09/07/2019

DRAFT BASIC ASSESSMENT REPORT

PROPOSED 19.4KM BULK WATER PIPELINE FROM LINDLEY TO LERATSWANA RESERVOIR DESTEA REF. NO.:





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

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

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, 2014 as amended 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. This report format is current as of **07 April 2017**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 3. The report must be typed within the spaces provided in the form. The size of the spaces provided is 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.
- 4. Where applicable **tick** the boxes that are applicable in the report.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. 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.
- 7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 8. No faxed or e-mailed reports will be accepted.
- 9. The signature of the EAP on the report must be an original signature.
- 10. The report must be compiled by an independent environmental assessment practitioner.
- 11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected

BASIC ASSESSMENT REPORT

- party should be provided with the information contained in this report on request, during any stage of the application process.
- 12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
- 14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
- 15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

BASIC ASSESSMENT REPORT

Basic Assessment Report ("BAR") in terms of the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (as amended) ("NEMA").

PREPARED BY:

NSVT Consultants PO Box 42452, Heuwelsig, Bloemfontein 9332

> Cell: 071 5454 241 Telephone: 051 430 1041/2 Fax: 086 239 9133

Contact person: Keagalaletsa Gobolawamang

Email: kea@nsvt.co.za

PREPARED FOR:

Nketoana Local Municipality P.O. Box 26, Reitz 9810

Cell: 072 333 9115 Telephone: 058 863 2811 Fax: 058 863 2523

Contact person: Mzwandile Manzi Email: mmanzi@nketoanafs.co.za





PROJECT INFORMATION

REPORT TITLE: BAR

REPORT STATUS: Draft

PURPOSE OF REPORT: The purpose of this BAR is to present the proposed development and the need for the development; provide details of the Environmental Assessment Practitioner ("EAP") appointed to undertake the Basic Assessment ("BA") process; provide an overview of the public participation process; and to set out the environmental outcomes, impacts and residual risks of the proposed development.

PROJECT TITLE: Proposed 19.4km pipeline from Lindley Water Treatment Plant to Leratswana Reservoir

APPLICANT: Nketoana Local Municipality

ENVIRONMENTAL CONSULTANTS: NSVT Consultants

REPORT COMPILATION RESPONSIBILITIES

REI ORT COMITICATION RESI ONSIBILITIES	
DEDORT COMPUED BY	
REPORT COMPILED BY:	

Keagalaletsa Gobolawamang Environmental Assessment Practitioner

REPORT REVIEWED BY:

Lorato Tigedi *Pr. Sci. Nat.* (400161/09)
South African Council for Natural Scientific Professions
Environmental Assessment Practitioner

TABLE OF CONTENTS

	Error! Bookmark not defined.
Activity Description	Error! Bookmark not defined.
Feasible and Reasonable Alternatives	Error! Bookmark not defined.
Activity Position	Error! Bookmark not defined.
4. Physical size of the activity	Error! Bookmark not defined.
5. Site Access	Error! Bookmark not defined.
6. Site or Route Plan	Error! Bookmark not defined.
7. Site Photographs	Error! Bookmark not defined.
8. Facility Illustration	Error! Bookmark not defined.
9. Activity Motivation	Error! Bookmark not defined.
9(a) Socio-economic value of the activity	Error! Bookmark not defined.
9(b) Need and desirability of the activity	Error! Bookmark not defined.
10. Applicable legislation, policies and/or guideling	es Error! Bookmark not
defined.	
11. Waste, effluent, emission and noise management	
11(a) Solid waste management	Error! Bookmark not defined.
11(b) Liquid effluent	Error! Bookmark not defined.
11(c) Emissions into the atmosphere	Error! Bookmark not defined.
11(d) Generation of noise	Error! Bookmark not defined.
12. Water Use	Error! Bookmark not defined.
13. Energy Efficiency	Error! Bookmark not defined.
SECTION B: SITE/AREA/PROPERTY DESCRIPTION	N Error! Bookmark not
defined.	
 Gradient of the Site 	Error! Bookmark not defined.
Location in Landscape	Error! Bookmark not defined.
Groundwater, Soil and Geological Stability of the Sit	e Error! Bookmark not defined.
4. Groundcover	Error! Bookmark not defined.
Land use character of surrounding area	Error! Bookmark not defined.
Cultural/Historical Features	Error! Bookmark not defined.
	Error! Bookmark not defined.
1. Advertisement	Error! Bookmark not defined.
Content of Advertisements and Notices	Error! Bookmark not defined.
Placement of Advertisements and Notices	Error! Bookmark not defined.
4. Determination of Appropriate Measures	Error! Bookmark not defined.
Comments and Response Report	Error! Bookmark not defined.
Authority Participation	Error! Bookmark not defined.
7. Consultation with other Stakeholders	Error! Bookmark not defined.
	Error! Bookmark not defined.
 Issues raised by Interested and Affected Parties 	Error! Bookmark not defined.
Impacts that may result from the Planning and Design	
decommissioning and Closure phases as well as propos	<u> </u>
Impacts and Proposed Mitigation Measures	Error! Bookmark not defined.
2 (a) Methodology for Determining of Potential Impacts	Error! Bookmark not defined.
2 (b) Impacts during planning and design phase	Error! Bookmark not defined.
2 (c) Impacts during construction, operation and decomr	nissioning phase Error!
Bookmark not defined.	Error Dockmant wat daths - d
3. Environmental Impact Statement	Error! Bookmark not defined.
SECTION E. RECOMMENDATION OF PRACTITION	NER Error! Bookmark not
defined.	Funcil Declarated and 150
SECTION F: APPENDIXES	Error! Bookmark not defined.

