



**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):	
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)

**Beaufort West Wind Farm (Pty) Ltd ('Beaufort West Wind Farm')** is proposing to install one (1) Radio Mast, approximately 90 metres (m) in height on the authorised 132kV/400kV Linking Station (Portion 1 of Farm No. 15 of Trakaskuilen - C0610000000001500001) located on the Beaufort West Cluster of wind farm developments, near the town of Beaufort West in the Western Cape Province.

The proposed radio mast is required by Eskom Holdings Ltd in order for the authorised Linking Station to be able to communicate via Radio frequency to other Linking stations in the area.

The proposed site is located approximately 60km south of the town of Beaufort West in the Prince Albert Local Municipality, within the Central Karoo District Municipality of the Western Cape Province (Figure 1). The authorised Beaufort West Cluster consists of two (2) wind farm projects with associated electrical infrastructure, which include a 132kV / 400kV Linking Substation, two (2) 33kV / 132kV onsite substations [one (1) per wind farm] and 132kV powerlines. The two (2) wind farms which form part of the Beaufort West Cluster were first authorised as one (1) larger wind farm (namely the Beaufort West Wind Farm) in March 2012 (DFFE Ref: 12-12-20-1784). Thereafter, in February 2017, the authorised Beaufort West Wind Farm was split into the Beaufort West (12-12-20-1784-1) and Trakas (12-12-20-1784-2) Wind Farms respectively.

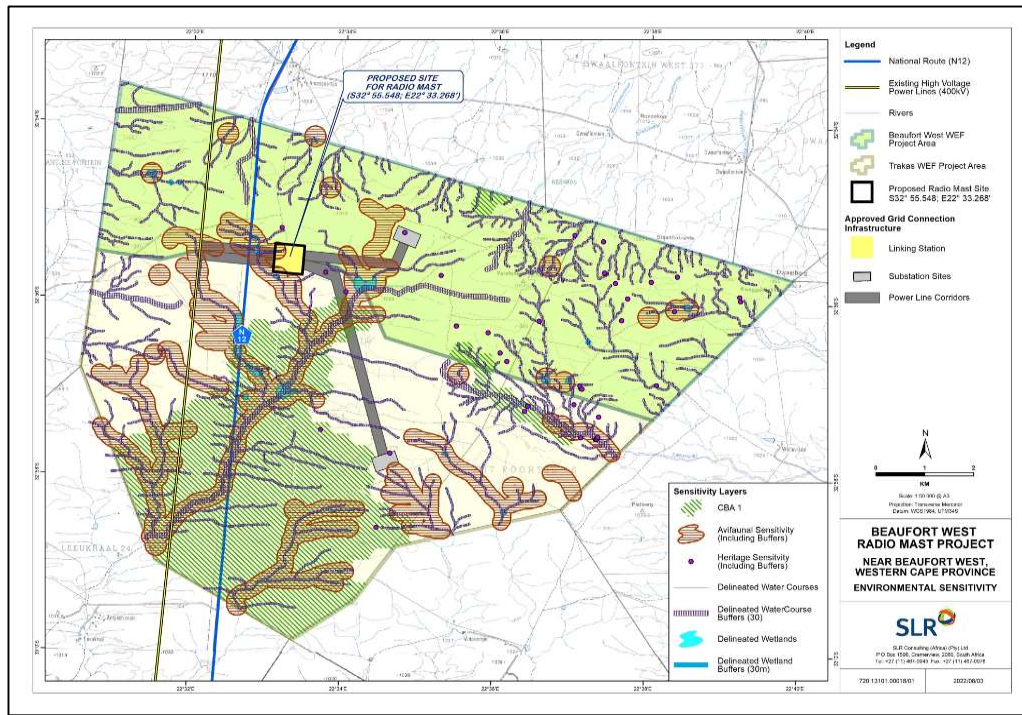


Figure 1: Locality map showing the location of the site for the proposed radio mast

Both above-mentioned Wind Farm Environmental Authorisations (EA) were further amended in 2020 to increase the turbine hub heights and increase the rotor diameters (Beaufort West Wind Farm – March 2020: 12-12-20-1784-1-AM5 and Trakas Wind Farm – February 2020: 12-12-20-1784-1-AM1). Further administrative amendments were also granted to both respective Wind Farms in 2020 (Beaufort West Wind Farm – March 2020: 12-12-20-1784-1-AM2 and Trakas Wind Farm – February 2020: 12-12-20-1784-2-AM2) that included changing the holder of the EAs, adding Battery Energy Storage Facilities and amending project descriptions.

The supporting powerlines, linking station and onsite substation infrastructure were authorised for both respective wind farms in January 2017 (14-12-16-3-3-2-925). This authorisation was subsequently amended to split and assign each substation and powerline to each respective wind farm in August 2021 (Beaufort West 132KV-400KV Linking Station, 132KV Power Line and onsite 132KV Substation – 14-12-16-3-3-2-925-1 as amended and Trakas 132KV-400KV Linking Station, 132KV Power Line and onsite 132KV Substation – 14-12-16-3-3-2-925-2 as amended).

Further to the above, Beaufort West Wind Farm has just received EAs for an additional 33/132 kilovolt (kV) onsite Substation, one (1) Battery Energy Storage System (BESS), one (1) laydown area and one (1) Operations & Maintenance (O&M) Building (14/12/16/3/3/1/2464) and one (1) 132kV switching station yard of the onsite substation and associated 132kV powerline (14/12/16/3/3/1/2465). This new substation, powerline and BESS will be constructed to service the Beaufort West Cluster. The Department of Forestry, Fisheries and the Environment (DFFE) authorised alternative two (2), however it was found that Alternative one (1) is more technically feasible and as such Part 2 Amendments have been submitted to DFFE for consideration to change the authorised alternative. These applications are in process and out for 30-day Public Participation (14/12/16/3/3/1/2464/AM1 and (14/12/16/3/3/1/2465/AM1).

It should be noted that on 28 October 2021, the Minister of Mineral Resources and Energy announced the Preferred Bidders of the Round 5 Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) and both above-mentioned wind energy facilities (Beaufort West Wind Farm – 12-12-20-1784-1-AM2 and Trakas Wind Farm - 12-12-20-1784-2-AM2) were awarded Preferred Bidder status. These wind energy facilities have now become Strategic Infrastructure Projects (SIPs) (i.e., SIPs 8 and 10) and therefore a reduced 57-day decision-making timeframe for the competent authority is now applicable, instead of the usual 107 days. SIPs 8 and 10 target the development of sustainable green energy initiatives in support of the South African economy and the expansion of electricity transmission and distribution networks respectively.

Note: Considering that the proposed radio mast is intrinsically linked to the continued functioning of the SIP project and Eskom requirements to maintain communication between linking substations, it is assumed that the reduced decision timeframe of 57 days will apply to this project as well.

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

- (i) **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.
- (ii) 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".
- (iii) 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.
- (iv) All applicable sections of this BAR must be completed.
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) 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.
- (xii) 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.

- (xiii) 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.
- (xiv) 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 Licensing 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><b>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530</b></p> <p><b>Registry Office 4<sup>th</sup> Floor, York Park Building 93 York Street George</b></p> <p><b>Queries should be directed to the Directorate: Development Management (Region 3) at: Tel: (044) 805-8600 Fax (044) 805 8650</b></p>

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### 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>

	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.
<b>Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.</b>	
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> <ol style="list-style-type: none"> <li>1. 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>2. The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan.</li> <li>3. 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>4. 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>5. 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>6. 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>7. Servitudes and an indication of the purpose of each servitude must be indicated on the site plan.</li> <li>8. Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): <ol style="list-style-type: none"> <li>8.1 Watercourses / Rivers / Wetlands</li> <li>8.2 Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable);</li> <li>8.3 Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&amp;DP");</li> <li>8.4 Ridges;</li> <li>8.5 Cultural and historical features/landscapes;</li> <li>8.6 Areas with indigenous vegetation (even if degraded or infested with alien species).</li> </ol> </li> <li>9. Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted.</li> <li>10. North arrow</li> </ol> <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	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.
Biodiversity Overlay Map:	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> .
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
WCBSP:	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:	<b>Maps</b>		
	Appendix A1:	Locality Map	x
	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	Not Applicable
	Appendix A3:	Map with the GPS co-ordinates for linear activities	Not Applicable
Appendix B:	Appendix B1:	Site development plan(s)	x
	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;	x
Appendix C:	Photographs		x
Appendix D:	Biodiversity overlay map		x
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	Attached in Appendix E1.
	Appendix E2:	Copy of comment from Cape Nature	To be provided with Final BAR

