DRAFT BASIC ASSESSMENT REPORT

THE PROPOSED CONSTRUCTION OF A CEMETERY ON POTION 213 (A PORTION OF PORTION 173) OF THE FARM NEILERSDRIFT 34, NORTHERN CAPE PROVINCE

Applicant: Kai !Garib Municipality
MDA Ref No: 40613 Lennertsville

Date: July 2014



Regional Planners, mental & Development ants

Physical Address: 9 Barnes Street, Westdene, Bloemfontein, 9301 Postal Address: PO Box 20298,

Willows, 9320

Tel: 051 4471583, Fax: 051 4489839 E-mail: admin@mdagroup.co.za

Northern Cape Province DEPARTMENT OF ENVIRONMENT & NATURE CONSERVATION



Porofensi Ya Kapa Bokone LEFAPHA LA TIKOLOGO LE TSHOMARELO YA TLHAGO

BASIC ASSESSMENT REPORT

Project applicant:	Kai !Garib Municipality		
Business reg. no./ID. no.:	NA		
Contact person:	Mr J Mackay		
Postal address:	Private Bag X6, Kakamas 8870		
Telephone:	054 431 6300	Cell:	078 282 5117
E-mail:		Fax:	054 431 6301

Prepared by:

Environmental Assessment Practitioner/Firm:	MDA		
Business reg. no./ID. no.:	1995/030752/23		
Contact person:	Neil Devenish		
Postal address:	P.O. Box 20298, Willows, Bloemfontein		
Telephone:	051 447 1583	Cell:	
E-mail:	neil@mdagroup.co.za	Fax:	053 448 9839

	(For official use only)
File Reference Number:	
Application Number:	
Date Received:	

Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2010.

Kindly note that:

- 1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
- 2. The report must be typed within the spaces provided in the form. The size of the spaces provided are not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
- 3. Where applicable tick the boxes that are applicable or black out the boxes that are not applicable in the report.
- 4. An incomplete report may be returned to the applicant for revision.
- 5. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 6. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 7. No faxed or e-mailed reports will be accepted.
- 8. The report must be compiled by an independent environmental assessment practitioner.
- 9. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

NO

If YES, please complete form XX for each specialist thus appointed: Any specialist reports must be contained in Appendix D.

1. **ACTIVITY DESCRIPTION**

Describe the activity, which is being applied for, in detail:

The proposed construction of a cemetery and associated infrastructure, including the provision of running water and sanitation facilities on site. The proposed construction activities will take place on Potion 213 (a portion of Portion 173) of the farm Neilersdrift 34, Northern Cape Province.

Listed Activity:

Activity 21 of Regulation 544, 18 June 2010: The establishment of cemeteries of 2 500 m² or more in size.

Associated activities to be undertaken:

- The site will be cleared of vegetation and laid out so as to provide burial sites for the local community.
- Pre-excavation of graves and re-filling of graves (hard material will be removed at each of the new graves and filled with the removed material until the specific grave is to be required, during the operational phase).
- This will be done as the construction of graves (by hand) during the operational phase is not recommended due to the type of soil (hard) encountered on site.
- Water supply to the site.
- Sanitation will be provided by means of a septic tank.
- A store room for storing of hand tools, etc.
- An ablution facility (male / female).
- A fence on the perimeter of the site as per requirements of Kai !Garib municipality.
- Construction of gravel access roads, where required.

2. FEASIBLE AND REASONABLE ALTERNATIVES

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

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

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable

NOTE:

Four main options were investigated:

Alternative 1_{Preferred}

A study revealed that the current graveyard is more than 90% full and that additional burial sites are required.

The preferred alternative consists of the construction of a new cemetery. This will implies various activities, such as the removal of vegetation and leveling of area, the construction of graves and re-filling of empty graves. An application for subdivision and rezoning in terms of the Northern Cape Planning and Development Act as well as the municipal land use management scheme was also submitted as part of this project.

Alternative 2_{Expansion of existing cemetery}

The existing cemetery is located within a storm water canal which was flooded a while ago. This situation resulted in the reburying of a number of corpses. Thus, the expansion of the existing cemetery cannot be seen as a feasible and / or reasonable alternative and will not be discussed throughout the current document.

Alternative 2_{Design}

Include a columbarium niche in the form of a building or a wall as this will minimize the area required for the storage of human remains.

However, people in this region do not make use of cremation and therefore this option cannot be seen as a feasible and / or reasonable alternative. This option will thus not be discussed throughout the current document.

Alternative 3_{Technology}

The construction of graves by hand during the operational phase.

However, this option is not feasible as hard material is encountered on site, and the community members will not be able to dig the graves to the acceptable depths.

This option will thus not be discussed throughout the current document.

The no-go option

Utilising the existing cemetery.

However, the settlement has only one graveyard and it is already more than 90% full.

The existing facility is deemed inadequate for the need of the community.

Therefore, this option is not seen as a reasonable and / or feasible alternative.

The no-go option will be discussed in this report.

Paragraphs 3 – 13 below should be completed for each alternative.

3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals

to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

List alternative sites if applicable.

