommended:

- That Albida Development Trust be granted an Environmental Clearance to proceed with the construction and operation of the proposed project by the Environmental Commissioner of the Ministry of Environment, Forestry and Tourism.
- The continuous monitoring of the identified impacts on the environment to be able to take preventative remedial action.
- The implementation of the Environmental Management Plan (EMP) to mitigate identified impacts which are associated with the construction and operational phase of the project.
- The consideration of green building/environmentally sustainable designs in the planning, construction and operational phases for example making use of rainwater tanks, recycling depots, etc.
- Testing of the water quality is also recommended in order to determine a baseline of the current water quality which can be used to monitor contamination which might occur from the proposed project operations and to determine if the water is suitable for use in the process. It is proposed that the water quality is monitored through annual testing and comparison with the baseline analysis.
- An Environmental Audit to be conducted on the new project a year from the date of the Environmental Clearance Certificate by an inspector (from the DEA) or an independent

Environmental Practitioner to ensure that the Environmental Management Plan has been implemented and is adhered to on a continuous basis.

- Training and induction courses should be given to the managers, workforce and employees.
- The proponent is responsible for ensuring that environmental awareness education of all employees and contractors is done satisfactorily.
- The proponent should ensure that employees and contractors are made aware of the environmental requirements of the project.
- The contractors, sub-contractors and staff should familiarize themselves with the full content of the Environmental Management Plan.
- Periodic environmental monitoring must be taken on a regular basis. This should be done to ensure compliance with all aspects of the Environmental Management Plan.
- A copy of the Environmental Management Plan should be kept at the site office and should be distributed to the manager, contractors and sub-contractors.
- Non-compliance to the measures stated in the Environmental Management Plan: Implement suitable corrective action and prevent recurrence of the incident.
- An independent environmental control officer should be appointed to monitor and review the on-site environmental management and implementation of the Environmental Management Plan.
- The environmental control officer should ensure that the impacts are kept to a minimum.
- He/she should be inspecting the site and surrounding areas regularly and should monitor an ongoing program to promote environmental awareness.
- He/she should request the removal of people or equipment not complying with the specifications of the Environmental Management Plan.
- Any areas outside the designated working zone should be considered “no go” areas.

## 6. ENVIRONMENTAL MANAGEMENT PLAN (EMP)

The proposed EMP has been drawn to give guidance to:

- Planning of future extensions or replacing of infrastructure, equipment and services **(Planning Phase)**.
- Constructing, rehabilitation and developing any infrastructure on the site **(Construction Phase)**.
- Operations concerning the daily management and running of the project and associated activities **(Operational phase)**.
- Decommissioning of the project **(Decommissioning Phase)**.

### 6.1. PLANNING PHASE

The location and design of the infrastructure must fit into the surroundings and the natural environment. The manager of the project must ensure that the sense of place be kept in accordance with the surrounding areas.

Construction and operation of the project are based on the assumption that it is feasible and viable. It is important that this be tested because of the work opportunities and socio-economic aspects involved. It is advised that the project be audited by an independent auditor to verify if it is feasible.

Specific actions are required to ensure the negative effects or impacts are minimized on the site. The following measures should be followed:

### 6.1.1. Addressing of Aesthetic and Visual Issues

Responsible Person	Measures
The Proponent, Developer or Builder	<ul style="list-style-type: none"> <li>a. Infrastructure on the site must be visually pleasing namely it must be in concordance with a certain natural style since the site is in rural/natural surroundings.</li> <li>b. The building shapes must not contrast too much of the area namely high rising buildings in future should rather be avoided.</li> <li>c. The use of earthy colors (paint) on the infrastructure, which are in harmony with the environment, are strongly recommended.</li> <li>d. If construction on the site is carried out, it must make use to a large extent of the natural materials namely rocks from the area, wooden poles either from already non-living trees or commercially produced poles and thatch in order not to destroy the environment.</li> <li>e. Should there be any development regarding communication masts, solar panels, water tanks and other prominent features, it must be placed or constructed at spots that prohibits visual destruction or minimize visual impact.</li> <li>f. Tourists or any person driving past the operations should not be able to notice visually unpleasing objects on the site.</li> <li>g. Avoid any neon or non-earthy signs that will reduce the sense of place, rather use rustic metal or wood to construct signs.</li> <li>h. If practical and feasible, all additional or new pipes and cables must be buried underground and not be visible to the public.</li> <li>i. The visual character of the project should not compromise the integrity of landmarks and places of cultural and heritage significance such as heritage sites, national monuments, urban conservation areas, old buildings, special scenic areas and tourist sites of interest.</li> </ul>