	<b>Appendix E3:</b>	<b>Final Comment from the DWS</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E4:</b>	<b>Comment from the DEA: Oceans and Coast</b>	<b>Not Applicable</b>
	<b>Appendix E5:</b>	<b>Comment from the DAFF</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E6:</b>	<b>Comment from WCG: Transport and Public Works</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E7:</b>	<b>Comment from WCG: DoA</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E8:</b>	<b>Comment from WCG: DHS</b>	<b>Not Applicable</b>
	<b>Appendix E9:</b>	<b>Comment from WCG: DoH</b>	<b>Not Applicable</b>
	<b>Appendix E10:</b>	<b>Comment from DEA&amp;DP: Pollution Management</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E11:</b>	<b>Comment from DEA&amp;DP: Waste Management</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E12:</b>	<b>Comment from DEA&amp;DP: Biodiversity</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E13:</b>	<b>Comment from DEA&amp;DP: Air Quality</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E14:</b>	<b>Comment from DEA&amp;DP: Coastal Management</b>	<b>Not Applicable</b>
	<b>Appendix E15:</b>	<b>Comment from the local authority</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E16:</b>	<b>Confirmation of all services (water, electricity, sewage, solid waste management)</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E17:</b>	<b>Comment from the District Municipality</b>	<b>To be provided with Final BAR</b>
	<b>Appendix E18:</b>	<b>Copy of an exemption notice</b>	<b>Not Applicable</b>
	<b>Appendix E19</b>	<b>Pre-approval for the reclamation of land</b>	<b>Not Applicable</b>

	<b>Appendix E20:</b>	<b>Proof of agreement/TOR of the specialist studies conducted.</b>	<b>x</b>
	<b>Appendix E21:</b>	<b>Proof of land use rights</b>	The site area is agricultural with Special Use Consent for Renewable Energy Facilities and associated infrastructure. Rezoning has been received.
	<b>Appendix E22:</b>	<b>Proof of public participation agreement for linear activities</b>	<b>Not Applicable</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>x</b>
<b>Appendix G:</b>	<b>Specialist Report(s)/ Site Sensitivity Verification Reports</b>		<b>x</b>
<b>Appendix H:</b>	<b>EMPr</b>		<b>x</b>
<b>Appendix I:</b>	<b>Screening tool report</b>		<b>x</b>
<b>Appendix J:</b>	<b>The impact and risk assessment for each alternative</b>		<b>x</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>		<b>x</b>
<b>Appendix L:</b>	<b>Any other attachments must be included as subsequent appendices.</b>		<b>x</b>
	<b>Project Team CVs and Qualifications</b>		

## SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE:		GEORGE OFFICE: <u>X</u>
	REGION 1 (City of Cape Town, West Coast District)	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Garden Route District)
<b>Duplicate this section where there is more than one Proponent</b>	<b>Beaufort West Wind Farm (Pty) Ltd</b>		
Name of Applicant/Proponent:			
Name of contact person for Applicant/Proponent (if other):	<b>Rebecca Thomas</b>		
Company/ Trading name/State Department/Organ of State:	<b>Beaufort West Wind Farm (Pty) Ltd</b>		
Company Registration Number:			
Postal address:			
Telephone:			
E-mail:			
Company of EAP:	<b>SLR Consulting Africa (South Africa) (Pty) Ltd</b>		



EAP name:	Stuart Heather-Clark	
Postal address:		
Telephone:		
E-mail:		
Qualifications:	CEAPSA - Certified as an Environmental Practitioner with the Interim Certification Board for Environmental Assessment Practitioners of South Africa (2006) IAIAsa- Member of the International Association for Impact Assessment South Africa IAIA International- Member of the International Association for Impact Assessment	
EAPASA registration no:	2019/613	
<b>Duplicate this section where there is more than one landowner</b>	Trakaskuilen Family Trust (registered Title Deed owner)	
Name of landowner:		
Name of contact person for landowner (if other):	Kevin John van Wyk	
Postal address:		
Telephone:		
E-mail:		
Name of Person in control of the land:	The landowner in control of his own land. Therefore, same as above.	
Name of contact person for person in control of the land:		
Postal address:		
		Postal code:
Telephone:	( )	Cell:
E-mail:		Fax: ( )

<b>Duplicate this section where there is more than one Municipal Jurisdiction</b>	Prince Albert Local Municipality	
Municipality in whose area of jurisdiction the proposed activity will fall:		
Contact person:		
Postal address:		
Telephone:		
E-mail:		

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

1.	Is the proposed development (please tick):	<b>New</b>	<input checked="" type="checkbox"/>	Expansion	<input type="checkbox"/>
2.	Is the proposed site(s) a brownfield or greenfield site? Please explain.				
<b>Brownfield site. The site has existing Environmental Authorisations for Wind Farms, substations, and powerlines (14-12-16-3-3-2-925-1) / (12-12-20-1784-2), (14/12/16/3/3/1/2464 and 14/12/16/3/3/1/2465). The radio mast will also be located on the Main Transmission Substation (MTS) existing authorised footprint. (14-12-16-3-3-2-925-1 &amp; 14-12-16-3-3-2-925-2) / (12-12-20-1784-2 &amp; 12-12-20-1784-1).</b>					
3.	<b>For Linear activities or developments – Not Applicable</b>				
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:				
3.2.	Development footprint of the proposed development for all alternatives.				m <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.				
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				

3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives																										
3.6.	<b>Starting point co-ordinates for all alternatives</b>																										
	Latitude (S)	°	‘	“																							
	Longitude (E)	°	‘	“																							
	<b>Middle point co-ordinates for all alternatives</b>																										
	Latitude (S)	°	‘	“																							
	Longitude (E)	°	‘	“																							
	<b>End point co-ordinates for all alternatives</b>																										
	Latitude (S)	°	‘	“																							
	Longitude (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):	<b>3775.601ha</b>																									
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):	<b>20 ha</b>																									
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	<b>+/-2 ha</b>																									
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).																										
<p><b>Beaufort West Wind Farm (Pty) Ltd ('Beaufort West Wind Farm') / is proposing to install one (1) Radio Mast on the authorised 132kV/400kV Linking Station development area (authorised under DFFE reference numbers: 14-12-16-3-3-2-925-1 &amp; 14-12-16-3-3-2-925-2) / (12-12-20-1784-2 &amp; 12-12-20-1784-1), situated on the Remaining Extent of Portion 1 of Farm No. 15 of Trakaskuilen (C0610000000001500001)), located located 60km south of the town of Beaufort West in the Prince Albert Local Municipality (Central Karoo District Municipality), on the Beaufort West Cluster of wind developments, Western Cape Province.</b></p>																											
<p>The radio mast is required by Eskom in order for the Linking Station to be able to communicate via Radio frequency to other Linking stations in the area.</p>																											
<p>The radio mast will be made from tapered steel lattice with either a square (4 leg) or triangular (3 leg) structure. The radio mast will be approximately 90m in height and will be placed within the substation footprint for the authorised 33kV/132kV Main Transmission Substation (MTS) (i.e. will be built on top of the authorised MTS). See figure 2 for visual impression of a radio mast below.</p>																											
<p>In terms of infrastructure services, no additional services are required for the mast and the intention is to use the already authorised buildings for use of ablutions, water, electricity etc.</p>																											
<p>There are no design / technology alternatives for the radio mast as Mainstream were provided with the Scope of Works (SoW) for the radio mast from Eskom and must adhere to this (must adhere to Eskom Standard). Eskom advised that the mast needs to be at least 85m in height. The requirements / specifications for the radio mast being proposed (up to 90m tapered steel lattice with either square, 4 leg, or triangular, 3 leg) is what was requested by Eskom, based on their requirements / standards (i.e., Eskom requested this). This is based on specific requirements following a comms study which Eskom undertook. There is no fibre on the Eskom line and no fibre alternatives. The requested mast thus needs to be a radio mast. There will be no guy wires used and the radio mast will be a self-supporting structure (as it typically is).</p>																											



