



**BASIC ASSESSMENT REPORT**

**THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND  
THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.**

**NOVEMBER 2019**

(For official use only)	
Pre-application Reference Number (if applicable):	16/3/3/6/7/1/B5/2/1524/22
EIA Application Reference Number:	
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

**GENERAL PROJECT DESCRIPTION**

(This must include an overview of the project including the Farm name/Portion/Erf number)

**THE PROPOSED ESTABLISHMENT OF AN APPROXIMATELY 2.5KM LONG BULK WATER  
SUPPLY PIPELINE ON ERVEN 1886 AND 1887, WOLSELEY**

## IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.
2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".
3. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.
4. All applicable sections of this BAR must be completed.
5. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.
6. This BAR is current as of **November 2019**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at <http://www.westerncape.gov.za/eadp> to check for the latest version of this BAR.
7. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.
8. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
9. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.
10. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.
11. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.
12. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.
13. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link <https://screening.environment.gov.za/screeningtool> to generate the Screening Tool Report. The screening tool report must be attached to this BAR.

14. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ("NEM:AQA"), the submission of the Report must also be made as follows, for-  
 Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licencing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

### DEPARTMENTAL DETAILS

<p align="center"><b>CAPE TOWN OFFICE: REGION 1 and REGION 2</b></p> <p align="center"><b>(Region 1: City of Cape Town, West Coast District)</b>  <b>(Region 2: Cape Winelands District &amp; Overberg District)</b></p>	<p align="center"><b>GEORGE OFFICE: REGION 3</b></p> <p align="center"><b>(Central Karoo District &amp; Garden Route District)</b></p>
<p>BAR must be sent to the following details:</p> <p>Western Cape Government            Department of Environmental Affairs and Development Planning            Attention: Directorate: Development Management (Region 1 or 2)            Private Bag X 9086            Cape Town,            8000</p> <p>Registry Office            1<sup>st</sup> Floor Utilitas Building            1 Dorp Street,            Cape Town</p> <p>Queries should be directed to the Directorate:            Development Management (Region 1 and 2) at:            Tel: (021) 483-5829            Fax (021) 483-4372</p>	<p>BAR must be sent to the following details:</p> <p><del>Western Cape Government</del>  <del>Department of Environmental Affairs and Development Planning</del>  <del>Attention: Directorate: Development Management (Region 3)</del>  <del>Private Bag X 6509</del>  <del>George,</del>  <del>6530</del></p> <p>Registry Office            4<sup>th</sup> Floor, York Park Building            93 York Street            George</p> <p><del>Queries should be directed to the Directorate:</del>  <del>Development Management (Region 3) at:</del>  <del>Tel: (044) 805-8600</del>  <del>Fax (044) 805-8650</del></p>

### MAPS

<p><b>Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.</b></p>	
<p>Locality Map:</p>	<p>The scale of the locality map must be at least 1:50 000.            For linear activities or development proposals 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:</p> <ul style="list-style-type: none"> <li>• an accurate indication of the project site position as well as the positions of the alternative sites, if any;</li> <li>• road names or numbers of all the major roads as well as the roads that provide access to the site(s)</li> <li>• a north arrow;</li> <li>• a legend; and</li> <li>• a linear scale.</li> </ul> <p>For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.</p> <p>Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.</p>

Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	
Site Plan:	<p>Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following:</p> <ul style="list-style-type: none"> <li>• The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale.</li> <li>• The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan.</li> <li>• On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided.</li> <li>• The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan.</li> <li>• The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan.</li> <li>• Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development <b>must</b> be clearly indicated on the site plan.</li> <li>• Servitudes and an indication of the purpose of each servitude must be indicated on the site plan.</li> <li>• Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): <ul style="list-style-type: none"> <li>o Watercourses / Rivers / Wetlands</li> <li>o Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable);</li> <li>o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&amp;DP");</li> <li>o Ridges;</li> <li>o Cultural and historical features/landscapes;</li> <li>o Areas with indigenous vegetation (even if degraded or infested with alien species).</li> </ul> </li> <li>• Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted.</li> <li>• North arrow</li> </ul> <p>A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.</p>
Site photographs	<p>Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as <b>Appendix C</b>. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.</p>
Biodiversity Overlay Map:	<p>A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as <b>Appendix D</b>.</p>
Linear activities or development and multiple properties	<p>GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system.</p> <p>Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix.</p> <p>For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as <b>Appendix A3</b>.</p>

## ACRONYMS

DAFF:	Department of Forestry and Fisheries
DEA:	Department of Environmental Affairs
DEA& DP:	Department of Environmental Affairs and Development Planning
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
TOR:	Terms of Reference

WC BSP:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government

## ATTACHMENTS

**Note:** The Appendices must be attached to the BAR as per the list below. Please use a ✓ (tick) or a x (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			✓ (Tick) or x (cross)
Appendix A:	Maps		
	Appendix A1:	Locality Map	✓
	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	N/A
	Appendix A3:	Map with the GPS co-ordinates for linear activities	✓
Appendix B:	Appendix B1:	Site development plan(s)	✓
	Appendix B2	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;	✓
Appendix C:	Photographs		✓
Appendix D:	Biodiversity overlay map		✓
Appendix E:	Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.		
	Appendix E1:	Final comment/ROD from HWC	✓
	Appendix E2:	Copy of comment from Cape Nature	✓
	Appendix E3:	Final Comment from the DWS	x
	Appendix E4:	Comment from the DEA: Oceans and Coast	N/A
	Appendix E5:	Comment from the DAFF	N/A
	Appendix E6:	Comment from WCG: Transport and Public Works	x
	Appendix E7:	Comment from WCG: DoA	x
	Appendix E8:	Comment from WCG: DHS	N/A