	<p>j. The project should not significantly impact on the integrity of significant views. If a proposed facility may interrupt such a view, the options to minimise the visual impact should be considered.</p>
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6.1.2. Ensuring water consumption efficiency	
Responsible Person	Measures
<p>The Developer and Builder</p>	<ul style="list-style-type: none"> <li>a. Any further addition of lawns or cultivated gardens on the site must be limited since it makes use of sparse clean water. The cultivation or enhancements of locally adapted natural grasses which can survive the natural conditions are preferred.</li> <li>b. Rivers and drainage systems bordering the site must be maintained and channels must be kept open to conserve the environment and flow of water.</li> <li>c. Water efficient systems/equipment which limit the use of water or make recycling of water possible should be introduced.</li> </ul>

### 6.1.3. Ensuring energy consumption efficiency

Responsible Person	Measures
The Developer or Builder	<ul style="list-style-type: none"><li>a. Preference must be given to the implementation of energy conserving and efficient systems. Renewable energy sources like gas produced from household waste or solar should be considered to replace the current commercially supplied electricity where possible.</li><li>b. Devices or equipment which conserves energy must be introduced and used in the operations of the development.</li><li>c. Cautioned measures on how to handle electricity in the facility must be addressed to everyone working or residing on or near the facility, so as to conform to safety regulations in workplace.</li></ul>

#### 6.1.4. Limiting creation of solid waste

Responsible Person	Measures
The Manager	<ul style="list-style-type: none"><li>a. Consumables and containers which can be recycled or which are biodegradable must be introduced in order to limit the creation of solid waste which has to be taken out of the area to be managed and handled at another site.</li><li>b. Hazardous waste should be transported to the Kupferberg landfill site.</li><li>c. Concepts like pollution control, material substitution and maximization on recycling content in order to reduce waste generation and disposal should be introduced.</li></ul>

#### 6.1.5. Health and Safety of the Workforce

Responsible Person	Measures
The Builders, Workforce, Constructors and Developers	<ul style="list-style-type: none"><li>a. The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment).</li><li>b. A health and safety officer should be employed to manage, coordinate and monitor risk and hazard and report all health and safety related issues in the work place.</li><li>c. The introduction of external workers into the area is sometimes accompanied with criminal activities posing security risks for neighbouring portions/farms therefore security measures should be introduced to prevent such activities for example a security guard can be employed to safeguard the property.</li></ul>

- |  |  |
|--|--|
|  | <ul style="list-style-type: none"><li>d. The welfare and quality of life of the neighbouring land/farms and workforce need to be considered in order for the project to be a success on its environmental performance.</li><li>e. Conversely, the process should not affect the overall health of persons related to the project including the neighbours.</li></ul> |
|--|--|

## 6.2. CONSTRUCTION PHASE

Construction is generally characterized by various activities that will take place on the site namely landscaping of the site, earthworks for the construction of bulk services and infrastructure, construction of additional buildings, removal, relocation and planting of trees and shrubs and installation/rehabilitation of sewer and water pipelines. All these activities have an unavoidable effect on the natural environment. Various actions must thus be undertaken to minimize the effect on the receiving and surrounding natural environment. The responsible persons in the entire process will be the proponent, the developer, project manager, subcontractors, etc. The developer takes the ultimate responsibility during the construction.

MEFT can ensure that the project operations adhere to the EMP stipulations through regular site inspections. The manager must ensure that the developer is aware of the EMP stipulations and enforces it on site. Throughout any construction it will be the Project Manager's, Quantity Surveyor's and Engineer's obligation to inspect the site at least once per month to make sure that all the mitigations measures are followed, adhered to and implemented. The Project Manager must do a final inspection and evaluation once the project is completed. The project manager must also issue the building contractor with a completion letter once he or she is satisfied that the project has been done in accordance with the Environmental Management Plan. A copy of the final letter must be sent to the Director of Environmental Affairs (DEA).

Damage to the environment during construction has a few origins that differ to large degree: accidental, negligent, spillage, vehicles, earthmoving equipment, generators, workshops and plant areas, excessive noise or heat, workers exposed to physical, chemical and ergonomic hazards. There are mitigation measures that must be followed in order to minimize or avoid damage and pollution. The following measures are based on the Ministry of Environment, Forestry and Tourism (MEFT) regulations and must strongly be adhered to:

### 6.2.1. Spillages of potentially toxic materials

Responsible Person	Measures
The Developer, Builders and Workforce	<ul style="list-style-type: none"><li>a. Any spillages of potentially toxic materials, whether by accident or through negligence, must be reported and the corrective action must be undertaken to 'clean' and to remove the evidence of the spillage.</li><li>b. Make use of design structures and transfer equipment so as to avoid spillage as far as possible.</li><li>c. Train the staff members on how to make use of diesel/fuel transfer and to avoid spillage. Fuel storage should be bunded.</li><li>d. Any spill must be cleaned up immediately by removing the spill together with the polluted soil and disposing of it at a recognized dumping site or facility.</li><li>e. Install oil traps in all appropriate places to collect potentially toxic materials.</li><li>f. When there is made use of diesel generators on site it must be placed on concrete slabs.</li><li>g. When a workshop is introduced, the entire work area must be lined by concrete.</li><li>h. Any runoff from the work areas either arising from wash downs or rainfall must be channeled into a pollution control pond.</li><li>i. There must be a weekly monitoring of all equipment namely a visual check; there must also be a weekly monitoring of work areas.</li></ul>

6.2.2. Site Preparation	
Responsible Person	Measures
The Developer and Builders	<ul style="list-style-type: none"> <li>a. Before any workers, equipment or building materials are brought in; the developer must set out the entire plan. The corners of every building, walkway, driveway, parking area, water installation, power generator, etc. must clearly be marked.</li> <li>b. The marked out area must be inspected and approved by the Engineer before any construction is started.</li> <li>c. The building contractor must demarcate the area with metal droppers and hazard tape so that there will be no confusion about which area may be disturbed for additional development and which areas will strictly be off-limits.</li> <li>d. Disturbance and risks related to sitting and construction should be minimized at all time. Construction activities and the site location should comply with national environment protection legislations and best practice environmental management guidelines.</li> <li>e. Construction should be carried out in a safe and effective manner and obstruction or danger to pedestrians or vehicles caused by the location of the project, construction activity or material used in construction should be minimized.</li> </ul>

6.2.3. Building Materials	
Responsible Person	Measures
The Developer, Builders and Workforce	<ul style="list-style-type: none"> <li>a. All the materials needed for construction namely bricks, sand, cement, poles, roofing, etc., must be brought into the site from outside.</li> </ul>

	<ul style="list-style-type: none"> <li>b. In the case of items that are not brought from a registered shop for example poles, the contractor must ensure that the harvesting of these materials did not cause any serious impacts at the place which they came from.</li> <li>c. Sand/rock that will be used for building should only be collected from approved sites or be commercially procured from a supplier.</li> <li>d. No materials, including rocks for building purposes may be collected from the environmentally sensitive areas pointed out in the Environmental Impact Assessment.</li> <li>e. The design, location, installation and operation of underground cables or ducts must be in accordance with the principles as set out.</li> <li>f. Where underground cables or duct require the removal of protected plant species, a permit from the Ministry of Agriculture, Water and Forestry – Department of Forestry is required for the removal of such a plant.</li> </ul>
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<b>6.2.4. Facilities for Workers</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent, Developer and Builders	<ul style="list-style-type: none"> <li>a. All workers that need to reside on the site while construction is in progress will have to be housed in temporary structures like tents or caravans to limit the impact on the environment. The majority of the workforce will consist of people already living in the area and therefore minimum impact on the environment is expected.</li> <li>b. The workforce residing on the site must be provided with water, proper toilets and washing facilities.</li> <li>c. Cooking on the site must be done on gas or open fires. When the workers make use of open fires, these must be made in a designated spot so that there will be no possibility for a veldt fire occurring.</li> </ul>

	<p>d. Although the surrounding settlers collect wood in the area, construction workers working or residing on site should not be allowed to collect wood for cooking purposes. The manager or developer must provide them with wood/charcoal preferably from intruder bush from outside sources.</p>
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<b>6.2.5. Waste Management</b>	
<b>Responsible Person</b>	<b>Measures</b>
<p>The Contractor, Developer and Builders</p>	<p>a. Should the developers and sub contractors make use of combustible waste for example empty cement bags, it must be collected at the end of each day and be stored in a cage structure to avoid it being blown around.</p> <p>b. All combustible and non-combustible waste must be removed from the site at least once a week to a designated and properly managed rubbish/waste dump site.</p> <p>c. Any waste that is stored temporarily on the site must be secured in refuse bags stored in a fenced-in area to avoid it being blown into the veldt.</p> <p>d. A temporary waste storage site or cage structure may not be set up close to any dam or any water courses.</p> <p>e. Measures must be taken to prevent waste that attracts scavengers for example jackal or vultures.</p> <p>f. No paint, solvents, thinners, diesel, oil or any other harmful substances may be poured onto the ground. The substances must be collected in containers and be removed from the site for proper disposal.</p>