SECTION A: ACTIVITY INFORMATION

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

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

Proposed bulk water pipeline is from Lindley to Arlington along R707 (West Direction), within Nketoana Local Municipality, it will transfer water from Lindley Water Treatment Plant to Leratswana Reservoir. The selection of the preferred route for the pipeline was based on the shortest distance with less crossings, i.e. railway line, road and watercourses as it would be cost effective. The preferred route does crosses watercourses, roads, private farmlands, Eskom and Telkom servitudes but it is 19.4km.

Water in Leratswana/Arlington is abstracted from Vals river and Spoornet Dam and other properties have boreholes, which aren't in use. Both water resources are not enough to supply the community and in dry season the condition worsen. Spoornet Dam, source of water in the area has a high accumulation of silt which has reduced its capacity significantly. The provision of water especially household is targeted at 100% for 2019 as one of the IDP priorities and for this to be realised, a reliable source of water supply for the area is a necessity. In order to address the water supply issue that the municipality face in the Leratswana/Arlington, it is proposed that a 19.4km uPVC pipeline with 250mm diameter and a new booster pump station to supply water with enough pressure to the reservoir, be constructed. Therefore, the construction of water supply infrastructure is of paramount importance to enable the local municipality as Water Service Authority and Provider, to provide the Leratswana/Arlington area with clean and reliable potable water and to have a sustainable water supply system.

The ambit of this Basic Assessment Report is the study of the proposed construction of a pipeline from Lindley to Arlington, identifying the possible impacts that this construction may have on the receiving and surrounding environment. Although the pipeline diameter doesn't fall within the ambit of the 2014 NEMA regulations as amended, the pipeline will cross 18 watercourses (2 significant river crossing and drainage lines, and excavations within the watercourse fall within the ambit of the EIA regulations. Therefore, this assessment will only focus on the construction of the pipeline and address all the watercourse crossings within this

assessment area.

The Technical Report and the methodology outlining how the pipe will be laid across the watercourse are attached hereto as Appendix J.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN	Description of project activity
327,325 and 324	
GNR 327: Activity 19: The infilling of material of more than 10m³ and excavation and removal of soil of more than 10m³ from a watercourse	Construction of a bulk water pipeline through various watercourses within private farms along the western side of the R707 road. Material that will be removed from the watercourses is 243m ³ and the material that will be used for backfilling is 186m ³ .

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—

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

Describe alternatives that are considered in this application as required by Appendix 1 (3)(h) of GN 326, Regulation 2014 as amended. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) 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 extent.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Alternative 1 (preferred alternative)				
Description	Lat Long (DDMMSS) (DDMMS			
Alte	ernative 2			
Description	Lat (DDMMSS)	Long (DDMMSS)		
Alternative 3				
Description	Lat (DDMMSS)	Long (DDMMSS)		

In the case of linear activities:

Alternative: Alternative S1 (preferred)		Latitude (S):	Longitude (E):
 Starting point of the activity 		27°52' 36.11"	27° 55' 19.33"
 Middle/Additional point of activity 	the	27° 57' 3.95"	27° 53′ 9.58″
 End point of the activity 		28° 1' 35.63"	27° 50' 32.74"
Alternative S2 (if any)			·
 Starting point of the activity 			
 Middle/Additional point of activity 	the		
 End point of the activity 			
Alternative S3 (if any)			
 Starting point of the activity 			
 Middle/Additional point of activity 	the		
 End point of the activity 			

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.