	<b>Appendix E9:</b>	<b>Comment from WCG: DoH</b>	<i>N/A</i>
	<b>Appendix E10:</b>	<b>Comment from DEA&amp;DP: Pollution Management</b>	<i>N/A</i>
	<b>Appendix E11:</b>	<b>Comment from DEA&amp;DP: Waste Management</b>	<i>N/A</i>
	<b>Appendix E12:</b>	<b>Comment from DEA&amp;DP: Biodiversity</b>	<i>N/A</i>
	<b>Appendix E13:</b>	<b>Comment from DEA&amp;DP: Air Quality</b>	<i>N/A</i>
	<b>Appendix E14:</b>	<b>Comment from DEA&amp;DP: Coastal Management</b>	<i>N/A</i>
	<b>Appendix E15:</b>	<b>Comment from the local authority</b>	X
	<b>Appendix E16:</b>	<b>Confirmation of all services (water, electricity, sewage, solid waste management)</b>	<i>N/A</i>
	<b>Appendix E17:</b>	<b>Comment from the District Municipality</b>	X
	<b>Appendix E18:</b>	<b>Copy of an exemption notice</b>	<i>N/A</i>
	<b>Appendix E19</b>	<b>Pre-approval for the reclamation of land</b>	<i>N/A</i>
	<b>Appendix E20:</b>	<b>Proof of agreement/TOR of the specialist studies conducted.</b>	✓
	<b>Appendix E21:</b>	<b>Proof of land use rights</b>	✓
	<b>Appendix E22:</b>	<b>Proof of public participation agreement for linear activities</b>	✓
<b>Appendix F:</b>	<b>Public participation information: including a copy of the register of I&amp;APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.</b>		✓
<b>Appendix G:</b>	<b>Specialist Report(s)</b>		✓
<b>Appendix H:</b>	<b>EMPr</b>		✓
<b>Appendix I:</b>	<b>Screening tool report</b>		✓
<b>Appendix J:</b>	<b>The impact and risk assessment for each alternative</b>		✓
<b>Appendix K:</b>	<b>Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline</b>		X
<b>Appendix.....</b>	<b>Any other attachments must be included as subsequent appendices</b>		

**SECTION A: ADMINISTRATIVE DETAILS**

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE:		GEORGE OFFICE:
	REGION 1 (City of Cape Town, West Coast District)	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Garden Route District)
<p><b>Duplicate this section where there is more than one Proponent</b></p> <p>Name of Applicant/Proponent: Name of contact person for Applicant/Proponent (if other): Company/ Trading name/State Department/Organ of State: Company Registration Number: Postal address: Telephone: E-mail:</p>	Witzenberg Local Municipality		
	David Nasson		
	Witzenberg Local Municipality		
	50 Voortrekker Street <b>CERES</b>		
			Postal code: 6385
	(023) 316 8196		Cell:
david@witzenberg.gov.za		Fax: ( )	
<p>Company of EAP: EAP name: Postal address: Telephone: E-mail: Qualifications: EAPASA registration no:</p>	EnviroAfrica CC		
	Bernard de Witt		
	P. O. Box 5367 <b>HELDERBERG</b>		
			Postal code: 7130
	(021) 851 1616		Cell: 082 448 99 91
			Fax: ( )
<p><b>Duplicate this section where there is more than one landowner</b></p> <p>Name of landowner: Name of contact person for landowner (if other): Postal address: Telephone: E-mail:</p>	Erf 1887 is owned by the applicant. The landowner details for Erf 1886, Ceres are the following:		
	National Department of Public Works		
	Phucuka Phenxa		
	Customs Building, Heerengracht Foreshore Private Bag X9027, <b>CAPE TOWN</b>		
			Postal code: 8000
	(021) 402 2160		Cell: 082 669 9406
Phucuka.Penxa@dpw.gov.za		Fax: ( )	
<p>Name of Person in control of the land: Name of contact person for person in control of the land: Postal address: Telephone: E-mail:</p>	The applicant and CapeNature are in control of the land		
	The contact details for the applicant are the same as those given above and the contact details for CapeNature are the following:		
	Shared Services Centre, cnr Bosduif & Volstruis Streets, Bridgetown, <b>CAPE TOWN,</b>		
			Postal code: 7764
	( )		Cell: 082 727 2691
	aduffell-canham@capenature.co.za		Fax: ( )



## SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INCLUDED IN THE APPLICATION FORM

1.	Is the proposed development (please tick):	New		Expansion																		
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.																					
The proposed site is very close to natural, but in certain places is quite disturbed and therefore does not fit neatly into the category of greenfield nor into the category of brownfield.																						
3.	<b>For Linear activities or developments</b>																					
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:																					
Erf 1886, Ceres and Erf 1887, Ceres																						
3.2.	Development footprint of the proposed development for all alternatives.				m <sup>2</sup>																	
Approximately 2500m long and approximately 0.35m in diameter. A total working area of not more than 10m wide from the sides of the existing ailing pipeline will be kept to. The 10m wide working space and 0.35m diameter add up to an approximately 10.35m wide and a 2500m long corridor and this is equal to a footprint of approximately 25875m <sup>2</sup>																						
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.																					
<p>The proposed development is a bulk water supply pipeline of approximately 2.5km in length and 350mm in diameter on Erven 1886 and 1887, Ceres to deliver bulk water water from the Tierhokskloof Stream to the Wittebrug Water Purification Plant ("WPP") for supplying potable water to the town of Wolseley.</p> <p>The above-ground length of the pipeline will extend for approximately 1.8km from the intake works in the Tierhokskloof Stream and up onto the rocky mountainside towards the Wittebrug WPP. This portion of the pipeline will be made of durable material such as ductile iron and will rest on stilts. In areas where the mountainside slope is extra steep, stone barriers or retaining walls will be used to support and keep the pipeline in place.</p> <p>The remaining 700m length of the pipeline will be constructed underground in the valley located to the west of the proposed site up to a connection point at the Wittebrug WPP. The underground length of the pipeline will be made of more cost-effective material such as HDPE.</p> <p>The proposed pipeline will be constructed alongside the existing bulk water supply pipeline and the maximum distance between the two pipelines will be kept to 10m. When the proposed pipeline starts being used, the existing pipeline will stop being used.</p> <p>The co-ordinates along the pipeline route include the following:                  Abstraction point in Tierhokskloof Stream (33° 25' 44.71"S, 19° 17' 0056"E), Waypoints (33° 25' 20.52"S, 19° 16' 57.04"E) and (33° 25' 14.84"S, 19° 16' 28.74"E) and End point at Witbrug Water Purification Plant (33° 25' 19.20"S, 19° 15' 59.74"E)</p> <p>Access to the proposed site will be gained off Michells Pass onto the offroad track that passes in front of the gate of the WPP</p>																						
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.																					
Access to the proposed site is available by means of an offroad vehicle track of approximately 700m in length. Thereafter, the proposed site is only accessible on foot.																						
3.5.	SG Digit codes for Erf 1886, Ceres	C	0	1	9	0	0	0	1	0	0	0	0	1	0	0	0	0	1	8	8	6
	SG Digit codes for Erf 1887, Ceres	C	0	1	9	0	0	0	1	0	0	0	0	1	0	0	0	0	1	8	8	7
3.6.	<b>Starting point co-ordinates for all alternatives</b>																					
Latitude (S)		33°			25'			44.71"S														
Longitude (E)		19°			17'			00.56"E														
<b>Middle point co-ordinates for all alternatives</b>																						
Latitude (S)		33°			25'			20.52" S,														
Longitude (E)		19°			16'			57.04" E														
<b>End point co-ordinates for all alternatives</b>																						
Latitude (S)		33°			25'			14.84"														
Longitude (E)		19°			16'			28.74" E														



<b>Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.</b>			
4.	<b>Other developments</b>		
4.1.	Property size(s) of all proposed site(s):		m <sup>2</sup>
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):		m <sup>2</sup>
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:		m <sup>2</sup>
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).		
4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.		
4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:		
4.7.	Coordinates of the proposed site(s) for all alternatives:		
	Latitude (S)	°	' "
	Longitude (E)	°	' "

## SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

### 1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	NO
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### 2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	YES	NO
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	YES	NO
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	YES	NO
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES	NO
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	NO

### 3. Other legislation

List any other legislation that is applicable to the proposed activity or development.

### 4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.

The proposed development corresponds with the objective of delivering basic services to the community that is specified in the Witzenberg Local Municipality IDP 2023/2024 and this is consistent with the National Development Plan

### 5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.
Guideline for involving specialists in the EIA process. Guideline for involving biodiversity specialists in the EIA process. Guideline on public participation. Guideline for involving aquatic specialists in the EIA process.

## 6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form
The specialists investigation reports required in the web-based Screening Tool Report have been compiled and attached hereto as appendices, except the specialist study reports that are deemed unnecessary as explained in the Site Sensitivity Verification Report.

## SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant <b>Basic Assessment Activity(ies)</b> as set out in <b>Listing Notice 1</b>	Describe the portion of the proposed development to which the applicable listed activity relates.
12	<p><i>“The development of— dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs—</i></p> <p><i>(a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; — excluding— (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; [or] (ee) where such development occurs within existing roads, [or] road reserves or railway line reserves; or (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared”.</i></p>	<p>The proposed development entails the construction of a bulk water supply pipeline and associated infrastructure of more than 100m<sup>2</sup> in size within 32m of the Tierhokskloof Stream</p>
19	<p><i>“The infilling or depositing of any material of more than 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic meters from a watercourse”</i></p>	<p>The abstraction infrastructure to be secured in the Tierhokskloof Stream requires that more than 10m<sup>3</sup> of material be moved in the Tierhokskloof stream</p>

Activity No(s):	Provide the relevant <b>Basic Assessment Activity(ies)</b> as set out in <b>Listing Notice 3</b>	Describe the portion of the proposed development to which the applicable listed activity relates.
12	<p><i>"The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken following a maintenance management plan.</i></p> <p><b>i. Western Cape</b></p> <p><i>i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i></p> <p><i>ii. Within critical biodiversity areas identified in bioregional plans;</i></p> <p><i>iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</i></p> <p><i>iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or</i></p> <p><i>v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister".</i></p>	The development footprint of the proposed pipeline is approximately 25875m <sup>2</sup> and the pipeline route is located partly within the Wittebrug Nature Reserve where more than 300m <sup>2</sup> of vegetation will be cleared.
<p><b>Note:</b></p> <ul style="list-style-type: none"> <li>The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted.</li> <li>Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority.</li> </ul>		

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant <b>Basic Assessment Activity(ies)</b> as set out in <b>Category A</b>	Describe the portion of the proposed development to which the applicable listed activity relates.

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant <b>Listed Activity(ies)</b>	Describe the portion of the proposed development to which the applicable listed activity relates.

## SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.
<p>The proposed development is a bulk water supply pipeline of approximately 2.5km in length and 350mm in diameter on Erven 1886 and 1887, Ceres to deliver bulk water water from the Tierhokskloof Stream to the Wittebrug Water Purification Plant ("WPP") for supplying potable water to the town of Wolseley.</p> <p>The above-ground length of the pipeline will extend for approximately 1.8km from the intake works in the Tierhokskloof Stream and up onto the rocky mountainside towards the Wittebrug WPP. This portion of the pipeline will be made of</p>	