<b>6.2.6. Water Use</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Developer, Builders and Workforce	<ul style="list-style-type: none"> <li>a. A Waste Water Permit should be obtained from the Ministry of Agriculture, Water and Forestry if waste water will be produced.</li> <li>b. Water must at all times be used sparingly in the construction period as well as in all the other phases.</li> <li>c. All tapes, pipes and tanks that will be constructed must be maintained and managed so that they do not leak.</li> <li>d. Water pipelines laid to the site shall be done in such a manner that the surface and natural vegetation are not unduly disturbed.</li> <li>e. Weekly visual checks on possible spillages must be conducted.</li> <li>f. Effluent water from washing facilities must be disposed of in a properly constructed French drain/storage/septic tank that must be located as far as possible, but not less than 50 meters from a stream, river, pan, dam or borehole.</li> <li>g. French drains may only collect domestic type wash water, any effluent containing oil, grease or other industrial substances must be collected in a suitable receptacle and must be removed from the site, it could either be for resale or for appropriate disposal at a recognized facility.</li> <li>h. There must be weekly inspections of drains.</li> <li>i. These drains must be demolished after construction and the sites must be cleaned and restored to its natural state.</li> <li>j. If concrete reservoir walls are built, it must be painted in a camouflage colour to aid in concealing it.</li> <li>k. When reservoirs are built, it must be covered to reduce evaporation.</li> <li>l. If practically feasible, no reservoirs must be visible from the main road.</li> <li>m. There must also be weekly visual checks of the reservoirs and it must be supervised on site by the managers.</li> </ul>

	<ul style="list-style-type: none"> <li>n. Water must be recovered if used for cutting, cooling or washing.</li> <li>o. The workforce must be advised to use water sparingly for human consumption.</li> <li>p. Water consumption must be checked on a three monthly basis.</li> </ul>
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<b>6.2.7. Wildlife</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Workforce, Builders, Contractors and Residents	<ul style="list-style-type: none"> <li>a. No wild animals on the site may be trapped or killed for any reason whatsoever by the workers, builders, contractors or residents.</li> </ul>

<b>6.2.8. Fuel, Transport and Storage</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Vehicle Drivers, Builders, Contractors	<ul style="list-style-type: none"> <li>a. Vehicles that transport materials to and from the site must be road worthy.</li> <li>b. All drivers that transport materials must have a valid driver's license and must at all times adhere to traffic rules and regulations.</li> <li>c. Vehicles carrying loads must be properly secured in order to completely avoid items falling off the vehicle at any time.</li> <li>d. The materials used in the construction process for example cement, bricks, poles, etc., must be stored at a central storage area on the site in order that the site be neat and orderly and to avoid a situation where materials are lying all over the place.</li> <li>e. Fuels, paints, solvents and chemicals must be stored in watertight containers that will ensure it cannot react with each other or be spilled onto the ground.</li> </ul>

<b>6.2.9. Vehicles, Trucks, Roads and Tracks</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Vehicle Drivers, Builders and Contractors	<ul style="list-style-type: none"> <li>a. Any haphazard driving of any vehicles where there are no existing routes must be avoided.</li> <li>b. Vehicles, trucks and earthmoving equipment with headlights must switch their headlights on at all times.</li> <li>c. No vehicles or trucks that move in the area may exceed 40km/h with warning, and speed signs must be positioned at relevant locations.</li> <li>d. All the personnel responsible for the driving of transport vehicles must be in possession of a valid driver's license.</li> </ul>

	<ul style="list-style-type: none"> <li>e. No littering is allowed along the road, dumping of waste and scrap, etc. and all drivers must be made aware of this.</li> <li>f. Daily or weekly visual checks are required and all drivers must be supervised.</li> <li>g. The safety of surrounding residents and land users, other motorists and animals should not be compromised by the vehicle associated with the constructional operation.</li> <li>h. Traffic control measures should be taken during construction in accordance with the traffic control regulations.</li> </ul>
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<b>6.2.10. Vegetation</b>	
<b>Responsible Person</b>	<b>Measures</b>
<p>The Builders, Contractors and Workforce</p>	<ul style="list-style-type: none"> <li>e. There must be an overall preservation of vegetation communities to ensure minimal disruption of important vegetation communities and valuable plant specimens.</li> <li>f. At all times, clearance of vegetation for firewood must be avoided.</li> <li>g. Alternative fuel and/or power sources must be made available namely paraffin stoves and diesel-driven generators if workers are accommodated on the site.</li> <li>h. No trees or shrubs must be damaged for the purpose of obtaining firewood.</li> <li>i. Daily inspections must be carried out and weekly checks whether the stock of alternative sources is sufficient.</li> <li>j. The developers or constructors must ensure the maximum use of local plant material for rehabilitation processes.</li> <li>k. Before new site construction begins, the upper level of the soil must be stripped and stockpiled separately so that this layer can be utilized in the rehabilitation process.</li> <li>l. There must also be a visual check on the wind erosion on a monthly basis.</li> </ul>

	m. Disturbance of flora and fauna should be minimized during construction and vegetation replaced to the satisfaction of the responsible authority at the conclusion of work.
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<b>6.2.11. Fauna</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Developers, Constructors, Residents and Workforce	<ul style="list-style-type: none"> <li>a. No hunting and trapping of resident animals will be allowed on the site.</li> <li>b. The developers or constructors must fence off waste pit storage areas to prevent animals from falling in or getting entangled in waste.</li> <li>c. The fences must be sufficient to control the access of large and small animals.</li> <li>d. There must be weekly visual checks of the fences and staff must report to the managers.</li> </ul>