The co-ordinates for the 2 river crossings and drainage lines are contained in the Property Description attached hereto as Appendix A.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

b) Lay-out alternatives

Alternative 1 (preferred alternative)				
Description	Lat	Long		
	(DDMMSS)	(DDMMSS)		
Alternative 2				
Description	Lat	Long		
	(DDMMSS)	(DDMMSS)		
Alternative 3				
Description	Lat	Long		
	(DDMMSS)	(DDMMSS)		

c) Technology alternatives

Alternative 1 (preferred alternative)		
Alternative 2		
Alternative 3		
Alternative 3		

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)			
Alternative 2		·	
Alternative 3			

e) No-go alternative

If the construction of the proposed pipeline doesn't take place, water shortages in the Leratswana/Arlington area will worsen as Nketoana Local Municipality will not be able to provide the communities with sufficient basic water. The existing water source would be unable to meet the current and future water demand. Paragraphs 3 – 13 below should be completed for each alternative.

3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:	Size of the activity:
Alternative A1 ¹ (preferred activity	m ²
alternative)	
Alternative A2 (if any)	m ²
Alternative A3 (if any)	m ²

or, for linear activities:

Alternative:	Length activity:	of	the
Alternative A1 (preferred activity alternative)		19 4	00 m
Alternative A2 (if any)			m
Alternative A3 (if any)			m

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

Alternative:	Size of the site/servitude:
Alternative A1 (preferred activity alternative)	m ²
Alternative A2 (if any)	m ²
Alternative A3 (if any)	m ²

4. SITE ACCESS

Does ready access to the site exist?

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



Describe the type of access road planned:

The proposed development is along R707 provincial road and the existing access roads to the private farmlands branching off from the road will be used.

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.

12

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town (s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The coordinates 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.

6. LAYOUT/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 property boundaries and numbers of all the properties within 50 metres of the site:
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives):
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses:
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges:
- cultural and historical features:
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

Locality Map, Layout Plan and Sensitivity Map are attached hereto as Appendix A.

8. 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 report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

Photographic History is attached hereto as Appendix B.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 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.

Facility Illustration is attached hereto as Appendix C.

10. **ACTIVITY MOTIVATION**

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



Please NO explain

The proposed activity does not alter the existing land use rights of the private farmlands aggressively/intensively. On completion a new servitude will have to be registered for the pipeline.

2. Will the activity be in line with the following?

(a) Provincial Spatial Development Framework (PSDF)

YES

Please explain

This proposed project is in line with the Provincial efforts to improve social services and infrastructure for the community of Leratswana/Lindley. All project must promote spatial sustainability.

(b) Urban edge / Edge of Built environment for the area

NO

Please explain

No. as it is between two towns, i.e. Lindley and Arlington and it runs along private farmlands, therefore most of the pipeline section will be outside the urban edge but on completion, the servitude of the pipeline will be registered.

(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).

YES

Please explain

According to the IDP 2018 - 2019, Arlington and Lindley water resources are not supplying adequate water to the residents due to drought and water availability at dams such as Spoornet dam. Secondly, availability will play a significant role in the eradication of Bucket system in Nketoana Local Municipality.

(d) Approved Structure Plan of the Municipality

YES NO

Please explain

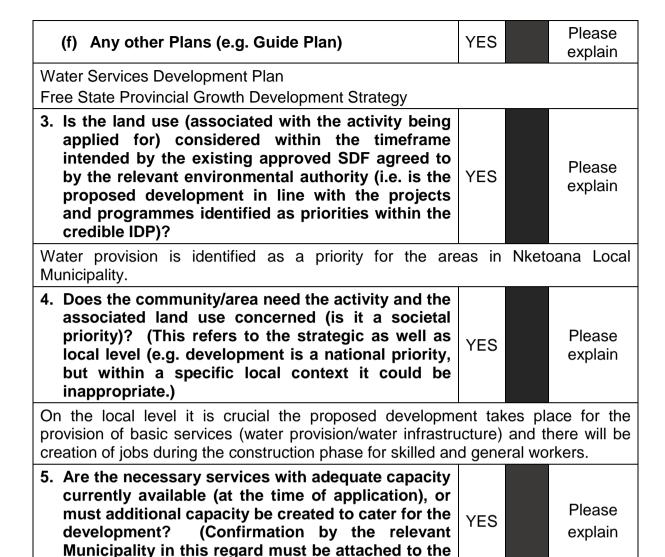
Nketoana Local Municipality doesn't have an approved structure plan.

(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)

YES

Please explain

Provision of potable drinking water and eradication of bucket system is an environmental priority.