Alternative:

Alternative 1_{Preferred}

Alternative S2 (if any)

Alternative S3 (if any)

In the case of linear activities:

Alternative:

Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Alternative S2 (if any)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- Middle point of the activity
- · End point of the activity

28°	45.519`	20°	59.961'
0	6	0	1
0	6	0	1

Latitude (S): Longitude (E):

6	0	í
4	0	4
4	0	٤
•	0	4
4	0	4
	0	4
	t t t t t	· 0

0	í	0	ŧ
0	6	0	•
0	6	0	6

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Alternative 1_{Preferred}

Alternative A2 (if any)

Alternative A3 (if any)

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

4 4200m ²	
m ²	
m ²	

Length of the activity:

Size of the activity:

m	
m	
m	

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative 1_{Preferred}

Alternative A2 (if any)

Alternative A3 (if any)

WIII OC	Jui).		
Size	of the	site/servitude:	

Size of the site/servitude:	
m²	
m^2	
m^2	

5. SITE ACCESS

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built

	NO
500m	

Describe the type of access road planned:

A new access road (length 500m, width 6m) will form part of the proposed project. Please refer to the maps attached as Appendix A for an indication for the proposed road in relation to the site.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

6. SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the scale of the plan which must be at least a scale of 1:500;
- the property boundaries and numbers of all the properties within 50 metres of the site;

- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
 - rivers
 - the 1:100 year flood line (where available or where it is required by DWA);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.9 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 6.10 the positions from where photographs of the site were taken.

7. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development phase of the activity?

What is the expected value of the employment opportunities during the development phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

K900 (JUU
R30 00	00
YES	
YES	
20	
R40 00	00
100%	
3	
R30 00	00
100	

D000 000

9(b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

The settlement currently has only one cemetery that is already more than 90% full, therefore reaching its capacity.

The existing facility is inadequate for the need of the community, especially when the population growth in the area is taken into account.

Therefore, a new cemetery is required to meet the needs of the Lennertsville Community.

The portion of land identified for the development of the proposed cemetery (including the provision of running water, sanitation facilities, a store room a new access road on site as well as security fencing) will provide new burial sites in close proximity to the people it will be serving.

With the above in mind, the proposed cemetery will be beneficial for

members form the Lennertsville Community.

Indicate any benefits that the activity will have for society in general:

The proposed development of a cemetery will provide new burial sites for the society in general.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

- Employment opportunities during the construction phase.
- Employment opportunities during the operational phase.
- The availability of adequate burial sites for members from the local community.

DESIR	ABILITY:		
1.	Does the proposed land use / development fit the surrounding area?	YES	
2.	Does the proposed land use / development conform to the relevant structure plans, SDF and planning visions for the area?	YES	
3.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	
4.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explana	ation:	
	N.A.		
5.	Will the proposed land use / development impact on the sense of place?		NO
6.	Will the proposed land use / development set a precedent?		NO
7.	Will any person's rights be affected by the proposed land use / development?		NO
8.	Will the proposed land use / development compromise the "urban edge"?		NO
9.	If the answer to any of the question 5-8 was YES, please provide further motivation / explana	ation.	
	N.A.		

BENEFITS:			
1.	Will the land use / development have any benefits for society in general?	YES	
2.	Explain:		
	The local community of Lennertsville will have a burial facility be highly accessible.	which	will
	be flightly accessible.		
3.	Will the land use / development have any benefits for the local communities where it will be located?	YES	
4.	Explain:		
	The facility will enable the community to have access to buriate within walking distance from their residential area. This issue important seeing that most of the residents in the area have transport.	e is	oile

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline:	Administering authority:	Date:	
National Environmental Management Act:	National Department	1998	
Waste Act	of Water Affairs	1990	
National Environmental Impact	Department of	2010	
Assessment Regulations	Environmental Affairs	2010	
Guideline for Public Participation	Department	2010	
	Environmental Affairs	2010	

Solid waste management

phase, due to the following:

intermediate material or hard rock.

If yes, what estimated quantity will be produced per month? How will the construction solid waste be disposed of (describe)?

11(a)

NO

Guideline on Alternatives	Department	2010	
	Environmental Affairs	2010	
National Water Act, 1998, (Act 36 of 1998)	DWA	1998	
National Heritage Resources Act (Act 25 of	SAHRA	1999	
1999)		1999	

It is not foreseen that any waste will be disposed of during the construction

The construction solid waste refers to soil, weathered granite and

Note that the proposed site is situated on a higher level than the existing storm water channels in the area and flooding of the proposed cemetery area is not likely to occur. An earth embankment on the north-eastern side of the proposed can be constructed from some of the construction solid waste as

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

Will the activity produce solid construction waste during the construction/initiation phase?

described above to prevent storm water from flowing into the ce to drain any run-off that originates from the proposed cemetery si	•				
Other soil collected during the leveling process will be used to backfill lower laying areas. Soil collected during the digging of graves will be used to backfill the graves. Left-over material may be used by the municipality (i.e. the applicant and landowner) for general maintenance on site.					
However, should any solid waste be generated by the proposed					
waste will be classified and disposed of at the nearest authorized I	andfill site.				
Where will the construction solid waste be disposed of (describe)?					
If any, it will be disposed of at the landfill site at Keimoes.					
Will the activity produce solid waste during its operational phase?	NO				
If yes, what estimated quantity will be produced per month?	m ³				
How will the solid waste be disposed of (describe)?					
N.A.					
Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?					
N.A					
If the solid waste (construction or operational phases) will not be disposed of in a registered landf up in a municipal waste stream, then the applicant should consult with the competent authority to it is necessary to change to an application for scoping and EIA.					
Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?	NO				
If yes, inform the competent authority and request a change to an application for scoping and EIA.					
Is the activity that is being applied for a solid waste handling or treatment facility?	NO				
If yes, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.					
11(b) Liquid effluent					
Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system? If yes, what estimated quantity will be produced per month?	MO NO				

Will the activity produce any effluent that will be treated and/or disposed of on site?