<b>6.2.12. Noise</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Workforce, Contractor and Builders	<ul style="list-style-type: none"> <li>a. If a generator is used, it must be positioned away from neighbours and must have boarding to help suppress noise.</li> <li>b. There must be limited impacts on adjacent settlements and on the workforce.</li> <li>c. There must be a weekly noise check of the generator and other equipment namely of trucks and construction machinery.</li> </ul>

<b>6.2.13. Dust</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Developers, Constructors and Builders	<ul style="list-style-type: none"> <li>a. The impact of dust on the air quality in general and on the fauna and flora must be limited.</li> <li>b. The general speed limit on the construction site must be kept below 40km/h to limit dust generated by construction traffic.</li> <li>c. There must be daily visual monitoring of transport activities and dust generation in the area.</li> </ul>

<b>6.2.14. Visual Impacts</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent, Developer, Constructor and Builders	<ul style="list-style-type: none"> <li>a. The height of the supporting buildings of the project must be in line with the design proposal to ensure that the infrastructure is aesthetically pleasing. Waste and stockpile dumps must not be visible from the road or neighbours.</li> <li>b. The developer should ensure that new structures on site blend in with the surrounding landscape.</li> <li>c. The design and architectural concepts proposed in the planning phase must be adhered to and implemented to ensure that the project is in harmony with the surrounding natural environment.</li> </ul>

<b>6.2.15. Historical, archaeological and cultural heritage</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Contractor, Developer and Builders	<ul style="list-style-type: none"> <li>a. No archaeological or cultural heritage sites had been identified or observed during the environmental assessment. However the developer and his sub contractors must carefully examine on the area before any construction is undertaken.</li> <li>b. If any archaeological or cultural heritage sites are found on the site, the manager must immediately advise the National Monuments Council to ensure that steps are taken for the preservation of the site or artefacts.</li> </ul>

<b>6.2.16. Accommodation and Sanitation</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Constructors, Developers and Builders	<ul style="list-style-type: none"> <li>a. There must be no camp or office site located closer than 50 meters from any spring, river, dam or pan.</li> <li>b. If space is required for a camp or office site, it must be kept to a minimum.</li> <li>c. Workers may make use of the existing toilet facilities on the site.</li> </ul>

<b>6.2.17. Rehabilitation after completion of construction phase</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Builders, Workforce,	<ul style="list-style-type: none"> <li>a. Before any final rehabilitation is started on the site, the Ministry of Environment, Forestry and Tourism must be advised to set certain terms and conditions.</li> </ul>

<p>Constructors, Developers and Residents</p>	<ul style="list-style-type: none"> <li>b. Qualified or accredited personnel from the constructing or developing companies must refill pits alternately with waste and not saleable stockpiled blocks and smaller fragments of larger blocks.</li> <li>c. Refilled rock waste must be covered with saved topsoil and complemented if necessary by scraping the area adjoining the pit on the condition that no vegetation is cleared for this operation.</li> <li>d. All rehabilitated areas must be monitored over a 4 year time period from the onset of the rehabilitation procedures. (The frequency of monitoring suggested is dependent on satisfactory performance. If however the requirements are not being met, the frequency of the monitoring must be increased).</li> <li>e. Unwanted materials and all waste namely domestic or industrial must be collected. Remaining domestic waste on site must be collected and transported to a recognised disposal facility.</li> <li>f. Waste material must be collected in drums and transported to a recognised disposal facility as well.</li> <li>g. All weedy species present on the site must manually be removed.</li> <li>h. Monitoring must be conducted when grasses are flowering.</li> <li>i. Upon the completion of all construction activities, remove workshops, surrounding fencing, generators and any scrap materials in the vicinity of the work area.</li> <li>j. Seal all petrol, diesel, oil and grease containers and remove it from the site to a recognised storage facility.</li> <li>k. Break up all unnecessary concrete slabs and structures on the site and transport the fragments to a suitable site for disposal or dump it in one of the pits.</li> </ul>
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<b>6.2.18. Health and Sickness/Disease</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Builders, Workforce, Constructors, Developers and Residents	<ul style="list-style-type: none"> <li>a. Any large project has the potential to increase the rate of HIV/AIDS infection, especially during construction as a large workforce from outside the area is brought in for a period, without their families, to work on the project. That impact cannot be realistically assessed, but mitigation measures are recommended, namely instruction to all personnel on HIV/AIDS education, and making condoms readily available at little or no cost.</li> <li>b. It can be expected that HIV/AIDS may have an impact on the project because labourers might be lost to this disease. This results also in a loss of skills, so that training programmes will need to be ongoing.</li> <li>c. The workforce should receive an induction course on awareness and spreading of HIV/AIDS.</li> <li>d. The workers should be informed that prevention is better than cure and condoms should be made available to the workers as mentioned above.</li> <li>e. The Ministry of Health and Social Services can be consulted to inform the workers of the dangers regarding the disease.</li> <li>f. HIV/AIDS's negative impacts/aspects should be discussed and the workers should know the dangers regarding the disease for instance sickness, loss of energy and eventually death.</li> </ul>