	<p> durable material such as ductile iron and will rest on stilts. In areas where the mountainside slope is extra steep, stone barriers or retaining walls will be used to support and keep the pipeline in place.</p> <p> The remaining 700m length of the pipeline will be constructed underground in the valley located to the west of the proposed site up to a connection point at the Wittebrug WPP. The underground length of the pipeline will be made of more cost-effective material such as HDPE.</p> <p> The proposed pipeline will be constructed alongside the existing bulk water supply pipeline and the maximum distance between the two pipelines will be kept to 10m. When the proposed pipeline starts being used, the existing pipeline will stop being used.</p> <p> The co-ordinates along the pipeline route include the following:  Abstraction point in Tierhokskloof Stream (33° 25' 44.71"S, 19° 17' 0056"E), Waypoints (33° 25' 20.52"S, 19° 16' 57.04"E) and (33° 25' 14.84"S, 19° 16' 28.74"E) and End point at Witbrug Water Purification Plant (33° 25' 19.20"S, 19° 15' 59.74"E)</p> <p> Access to the proposed site will be gained off Michells Pass onto the gravel track that passes in front of the gate of the WPP</p>
2.	<p> Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.</p> <p> The proposed water supply pipeline will be placed alongside an existing water supply pipeline that was constructed in 1953 that must be replaced soon. The proposed water supply pipeline will therefore remain in line with how Erven 1886 and 887, Ceres have been used since 1953.</p>
3.	<p> Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.</p> <p> N/A</p>
4.	<p> Explain how the proposed development will be in line with the following?</p>
4.1	<p> The Provincial Spatial Development Framework.</p> <p> The proposed water supply pipeline is of very small scale and has no bearing on the PSDF</p>
4.2	<p> The Integrated Development Plan of the local municipality.</p> <p> The following is stated under Objective 1.1 of the 2023/2024 IDP of the Witzenberg Local Municipality: "<i>An important emphasis for the municipality is to ensure that basic services infrastructure is provided and upgraded to support areas of growth</i>". The proposed water supply pipeline will contribute towards the attainment of the aforesaid objective</p>
4.3.	<p> The Spatial Development Framework of the local municipality.</p> <p> The proposed municipal water supply pipeline will be placed alongside an existing water supply pipeline that was constructed in 1953 that must be replaced soon. The proposed municipal water supply pipeline will therefore not deviate from the SDF of the Witzenberg Local Municipality.</p>
4.4.	<p> The Environmental Management Framework applicable to the area.</p> <p> N/A</p>
5.	<p> Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.</p> <p> The recommendations contained in the Aquatic Biodiversity Assessment Report and the Biodiversity Compliance Statement have been incorporated in the EMPr appended to this Draft BAR.</p>
6.	<p> Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.</p> <p> The proposed development is a bulk water supply pipeline of approximately 2.5km in length, 0.35m in diameter and the total working area that will be provided is 10m wide on the sides of the pipeline, thereby making the development footprint approximately 25875m<sup>2</sup> big. The proposed bulk water supply pipeline is of very small scale and will not change the current usage of Erven 1886 and 1887, Ceres. This is especially the case, when it is taken into account that the proposed pipeline will be constructed alongside the route of the existing 70 years old bulk water supply pipeline that is soon not be usable anymore.</p>
7.	<p> Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.</p> <p> N/A</p>
8.	<p> Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.</p> <p> The Screening Tool Report has not changed</p>
9.	<p> Explain how the proposed development will optimise vacant land available within an urban area.</p> <p> The proposed development is not within the urban area</p>
10.	<p> Explain how the proposed development will optimise the use of existing resources and infrastructure.</p>

The proposed water supply pipeline will be placed as close as possible alongside the route of the existing water supply pipeline that was constructed in 1953. In this way, the development footprint of the replacement pipeline to on the mountainside will not spread much beyond the footprint of the existing water supply pipeline.	
11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).
The proposed water supply pipeline will not require any municipal services.	
12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.
<p>The existing water supply pipeline to the town of Wolseley was constructed in 1953. The pipeline is therefore approximately 70 years old and can therefore not be expected to keep performing well for much longer owing to damage sustained in previous bush fires as well as wear and tear during the past 70 years. Should the pipeline not be replaced until a point where the pipeline can no longer deliver water to the Wittebrug WPP for supplying Wolseley with water, the health risks associated with lack of hygiene, the economic consequences to water-dependant businesses and the overall social distress that would result would be highly undesirable.</p> <p>The provision of potable water is among the basic services that every municipality must deliver to the community. The replacing of the existing water supply pipeline with a new pipeline will therefore help to ensure that the Witzenberg Local Municipality is able to keep fulfilling the basic need of a water supply to the community of Wolseley so that the aforementioned consequences of a lack of water supply can be avoided.</p> <p>In light of the fact that almost all economic activities are directly or at least indirectly dependant on water supply, the continued provision of an adequate water supply owing to the proposed water supply pipeline will help to ensure that the town of Wolseley has a chance to keep rising socially and economically well into the future.</p>	

## SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

A public participation process that meets the requirements of Regulation 41 of the EIA Regulations of 2014 (as amended) will be conducted as was specified by the competent authority in the letter acknowledging receipt of the Notice of Intent to submit an application ("NOI")

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F.

The public participation process indicated in the application form has been complied with. Please refer to **Appendix F**

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

The National Department of Public Works as the landowner of Erf 1886, Ceres, the Western Cape Government: Agriculture, CapeNature and the Breede-Gouritz Catchment Management Agency,

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

The National Department of Water and Sanitation has not been consulted, as the Breede-Gouritz Catchment Management Agency is the authorised representative thereof in the Overberg and Boland Regions of the Western Cape Province.

5. if any of the State Departments and Organs of State did not respond, indicate which.

The Breede-Gouritz Catchment Management Agency did not respond as well as the Western Cape Government: Agriculture.

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

CapeNature raised the concern that if no servitude was ever registered for the pipeline that was constructed in 1953, the proposed pipeline may require that a long process be followed for amendment of the Hexriver Complex Protected Area Management Plan before the proposed pipeline can be constructed. However, CapeNature eventually confirmed that although a servitude was never registered for the existing pipeline, the pipeline does appear on a map of the Hexriver Complex Protected Area Management Plan and therefore the concern that was raised falls away. Please refer to **Appendix E**

**Note:**

A register of all the I&AP's notified, including the Organs of State, and all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that "Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
  - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
  - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
  - if a facsimile was sent, a copy of the facsimile Report;
  - if an electronic mail was sent, a copy of the electronic mail sent; and
  - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

**SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT**

All specialist studies must be attached as Appendix G.