YES

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

NOTE:

Sewage water will be managed by means of a septic tank, on site. However, this is not a listed activity, and therefore the application should not change to an application for scoping and EIA.

Will the activity	produce effluent that will be treated and/or dispo	osed of at another facil	ity?		NO
If yes, provide the	he particulars of the facility:				
Facility name:					
Contact					
person:					
Postal					
address:					
Postal code:					
Telephone:		Cell:			
E-mail:		Fax:			
Describe the me	easures that will be taken to ensure the optimal	reuse or recycling of w	aste wate	r, if any:	
11(c) Emission	ns into the atmosphere				
AACH da a a chach a a la					
will the activity rele	ase emissions into the atmosphere?			YES	
If yes, is it controlle	d by any legislation of any sphere of governmen	nt?			NO
	int should consult with the competent author ge to an application for scoping and EIA.	rity to determine whet	her it is		

The emissions associated with the proposed activity can be described as general vehicle emissions. In addition, dust can also be seen as a potential issue during the development phase. However, these emissions are not controlled by any legislation. The formation of dust will be controlled by dust suppression methods, when required. In addition, construction activities will be limited to day time hours.

11(d) Generation of noise

Will the activity generate noise?

If yes, is it controlled by any legislation of any sphere of government?

If no, describe the emissions in terms of type and concentration:

YES	
	NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

Noise associated with the development activities will be from general vehicular activities as well as building activities. Heavy vehicles will be equipped with silencers. In addition, construction activities will be limited to day time hours.

12. WATER USE

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

municipal							
If water is to be	extracted from gr	oundwater, river,	stream, dam,	lake or any	other natural f	eature, pl	ease indicate
the volume that	will be extracted	per month:					NI/A

Does the activity require a water use permit from the Department of Water Affairs?

N/A NO

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

13. ENERGY EFFICIENCY

Describe the design measures, if any,	that have be	en taken to en	sure th	at the ac	tivity is en	ergy e	efficient:	
N/A								
Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:					activity, if			
N/A								
SECTION B : SITE/AREA/PROPERTY DESCRIPTION								
Important notes: 1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.								
Section C Copy No. (e.g. A):								
2. Paragraphs 1 - 6 below mus	t be complet	ed for each alt	ternativ	е.				
3. Has a specialist been consu	Ited to assist	with the comp	oletion o	of this sec	ction?			NO
If YES, please complete form XX for each All specialist reports must be contained			ed :N A					
1. GRADIENT OF THE SITE Indicate the general gradient of the site. Alternative 1 _{Preferred} :								
Flat 1:50 -								
1:20								
Alternative S2 (if any): Flat	:15 1:15	5 – 1:10	1:10 -	1:7,5	1:7,5 – 1	:5	Steeper	than 1:5
Alternative S3 (if any): Flat 1:50 - 1:20 1:20 - 1	.15 1.14	5 – 1:10	1.10 -	1.7.5	1:7,5 – 1	-5	Steener	than 1:5
2. LOCATION IN LANDSCAPE								
Indicate the landform(s) that best describes the site:								
2.1 Ridgeline 2.2 Plateau 2.3 Side slope of hill/mountain 2.4 Closed valley 2.5 Open valley 2.6 Plain 2.7 Undulating plain / low hills 2.8 Dune 2.9 Seafront								
3. GROUNDWATER, SO	IL AND G	EOLOGIC	AL ST	ABILIT	Y OF T	HE S	SITE	
Is the site(s) located on any of the follo	wing (tick the Alternativ		boxes)?	Alterna	itive S2		Alternative	e S3 (if
Shallow water table (less than 1.5m deep)		NO		(if any) YES	NO	a	ny): YES	NO
Dolomite, sinkhole or doline areas		NO		YES	NO		YES	NO
Seasonally wet soils (often close to water bodies)	YES			YES	NO		YES	NO

Unstable rocky slopes or steep slopes with loose soil

Dispersive soils (soils that dissolve in water)

Soils with high clay content (clay fraction more than 40%)

Any other unstable soil or geological feature

An area sensitive to erosion

	NO
	NO
	NO
	NO
YES	

YES	NO
YES	NO

YES	NO
YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

- 4.1 Natural veld good condition ^E
- 4.2 Natural veld scattered aliens ^E
- 4.3 Natural veld with heavy alien infestation E
- 4.4 Veld dominated by alien species
- 4.5 Gardens
- 4.6 Sport field
- 4.7 Cultivated land
- 4.8 Paved surface
- 4.9 Building or other structure

4.10 Bare soil (with scattered vegetation)

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil (with scattered vegetation)

If any of the boxes marked with an "E" is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

NOTE:

The area consists of Bushmanland Arid Grassland (NKb 3). This vegetation is not currently listed as being a Threatened Ecosystem. The area is largely natural and is not currently subjected to any pronounced development pressures. The topography of the site is relatively flat with a gradual slope toward the north.