Figure 2: Visual Impression of the proposed Radio Mast

4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.																						
<p><b>Access to the project site will be from the N12 national road, which bisects the authorised Beaufort West and Trakas Wind Farm project sites (Figure 1), as well as existing roads in the area. In addition, the access roads authorised as part of the Beaufort West and Trakas Wind Farm projects will also be utilised as part of the proposed radio mast project.</b></p>																							
4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C	0	6	1	0	0	0	0	0	0	0	0	0	1	5	0	0	0	1	0		
Coordinates of the proposed site(s) for all alternatives:																							
4.7.	Latitude (S)	32°				55'				23.95"													
	Longitude (E)	22°				33'				28.30"													
	Longitude (S)	32°				55'				22.49"													
	Latitude (E)	22°				33'				5.43"													
	Longitude (S)	32°				55'				41.75"													
	Latitude (E)	22°				33'				3.79"													
	Longitude (S)	32°				55'				43.33"													
	Latitude (E)	22°				33'				26.62"													

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

### i. 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 <input checked="" type="checkbox"/>
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### ii. 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 <input checked="" type="checkbox"/>
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 <input checked="" type="checkbox"/>	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 <input checked="" type="checkbox"/>
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 <input checked="" type="checkbox"/>
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO <input checked="" type="checkbox"/>
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO <input checked="" type="checkbox"/>
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO <input checked="" type="checkbox"/>
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 <input checked="" type="checkbox"/>

### iii. Other legislation

List any other legislation that is applicable to the proposed activity or development.
<ol style="list-style-type: none"> <li>1. The Spatial Planning and Land Use Management Act 16 of 2013;</li> <li>2. Occupational Health and Safety Act (Act No. 85 of 1993) [OHSA];</li> <li>3. Road Safety Act (Act No. 93 of 1996);</li> <li>4. Development Facilitation Act (Act No. 67 of 1995);</li> <li>5. Promotion of Access to Information Act, (Act No. 2 of 2000);</li> <li>6. Protection of Public Information Act (Act No. 4 of 2013);</li> <li>7. The Hazardous Substances Act (Act No. 15 of 1973); and</li> <li>8. Subdivision of Agricultural Land Act, 70 of 1970.</li> </ol>

### iv. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
<ul style="list-style-type: none"> <li>• Since the Prince Albert Local Municipality does not have a telecommunication mast infrastructure policy, the proposed development will use the City of Cape Town's Telecommunication Mast Infrastructure Policy (TMIP) (April 2015) as a guideline. The mast must also comply with the International Commission on non-ionizing Radiation Protection for electromagnetic radiation. The TMIP was considered in the site selection, placement and design of the mast. The proposed radio mast meets the lattice requirements as it will be painted red and white.</li> <li>• The United Nations Framework Convention on Climate Change (UNFCCC, 1992) is an international environmental treaty aimed at addressing climate change, which was negotiated and signed by 154 countries at the United Nations Conference on Environment and Development (UNCED), informally known as the 'Earth Summit', held in Rio de Janeiro (Brazil) from 3 to 14 June 1992. The primary objective of this international environmental treaty is to stabilize greenhouse gas emissions in the atmosphere to a level that prevents harmful / dangerous human-induced interference with the earth's climate system. The treaty places an obligation on signatory countries such as South Africa to adopt national policies and take measures to mitigate the impacts of climate change by limiting their anthropogenic (i.e., man-made) emissions of greenhouse gases, as well as to report on the steps undertaken to return their emissions to pre-1990 levels</li> </ul> <p>The proposed Radio Mast will service Mainstream's Beaufort West Cluster of wind developments. Taking the above into consideration, the integration of the approved Beaufort West Cluster of wind developments into the grid will contribute at least 280MWac of electricity from renewable energy (namely wind energy), thereby reducing government reliance on electricity generation from the combustion of fossil fuels, which leads to the</p>

inevitable release of greenhouse gases such as CO<sub>2</sub> into the atmosphere. From this perspective, taking the information above into consideration, the proposed switching substation and associated powerline will support the development of Mainstream's Beaufort West Cluster of wind developments, and is thus in alignment with the obligations placed on South Africa in response to climate change through the UNFCCC (1992) and the Kyoto Protocol (1998).

- The Paris Agreement is an international agreement / treaty, in terms of the UNFCCC, on climate change, which was adopted in 2015. It addresses mitigation, adaptation and finance and was adopted at the 2015 United Nations Climate Change Conference (COP21), which was held in Le Bourget near Paris, France. The Paris Agreement was opened for signature on 22 April 2016. The agreement aims to improve upon and replace the Kyoto Protocol by committing countries to keeping the long-term rise of global temperatures below 2°C, above pre-industrial levels, and to pursue efforts to limit the increase to 1.5°C, thereby recognizing that this would substantially reduce the risks and impacts of climate change.

South Africa signed the Paris Agreement and submitted its pledge in 2016. The pledge is also known as the 'Nationally Determined Contribution' or NDC. According to the pledge, South Africa adopted a 'peak, plateau and decline' approach, whereby it is anticipated the greenhouse gas emissions will peak by 2025, plateau for a decade and then start to decline. By signing the agreement, countries are required to adopt the conditions of the agreement into their own legal systems through ratification, acceptance, approval, or accession. The agreement will become enforceable when ratified / approved by at least 55 countries, which together account for at least 55 % of the global greenhouse gas emissions. By prioritising the procurement of electricity from renewable energy technologies through the Integrated Resources Plan (IRP) and the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP), government has begun acting on the obligations of the Paris Agreement. Authorising the development of the Radio Mast will allow the integration of the approved Beaufort West Cluster of wind developments into the grid which will contribute at least 280MWac of electricity from renewable energy (namely wind energy), thus aiding the South African government in reaching its target to peak with greenhouse gas emissions by 2025. As mentioned, the proposed Radio Mast will service Mainstream's Beaufort West Cluster of wind developments. From this perspective, the proposed project aligns with the Paris Agreement, as well as any subsequent updates thereto.

- The Constitution of South Africa (No. 108 of 1996) provides environmental rights and includes implications for environmental management. Section 24 of the Constitution states that:  
'Everyone has the right
  - To an environment that is not harmful to their health or well-being; and
  - To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
    - Prevent pollution and ecological degradation; Promote conservation; and
    - Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.'The Constitution is the overarching legislation for South Africa. Although it provides for certain rights and obligations, the NEMA has been promulgated in order to manage the various spheres of both the social and natural environment.
- National Climate Change Response Policy White Paper (2011) This White Paper presents the South African Government's vision for an effective climate change response and the long-term, just transition to a climate-resilient and lower-carbon economy and society. South Africa's response to climate change has two (2) objectives:
  - Effectively manage inevitable climate change impacts through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity.
  - Make a fair contribution to the global effort to stabilise greenhouse gas (GHG) concentrations in the atmosphere at a level that avoids dangerous anthropogenic interference with the climate system within a timeframe that enables economic, social and environmental development to proceed in a sustainable manner.
- Integrated Energy Plan (IEP) (2016) The development of a National Integrated Energy Plan (IEP) was envisaged in the White Paper on the Energy Policy of the Republic of South Africa of 1998, and in terms of the National Energy Act, 2008 (Act No. 34 of 2008) which places an obligation on the Minister of the DMRE to publish the IEP in the Government Gazette. The intention of the IEP is to provide a roadmap of the future of the energy landscape for South Africa which guides future energy infrastructure investments and policy development. The National Energy Act, 2008 (No. 34 of 2008), requires the IEP to have a planning horizon of no less than 20 years. The development of the IEP is therefore a continuous process as it needs to be reviewed periodically to consider changes in the macroeconomic environment, developments in new technologies and changes in national priorities and imperatives. As a fast-emerging economy, South Africa needs to balance the competing need for continued growth with its social needs and the protection of the natural environment. South Africa needs to grow its energy supply to support economic expansion and in so doing, alleviate supply bottlenecks and supply-demand deficits. In addition, it is essential that all citizens are provided with clean and modern forms of energy at an

affordable price. From the myriad of factors which had to be considered and addressed during the Integrated Planning Process, eight (8) key objectives were identified:

- **Objective 1: Ensure security of supply;**
- **Objective 2: Minimise the cost of energy;**
- **Objective 3: Promote the creation of jobs and localisation;**
- **Objective 4: Minimise negative environmental impacts from the energy sector;**
- **Objective 5: Promote the conservation of water;**
- **Objective 6: Diversify energy supply sources and primary sources of energy;**
- **Objective 7: Promote energy efficiency in the economy; and**
- **Objective 8: Increase access to modern energy.**

#### v. 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	Governing Body	Relevance
<ul style="list-style-type: none"> <li>• Mitigating biodiversity impacts associated with solar and wind energy development (2021)</li> </ul>	International Union of Conservation of Nature	Provides guidelines for mitigating biodiversity impact associated with the development of grid connection infrastructure for wind energy facilities.
<ul style="list-style-type: none"> <li>• Public Participation in terms of NEMA, EIA Regulations (2017)</li> </ul>	DFFE	The purpose of this guideline is to ensure that an adequate public participation process is undertaken for the BA process (see Section 3.6).
<ul style="list-style-type: none"> <li>• Guideline on need and desirability in terms of the EIA Regulations (2014)</li> </ul>	DFFE	These guidelines inform the consideration of the need and desirability aspects of the proposed project (see Section 4.2).
<ul style="list-style-type: none"> <li>• Guideline for Environmental Management Plans (2005)</li> </ul>	WCDEADP	The purpose of this guideline is to assist proponents and their consultants in the formulation of EMPs which effectively address the management actions identified in the EIA process;
<ul style="list-style-type: none"> <li>• Guideline for involving visual and aesthetic specialists in the EIA process (2005)</li> </ul>	WCDEADP	The guidelines have been developed to support project-level EIA processes regardless of whether they are used during the early project planning phase to inform planning and design decision.
<ul style="list-style-type: none"> <li>• Guideline for involving biodiversity specialists in EIA processes (2005)</li> </ul>	WCDEADP	The guideline gives an introductory background to, and key concepts underpinning, consideration of biodiversity in EIA.

#### vi. 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 relevant specialists whose input is required as part of the proposed radio mast project will compile specialist letters addressing the proposed amendments (including management measures and recommendations), which will be in line with the EIA Regulations, 2014 (as amended), as well as any specific Gazetted specialist protocols<sup>1</sup> (if required / applicable), as identified in the DFFE National web-based screening tool.**

**Potential applicable protocols include the following:**

- Government Notice (GN) 320 of 20 March 2020; and
- GN 1150 of 30 October 2020.

## 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.
<b>NOT APPLICABLE</b>		
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.
<b>3 (b) (i) (i)</b>	<b>The development of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast or tower— a) is to be placed on a site not previously used for this purpose; and (b) will exceed 15 metres in height. (i.) Western Cape i.) All areas outside urban areas;</b>	<b>The project involves the development of an up to 90m in height Radio Mast that will be situated on an approved MTS in Beaufort West, located within Western Cape. (authorised under: 14/12/16/3/3/1/2465 &amp; 14/12/16/3/3/1/2464).</b>
<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 – **Not Applicable**

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

**There are no listed waste management activities that are triggered by the proposed project and therefore a waste management license is not required.**

**General and hazardous waste handling, storage and disposal will, however, be required during construction and operation. The National Norms and Standards for the Storage of Waste (GNR 926), published under Section 7(1)(c) of the NEM:WA, will need to be considered in this regard. It should be noted that the management of waste (under all circumstances) will be done in accordance with section 16 of the NEM:WA: "general duty in respect of waste management". All reasonable measures will be taken to manage waste in such a manner that it does not endanger health or the environment or cause a nuisance through noise, odour or visual impacts. The Applicant also acknowledges their "general duty of care towards the environment", as prescribed in section 28 of the NEMA (as amended).**

List the applicable listed activities in terms of the NEM:AQA- **Not Applicable**

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><b>Beaufort West Wind Farm (Pty) Ltd ('Beaufort West Wind Farm') / is proposing to install one (1) Radio Mast on the authorised 132kV/400kV Linking Station (Portion 1 of Farm No. 15 of Trakaskuilen (C0610000000001500001)) located on the Beaufort West Cluster of wind developments, near the town of Beaufort West in the Western Cape Province.</b></p> <p><b>The mast is required by Eskom in order for the Linking Station to be able to communicate via Radio frequency to other Linking stations in the area.</b></p> <p><b>The Radio Mast will be made from tapered steel lattice with either a square (4 leg) or triangular (3 leg) structure. The radio mast will be up to 90m in height and will be placed within the substation footprint for the authorised 33kV/132kV Main Transmission Substation (MTS) (i.e., will be built on top of the authorised MTS) (14-12-16-3-3-2-925-1) / (12- 12-20-1784-2).</b></p>
2.	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.

<b>The site area is agricultural with Special Use Consent for Renewable Energy Facilities and associated infrastructure. Rezoning has been received.</b>	
3.	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>The proposed project will not result in conflict with the proposed development as Beaufort West Wind Farms is currently the holder of the EA for the authorised site, and they are applicant proposing the new development of the Radio Mast, which forms part of this new separate application. As mentioned above, the mast is required by Eskom in order for the Linking Station to be able to communicate via Radio frequency to other Linking stations in the area. This radio mast project will service both the authorised Beaufort West and Trakas Wind Farm projects and associated electrical infrastructure. Therefore, no conflict is anticipated.</p>	
4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.
<p>In terms of the Western Cape Provincial Spatial Development Framework (WCSDf, 2014), Policy R4 (recycle and recover waste, deliver clean sources of energy to urban consumers, shift from private to public transport, and adapt to and mitigate against climate change) highlights the need support of IPPs, and sustainable energy producers to assist in a reducing the power shortage and mitigating against climate change. One (1) of many economic sectors targeted for growth is renewable energy. Further to this, regional economic infrastructure targeted by the Western cape, includes the Development of the renewable sector (including associated grid connection infrastructure, such as this project). Western Cape's Green Economy Strategic Framework is centered on investment in new and expanding market opportunities that support a low carbon, resource efficient and socially inclusive economic pathway, revolving around (amongst others), expanding the renewable sector through off grid investments, Power Purchase Agreements (PPAs) and lobbying.</p> <p>The proposed Radio Mast will service Mainstream's Beaufort West Cluster of wind developments. As such, the proposed project falls in line with the WCSDf.</p>	
4.2	The Integrated Development Plan of the local municipality.
<p>The Prince Albert Local Municipality Integrated Development Plan (IDP) (2017-2022) is the fourth round of strategic plans since the inception of the IDP as a planning mechanism to synchronise planning and fiscal spending across all spheres of government. A number of Strategic objectives and outcomes have been developed as part of the IDP to address the challenges identified during the IDP development process. The strategic objectives agreed are linked to service areas and departmental objectives. In terms of the municipality's strategy, the following "Development Strategies" have been identified (Prince Albert Local Municipality IDP, 2017-2022):</p> <ul style="list-style-type: none"> <li>• To harness social, technical, economic and environmental innovation to the benefit of Prince Albert Local Municipality;</li> <li>• To establish partnerships with stakeholders in the municipal space, including the community and ward representatives, sector departments and private sector.</li> </ul> <p>In addition, Strategic Objective (SO) 4 includes providing quality, affordable and sustainable services on an equitable basis and states that one (1) of the challenges is that climate change will have an impact on the likelihood of disasters and the levels of readiness for man-made disasters. To date, the implementation of climate change responses to this changed climate has been slow. The consideration of alternative energy supply opportunities, which this project forms part of, has been listed as a Development Objective in response to this challenge.</p> <p>The proposed project is considered to align with the strategies listed above as the renewable energy development will be to the benefit of the Prince Albert Local Municipality. The project will also allow the municipality to establish a partnership with an IPP involved in the private energy sector.</p> <p>The IDP further states that the electricity network requires a further upgrade to cater for the expected demand. The future population will impact on the available Notified Maximum Demand (NMD) from Eskom for each of the towns in the municipal area. According to the IDP (2017-2022), the Prince Albert Municipality will be required to amend their current electricity supply by-law to accommodate renewable energy additions to the electricity network. The council should implement the SSEG by-law regulations to guide their consumers on how to safely and effectively employ renewable energy technologies on domestic and commercial level. The proposed amended by-law must provide for the supply of electricity to the residents within the area of jurisdiction of the municipality and provide for procedures, methods and practices to regulate such provision of electricity.</p> <p>Alignment to National and Provincial government policies and plans is crucial in the strategic planning of the municipality. In terms of national and provincial government policies and plans, the IDP highlights the "Green Cape" programme which was established to promote the development of the green economy in the Western Cape Province. The aim is to help unlock the investment and employment potential of green business, technologies and manufacturing and put the province on course to become the green economy hub for Sub-Saharan Africa. The programmatic focus areas include energy (renewable energy, energy efficiency and green building), waste and resources. With a focus on the technologies identified in the REIPPP, the Green Cape's Renewable Energy Sector Desk works closely with Green Cape's Energy Efficiency Sector desk and communicates with entities such as the DOE, DTI, National Treasury, and remains current with the REIPP and legislation relevant to the industry. Green Cape's Renewable Energy Sector Desk acts as an interface between industry and government on renewable energy matters. The proposed project is thus aligned with National and Provincial government policies and plans such as the "Green Cape" programme.</p>	
4.3.	The Spatial Development Framework of the local municipality.
<p>According to the Prince Albert Local Municipality Draft SDF (2021), climate-related impacts are not new in the Central Karoo District but are likely to be exacerbated, as well as increase in frequency and severity. The IDP states that Prince Albert should</p>	