There is adequate capacity at Lindley Water Treatment Plant to supply Arlington/Leratswana without compromising water supply in the Lindley area and Leratswana Reservoir has adequate capacity to receive the additional water supply from Lindley. This is contained in the Technical Report attached hereto as Appendix J.

final Basic Assessment Report as Appendix I.)

6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)

NO Please explain

Funding is obtained from Water Services Grant Infrastructure Grant, therefore, there will be no implication on the infrastructure planning of the municipality.

7. Is this project part of a national programme to address an issue of national concern or importance?

NO Please explain

8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)

YES Please explain

The location favours the proposed development as there is no other alternative that the municipality could implement to augment their water supply without constructing the pipeline from the water treatment plant to the reservoir. The watercourse crossings cannot be bypasses as they are located between the two (2) towns, *i.e.* Lindley and Arlington.

9. Is the development the best practicable environmental option for this land/site?

YES

Please explain

The method to be adopted for crossing of the watercourses will ensure that environmental impacts are mitigated to a greater extent. On completion of construction phase, rehabilitation of the impacted area will be undertaken to return the site to its original condition before the disturbance and prevent further degradation of the watercourse.

10.Will the benefits of the proposed land use/development outweigh the negative impacts of it?

YES

Please explain

With careful planning and practicing due diligence during the construction phase, together with proper site re-instatement any potential environmental impacts will be reduced. This will negate the long-term significant impacts imposed on the respective systems. Therefore, mitigation measures have been provided to ensure that the positive impacts outweigh the negative impacts

11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?

NO

Please explain

There will be no need to construct a new pipeline to augment water supply in the Leratswana/Arlington area from Lindley.

12. Will any person's rights be negatively affected by the proposed activity/ies?

NO

Please explain

From the public participation process undertaken, no objections were received thus it is assumed that no person's rights will be negatively affected.

13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?

NO

Please explain

The proposed development occurs between two towns within Nketoana Local Municipality through private farmlands, therefore no urban edge will be compromised.

14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?

YES

Please explain

It will contribute to SIP 6-Integrated Municipal Infrastructure Project- Develop national capacity to assist the 23 least resourced districts (19 million people) to address all the maintenance backlogs and upgrades required in water, electricity and sanitation bulk infrastructure. As the construction of the pipeline will contribute to the water bulk infrastructure.

15. What will the benefits be to society in general and to the local communities?

Please explain

Yes, the community of Leratswana/Arlington including neighbouring farmlands will have access to clean and reliable water.

16. Any other need and desirability considerations related to the proposed activity?

Please explain

The pipeline will transport bulk water from Lindley to Arlington, which will supply the Leratswana/Arlington area with the adequate water to meet the basic needs of the local people in terms of their right to water, as set out in Section 27 (1) of the Constitution. There will be connections to the private farmland from the pipeline so that the farm workers are provided with water too and farmers can also have water for their livestock.

17. How does the project fit into the National Development Plan for 2030?

Please explain

The proposed development is in line with the objective contained in Chapter 4, Economic Infrastructure of the NDP for 2030, which is as follows" *Ensure that all people have access to clean, potable water and that there is enough water for agriculture and industry, recognising the trade-offs in the use of water*". Therefore, the development will ensure Nketoana Local Municipality has a sustainable bulk water supply that enables the municipality to supply adequate water to areas within their jurisdiction for different uses, e.g. water for livestock within the farming lands. It will address challenge contained in the National Development Plan "3. *Infrastructure is poorly located, inadequate and under-maintained*" by expanding and improve the existing water infrastructure within the municipality.

18.Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

The objectives of IEM have been considered as Nketoana Local Municipality, as the applicant will be accountable and take responsibility of ensuring implementation and compliance of the conditions that will be set out in the Environmental Authorisation and Water use License. The Department of Water and Sanitation will ensure that the impacts on the watercourse during the laying of the pipeline are localized and mitigated to a greater extend. Public Participation Process was undertaken and during the process, means of empowering people so that they can have meaningful involvement were sought. Comments and input received are captured so that they can be considered during decision-making. Some of the identified aspects will be addressed by specialists to ensure that proper mitigation measures and recommendations are made for the negative impacts on the receiving environment are minimized. On completion of the project, there will be equitable access of clean and reliable water supply for the Leratswana/Arlington community and the still have enough water to meet the future demand. Mitigation and management measures that are outlined will ensure that no-one is adversely affected, particularly the vulnerable and disadvantaged individuals. The information obtained during the Basic Assessment and Water Use License Application will be reported to the Department of Economic development, Small Business, Tourism and Environmental Affairs, and Department of Water and Sanitation in a manner that will enable them to make an informed decision.