The site is situated in a predominately natural area but is bordered on the north by an old borrow pit and to the west by commercial buildings and infrastructure. A portion of the site was previously cultivated, presumably for vineyards or orchards but is currently fallow.

The area contains sandy soils covered by recent alluvium, calcrete and superficial deposits of the Kalahari Group. Bedrock is shallow in many areas of the site and areas where gneisses outcrop occur on the site. This creates a free draining area which may become susceptible to erosion.

An ephemeral drainage line crosses the site. The drainage line enters at the south of the site and flows north where it exits the site. The drainage line is degraded downstream of the site by the borrow pit and extensive vineyards. Although in a degraded condition the drainage line remains a vital water transporting body and therefore is regarded as sensitive. It should be excluded from the graveyard and a buffer zone of 10 meters should be afforded to the drainage line.

The region is very arid with a very low Mean Annual Precipitation (MAP) of 124mm. Rain occurs mainly in the form of summer thunderstorms and these may periodically cause flash floods. The soils of the area are loose, freely draining soils that are easily mobilised by surface water flow. As a result the areas on the site adjacent to the drainage lines would be subjected to water erosion. This must be kept in mind throughout the design of the graveyard. The implementation of erosion measures should be investigated.

The vegetation structure consists predominately of a grass layer with dwarf shrubs and scattered shrubs. The drainage line on the site contains a prominent small tree and shrub layer. The site also contains a prominent annual herb component which is activated by sufficient rains.

Dominant grasses include *Stipagrostis obtusa*, *S. ciliata* and *Schmidtia kalahariensis*. Dwarf shrubs consist of *Zygophyllum decumbens* subsp. decumbens and *Monechma genistifolium*. The annual herb component consists among others of *Arctotis leiocarpa*, *Dimorphotheca sinuata*, *Foveolina dichotoma*, *Osteospermum sp.*, *Gisekia pharnacioides*, *Leysera tenella* and *Tribulus zeyheri*. Other perennial herbs that are common on the site include *Barleria lichtensteiniana*, *Blepharis mitrata* and *Dicoma capensis*. Scattered shrubs include *Phaeoptilum spinosum*, *Rhigozum trichotomum* and *Lycium cinereum*.

The ephemeral drainage line is dominated by the small tree, *Senegalia mellifera* subsp. *detinens*. The small tree, *Parkinsonia africana*, also occurs along the drainage line as well as the grass, *Cenchrus ciliaris*.

Several protected succulents occur on the site and are associated with areas of exposed rock. These species are *Aloe claviflora, Euphorbia braunsii* and *E. gariepina* subsp. *gariepina*. These are widespread and not considered to be rare. However, permits must be obtained and the species transplanted to an area where they will not be affected by the proposed graveyard.

According to the species list sourced from Plants of South Africa on 18 June 2014 only one species of conservational concern occurs in the region. This species is *Dinteranthus wilmotianus* which is Red Listed as Near Threatened.

The site was surveyed for this species but was not found to occur on the site.

The site also does not contain the required habitat for this species.

The vegetation on the site cannot be considered to be sensitive or unique and does not contain rare or endangered species.

The site is somewhat degraded by surrounding activities. The drainage line occurring on the site is deemed as sensitive and must be excluded from the graveyard.

The site proposed for the Lennertsville Graveyard has been rated as being acceptable for the development.

For more information, please refer to the Ecological study attached to Appendix D.

5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

- 5.1 Natural area
- 5.2 Low density residential
- 5.3 Medium density residential
- 5.4 High density residential

5.5 Informal residential

5.6 Retail commercial & warehousing

5.7 Light industrial

- 5.8 Medium industrial ^{AN}
 5.9 Heavy industrial ^{AN}
- 5.10 Power station
- 5.11 Office/consulting room
- 5.12 Military or police base/station/compound
- 5.13 Spoil heap or slimes dam^A

5.14 Quarry, sand or borrow pit

- 5.15 Dam or reservoir
- 5.16 Hospital/medical centre
- 5.17 School
- 5.18 Tertiary education facility
- 5.19 Church
- 5.20 Old age home
- 5.21 Sewage treatment plant^A
- 5.22 Train station or shunting yard N
- 5.23 Railway line N
- 5.24 Major road (4 lanes or more)^N 5.25 Airport N
- 5.26 Harbour

5.27 Sport facilities (informal soccer field)

- 5.28 Golf course
- 5.29 Polo fields
- 5.30 Filling station H
- 5.31 Landfill or waste treatment site

5.32 Plantation (700m north east of site)

5.33 Agriculture

5.34 River, stream or wetland

- 5.35 Nature conservation area
- 5.36 Mountain, koppie or ridge
- 5.37 Museum
- 5.38 Historical building
- 5.39 Protected Area
- 5.40 Graveyard
- 5.41 Archaeological site
- 5.42 Other land uses

If any of the boxes marked with an "N" are ticked, how this impact will / be impacted upon by the proposed activity.

If YES, specify and explain:	N/A		
If any of the boxes marked wit	h an "An" are ticked, how will this impact / be impacted upon by the proposed activity.		
If YES, specify and explain:	N/A		
If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.			
If YES, specify and explain:	N/A		

CULTURAL/HISTORICAL FEATURES 6.

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site?