There must be photographic evidence at different rehabilitated places with a camera providing dates on the prints. These photographs must be taken every year around the same period at the same places.

## 6.3. THE OPERATIONAL PHASE

Steps to be taken in the daily management and running of the proposed project are stated in the following section. To ensure that the project is operated on an environmentally sustainable manner the following **general guidelines** are included in the EMP:

- a. The project must be managed with minimal disturbance to the surrounding natural environment.
- b. It must be ensured that guests/clients to the site behave in an appropriate manner that does not impact negatively on the environment, wildlife and local communities.
- c. The conservation of the natural and human environment must be regarded as high priority.
- d. An “environmental friendly behavior” must be cultivated and maintained amongst all people involved in the operation of the project activities.
- e. The job description for the manager must include his/her responsibilities and duties towards the implementation and adherence to the EMP.

The following specific environmental management issues which require daily operational attention from management and staff are included in the EMP:

<b>6.3.1. Human Waste Management (Sewage)</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent, Developer, Constructor and Builders	<ul style="list-style-type: none"> <li>a. All the toilets must be flush-type toilets and should be linked to their own French Drain/septic tank.</li> <li>b. Notices must be placed in the toilets indicating that staff members or workers should not flush foreign objects down the toilet to ensure a healthy environment and the sustained functioning of the sewer system.</li> </ul>

<b>6.3.2. Storage of Raw Materials</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent and Manager	<ul style="list-style-type: none"> <li>a. Smelly products should be managed in order that it will have a limited impact on the surrounding neighbours.</li> <li>b. The storage areas should be clearly marked and have clear/highly visible instructions on procedures to be followed in the handling and in case of spillages or other emergencies.</li> <li>c. The handling, operations and storage areas of the project should be hygienically managed to prevent the breeding of flies and the generation of bad smells.</li> </ul>

<b>6.3.3. Management of Waste Water</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent and Manager	<ul style="list-style-type: none"> <li>a. The possibility of leakages at the project must be managed by ensuring that the condition of the pipelines and channels are continuously visually monitored by the manager and staff members.</li> <li>b. The staff must monitor and limit water consumption as efficiently as possible.</li> <li>c. Staff members must not have lawns or gardens that need to be watered (small vegetable gardens are permitted on the site).</li> <li>d. All pipes must be well maintained and leaks must be repaired immediately.</li> <li>e. All taps must be turned off after it had been used.</li> <li>f. A water meter must be installed and it must be checked regularly to keep a register of water consumption and to monitor trends.</li> <li>g. Special care should be taken to prevent chemicals from washing/leaching into surface or groundwater systems.</li> <li>h. During operations, it should be ensured that the conditions as stated under the Waste Water Permit obtained during construction are adhered to at all times.</li> </ul>

<b>6.3.4. Energy Management</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent, Constructor, Builders, Manager and Residents	<ul style="list-style-type: none"> <li>a. Electricity must be obtained from approved electrical suppliers like NamPower to ensure efficiency of generation and use as well as sustainability of supply.</li> <li>b. Gas must be used as alternative to electricity in kitchens due to its efficiency and low pollution factor.</li> </ul>

	<ul style="list-style-type: none"> <li>c. They may only use a generator as emergency source of electricity as continued operation thereof normally creates additional noise, require the bulk storage of fuel and oil which can have a negative impact on the environment if not managed properly.</li> <li>d. When fires are used on the site, the workforce must make use of alien-invasive wood that is readily available for example wood that comes from bush encroaching species for example <i>Acacia melifera</i>. The workers must avoid using Mopani, Leadwood or other species that might be harvested unsustainably.</li> <li>e. The workers may not buy wood from the local people since that might lead to increased deforestation by cutting down protected species or the natural forests.</li> </ul>
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<b>6.3.5. Nature Conservation</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent, Manager and Residents	<p>To sustain the natural attributes on the site, it needs to be preserved and protected to the best of their abilities. The manager of the development activities has a key responsibility in protecting the environmental aspects on the site and the following measures should be taken:</p> <ul style="list-style-type: none"> <li>a. There must be adequate waste management control.</li> <li>b. There must be adequate water management control.</li> <li>c. The workforce/manager/proponent must refrain from planting alien plants.</li> <li>d. A general environmental awareness must be established amongst staff members/workers and visitors.</li> </ul>