	<p>seek to become a resilient municipality that can adapt to and mitigate against the negative effects of climate change, increasing temperatures, reduced rainfall and the host of downstream impacts on the economy and society at large.</p> <p>In addition, the existing load on the Prince Albert network is in the order of 2.5MW and is expected to grow to between 3.5 and 5.5 MW by 2030. With the expected load growth in the future, the deficiencies will be more prominent. The proportion of households with access to electricity in Prince Albert was 96.8% in 2016. Alternative energy sources within the municipality include gas, paraffin, wood, coal, animal dung and solar. Climate conditions within the municipality present an opportunity for solar energy generation projects and the use of renewable energy sources should be explored and encouraged by the municipality. The SDF (2021) also identifies renewable energy as one (1) of the regional opportunities from the SDF <i>status quo</i> and states that renewable energy production can be up-scaled in the region and create downstream opportunities</p> <p>To achieve the vision statement and spatial concept, four (4) Spatial Development Strategies (A, B, C and D) for the Prince Albert Municipality have been developed. In addition to combatting the effects of Climate Change through policies A1 and A3 of Strategy A, several policies dealing with adaptation and mitigation have been proposed. One (1) of these include the promotion of renewable energy generation and use (xi of Policy A4 Guidelines for Adaptation and Mitigation). The proposed project therefore aligns with the policies dealing with adaptation and mitigation of Climate Change as set out in Strategy A. In addition, Strategy D states that Prince Albert, as part of the Central Karoo, must seek partnership driven solutions. It is therefore required that a range of partnerships be explored to find a shared service solution within the Central Karoo that ensures shared financial viability, administrative and logistical burdens associated with servicing a sparse region. Focus areas of potential partnership between all spheres of government and civil society pertaining to the Prince Albert Municipality include water, gas, energy, rural mobility and tourism. The proposed project therefore also potentially aligns with one (1) of the focus areas of potential partnership as set out in Strategy D.</p>
4.4.	The Environmental Management Framework applicable to the area.
	<p>Currently there is no EMF adopted by the area. However, the Western Cape Biodiversity Spatial Plan (WCBDP), which sets out the land use objectives spatially, has been considered as part of the proposed project. Specialist assessments have also been undertaken to identify environmentally sensitive areas and exclude identified highly sensitive and/or 'no-go' areas from the proposed development footprint.</p>
5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
	<p>According to the Terrestrial Ecology Specialist Study, with the application of relatively simple mitigation and avoidance measures, the impact of the Radio Mast and associated infrastructure on the local environment can be reduced to a low and acceptable magnitude. Overall, there are no specific long-term impacts likely to be associated with the development of the Radio Mast that cannot be reduced to a low significance. As such, there are no fatal flaws associated with the respective development and no terrestrial ecological considerations that should prevent them from proceeding.</p>
6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.
	<p>In terms of the 2017 Western Cape Biodiversity Spatial Plan, the proposed site falls within an Ecological Support Area 2 (ESA). The Terrestrial Ecology Specialist Study revealed that the habitats present on site are not localized or unique and as such, the footprint within these areas would be low. There would therefore not be any irreplaceable loss of resources as related to the ESAs and CBAs of the affected area. Therefore the Western Cape Biodiversity Spatial Plan has been used to identify the Ecological Support Area 2 (ESA).</p>
7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
	<b>Not Applicable. The proposed development is 120.09 km away from any coastline.</b>
8.	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.
	<b>The screening report has not changed from the one submitted together with the application form. The Screening report is attached as Appendix I.</b>
9.	Explain how the proposed development will optimise vacant land available within an urban area.
	<b>Not Applicable. The proposed development is not situated within an urban area nor will it optimise vacant land available other than being placed on an authorised substation footprint.</b>
10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
	<b>Vehicles are likely to use existing, established service roads. The mast will also be placed on an already authorised substation footprint and will utilise the required operation and maintenance building as part of the authorised infrastructure (i.e. no new infrastructure requirements are required for the proposed project).</b>
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).
	<b>The developer has ensured the necessary services are available. Electricity will be provided by Eskom. When formal capacity confirmation is received, the Department of Environmental Affairs and Development Planning will be notified accordingly. No other services are required.</b>
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 EIA Regulations of 2014, as amended, require that the need and desirability of a proposed project are considered and evaluated against the principles of sustainability. This requires investigation of the effect of the project on social, economic and ecological systems, and places emphasis on consideration of a project's justification. Various means for assessing the needs have been investigated in assessing the proposed projects need and desirability in the context of both the greater community, as well in the context of the proponent.</p> <p>The EAPs and specialists, through the interrogation of planning documents and, where these planning documents are not available - using best judgment, have considered the anticipated needs and interests of the broader community. In summary, supporting grid connection infrastructure for wind energy facilities is desirable as it:</p>

- Creates a more sustainable economy by promoting South Africa's energy policy towards energy diversification.
- Reduces the demand on scarce resources such as water by promoting energy generating facilities which are less resource intensive.
- Assists in meeting international commitments to carbon emission targets in line with global climate change commitments.
- Reduces pollution by using 'cleaner' energy generating mechanisms and reducing the demand on carbon-based fuels.
- Promotes local economic development by creating jobs and promoting skills development.
- Enhances energy security by assisting in diversifying generation (since the project will service authorised wind energy facilities).

The proposed radio mast is required by Eskom Holdings Ltd in order for the authorised Linking Station to be able to communicate via Radio frequency to other Linking stations in the area.

The proposed project is also viewed in a positive context due to the potential for employment creation within the local community. It should also be noted that the cumulative effect of the proposed project and other developments in the area has the potential to result in positive socio-economic opportunities for the region. The proposed project, in conjunction with the authorised Beaufort West cluster of wind developments (since intrinsically linked), will also address electricity constraints within both the local and district Municipalities by generating, distributing and evacuation a continued realisable source of electricity. Improved electrification, increased electricity supply to houses and businesses and investment in renewable energy developments are strategic objectives of both the District and Local Municipality.

It should be noted that on 28 October 2021, the Minister of Mineral Resources and Energy announced the Preferred Bidders of the Round 5 Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) (see Section 2.2.10 for explanation on the REIPPPP) and both the Beaufort West (12-12-20-1784-1-AM2) and Trakas (12-12-20-1784-2-AM2) Wind Farm projects (which form part of the Beaufort West Cluster of wind developments) received Preferred Bidder status. These wind energy facilities have now become Strategic Infrastructure Projects (SIPs) (i.e., SIPs 8 and 10) and therefore a reduced 57-day decision-making timeframe for the competent authority is now applicable, instead of the usual 107 days. SIPs 8 and 10 target the development of green energy in support of the South African economy and the provision of electricity transmission and distribution respectively.