	NO
NO	

NO

NO

If YES, explain: N/A

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist: In accordance with the types and ranges of heritage resources as outlined in Sections 34, 35 and 36 of the National Heritage Resources Act (No 25 of 1999), there are no major palaeontological or archaeological grounds to halt the proposed development within the demarcated area. However, should any archaeological / paleontological artefacts be found on site, SAHRA should be notified immediately and construction activities in the area may only proceed after authorisation is received from SAHRA.

Please refer to the Archaeological and Heritage Report, Appendix D, for more information.

Will any building or structure older than 60 years be affected in any way?

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
 - (i) the site where the activity to which the application relates is or is to be undertaken; and
 - (ii) any alternative site mentioned in the application;
- (b) giving written notice to
 - the owner or person in control of that land if the applicant is not the owner or person in control of the land:
 - the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
 - (v) the municipality which has jurisdiction in the area;
 - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
 - (vii) any other party as required by the competent authority;
- (c) placing an advertisement in-
 - (i) one local newspaper; or
 - (ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
 - (i) illiteracy;
 - (ii) disability; or
 - (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
 - that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;
 - (ii) whether basic assessment or scoping procedures are beingapplied to the application, in the case of an application for environmental

authorisation;

- (iii) the nature and location of the activity to which the application relates;
- (iv) where further information on the application or activity can be obtained; and
- (iv) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

List of authorities informed:

Ward councillor Local Municipal Manager District Municipal Manager Dept. Agric DWA SAHRA

List of authorities from whom comments have been received:

None to date.

All comments received during the public participation process, will be attached to the fBAR.

7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub regulation to the extent and in the manner as may be agreed to by the competent authority.

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

None

Has any comment been received from stakeholders?

NO

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

No comments received to date.

All comments received during the public participation process will be attached to the fBAR.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

No comments were received to date.

All comments received during the public participation process will be attached to the fBAR

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

No response as no comments were received to date.

All comments received during the public participation process will be attached to the fBAR

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

Alternative 1_{Preferred:}

Potential Impacts	Recommended mitigation	
	measures	
Planning and design phase		
Direct Impacts	No mitigation measures to be	
• None	implemented as no impacts are	
Indirect Impacts	associated with the planning	
• None	phase	
Cumulative Impacts		
• None		
No-go		
• None		
Development phase (Constructio	n of graves and levelling of area)	
Direct Impacts	Surface will be levelled to ensure	
 Removal of topsoil and potential 	a free-draining surface to prevent	
loss thereof	ponding of surface water as well	
 Removal of vegetation and loss 	as to limit erosion	
thereof	Storm water measures such as	
 Destruction of habitat for small 	channels, diversion berms, etc.	
animals	will be constructed where	
 Possible change in natural storm 	necessary to limit and / or	
water drainage pattern	prevent erosion and separate	
 Noise elevation due to the 	clean and dirty runoff	

- operation of construction vehicles
- Nuisance dust generation
- Possible damage to paleontological or heritage material
- Potential removal of protected plant species

Indirect Impacts

- Potential erosion of the exposed soil
- Possible dumping of general waste on site
- Possible spillage of petrochemicals and other hazardous materials
- Possible spillage of untreated sewage to the surrounding environment
- Deterioration of the access road as a result of an increase in construction vehicles to the site
- Increase in traffic in the area

Cumulative Impacts

None

No-go

- No direct environmental impacts are foreseen if the no-go alternative is decided upon.
- However, no approved burial sites will be available to the community, as the existing cemetery is almost full.
- Possible health and safety issues may arise as bodies will be buried in shallow, hand dig graves in unsuitable areas.
- Loss of job opportunities associated with the development and construction phase.

- Speed limit will be enforced on construction vehicles
- Construction activities will be limited to daytime to limit disturbance to neighbouring landowners
- Dust control measures will be implemented if nuisance dust generation proves to be problematic
- SAHRA will be notified should traces of any paleontological or heritage material be found during construction
- No waste may be dumped on site or in the veld
- All spills should be cleaned immediately and handled according to best practices
- Receptacles should be placed on site for the collection of general waste
- Waste receptacles should be emptied on a regular basis and the waste disposed of at an authorised landfill site
- Temporary toilets should be made available for use by the employees and the sewage from these toilets should be managed properly – no disposal on site or the surrounding environment will be allowed
- Alternatively, a septic tank should be utilised
- No open fires allowed
- No collection of fire wood, plants or animals will be allowed
- Access roads should be maintained
- A permit should be obtained prior to the removal of protected plant species, should any protected plants be removed.

Operational phase (Established cemetery)

Direct Impacts

- Possible change in natural storm water drainage pattern
- No waste will be dumped in the area
- The area should be investigated

- Potential pollution to stormwater, surface water and groundwater resources
- Increase in traffic in the area, at certain intervals
- The site may in the future become full which will necessitate a search for a new cemetery site.

Indirect Impacts

- Erosion on site
- Deterioration of the access roads
- Potential erosion of exposed soil
- Dumping of general waste

Cumulative Impacts

None

No-go

- No direct environmental impacts are foreseen if the no-go alternative is decided upon.
- However, no approved burial sites will be available.
- Possible health and safety issues, as bodies will be buried in shallow, hand dig graves in unsuitable areas.
- Loss of employment opportunities associated with the construction phase

- for erosion on a regular basis
- Eroded areas should be rehabilitated as soon as possible
- The access road should be maintained by the local municipality
- Stormwater mitigation measures constructed during the construction phase, such as the levelling of the area and the construction of channels / diversion berms, etc. should be inspected on a regular basis to determine if it is sufficient to limit any potential pollution to stormwater, surface water or groundwater resources. If not, alternative measures should be implemented as soon as possible.