**1. Groundwater**

1.1.	Was a specialist study conducted?	YES	NO
1.2.	Provide the name and or company who conducted the specialist study.		
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		

**2. Surface water**

2.1.	Was a specialist study conducted?	YES	NO
2.2.	Provide the name and/or company who conducted the specialist study.		
<b>WATSAN AFRCA</b>			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		

The recommendations contained in the Aquatic Biodiversity Specialist Study Report have resulted in the mitigation measures that relate to watercourses in the EMPr attached hereto.

### 3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO
3.2.	Provide the name and/or company who conducted the specialist study.		
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.		

### 4. Biodiversity

4.1.	Were specialist studies conducted?	YES	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
PB Consult was appointed to compile the terrestrial biodiversity specialist investigation report attached hereto as Appendix G1.			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		
The proposed water supply pipeline is located partly within the proclaimed Wittebrug Nature Reserve. Although this is the case, the proposed water supply pipeline is of very small scale and the environmental impacts thereof are low. The Terrestrial Biodiversity Compliance Statement attached hereto as Appendix G1 contains impact mitigation measures recommended by the specialist that will help to minimise the environmental impact of the proposed development and the mitigation measures have been included in the EMPr that is attached hereto as Appendix H.			
4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how this has influenced your proposed development.		
The proposed water supply pipeline is located partly within the proclaimed Wittebrug Nature Reserve. Although this is the case, the proposed water supply pipeline is of very small scale and the environmental impacts thereof are low. The Terrestrial Biodiversity Compliance Statement attached hereto as Appendix G1 contains impact mitigation measures recommended by the specialist that will help to minimise the environmental impact of the proposed development and the mitigation measures have been included in the EMPr that is attached hereto as Appendix H.			
4.5.	Explain what impact the proposed development will have on the site-specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.		
The proposed water supply pipeline is located partly within the proclaimed Wittebrug Nature Reserve. Although this is the case, the proposed water supply pipeline is of very small scale and the environmental impacts thereof are low. The Terrestrial Biodiversity Compliance Statement attached hereto as Appendix G1 contains impact mitigation measures recommended by the specialist that will help to minimise the environmental impact of the proposed development and the mitigation measures have been included in the EMPr that is attached hereto as Appendix H.			
4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.		
The proposed water supply pipeline will be placed alongside an existing 70 year old water supply pipeline that is reaching the end of its reliability. CapeNature has confirmed in writing that the old water supply pipeline appears in maps of the Hexriver Protected Area Complex and that the proposed pipeline being placed alongside the old water supply pipeline will therefore not require an amendment of the management plan of the protected area.			
4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.		
The presence of fauna on the proposed site has influenced the recommendations contained in the aquatic biodiversity specialist investigation report and the terrestrial biodiversity specialist investigation report. For example, the aquatic biodiversity specialist has recommended that the above-ground section of the proposed pipeline be placed on stilts that are sufficiently high to allow tortoise, steenbuck etc. to move across the proposed pipeline. This recommendation and other recommendations contained the specialist investigation reports have been included in the EMPr (Appendix H) that must be complied with when the proposed pipeline is constructed.			

### 5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.
N/A

### 6. Heritage Resources



6.1.	Was a specialist study conducted?	YES	NO
6.2.	Provide the name and/or company who conducted the specialist study.		
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		
	Heritage Western Cape has indicated in a letter dated 25 January 2023 that it is unlikely that the proposed pipeline will impact on heritage resources and so no further action beyond the submitted NID is deemed necessary in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999).		

## 7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.	
Heritage Western Cape has indicated in a letter dated 25 January 2023 that it is unlikely that the proposed pipeline will impact on heritage resources and so no further action beyond the submitted NID is deemed necessary in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999).	

## 8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.
	<p>The Witzenberg Local Municipality Area is located in the Breede Valley and is best known for its fruit and wine products. The region is also well-known for producing other agriculture-linked products such as olives and grain, as well as for producing beef and pork products. Horse and cattle stud farms are also found within the municipal area.</p> <p>As of 2022, 16% of the Cape Winelands' population resides in the Witzenberg municipal area. The population totals 153 475 persons in 2022 and is estimated to be 167 536 persons by 2026. This equates to an estimated average annual growth rate of 2.2 per cent for the period. The overall sex ratio indicates the number of males per 100 females in the population. The data indicates that as of 2022, there are more males than females in the Witzenberg municipal area with a ratio of 52.1 per cent (males) to 47.9 per cent (females), meaning that for every 100 women there are 109 men.</p> <p>Between 2022 and 2026, the largest population growth was recorded in both the working age (15-64) and 65+ age category at 2.4 per cent. These predicted growth rates decrease the dependency ratio from 39.1 in 2022 to 37.9 in 2026. The decreasing dependency ratio is beneficial as it implies less pressure on social systems and municipal services. It indicates that a smaller proportion of the Witzenberg population is not working, and, as a result, there is less strain placed on the government for support and the working population to support the non-working population.</p>
8.2.	Explain the socio-economic value/contribution of the proposed development.
	The proposed water supply pipeline will enable the Witzenberg Local Municipality to keep providing a basic service to the community of Wolseley when the existing pipeline is no longer in use and so is not for economic gain/ income generation purposes per se. However, the provision of water to the town of Wolseley via the pipeline will help to ensure that the growth of businesses in Wolseley that depend directly on an adequate supply of potable water and other businesses too will not be hindered by water shortages and the businesses can therefore keep providing employment opportunities and contributing to the economy. The more reliable water supply expected from the operation of the proposed pipeline will also help to limit social problems such as the psychological distress and the health risks related to poor hygiene that water shortages can cause.
8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.
	The proposed water supply pipeline is itself intended to meet the water needs of the community
8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.
	The proposed bulk water supply pipeline will not impact negatively on the health of people. In fact, the opposite is envisaged.

## SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

### 1. Details of the alternatives identified and considered

1.1.	Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
	Provide a description of the preferred property and site alternative.
	The preferred site alternative for the proposed development consists of Erven 1886 and 1887, Ceres. These properties are located on a mountainside and are also the place where the existing water supply pipeline to Wolseley was constructed in 1953. The proposed water supply pipeline will be placed alongside the old water supply pipeline.
	Provide a description of any other property and site alternatives investigated.

N/A	
Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.	
Erven 1886 and 1887, Ceres are the preferred site alternative, as the usage of these erven will allow the proposed water supply pipeline to be constructed alongside the old pipeline that is to be replaced, thereby helping to prevent the proposed development from impacting any new areas. In view of this, no other site alternatives were considered for the proposed water supply pipeline.	
Provide a full description of the process followed to reach the preferred alternative within the site.	
Erven 1886 and 1887, Ceres are the preferred site alternative, as the usage of these erven will allow the proposed water supply pipeline to be constructed alongside the old pipeline that is to be replaced, thereby helping to prevent the proposed development from impacting any new areas. In view of this, no other site alternatives were considered for the proposed water supply pipeline.	
Provide a detailed motivation if no property and site alternatives were considered.	
Erven 1886 and 1887, Ceres are the preferred site alternative, as the usage of these erven will allow the proposed water supply pipeline to be constructed alongside the old pipeline that is to be replaced, thereby helping to prevent the proposed development from impacting any new areas. In view of this, no other site alternatives were considered for the proposed water supply pipeline.	
List the positive and negative impacts that the property and site alternatives will have on the environment.	
Erven 1886 and 1887, Ceres constitute the preferred site alternative, as the usage of these erven will allow the proposed water supply pipeline to be constructed alongside the old pipeline that is to be replaced, thereby helping to prevent the proposed development from impacting any new areas. In view of this, no other site alternatives were considered for the proposed water supply pipeline.	
1.2.	Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred activity alternative.	
No activity alternatives that can be implemented in the stead of the proposed bulk water supply pipeline to Wolseley are deemed feasible. In light of the technology that exists at present, the delivery of water by means of a bulk water supply pipeline from the Tierhokskloof Stream to the Witbrug Water Purification Plant seems to be the most feasible way to replace the existing 70 years old pipeline that is reaching the end of its usability.	
Provide a description of any other activity alternatives investigated.	
N/A	
Provide a motivation for the preferred activity alternative.	
The town of Wolseley requires a reliable means of bulk water delivery to the Witbrug Water Purification Plant that will replace the existing 70 years old bulk water supply pipeline that will soon not be usable anymore. In light of the technology that exists at present, the delivery of water by means of a bulk water supply pipeline from the Tierhokskloof Stream to the Witbrug Water Purification Plant ("WWP") seems to be the most feasible way of replacing the existing 70 year old pipeline that is reaching the end of its usability.	
Provide a detailed motivation if no activity alternatives exist.	
No activity alternatives that can be implemented in the stead of the proposed bulk water supply pipeline to Wolseley are deemed feasible. In light of the limits of the technology that is available at present, the delivery of water by means of a bulk water supply pipeline from the Tierhokskloof Stream to the Witbrug WPP seems to be the only feasible way to replace the existing 70 years old pipeline that is reaching the end of its usability.	
List the positive and negative impacts that the activity alternatives will have on the environment.	
N/A	
1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts
Provide a description of the preferred design or layout alternative.	
The preferred alternative entails constructing a bulk water supply pipeline of approximately 2.5km in length and 350mm in diameter on Erven 1886 and 1887, Ceres to deliver bulk water water from the Tierhokskloof Stream to the Wittebrug Water Purification Plant ("WPP") for supplying potable water to the town of Wolseley.	
The above-ground length of the pipeline will extend for approximately 1.8km from the intake works in the Tierhokskloof Stream and up onto the rocky mountainside towards the Wittebrug WPP. This portion of the pipeline will be made of durable material such as ductile iron and will rest on stilts. In areas where the mountainside slope is extra steep, stone barriers or retaining walls will be used to support and keep the pipeline in place.	
The remaining 700m length of the pipeline will be constructed underground in the valley located to the west of the proposed site up to a connection point at the Wittebrug WPP. The underground length of the pipeline will be made of more cost-effective material such as HDPE.	
The proposed pipeline will be constructed alongside the existing bulk water supply pipeline and the maximum distance between the two pipelines will be kept to 10m. When the proposed pipeline starts being used, the existing pipeline will stop being used.	
The co-ordinates along the pipeline route include the following:	
Abstraction point in Tierhokskloof Stream (33° 25' 44.71"S, 19° 17' 00.56"E), Waypoints (33° 25' 20.52"S, 19° 16' 57.04"E) and (33° 25' 14.84"S, 19° 16' 28.74"E) and End point at Witbrug Water Purification Plant (33° 25' 19.20"S, 19° 15' 59.74"E)	