**DUE TO THE NATURE OF THE NEED, THERE ARE CURRENTLY NO OTHER ALTERNATIVES WHICH CAN PROVIDE THE SERVICE REQUIRED. AS NO ALTERNATIVES ARE AVAILABLE TO AVOID IMPACTS, MITIGATION MEASURES ARE PROVIDED WHICH WILL MINIMISE NEGATIVE IMPACTS AND ENHANCE POSITIVE IMPACTS. THE PROPOSED RADIO MAST IS CONSIDERED TO HAVE LONG TERM POSITIVE ECONOMIC AND SOCIAL IMPACTS WHICH WILL OUTWEIGH THE NEGATIVE IMPACTS FROM BOTH MUNICIPAL AND EIA PLANNING PERSPECTIVES.**

## 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.

Not Applicable

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 principles of the NEMA and EIA Regulations, 2014 (as amended), govern the BA process, including public participation. These include provision of sufficient and transparent information on an on-going basis to Interested and Affected Parties (I&As) and key stakeholders, such as Organs of State (OoS), to allow them to comment, and ensuring the participation of previously disadvantaged people, women and the youth. To fulfil the necessary public participation required as part of the BA Process, a public participation process which is in accordance with the EIA Regulations, 2014 (as amended), WC DEADP PPP requirements as well as the DFFE's Public Participation Guideline, in terms of the NEMA EIA Regulations, 2014 (as amended), is being undertaken.

The PPP as indicated in the application has been complied with. Please refer to Appendix F for the PPP report.

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

- Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
- National Department of Water and Sanitation,
- Department of Forestry, Fisheries and the Environment (DFFE)

- Department of Water and Sanitation: Acting Provincial Head (Western Cape),
- Western Cape Department of Agriculture, Forestry and Fisheries (DAFF),
- Western Cape Department of Agriculture,
- Western Cape Department of Economic Development and Tourism,
- Eskom Holdings Limited,
- Heritage Western Cape (HWC),
- Cape Nature,
- South African National Parks (SANParks),
- Transnet: Radio Communication Department,
- SANRAL (Environmental coordinator),
- Central Karoo District Municipality,
- Prince Albert Local Municipality,
- Air Traffic & Navigation Services (ATNS)
- Civil Aviation Authority (CAA),
- Birdlife South Africa,
- South African National Defence Force, and
- An Interested and Affected Party (IAP) database has been appended to this application form for further reference.

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

**Not Applicable**

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

**Note: this will be confirmed following the circulation of the Draft Basic Assessment Report for public comment.**

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.

**A summary of issues will be provided following the 30 day public review of the Draft Basic Assessment Report.**

**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:

- (i) 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;
- (ii) in terms of the written notices given, a copy of the written notice sent, as well as:
  - a. 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);
  - b. 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);
  - c. if a facsimile was sent, a copy of the facsimile Report;
  - d. if an electronic mail was sent, a copy of the electronic mail sent; and
  - e. 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
- (iii) 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.

### (I) Groundwater

1.1.	Was a specialist study conducted?	YES	NO <b>X</b>
1.2.	Provide the name and or company who conducted the specialist study.		
<b>Not Applicable</b>			
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
<b>Not Applicable</b>			
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.		
<b>Not Applicable</b>			

### (ii) Surface water

2.1.	Was a specialist study conducted?	YES <b>X</b>	NO
2.2.	Provide the name and/or company who conducted the specialist study.		
<b>Dr Brian Collopy (EnviroSci (Pty) Ltd)</b>			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		
<b>The study area is also not located within an International Bird Area (IBA) or a Strategic Water Resource Area and did not contain any wetland clusters or listed Threatened Ecosystems. The aquatic environment is typical of this portion of the Great Karoo ecoregion, being dominated by large numbers of small drainage lines and watercourse that flow for short periods of time, with little to no facultative aquatic habitats.</b>			

### (III) Coastal Environment- Not Applicable

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.		

### (IV) Biodiversity

4.1.	Were specialist studies conducted?	YES <b>X</b>	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
<b>3Foxes Biodiversity Solutions</b>			
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.		

<p><b>Vegetation:</b></p> <p>(iv) Vegetation types and their conservation status were extracted from the South African National Vegetation Map (Mucina and Rutherford, 2012 and SANBI 2018 update).</p> <p>(v) Information on plant and animal species recorded for the wider area was extracted from the SABIF/SIBIS database hosted by SANBI. Data was extracted for a significantly larger area than the study area, but this is necessary to ensure a conservative approach as well as counter the fact that the site itself has not been well sampled in the past.</p> <p>(vi) The IUCN conservation status of the species in the list was also extracted from the database and is based on the Threatened Species Programme, Red List of South African Plants (2021).</p> <p><b>Ecosystem:</b></p> <p>(vii) Freshwater and wetland information was extracted from the National Freshwater Ecosystem Priority Areas assessment, NFEPA (Nel et al. 2011).</p> <p>(viii) Critical Biodiversity Areas in the study area were obtained from the 2017 Western Cape Biodiversity Spatial Plan (WC-BSP), for the Prince Albert and Beaufort West municipalities, which cover the study area.</p> <p><b>Fauna:</b></p> <p>(ix) Lists of mammals, reptiles and amphibians which are likely to occur at the site were derived based on distribution records from the literature and the ADU databases (ReptileMap, Frogmap and MammalMap) <a href="http://vmus.adu.org.za">http://vmus.adu.org.za</a>.</p> <p>(x) Literature consulted includes Branch (1988) and Alexander and Marais (2007) for reptiles, Du Preez and Carruthers (2009) for amphibians, EWT &amp; SANBI (2016) and Skinner and Chimimba (2005) for mammals.</p> <p>(xi) The faunal species lists provided are based on species which are known to occur in the broad geographical area, as well as an assessment of the availability and quality of suitable habitat at the site.</p> <p>(xii) The conservation status of mammals is based on the IUCN Red List Categories (EWT/SANBI 2016), while reptiles are based on the South African Reptile Conservation Assessment (Bates et al. 2013) and amphibians on Minter et al. (2004) as well as the IUCN (2018).</p>	
4.4.	<p>Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.</p> <p><b>The Biodiversity Spatial Plan categories were reviewed. The proposed development falls within an area classified as Ecological Support Area 2. There are several small Ecological Support Areas (ESAs) along the grid corridors for the proposed site area. The impact of the proposed Radio Mast on ESAs is concluded to be minor and is therefore considered acceptable.</b></p> <p><b>There is therefore no influence on the development, as the site has been extensively reviewed previously and the proposed development of the radio mast is on an already authorised site, so therefore there is no negative influence.</b></p>
4.5.	<p>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.</p> <p><b>None. This is not applicable since the proposed mast is to be located on an already authorised Linking Substation.</b></p>
4.6.	<p>If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.</p> <p><b>Not Applicable</b></p>
4.7.	<p>Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.</p> <p><b>Increased levels of noise, pollution, disturbance and human presence during construction will be detrimental to fauna. Sensitive and shy fauna are likely to move away from the area during the construction phase as a result of the noise and human activities present, while some slow-moving species would not be able to avoid the construction activities and might be killed. However, all mitigation measures as included in the EMP (Appendix H ) will be strictly adhered to in order to minimise any negative effects on biodiversity.</b></p>

**(v) Geographical Aspects**

<p>Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.</p> <p><b>Not Applicable, no geographical aspects will be affected by the proposed development.</b></p>
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**(vi) Heritage Resources**

6.1.	Was a specialist study conducted?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
6.2.	Provide the name and/or company who conducted the specialist study.	Jayson Orton – ASHA Consulting	
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		

	<p>A chance find protocol has been included in the EMPr (Appendix H) and a NID has been submitted to Heritage Western Cape. Comment from HWC has been included in Appendix E1.</p> <p>It is not anticipated that the proposed development will significantly impact upon the following National Estate categories of the site and environs due to the nature of the development, the disturbed nature of the footprint and absence of significant categories of the National Estate on site and in the direct environs that could potentially be impacted:</p> <ul style="list-style-type: none"> <li>(xiii) Places, buildings, structures and equipment of cultural significance</li> <li>(xiv) Places to which oral traditions are attached or which are associated with living heritage</li> <li>(xv) Historical settlements and townscapes</li> <li>(xvi) Landscapes and natural features of cultural significance – this aspect is assessed in the Visual specialist study</li> <li>(xvii) Geological resources of scientific or cultural importance</li> <li>(xviii) Archaeological resources</li> <li>(xix) Palaeontological resources</li> <li>(xx) Graves and burial grounds</li> <li>(xxi) Other human remains</li> <li>(xxii) Sites of significance relating to the history of slavery in South Africa</li> <li>(xxiii) Other heritage resources</li> </ul>
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**(vii) Historical and Cultural Aspects**