19.Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

proposed development will enable the municipality to serve the Leratswana/Arlington community with clean potable water, therefore the needs of the people are placed at the forefront of Environmental management and it will serve their social interest. The sensitivity of the receiving environment has been taken into consideration and specialists' studies have been undertaken to ensure aspects related to the proposed development are addressed so that the negative impacts are localised and there will be no residual environmental degradation of the river system thus deteriorating the river health. During construction, there will be containers provided to contain general and construction waste and the contents thereof will be emptied to the registered landfill site in either Arlington or Lindley. All the legislation and regulations relevant to the proposed development will be complied with, and the municipality will implement mitigation and management measures outlined in the environmental reports. Public participation process will be undertaken as part of the Basic Environmental Impact Assessment and Water Use License Application Process. The new water supply will be used optimally and serve the interest of all the water users within the Leratswana/Arlington areas and neighbouring private farmlands.

11. 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	Applicability to the project	Administering authority	Date
The Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)	Chapter 2-Bill of Rights Section 24: Environmental Right Section 27(1)(b): Right of access to enough water Section 32: Right to access of Information	Government of South Africa	04 February 1997
National Environmental Management Act (Act 107 of 1998)	Chapter 1-National Environmental Management Principles Section 2: National Environmental management principles. Chapter 5-Integrated Environmental Management Section 24: Environmental Authorisation (control of activities which may have a detrimental effect on the environment). Chapter 7: Compliance and	Department of Environmental Affairs	29 January 1999

	Enforcement Section 28: Duty of care and remediation of environmental damage. Section 29: Protection of workers refusing to do environmentally hazardous work		
Environmental Impact Assessment Regulation, 2014 as amended	Listing Notice 1 of 2014 (GNR 387) – which set out activities which require a BA before an Environmental Authorisation may be issued	Provincial Environmental Affairs-DESTEA	07 April 2017
National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)	Chapter 4-Air Quality Management. Measures Section 32: Control of Dust Section 34: Control of Noise.	Department of Environmental Affairs	11 September 2005
National Environmental Management: Biodiversity Act (Act 10 of 2004)	Chapter 5-Species and organisms posing threat to the Biodiversity Section 75: Control and eradication of Listed Alien Invasive Species	Department of Environmental Affairs	01 September 2004
National Environmental Management: Waste Act (Act 59 of 2008)	Chapter 4-Waste Management Measures Section 21: General Requirements for Storage of Waste Section 26: Prohibition of unauthorised disposal Section 27(2)(a): Littering	Department of Environmental Affairs	01 July 2009
National Water Act (Act No. 36 of 1998)	Chapter 3 – Protection of Water Resources. Section 19 – Prevention and remedying effects of pollution. Section 20 – Control of emergency incidents. Chapter 4 – Use of Water Section 21: Licensing of Water Uses	Department of Water and Sanitation	06 December 1999
Conservation of Agricultural Resources Act (Act No. 43 of 1983)	Section 5: Prohibition of spreading of weeds. Section 6(e)(f)(j)(l): Control Measures	Department of Agriculture, Forestry and Fisheries	01 June 1984
Occupational Health and Safety Act (Act 15 of 1993)	Provisions for Occupational Health & Safety in the workplace.	Department of Labour	23 June 1993
Water Services Act, 1997	To provide for the rights of	Nketoana Local	19

BASIC ASSESSMENT REPORT

(Act No 108 of 1997)	access to basic water supply	Authority	December
	and basic sanitation		1997

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

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

If YES, what estimated quantity will be produced per month?

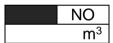
How will the construction solid waste be disposed of (describe)?

The waste generated from construction activities cannot be estimated but the waste will be disposed of at the nearest local licenced landfill site within Nketoana Local Municipality.

Where will the construction solid waste be disposed of (describe)?

It will be disposed of at the Lindley or Arlington landfill site depending on the one nearer to the construction site.

Will the activity produce solid waste during its operational phase? If YES, what estimated quantity will be produced per month? How will the solid waste be disposed of (describe)?



N/A

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

N/A

Where will the solid waste be disposed of 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 landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether 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 NEM:WA?



If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?



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. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

NO m³

If YES, what estimated quantity will be produced per month? Will the activity produce any effluent that will be treated and/or disposed of on site?

NO 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.

Will the activity produce effluent that will be treated and/or disposed of at another facility?



If YES, provide the particulars of the facility:

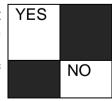
, I	a contract of the contract of	,		
Facility name:				
Contact person:				
Postal address:				
Postal code:				
Telephone:				
E-mail:				

Describe the measures that will be taken to ensure the optimal reuse or recycling of wastewater, if any:

Due to the nature of the proposed project, no wastewater will be generated during the construction or operational phase of the activity.