Decommissioning and closure phase

Direct Impacts

None

Indirect Impacts

None

Cumulative Impacts

None

No-go

None

As the proposed project entails the construction of a cemetery, it is not anticipated that the proposed project will come to an end in the nearby future. However, if decommissioning is decided upon, a rehabilitation plan will be developed and submitted for approval. The enduse of the area will be kept in mind during the compilation of the rehabilitation plan.

3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative 1_{Preferred:}

- Preparation and development of the cemetery will result in the destruction of the vegetation.
- Erosion control measures should be implemented.
- Pre-excavation of the burial sites will result in a temporary disturbance of the surface, but will be filled up until it is utilized. This action is taken proactively so as to enable the community to excavate burial sites by hand, during the operational phase.
- The project will provide for new burial sites for future usage.
- The possible impacts associated with the proposed project can be minimised if the recommended mitigation measures as mentioned in this document and the EMPr is adhered to.

No-go alternative (compulsory):

- No direct environmental impacts are foreseen if the no-go alternative is decided upon.
- However, no approved burial sites will be available.
- Possible health and safety issues, as bodies will be buried in shallow, hand dig graves in unsuitable areas.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	
YFS	

Is an EMPr attached?

The EMPr must be attached as Appendix F.

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

N/A

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

It is recommended that a small earth embankment or berm, of approximately 300mm in height, on the eastern side of the site should be constructed to prevent external storm water flowing over the site.

Internal storm water drainage can be accommodated by shaping the roads on the site.

Please refer to the recommended conditions and mitigation measures as listed in the EMPr (Appendix F)

SECTION F: APPENDIXES

Appendix A: Site plan(s) / Locality maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix D_1 : Archaeological and Heritage Assessment Appendix D_2 : Ecological Report

Appendix D₂: Ecological Report Appendix D₃: Technical Report Appendix D₄: Geotechnical Report

Appendix E: Comments and responses report

Appendix E₁: List of identified interested and affected parties Appendix E₂: Example of notification

Appendix E₂: Example of notification Appendix E₃: Proof of notification Appendix E₄: List of registered parties Appendix E₅: List of comments received

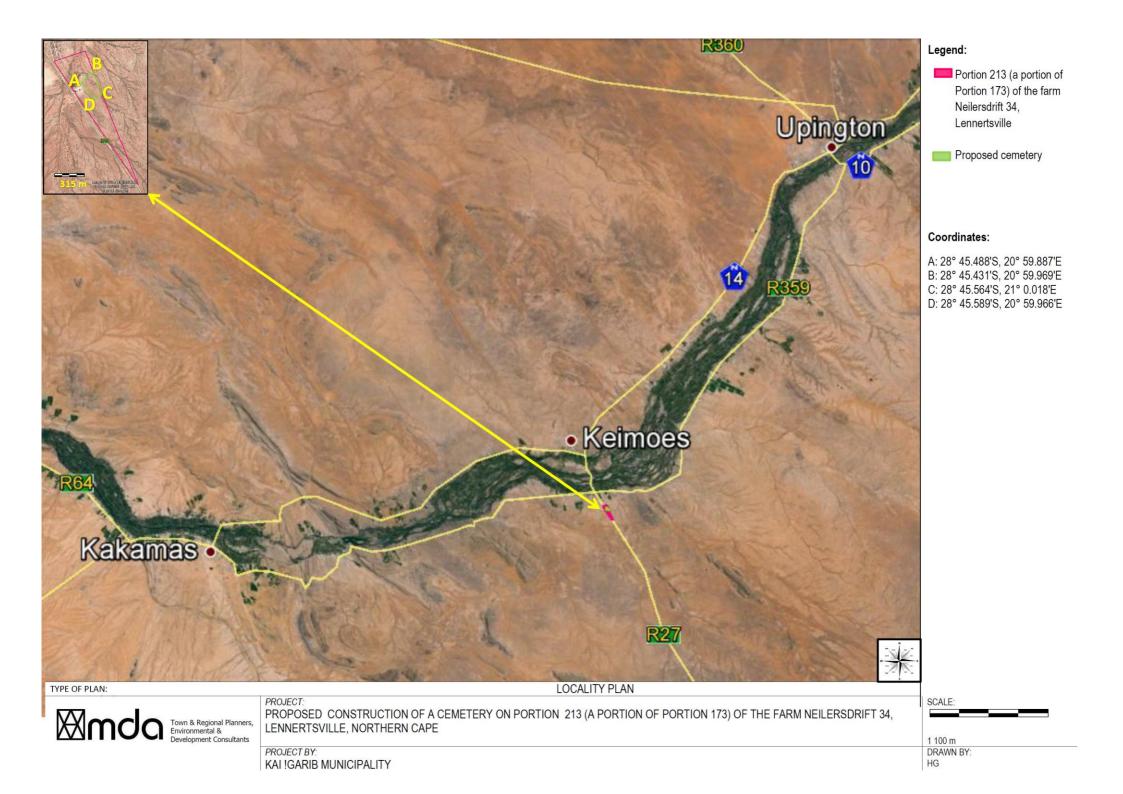
Appendix E₆: Proof of response to comments received