Access to the proposed site will be gained off Michells Pass onto the offroad track that passes in front of the gate of the WPP	
Provide a description of any other design or layout alternatives investigated.	
N/A	
Provide a motivation for the preferred design or layout alternative.	
<p>The preferred design alternative entails constructing the proposed bulk water supply pipeline above the ground for approximate 1800m from the intake point in the Tierhokskloof Stream and all along the mountainside until a point located approximately 700m east of the Witbrug WPP in a valley.</p> <p>The aboveground length of the pipeline on the mountainside is to help avoid the significant environmental impacts that are likely when excavating on steep mountain slopes to construct an underground pipeline. The aboveground length of the pipeline will be made of durable material such as ductile iron and will be placed on stilts. In areas where the mountainside is extra steep, the pipeline will be supported and kept in place using stone barriers and retaining walls. In the valley, the proposed pipeline will be placed under the ground and will be made of more cost-effective material such as HDPE. The excavations for placing the pipeline under the ground will not result in significant negative environmental impacts.</p>	
Provide a detailed motivation if no design or layout alternatives exist.	
<p>The alternative of constructing the whole pipeline under the ground would be advantageous in that the whole pipeline would be less vulnerable to rockfalls, fires and potential vandalism. However, the excavations that would be required on the steep mountainside for placing the pipeline under the ground would destabilise the mountainside, causing undesirable impacts that include <i>inter alia</i>, soil erosion, a heightened risk of landslides and rockfalls and their associated danger to fauna in the area and to the pipeline construction workers and pipeline maintenance workers as well as to the pipeline itself.</p> <p>In light of this, the proposed pipeline will be placed above the ground from the intake point in the Teirhokskloof Stream for approximately 1.8km along the steep mountainside until up to a point located approximately 700m east of the Witbrug WPP in a valley. It is only from this point in the valley that the pipeline will be placed under the ground for approximately 700m to connect to the Witbrug WPP.</p> <p>The aboveground length of the pipeline will be made of material of high durability such as ductile steel in order to better withstand rockfalls and bush fires on the mountainside. The underground length of the pipeline will be made of more cost-effective material such as plastic, as the risk posed by bush fires and rockfalls to the underground pipeline in the valley will be low.</p> <p>The description of the proposed development given above is deemed the most cost-effective and as well as the only feasible design alternative and so no other design alternative was considered.</p>	
List the positive and negative impacts that the design alternatives will have on the environment.	
1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred technology alternative:	
The only technology alternative considered is the usage of a pipeline for delivering bulk water from the intake point in the Tierhokskloof Stream to the Witbrug WPP.	
Provide a description of any other technology alternatives investigated.	
N/A	
Provide a motivation for the preferred technology alternative.	
This usage of a pipeline is deemed the most effective technology at present by which bulk water can be delivered from the Tiekhokskloof Stream to the Witbrug WPP so that the town of Wolseley can continue to be supplied with potable water.	
Provide a detailed motivation if no alternatives exist.	
The usage of a pipeline is deemed the most effective technology available at present by which bulk water can be delivered from the Tiekhokskloof Stream to the Witbrug WPP so that the town of Wolseley can continue to be supplied with potable water.	
List the positive and negative impacts that the technology alternatives will have on the environment.	
<p>A potential negative impact of the aboveground length of the pipeline is that the pipeline may stand out as an eyesore to onlookers travelling on Michells Pass, if the colour of the pipeline is not carefully chosen to be inconspicuous. In addition, if the aboveground length of the pipeline is not given a sufficiently high ground clearance, fauna such as tortoises and steenbuck may be blocked from crossing the pipeline to reach other areas of the mountainside that they need to travel to. Also, if the impact avoidance and mitigation measures contained in the EMPr are not strictly adhered to, the potential negative environmental impacts of the proposed bulk water supply pipeline may rise to undesirable levels.</p> <p>The positive potential impacts of establishing the proposed bulk water supply pipeline include that the Witzenberg Local Municipality will be able to supply the town of Wolseley with water in a more reliable manner, thereby meeting a basic community need in the area. In addition, it is noteworthy that economic activities all rely directly or indirectly on an adequate supply of water. In light of this, the more reliable water supply that will be made available by the proposed bulk water supply pipeline will help to ensure that water shortages do not constitute a hindrance to the socio-economic growth of Wolseley.</p>	

1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	
The only operational alternative considered is the abstraction of water from the abstraction point in the Tierhokskloof Stream and the delivery of the water to the Witbrug WPP by means of the proposed bulk water supply pipeline.	
Provide a description of any other operational alternatives investigated.	
N/A	
Provide a motivation for the preferred operational alternative.	
The preferred operational alternative will help to ensure that the Witzenberg Local Municipality is able to meet the basic community need of an adequate water supply in the town of Wolseley. In addition, the more reliable water supply that will become available to the town of Wolseley will help to ensure that water shortages will not constitute a hindrance to the socio-economic growth of Wolseley.	
Provide a detailed motivation if no alternatives exist.	
See immediately above.	
List the positive and negative impacts that the operational alternatives will have on the environment.	
See above	
1.6.	The option of not implementing the activity (the 'No-Go' Option).
Provide an explanation as to why the 'No-Go' Option is not preferred.	
The 'no-go' alternative entails not proceeding with the proposed development. If the 'no-go' alternative is adopted, the town of Wolseley will remain dependant on the existing 70 years old bulk water supply pipeline that is soon not going to be usable anymore. Should the situation remain unattended until the old pipeline is no longer usable, the Witzenberg Local Municipality will no longer be able to meet the basic community need of providing an adequate water supply to the community of Wolseley. Furthermore, businesses in Wolseley that are directly dependant on water supply in the area will suffer soon thereafter. Businesses that are less directly dependant on water will eventually suffer too as employees start dealing with <i>inter alia</i> , the social distress caused by a lack of water, sick leave applications relating to health problems associated with poor hygiene etc.	
The 'no-go' alternative is therefore associated with disadvantages that significantly outweigh any advantages. The 'no-go' alternative should therefore be discarded and the preferred alternative should be authorised.	
1.7.	Provide an explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.
The preferred alternative and the 'no-go' alternative are the only alternatives considered and the arguments for the preferred alternative have been provided above as well as the arguments against the 'no-go' alternative.	
1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.
The establishment of the proposed bulk water supply pipeline will facilitate the delivery of water abstracted from the Tierhokskloof Stream to the Wittebrug WPP in a reliable manner as the existing 70 years old water supply pipeline nears the end of its usability. The proposed water supply pipeline will therefore provide major socio-economic benefits for the community of Wolseley.	
On the contrary, the potential negative environmental impacts of establishing the proposed pipeline as identified in Appendix J and in the specialist investigation reports are low after impact mitigation measures have been implemented.	
It can therefore be concluded that the benefits the community of Wolseley will enjoy as a result of the establishment of the proposed bulk water supply pipeline far outweigh the potential environmental impacts.	