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions and dust associated with construction phase activities?



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

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

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

The emission will be from construction vehicles, the carbon monoxide from the cars will be in very low quantities therefore negligible. However, construction vehicles would be kept in a god working condition. There will be excessive generation of dust from construction related activities, which is temporarily, and measures will be in place to ensure that it doesn't cause any harm to human health or well-being.

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?



If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

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



Describe the noise in terms of type and level:

The noise that will be generated will be associated with construction activities, e.g. excavation, earthmoving, drilling, pumping, movement of construction machinery and equipment, however, construction will be during normal working hours.

13. 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 groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

litres
YES

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

Application has not been submitted to DWS as we await consent from the landowners and proof of submission will be provided in due course.

14. ENERGY EFFICIENCY

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

No energy efficiency measures were taken into account.

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

N/A

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

 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 B and indicate the area, which is covered by each copy No. on the Site Plan.

Section	В	Сору	No.	(e.g.	
A):					

- 2. Paragraphs 1 6 below must be completed for each alternative.
- 3. Has a specialist been consulted to assist with the completion of this section?

YES

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/ph ysical address:

Province	Free state
District	Thabo Mofutsanyana District
Municipality	
Local	Nketoana Local Municipality
Municipality	
Ward	5
Number(s)	
Farm name and	Mike 282
number	
Portion	Parent
number	
SG Code	F0220000000028200000

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

A full list of Property Description is attached hereto as Appendix A.

Current landuse zoning as per local municipality IDP/records:

Agriculture			

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application. Is a change of land-use or a consent use application required?

NO

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

,											
Flat											
Alternati	ve S2 (if a	ny):									
Flat	1:50	_	1:20	_	1:15	_	1:10	_	1:7,5	_	Steeper
	1:20		1:15		1:10		1:7,5		1:5		than 1:5
Alternati	ve S3 (if a	ny):									
Flat	1:50	_	1:20	_	1:15	_	1:10	_	1:7,5	_	Steeper
	1:20		1:15		1:10		1:7,5		1:5		than 1:5

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

		_					
2.1 Ridgeline			2.4 C	losed valley		2.7 Undulating plain / low	V
G				,		hills	X
2.2 Plateau			2.5 O	pen valley		2.8 Dune	
2.3 Side	slope	of	2.6 P	lain	Y	2.9 Seafront	
hill/mountain					_ ^		
2.10 At sea						•	

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alterna S1:	ative	Alternative S2 (if any)	-	Alterna S3 (if a	
Shallow water table (less than 1.5m deep)		NO				
Dolomite, sinkhole or doline areas		NO				
Seasonally wet soils (often close to water bodies)	YES					
Unstable rocky slopes or steep slopes with loose soil		NO				
Dispersive soils (soils that dissolve in water)		NO				
Soils with high clay content (clay fraction more than 40%)	YES					
Any other unstable soil or geological feature		NO				

An area sensitive to erosion



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. 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	
	Cultivated land		Building or other structure	

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.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River		
Non-Perennial River	YES	
Permanent Wetland		
Seasonal Wetland		
Artificial Wetland		
Estuarine / Lagoonal wetland		

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

There are relatively natural portions of small ephemeral water drainage lines and significant ephemeral watercourses. The small ephemeral courses possess no distinct surrounding riparian zones with any significant woody presentation due to the lack of continuous water flow through them. The significant ephemeral watercourse possesses distinct surrounding riparian zones with significant woody representation due to the more constant water flows. Along the pipeline route, there are 18 watercourse crossings from Lindley to Leratswana and river crossings are at crossing 6 (River Crossing 1) and 7 (River Crossing 2) with the rest being drainage lines crossings, which are very important to the Quartenary Surface Water Catchment, which drains towards the north west, therefore, they are viewed as conservationally significant.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that 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:

Natural area	Dam or reservoir	
Low density residential		
Medium density residential		
		Plantation
		Agriculture
		River, stream or wetland
	Railway line N	
		Archaeological site

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

The 60 years old railway bridge in proximity of the proposed water pipeline is of heritage or archaeological value and have been avoided.

BASIC ASSESSMENT REPORT

If any of the boxes marked with an " $^{\rm An}$ " are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	NO
Core area of a protected area?	NO
Buffer area of a protected area?	NO
Planned expansion area of an existing protected area?	NO
Existing offset area associated with a previous Environmental	NO
Authorisation?	
Buffer area of the SKA?	NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

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? If YES, explain:

YES
Uncertain

According to the Heritage Specialist, the two sites that were identified during the assessment are both represented by historic Railway Bridges on the Lindley-Arlington rail line. Both sites are located relatively close to the proposed pipeline and as these bridges are older than 60 years of age (more than likely older than 100 years of age) they are deemed historically significant and should be avoided by the proposed development and preserved intact. If these features cannot be avoided by the proposed pipeline route then the features should be documented in detail through mapping, drawing and photographic recording.