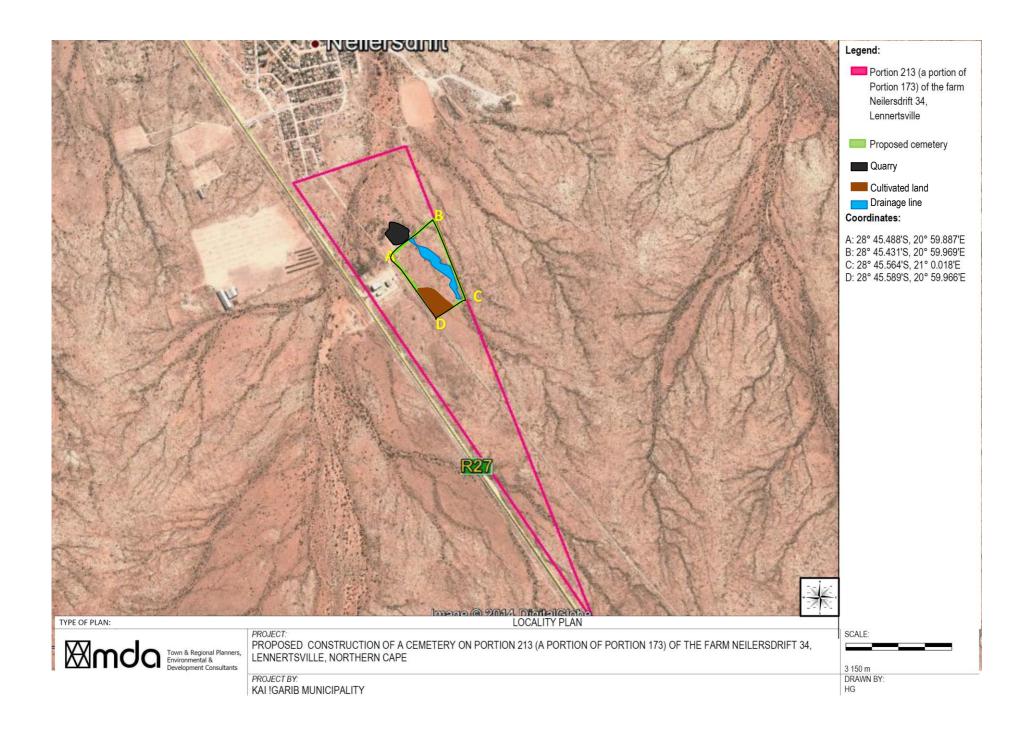
Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

 $\begin{array}{lll} \mbox{Appendix } G_1 \mbox{: Declaration of specialists} \\ \mbox{Appendix } G_2 \mbox{: Declaration of EAP} \end{array}$

Appendix A Locality Maps





Appendix B Photographs



Figure 1: The percentage ground cover is relatively low due to the aridity of the area. Scattered small trees and shrubs are present. The vegetation is dominated by white grasses.



Figure 2: The study area, in an easterly direction.



Figure 3: The study area, in a soutehrly direction.

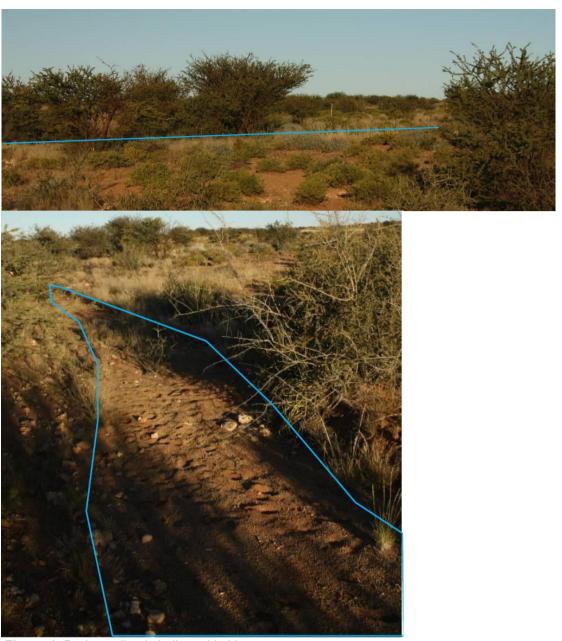


Figure 4: Drainage line is indicated in blue.

Appendix C Facility illustration(s)



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LENNERTSVILLE UPGRADING OF GRAVEYARD	





Appendix D Specialist reports

Appendix D₁ Archaeological and Heritage Assessment

Appendix D₂ Ecological Report

Appendix D₃ Technical Report

Appendix D₄ Geotechnical Report

Appendix E Comments and response report

Appendix E₁ List of identified interested and affected parties

Proposed extension of the cemetery at Lennertsville		
Table 1: List of identified interested and / or affected parties Authorities & Stakeholders		
Organization	Contact person and contact detail	
The Municipal Ward Councilor: Ward 30802005	Cllr. Angela Veronica du Plessis Kai !Garib Local Municipality Private Bag X6 Kakamas 8870	
	9 11th Avenue Kakamas 8870 T: 054 461 6400 F: 054 461 6401 www.kaigarib.gov.za	
Local Municipal Manager	Kai !Garib Local Municipality Private Bag X6 Kakamas 8870 9 11th Avenue Kakamas 8870 T: 054 461 6400 F: 054 461 6401 www.kaigarib.gov.za	
District Municipal Manager	ZF Mgcawu District Municipality (Previously known as Siyanda District Municipality) Private Bag X6039 Upington 8800 Cnr Hill and Le Roux Streets Upington 8800 T: 054 337 2800 F: 054 337 2888 www.zfm-dm.co.za	
Department of Water	Shaun Cloete	