## 2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).
A working space of not more than 10m in total on the sides of the existing pipeline will be kept to for construction of the proposed water supply pipeline. All other areas outside of the 10m working space are 'no-go' areas.

## 3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.
Please see Appendix J

#### 4. Assessment of each impact and risk identified for each alternative

**Note:** The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

<b>Alternative:</b>	
<b>PLANNING, DESIGN AND DEVELOPMENT PHASE</b>	
<b>Potential impact and risk:</b>	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
<b>OPERATIONAL PHASE</b>	
<b>Potential impact and risk:</b>	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
<b>DECOMMISSIONING AND CLOSURE PHASE</b>	
<b>Potential impact and risk:</b>	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

## SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1.	Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.
The findings of the appointed specialists have not resulted in any change in the preferred route of the proposed bulk water supply pipeline nor any change in the preferred design alternative for the proposed pipeline. However, the findings	
2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr
All the recommendations made by the specialists are included in the EMPr. Please see Appendix J and the EMPr	
3.	List the specialist investigations and the impact management measures that will <b>not</b> be implemented and provide an explanation as to why these measures will not be implemented.
N/A	
4.	Explain how the proposed development will impact the surrounding communities.
The proposed bulk water supply pipeline will impact the community of the town of Wolseley positively by helping to ensure that the said town is provided with water from the Tierhokskloof Stream in a more reliable manner as the existing 70 years old bulk water supply pipeline nears the end of its usability and increasingly underperforms.	
5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.
N/A	
6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.
N/A	
7.	Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.
The recommendations specified by the appointed terrestrial biodiversity specialist and aquatic biodiversity specialist in response to the findings made on the proposed site by the same specialists have all been incorporated in the impact avoidance and impact mitigation measures contained in the EMPr. Please refer to Appendix H	
8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.
The mitigation hierarchy has been applied to the proposed development in that the negative impacts that are likely to result from the proposed development are only the impacts that cannot be avoided if the proposed development is proceeded with. Furthermore, impact mitigation measures that include all the recommendations contained in the specialist investigation reports have been included in the EMPr that must be implemented, so that the unavoidable negative impacts of the proposed development can be minimised.	

## SECTION J: GENERAL

### 1. Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.
The benefits to the community of Wolseley as a result of the establishment of the proposed bulk water supply pipeline are of major significance, whereas the potential negative environmental impacts of the proposed development will remain low as a result of the impact avoidance and impact mitigation measures and the conditions of environmental authorisation being adhered to	
1.2.	Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)
1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.
Please see Appendix J	

### 2. Recommendation of the Environmental Assessment Practitioner ("EAP")

2.1.	Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr
Please see Appendix J	

2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.
<b>All the recommendations of the specialists must be included in the conditions of environmental authorisation</b>	
2.3.	Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.
The establishment of the proposed bulk water supply pipeline should be authorised, as the pipeline will replace the exiting ailing water supply pipeline that was constructed 70 years ago. The proposed pipeline will therefore help to ensure that water abstracted from the Tierhokskloof Stream is once again delivered to the Wittebrug WPP in a reliable manner, is purified and then supplied in potable form to the town of Wolseley. This positive impact on society will be achieved with only low negative environmental impacts upon adherence to the EMPr.	
2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.
	N/A
2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.
The validity period of the environmental authorisation should be at least seven years, as it is possible that the funds required to complete the proposed bulk water supply pipeline will only be made available to the applicant in batches over a number of financial years	

### 3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.

The proposed development will use only very small amounts of water for construction workers to drink and for mixing the cement that will at times be required for constructing gabions to support the proposed bulk water supply pipeline on the mountainside.

### 4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.

A system for the regular collection of waste will be put in place and the waste will be removed regularly from the proposed site, sorted to enable recycling and re-use and the non-re-usable and non-recyclable waste disposed of at a suitably licensed municipal waste disposal site.

### 5. Energy Efficiency

8.1. Explain what design measures have been taken to ensure that the development proposal will be energy efficient.

The work of constructing the proposed water supply pipeline will largely be conducted manually, as most of the proposed site is located on a steep mountain side and is therefore inaccessible by vehicle. The usage of manual labour will enable a lot of energy to be saved that would have been used up by construction machinery. The proposed bulk water supply pipeline will also deliver water to the Wittebrug WPP through gravitation, thereby helping to save a lot of energy that would have otherwise been required to pump the abstracted water upslope.



## SECTION K: DECLARATIONS

### DECLARATION OF THE APPLICANT

**Note:** Duplicate this section where there is more than one Applicant.

I, DAVID NASSON, ID number 66/2205214089 in my personal capacity or duly authorised thereto hereby declare/affirm that all the information submitted or to be submitted as part of this application form is true and correct, and that:

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;
- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
  - meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
  - meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
  - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
  - Legitimate costs in respect of specialist(s) reviews; and
  - the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

**Note:** If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the Applicant:

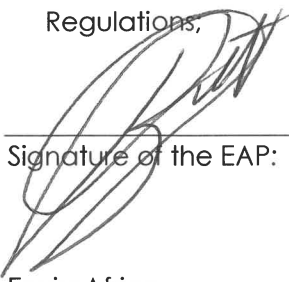
Date:

Name of company (if applicable):

**DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")**

I Bernard de Witt., EAPASA Registration number 2021/3903.. as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations,



Signature of the EAP:

29/05/2023

Date:

EnviroAfrica

Name of company (if applicable):