### 6.3.6. Maintaining Sense of Place

Responsible Person	Measures
The Proponent, Manager and Residents	<p>Sense of place is seen as the style of the area, the atmosphere present when entering the site and the general “vibe” of the place. The “sense of place” normally differentiates one area from the other and therefore management must avoid the following:</p> <ul style="list-style-type: none"><li>a. They may not make use of any inappropriate décor for example bright or clashing colors, unattractive murals or art, unnecessary statues, etc.</li><li>b. No shabbiness may be experienced on the site; management must make sure that they abstain from untidiness, un-emptied ashtrays, rubbish bins etc.</li><li>c. The manager must repair and maintain all infrastructure since un-repaired infrastructure creates a poor impression.</li><li>d. Waste must be properly managed on the site; visitors and residents may not smell rubbish bins. The manager must keep drains clean in order to avoid unpleasant smells.</li><li>e. The site may not have many signs or objects that distract tourists driving past the site from the natural beauty of the area.</li><li>f. No scrap metal for example old vehicles or equipment may lie around in various states of disrepair, the site must be clean and neat.</li><li>g. The manager may not allow overcrowding at the site since this will destroy sense of place in a way that it will takes away the feeling of exclusivity.</li><li>h. There may be no people loitering around at the site, whether visiting staff or looking for work.</li></ul>

<b>6.3.7. Community Relations</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent, Manager and Residents	<ul style="list-style-type: none"> <li>a. The manager must have sound relations with communities in the vicinity.</li> <li>b. They may not damage any cultural or archaeological sites.</li> <li>c. They must employ as many local people as possible for all levels of operation.</li> <li>d. They must make use of dispute resolution methods and labour practices that are within the law and cultural norms.</li> <li>e. All staff must be trained in order that they have the knowledge to do their work properly.</li> <li>f. The manager must provide opportunities for career advancement and skills development.</li> </ul>

<b>6.3.8. Occupational Health &amp; Safety Issues &amp; Hospital Services</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Workforce and Residents	<ul style="list-style-type: none"> <li>a. Potential accidents may require the use of emergency services and hospital facilities nearby.</li> <li>b. Personnel on site should be trained in handling emergencies such as response to fire, accidents etc.</li> <li>c. There should be careful planning of emergency procedures.</li> <li>d. Training in first aid and emergency response to employees on site should be done.</li> <li>e. The Labour Act (No. 6 of 1992) makes certain provisions with regard to occupational health and safety, e.g. in relation to hazardous substances.</li> <li>f. In particular it is expected that workers will need to be protected against dust and noise in the work place.</li> </ul>

## 6.4. DECOMMISSIONING/CLOSURE PHASE

The decommissioning phase normally follows the operational phase. This is a site-specific plan developed to ensure that appropriate environmental management practices are followed during the decommissioning phase of this project and to detail remediation, site control, and monitoring activities that will continue once the project/infrastructure is no longer required/needed.

The decommissioning phase:

- Provide effective, site-specific, and implementable procedures and mitigation measures to monitor and control environmental impacts throughout this phase of the project, such that the related activities do not adversely impact amenity, traffic, or the environment in the surrounding area.
- Establish long-term management of the project site for its next intended use, detailing plan for site assessment, remediation of contamination, and ecological restoration activities.
- Eliminate the long-term liability issues related to the site for the proponent or owner of the facility or project site.

The decommissioning/closure of the project is not anticipated. However, should this be required for any reason, the following conditions are generally required.

### 6.4.1. Equipment

#### Responsible Person

#### Measures

The Proponent,  
Manager and the  
Environmental Control  
Officer

- a. An investigation on the soil and groundwater contamination must be conducted to determine the presence, nature and extent of any contamination. This will provide information as to the current status of the site in terms of the level of contamination, which will influence the level or type of remediation that needs to be undertaken.
- b. Prior to the infrastructure being destroyed, all residue products must be carefully removed for recycling or safe disposal.
- c. Solid materials must be used for filling. Only clean soil should be used for filling purposes.