<p>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.</p>
<p><b>There are no heritage features of high significance which require a specific heritage mitigation measure such as a buffer. Heritage resources are not concentrated at any specific locations on Trakas Kuilen 15 and therefore there are no highly sensitive heritage locations. A NID has been submitted to Heritage Western Cape. Comment from HWC has been included in Appendix E1.</b></p>

**(viii) Socio/Economic Aspects**

<p>8.1.</p>	<p>Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.</p>
<p><b><u>District and Local Municipality</u></b></p> <p>The proposed project falls within the Central Karoo District Municipality (CKDM) in the Western Cape Province. The CKDM is a Category C municipality situated in the north-eastern part of the Western Cape Province. Central Karoo is a land-locked district and the largest district in the province, making up a third of its geographical area. According to the CKDM IDP (2021-2022), the CKDM is one (1) of five (5) Category C District municipalities in the Western Cape Province. The N1 (National Road) and main railway cuts through the district in a northeast – southwest direction, connecting it to Cape Town (500km south west of the district) and Johannesburg (1000km north east of the district). The CKDM covers a total area of 38 852km<sup>2</sup>, making it the largest district municipality in the province. It stretches approximately 400km from its furthest south east point to its furthest north west point, and includes the towns of Beaufort West, Laingsburg and Prince Albert (also the names of the 3 local municipalities within the district). The District Municipality is divided into three (3) local municipalities, namely the Beaufort West Local Municipality, Laingsburg Local Municipality and Prince Albert Local Municipality. The proposed project is located within the Prince Albert Local Municipality.</p>	

The Prince Albert Local Municipality is a Category B municipality located within the CKDM in the Western Cape Province. This municipal area lies between the other two (2) category B municipalities and borders on the Northern Cape province to the north, and the Eastern Cape province to the east. Prince Albert is the main town and home to the head office of the municipality. The area does have a major link road to the southerly located municipalities in the Eden district. The Prince Albert Local Municipality borders Beaufort West Local Municipality, Laingsburg Local Municipality and the Eden District. The Prince Albert Municipal area covers a total of 8 800 km<sup>2</sup> with vast parts of these being in the rural areas where vast hectares are under agricultural production, mainly fruit and sheep farming. District roads radiate out of Prince Albert connecting it to its satellite towns of Prince Albert Road on the N1, Klaraarstroom on the R329 and Leeu-Gamka on the N1. In recent years Prince Albert, has seen the biggest economic growth in the region due to the demand in high-income property being bought especially by Europeans. It is known as a little town with Victorian and Karoo style architecture, art and décor shops, sidewalk coffee shops, the breathtakingly beautiful Swartberg Valley, Meiringspoort and the annual Olive Festival which attracts hundreds of tourists each year (CKDM IDP, 2021-2022).

#### Population

According to the 2020 Socio-economic Profile: Prince Albert Local Municipality, Prince Albert has currently a population of 14 510, rendering it the second most populated municipal area in the Central Karoo District, after Beaufort West with 51 074 people. This total is expected to increase to 14 911 by 2024. Amidst rapid urbanisation across the Western Cape, population density figures will aid public sector decision makers to mitigate environmental, individual health and service delivery risks. In 2020, the population density of the Central Karoo District (CKD) was 2 persons per square kilometre.

#### Household sizes

Household size refers to the number of people per household. The actual size of households in Prince Albert remained unchanged between 2020 and 2024. Contributing factors to a stagnation in household size growth could include, but are not limited to, lower fertility rates, occurrences of divorce, ageing population, etc

#### Economic Profile

The economy in the Central Karoo municipal area is characterised by the following:

- (xxiv) High levels of poverty and low levels of education,
- (xxv) It is a small to medium-town sub-region with a low level of development despite the strategic location in terms of the national transport corridor,
- (xxvi) Sparsely populated towns with a number of larger towns serving as “agricultural service centres”; spread evenly throughout the district as central places,
- (xxvii) High rate of unemployment, poverty and social grant dependence,
- (xxviii) Prone to significant environmental changes owing to long-term structural changes (such as climate change, energy crises and other shifts),
- (xxix) Geographic similarity in economic sectors, growth factors and settlement patterns,
- (xxx) Economies of scale not easily achieved owing to the relatively small size of towns,
- (xxxi) A diverse road network with national, trunk, main and divisional roads of varying quality,
- (xxxii) Potential and impact of renewable energy resource generation, and
- (xxxiii) Potential and impact of ‘fracking’ i.e., the possible exploration for shale gas and uranium mining.

#### Education

According to the CKDM IDP (2021-2022), the literacy rate in the Central Karoo was recorded at 60% in 2011. The learner to teach ratio in the Central Karoo in 2016 was extremely high, sitting at about 51 learners per teacher. Dropout rates are also very high in the Central Karoo, specifically in Laingsburg where the dropout rate was 72.3% in 2016 (this is the % of learners that enrol in grade 10 but do not complete grade 12). In addition, approximately a quarter of the adult population in the CKDM have not completed primary education. Most the adult population without any form of schooling in the CKDM resides in Beaufort West. Laingsburg contains the least number of individuals without any form of schooling, but given the municipality’s relatively small population, it has the largest proportion of individuals without any form of schooling compared to Prince Albert and Beaufort West. The largest proportion of people without schooling are found in Laingsburg having the highest proportion (14.1%) followed by Beaufort West (12.4%) and Prince Albert (12.0%). Beaufort West has the largest proportion of people with a Grade 12 qualification (17.8%) followed by Prince Albert (13.2%). High educational achievements indicate the availability of a skilled and qualified workforce which augurs well for economic growth

#### Employment Status

The overall results regarding the employment status of the workforce / potentially economically active group in the district municipal area have improved from the 2001 figure of 63.8% employed and 36.2% unemployed. In 2011, the number of unemployed individuals was about 13% below what it was in 2001. Owing to the still relatively high numbers of unemployed persons, other main sources of income such as pension / welfare payments are critical to ensure livelihoods of households.

Based on the results of the labour force by district and sex as per the Census 2011, the Central Karoo District had the lowest employed rate for both males and females and the highest discouraged work seekers and female unemployment rate in the Western Cape.

Unemployment rates	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Beaufort West	23.1	24.1	23.8	23.5	22.9	23.1	22.0	23.0	23.8	23.4	24.2
Laingsburg	17.5	18.3	18.1	17.5	16.9	17.0	15.5	16.1	16.7	16.4	17.0
<b>Prince Albert</b>	<b>19.3</b>	<b>20.3</b>	<b>20.0</b>	<b>19.3</b>	<b>18.4</b>	<b>18.5</b>	<b>16.7</b>	<b>17.4</b>	<b>18.0</b>	<b>17.5</b>	<b>18.1</b>
Central Karoo	21.7	22.6	22.4	21.9	21.2	21.4	20.1	21.0	21.7	21.3	22.0
Western Cape	14.2	15.5	15.7	15.8	15.7	16.0	16.1	17.3	18.1	18.0	19.4

Figure 3: Unemployment rates in Prince Albert

### Access to Basic Services

According to the CKDM IDP (2021-2022), In 2011, approximately 97% of households in the district had access to a formal dwelling. By 2016, 97.8% of households had access to a formal dwelling. This indicates that housing delivery across the district takes place at a faster rate than the growth in the total number of households. With regards to potable water, in 2011 approximately 99.4% of households had access to piped water inside the dwelling or yard, or within 200 metres from the yard. By 2016, this figure had decreased to 95.1%. This indicates that the growth in the number of households is outpacing the delivery of water services. In 2011, 89.5% had access to a flush or chemical toilet connected to the municipal sewage system. By 2016, this figure had increased to 97.1%. In terms of electricity as a primary source of lighting, in 2011 89.4% of the district's households had access to this form of energy. And by 2016, this figure had increased to 95.4%. Lastly, in 2011 78.7% of households had their refuse collected by local authorities once a week, and by 2016 this number had increased to 90.8%.

8.2. Explain the socio-economic value/contribution of the proposed development.

The proposed project is expected to have positive impacts related to GDP growth, limited local and preferential procurement (BBBEE, etc.), enterprise development, the creation of employment and skills development opportunities. This is compatible with the economic development vision of the District and Local municipalities. Renewable energy developments, which this proposed project will service, would create direct and indirect job opportunities (with associated skills development and transfer) for the community (local, district / regional and provincial).