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

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 provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

unemployment rate 30.4%

Economic profile of local municipality:

Agricultural sector is the main economic drive of the municipality and retail. 20.6% of employment in 2011 was generated by agricultural sector.

Level of education:

According to statssa 2011- Nketoana municipality has 6.7% have higher education and 20 % has matric

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R	
What is the expected depical value of the delivity of completion.	72 517	099.43
What is the expected yearly income that will be generated by or as a result of the activity?	N/A	
Will the activity contribute to service infrastructure?	YES	
Is the activity a public amenity?	YES	
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	20	
What is the expected value of the employment opportunities	R12	755
during the development and construction phase?	129.829	9
What percentage of this will accrue to previously disadvantaged individuals?	30%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	0	
What is the expected current value of the employment opportunities during the first 10 years?	R0	
What percentage of this will accrue to previously disadvantaged individuals?	90%	

9. BIODIVERSITY

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

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

Systematic Biodiversity Planning Category		If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan		
		Other Natural		The area is largely degraded and only a portion is categorised as Other Natural Area
		Area (ONA)		

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	12%	The other areas are natural and not disturbed
Near Natural (includes areas with low to moderate level of alien invasive plants)	3%	Alien Invasive Management Plan to be compiled by a qualified ecologist
Degraded (includes areas heavily invaded	35%	Grazing and buildings

by alien plants)		
Transformed (includes cultivation, dams, urban, plantation,	60%	Agricultural activities
roads, etc)		

c) Complete the table to indicate:

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

Terrestrial Ecosystems			Aquatic Eco	syster	ns	
Ecosystem threat status as per the National Environmental Management: Biodiversity Act	Vulnerable	depres: and wetlar pans	d (including rivers, sions, channelled unchanneled nds, flats, seeps and artificial wetlands)			
(Act No. 10 of 2004)		YES				

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

The majority of the watercourse crossings falls within the Eastern Free State Clay Grassland vegetation Type (Gm3), whereas the northern crossings in Arlington are within the Central Free State Grassland vegetation type (Gh 6). Gm3 vegetation type is endangered due to significant transformation and degradation mostly caused by agricultural activities and Gh 6 is classified as vulnerable as a significant portion has been transformed either by cultivation or for building of dams. Gm3 is also classified as Nationally Vulnerable Status in terms of the Department of Environmental Affairs' National Threatened Ecosystems System, therefore it renders the entire vegetation type a priority ecosystem type for conservation on a National Scale. The majority of the proposed pipeline route is categorised as degraded land in accordance with the Free State Provincial Spatial Biodiversity Plan 2017, which sets out biodiversity priority areas in the province. Only small intermittent sections along the route are categorised as Other Natural Areas (ONA). There are clumps of the provincially protected aquatic bulb species Crinum bulbispermum were found to be present within the two significant ephemeral watercourses. No Red Data Listed, provincially- or nationally protected or any other species of conservational significance were found to be present within the other watercourse crossings, i.e. drainage lines.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication	The Weekly	
name		
Date published	8-14 March 2019	
Site notice	Latitude	Longitude
position	27°52'28.72"	27°55'20.46''
Date placed	8-14 March 2019	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 326

The measures that were undertaken to include the potential I&APs are as follows: The notices were placed at Arlington Water treatment Plant and Municipal office. In Arlington the notices were placed at Leratswana Library, Nketoana Municipal Office, Police Station and OVK Store. Secondly, public meeting was held on the 20th June 2019 in Arlington.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 326

Title, Name and	Affiliation/ key stakeholder	Contact details (tel
Surname	status	number or e-mail
		address)
Mr. Name Nhlapo	Councillor (Ward 5)-Arlington	073 566 8285
Mr. Mofokeng	Councillor (Ward 4)-Lindley	082 963 0825
Mr F. Bertram	Landowner	082 920 1953
Mr J. Touder	landowner	082 496 2557
Mr Van Rens	Landowner	082 780 7784
Mr M. Mkwanazi	Nketoana Municipality	073 2329 229
Senwes/ Mr G. Nel	Landowner	079 5999 713
Marelie Botha	Registered Interested and	082 493 5166
	Affected Party/Landowner	

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

The BIDs were sent to the identified I&APs and the attendance register of the meeting held with the affected landowners are attached hereto but notifications weren't sent to councillor only verbal and telephonic discussion were held. The draft review will be couriered or hand-delivered to the I&APs and the courier waybills and the acknowledgement letters will be included in the Final BAR.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by	Summary of response from EAP			
I&APs				
Will the pipeline be excavated deep as	It will be embedded 1.5 m deep,			
not to prevent planting?	therefore replantation may take place as			
	normal			
Will the municipality carry the cost of	Yes, the fence of the farmers will be put			
fixing fence after the project is	back and it is the responsibility of the			
complete?	applicant/ contractor			

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR 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 the Final BAR as Appendix E3.