#### 6.4.2. Stormwater and Wastewater Management

Responsible Person	Measures
The Proponent, Manager and the Environmental Control Officer	<ul style="list-style-type: none"><li>a. Water used for flushing the pipes and tanks must be disposed safely if it is not suitable for disposal via the sewer system. The relevant department must be contacted with regard to the discharge of water containing waste to the sewer system.</li><li>b. The water containing waste must pass through a separator before discharge could be allowed.</li><li>c. Any water containing waste should not contaminate clean storm water.</li></ul>

#### 6.4.3. Waste Management

Responsible Person	Measures
The Proponent, Manager and the Environmental Control Officer	<ul style="list-style-type: none"><li>a. Solid waste generated from the removal of the tanks must be handled according to the precautionary principle meaning that waste (including soils, metals and other material) should be treated as hazardous unless proven otherwise.</li><li>b. Contaminated soil and other waste material must be disposed of at an authorized/permitted landfill site.</li><li>c. Waste must not be allowed to be stockpiled on the site for extensive periods but must be disposed of as generated/soon as possible.</li><li>d. If waste material is stockpiled temporarily on site, it must be adequately protected from the environment to prevent leaching of potentially harmful contaminants.</li></ul>

<b>6.4.4. Spillage</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent, Manager and the Environmental Control Officer	a. Spillages during the decommissioning must be reported to the relevant authorities.

<b>6.4.5. Remediation</b>	
<b>Responsible Person</b>	<b>Measures</b>
The Proponent, Manager and the Environmental Control Officer	<ul style="list-style-type: none"> <li>a. Clean-up or remediation of any contamination must be done.</li> <li>b. The owner of the land, the person in control of land or the person who occupies or uses the land on which pollution has occurred is not absolved from the responsibility of any further and/or associated pollution arising from this property.</li> <li>c. Should there be a risk to downstream users or the environment from this site in the future, it would be requested that further remedial measures be instituted at this site.</li> </ul>

#### 6.4.6. Site Rehabilitation

Responsible Person	Measures
The Proponent, Manager, Contractor and the Environmental Control Officer	<ul style="list-style-type: none"><li>a. It should be ensured that all structures, equipment, materials, waste, rubble, notice boards and temporary fences used during the construction and operation and decommissioning be removed with minimum damage to the surrounding and receiving area or environment.</li><li>b. The site should be cleaned and cleared to the satisfaction of the ECO.</li><li>c. In the case of accidental spills of oil or chemicals in the construction camp, the affected soil should be dug out and removed from the site for disposal at a hazardous waste site and replace with fresh topsoil.</li></ul>

#### 6.4.7. Health and Safety of the Workers

Responsible Person	Measures
The Contractor, Builders, Workforce, Constructors and Developers	<ul style="list-style-type: none"><li>a. The safety and security of labourers in the decommissioning phase of the project are required and of high importance.</li><li>b. The Contractor shall comply with all standard and legally required health and safety regulations as promulgated under the Occupational Health and Safety Act and Labour Act and associated regulations.</li><li>c. The Contractor must provide and maintain personal protective equipment and facilities to employees working with hazardous chemical substances.</li><li>d. The Contractor shall provide a standard first aid kit at the site and/or at additional identified locations where needed.</li><li>e. Disturbed soils, slopes and areas of open excavation must be minimised to avoid wind erosion.</li><li>f. A health and safety officer should again be employed to manage, coordinate and monitor risk and hazard and report all health and safety related issues in the work place.</li><li>g. Conversely, it is anticipated that the process should not affect the overall health of persons related to the project including the neighbours.</li></ul>

## 7. ENVIRONMENTAL STATEMENT/AGREEMENT

After all assessing was done and information available was reviewed, the conclusion was reached that the site of land allocated, is suitable to be used as it will have a low significance impact rating. The project will also not have a large negative impact on the environment, and it is therefore recommended to proceed with the process. The activities associated with the project will exert a general low impact on the environment and are easily manageable if the impact on the environment is mitigated through the implementing of the Environmental Management Plan (EMP) as proposed in this document. Management actions prescribed and recommended in this EMP are designed to minimize or manage the impacts exerted by the activities and operations and the staff members working/residing on the site.

It should however be noticed that the management activities should further be strengthened with continuous and well orchestrated monitoring of the implementation of the given EMP. The manager needs to understand the severity of the situation and all efforts should be made to ensure that the message is conveyed to the workforce and visitors.

It should further be noted the proposed EMP will have little or no value in managing the impacts of the activities on the environment if it is not implemented by the proponent and not monitored by the responsible authorities. **It is thus suggested that the level of implementation of the EMP is audited at regular intervals by the Environmental Control Officer of the MEFT in order to ensure that remedial actions are taken on time and on a continues basis.**

The Ministry of Environment, Forestry and Tourism is herewith requested to accept and approve the EMP to finalise the Town Planning procedures for the development of 43 portions and the Remainder (Street) on the Remainder of Farm Kupferberg No. 33, Windhoek, Khomas Region and to issue the site with an Environmental Clearance Certificate.