Affairs	Private Bag X5912
Allalis	Upington
	8800
	0000
	Louisvale Road
	Upington
	8800
	T: 054 338 5800
	F: 054 334 0205
	113313313233
	cloetes@dwa.gov.za
Department of	Jacoline Mans
Agriculture, Forestry and	
Fisheries	P. O. Box 2782
	Upington
	8800
	Louisvale Road
	Upington
	8800
	T: 054 338 5909
0.1117.1	jacolinema@daff.gov.za
SAHRA	On-line application will be submitted
	Adjacent Landowners
Property Name	Contact Name and Contact Detail
Portion 187 of the farm	Kai !Garib Local Municipality
Neilersdrift 34	Contact Person: Mr V MacPherson
	Private Bag X6
	Kakamas
	8870
	0070
	9 11th Avenue
	Kakamas
	8870
	T: 054 461 6400
	F: 054 461 6401
	www.kaigarib.gov.za
*DI	discont landowners within the informal settlement were notified by means of

^{*}Please note that adjacent landowners within the informal settlement were notified by means of a pamphlet distribution process that was undertaken on 19 June 2014.



Appendix E₂ Example of notification

ENVIRONMENTAL IMPACT ASSESSMENT

BASIC ASSESSMENT PUBLIC PARTICIPATION PROCESS

Date: 20 June 2014

Notice is given in terms of Regulation 54(2)(b) of the Environmental Impact Assessment Regulations of 2010 No. R. 543 published in Government Notice No. 33306 of 18 June 2010 of the National Environmental Management Act (Act No. 107 of 1998) that an Application for Environmental Authorisation was submitted to the Northern Cape Province Department of Environment and Nature Conservation for the following project:

<u> </u>		
Project:	Proposed construction of a cemetery on Portion 213 (a portion of portion 173) of the	
	farm Neilersdrift 34, Lennertsville	
Locality:	Portion 213 (a portion of portion 173) of the farm Neilersdrift 34, Lennertsville	
Project by:	Kai! Garib Local Municipality	

If you have any information or comments regarding the environmental impact of the proposed development or need additional information regarding the proposed development, please submit your name, contact information and interest to Hanlie Groenewald at the following consultants **within 30 days** of this notice.

Environmental Consultants:





MDA

P.O. Box 20298 Willows Bloemfontein 9320

Tel: 051 447 1583 **Fax**: 051 448 9839

Contact person:

Hanlie Groenewald hanlie@mdagroup.co.za



Appendix E₃ Proof of notification

Site notices









Pamphlet distribution



Proof of postage

To be attached to fBAR

Appendix E₄ List of registered parties

NOTE: no parties registered to date

·	NOTE: no parties registered to date		
Proposed extension of the cemetery at Lennertsville Table 2: List of registered parties			
Authorities & Stakeholders			
Organization	Contact person and contact detail		
The Municipal Ward Councilor: Ward 30802005	Cllr. Angela Veronica du Plessis Kai !Garib Local Municipality Private Bag X6		
	Kakamas 8870 9 11th Avenue Kakamas		
	8870 T: 054 461 6400 F: 054 461 6401 www.kaigarib.gov.za		
Local Municipal Manager	Kai !Garib Local Municipality Private Bag X6 Kakamas 8870 9 11th Avenue Kakamas 8870 T: 054 461 6400 F: 054 461 6401 www.kaigarib.gov.za		
District Municipal Manager	ZF Mgcawu District Municipality (Previously known as Siyanda District Municipality) Private Bag X6039 Upington 8800 Cnr Hill and Le Roux Streets Upington 8800 T: 054 337 2800 F: 054 337 2888 www.zfm-dm.co.za		

Department of Water	Shaun Cloete
Affairs	Private Bag X5912
	Upington
	8800
	Louisvale Road
	Upington
	8800
	T: 054 338 5800
	F: 054 334 0205
	cloetes@dwa.gov.za
Department of	Jacoline Mans
Agriculture, Forestry and	D O D 0700
Fisheries	P. O. Box 2782
	Upington
	8800
	Louisvale Road
	Upington
	8800
	0000
	T: 054 338 5909
	1. 33 1 333 3333
	jacolinema@daff.gov.za
SAHRA	On-line application will be submitted
Adjacent Landowners	
Property Name	Contact Name and Contact Detail

Appendix E₅ List of comments received

No comments received to date. All comments received will be attached as part of the fBAR.

Appendix E₆ Proof of response to comments received

No response as no comments received to date. All comments received (and response thereto) will be attached as part of the fBAR.

Appendix F Environmental Management Programme (EMPr)

Appendix G Other information

Appendix G₁ Declaration of specialists

To be attached to fBAR

Appendix G₂ Declaration of EAP

To be attached to fBAR