The Comments and Responses Report is attached hereto as Appendix E3. It will be updated when comments are received from reviewing of Draft BAR.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	F a x N o	e-mail	Postal address
DESTEA	Ms Molokwane	051 400 4831		molokwanen@destea.g ov.za	
Department of Roads	Mr Willie Naude	082 0599 707		fsplanning@gmail.com	
Eskom	Ms Jeanine Burger	051 404 2439		Burgerje@eskom.co.za	
Telkom	Mr Mothobi Martin	051 861 8747		MartiMC2@telkom.co.za	
Department of water and sanitation	Mr George Nel	051 405 9000		NelG@dws.gov.za	

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

Proof of BIDs that were sent via emails to the Authorities and Organs of State are attached hereto as Appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) 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.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

A List of registered I&APs are attached hereto as Appendix E5.

BASIC ASSESSMENT REPORT

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

Copies of emails sent to are attached hereto as Appendix E5.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 as amended 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. 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

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts 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. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

REFER TO APPENDIX F

Activity	Impact summary	Significance	Proposed mitigation			
Alternative 1 (preferred alternative)						
	Direct impacts:					
	Indirect impacts:					
	Cumulative impacts:					
	Direct impacts:					
	Indirect impacts:					
	Cumulative impacts:					
Alternative 2						
	Direct impacts:					
	Indirect impacts:					
	Cumulative impacts:					
	Direct impacts:					
	Indirect impacts:	_				

Activity	Impact summary	Significance	Proposed mitigation
	Cumulative impacts:		
Alternativ	e 3		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
No-go opt	ion	-	
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
	1		1

A complete impact assessment in terms of Regulation 19(3) of GN 326 must be included as Appendix F.

2. 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 <u>after</u> 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 A (preferred alternative)

The construction of the Nketoana bulk Water Supply line is necessary as the Nketoana local Municipality cannot supply the present or future need with regards to the basic water supply to the residents of the Municipality. It has therefore been proposed that a bulk water supply pipeline is constructed from Lindley Water Treatment Plant to Leratswana Reservoir in order to provide sufficient water for the community of Leratswana/Arlington. The construction of the pipeline will cross watercourses, which include drainage lines and rivers. Given the required footprint to lay the pipeline, construction activities would be limited to the narrow section and with the necessary mitigation measures implemented during the construction phase, the impacts will be greatly minimized and will furthermore rehabilitation will

be done immediately on completion of construction activities along the watercourses to ensure that the impacted areas can return to their former function.

The construction impacts will be of low significance as they will be localised, short term and restricted to the construction phase, and will be adequately mitigated to minimize the impacts on wetlands and vegetation removal. The operational impacts will result in an environmental benefit due to fact the surrounding communities will be provided with sufficient water supply.

If the proper mitigation procedures are followed during the construction phase, the impacts on the environment during the operational phase will be insignificant and residual impacts limited. The impacts will be of short duration (only during the construction phase) and the development footprint will be kept to the minimum. The impacted environment will be able to return to normal on completion of rehabilitation phase and the likelihood of any environmental degradation post-construction will be reduced significantly.

Alternative B

Alternative C

No-go alternative (compulsory)

If the construction of the pipeline does not take place, the Nketoana Local Municipality will not be able to provide the basic need of water to the Leratswana/Arlington community and therefore, they will be un breach of their constitutional mandate as the local authority and Water Services Authority.

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)?



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).

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.

- An Environmental Control Officer must be appointed prior to commencement of construction activities.
- The provincially protected species must be removed prior to commencement of construction activities.
- Alien Invasive Management Plan must be compiled prior to commencement of construction activities including vegetation clearance.
- Impacted areas must be rehabilitated immediately when construction activities cease, therefore a Rehabilitation Plan must be compiled as reviewed by a Control Environmental Officer.
- Impacted watercourses must be monitored for 12 months post rehabilitation.

Is an EMPr attached?

YES

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.



PROPOSED 19.4KM BULK WATER PIPELINE FROM LINDLEY TO LERATSWANA RESERVOIR

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information