In conjunction with the authorised Beaufort West cluster of wind developments, the proposed project will address electricity constraints within both the local and district Municipalities by generating, distributing and evacuating a continued realisable source of electricity. Improved electrification, increased electricity supply to houses and businesses and investment in renewable energy developments are strategic objectives of both the District and Local Municipality.

8.3. Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.

No social initiatives are planned at this stage. To uplift the community in the area, the applicant will, where possible, aim to employ people from the local communities during the construction phase of the proposed project.

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.

No evidence exists to show that the proposed activity contributes or constitutes harm on the receiving environment and its affected people. No proven health hazards are caused by the proposed activity. The applicant is obligated to monitor and maintain quality standards of the structure in terms of attributing governing national legislation. The National Department of Health has issued a statement to note that as long as ICNIRP standards are adhered to; people's health will be protected around base stations. This includes keeping the radiation emission to in line with the ICNIRP public exposure guidelines.

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

### (I) 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 property and site alternative is on Portion 1 of Farm No. 15 of Trakaskuilen (C0610000000001500001) located on the Beaufort West Cluster of wind developments, approximately 60km south of the town of Beaufort West in the Prince Albert Local Municipality, within the Central Karoo District Municipality of the Western Cape Province.


No other locations (i.e., project sites) were considered for the placement of the Radio Mast, as this placement is dependent on the location of Mainstream's authorised Beaufort West (12-12-20-1784-1-AM3) and Trakas (12-12-20-1784-2-AM3) Wind Farm projects. As mentioned, the proposed project will service the above-mentioned authorised wind farm projects (including their associated electrical infrastructure). If the project does not receive EA, then the existing electricity supply to the area as well as future economic development will be limited and compromised.

Provide a description of any other property and site alternatives investigated.

No other locations (i.e., project sites) were considered for the placement of the Radio Mast, as this placement is dependent on the location of Mainstream's authorised Beaufort West (12-12-20-1784-1-AM3) and Trakas (12-12-20-1784-2-AM3) Wind Farm projects. As mentioned, the proposed project will service the above-mentioned authorised wind farm projects (including their associated electrical infrastructure). If the project does not receive EA, then the existing electricity supply to the area as well as future economic development will be limited and compromised.

Provide a motivation for the preferred property and site alternative including the outcome of the site selection matrix.



<p><b>The radio mast is required in order linking stations to communicate with one another. In addition, it will be placed on an already authorised MTS. A site selection matrix was therefore not undertaken.</b></p>	
<p>Provide a full description of the process followed to reach the preferred alternative within the site.</p>	
<p><b>Not applicable. Refer to comment above.</b></p>	
<p>Provide a detailed motivation if no property and site alternatives were considered.</p>	
<p><b>Refer to comment above.</b></p>	
<p>List the positive and negative impacts that the property and site alternatives will have on the environment.</p>	
<p><b>Positive - The preferred site:</b></p> <ul style="list-style-type: none"> <li>- Provides the best location for optimal signal coverage;</li> <li>- Is already transformed; and,</li> <li>- Will have a moderate visual impact on the surrounding area;</li> </ul> <p><b>Negative – The preferred site:</b></p> <ul style="list-style-type: none"> <li>- Falls within a ESAs setting; and,</li> <li>- Has natural fauna and flora surrounding the old quarry.</li> </ul>	
1.2.	<p>Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.</p>
<p>Provide a description of the preferred activity alternative.</p>	
<p><b>No other activity was considered or assessed for the proposed project. The proposed project will connect Mainstream's authorised Beaufort West and Trakas Wind Farm projects to the grid. As a result, no other activity alternatives could be considered for the proposed project.</b></p>	
<p>Provide a description of any other activity alternatives investigated.</p>	
<p><b>Not Applicable</b></p>	
<p>Provide a motivation for the preferred activity alternative.</p>	
<p><b>Not Applicable</b></p>	
<p>Provide a detailed motivation if no activity alternatives exist.</p>	
<p><b>The identified location alternative was the only one provided to the EAP. Other location alternatives were disregarded due to physical and geographical characteristics, visual obtrusions, optimum range of signal, space availability, suitability and land owner willingness to erect a base station. The location provided is based on best suitability in terms of visual impact as well as impact on the receiving, natural environment.</b></p>	
<p>List the positive and negative impacts that the activity alternatives will have on the environment.</p>	
<p><b>Not Applicable</b></p>	
1.3.	<p>Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts</p>
<p>Provide a description of the preferred design or layout alternative.</p>	
<p><b>Alternative 1: Construction of up to 90 m Lattice mast – Preferred alternative</b></p>	
<p>The Lattice Mast is a free-standing ninety meter (90 m) high triangular base station with three sides (3)/ four (4) sides. Lattice Masts can be considered to resemble industrial clutter, whereas a Monopole Mast is more discreet. The principles as set out in the City of Cape Town's Draft Telecommunication Infrastructure Policy: April 2015, will be used as a guideline. The Policy states that a general rule for new freestanding telecommunication masts, a slim line monopole should be used in an urban context, while a lattice mast should be used in an industrial and rural context. As the proposed development will be situated within a rural context within the Prince Albert Local Municipality, the Lattice mast is considered to be the preferred design alternative. The Radio Mast will be made from tapered steel lattice with either a square (4 leg) or triangular (3 leg) structure. The radio mast will be approximately up to 90m in height and will be placed within the substation footprint for the authorised 33kV/132kV Main Transmission Substation (MTS) (i.e. will be built on top of the authorised MTS).</p>	
	
<p><i>Figure 4: Visual Impression of a Lattice Mast</i></p>	

Provide a description of any other design or layout alternatives investigated.	
<p>No other design or layout alternatives have been investigated. There are no design / technology alternatives for the radio mast as Mainstream were provided with the Scope of Works (SoW) for the radio mast from Eskom and must adhere to this (must adhere to Eskom Standard). Eskom advised that the mast needs to be at least 85m in height. The requirements / specifications for the radio mast being proposed (up to 90m tapered steel lattice with either square, 4 leg, or triangular, 3 leg) is what was requested by Eskom, based on their requirements / standards (i.e., Eskom requested this). This is based on specific requirements following a comms study which Eskom undertook. There is no fibre on the Eskom line and no fibre alternatives. The requested mast thus needs to be a radio mast. There will be no guy wires used and the radio mast will be a self-supporting structure (as it typically is).</p>	
Provide a motivation for the preferred design or layout alternative.	
<p>The Lattice Mast is the preferred design alternative due to the rural nature of the proposed development. It is advised that a lattice mast be developed as it will have a lower visual impact over distance as it allows visibility of the background, where a monopole mast is more concentrated against the background. Furthermore, the mast must be painted white and red in order to comply with the Civil Aviation Authority as the proposed development is considered an obstacle and as such only a lattice and monopole mast are acceptable according to the Visual Specialist. An advantage of Lattice towers/masts is that they can accommodate more users through co-location of antennae compared to monopole masts. The proposed site is in a rural agricultural zone with very few visual observers that are permanently in the vicinity.</p>	
Provide a detailed motivation if no design or layout alternatives exist.	
<p>No other design or layout alternatives have been investigated. There are no design / technology alternatives for the radio tower as Mainstream were provided with the Scope of Works (SoW) for the radio tower from Eskom and must adhere to this (must adhere to Eskom Standard). Eskom advised that the tower needs to be at least 85m in height. The requirements / specifications for the radio tower being proposed (up to 90m tapered steel lattice with either square, 4 leg, or triangular, 3 leg) is what was requested by Eskom, based on their requirements / standards (i.e., Eskom requested this). This is based on specific requirements following a comms study which Eskom undertook. There is no fibre on the Eskom line and no fibre alternatives. The requested tower thus needs to be a radio tower. There will be no guy wires used and the radio mast will be a self-supporting structure (as it typically is).</p>	
List the positive and negative impacts that the design alternatives will have on the environment.	
<p><b>Preferred Alternative- Lattice Mast</b></p> <p>- Positive:</p> <ul style="list-style-type: none"> <li>• The design is more appropriate for the rural context of the development site;</li> <li>• Will have a lower visual impact over distance as it allows visibility of the background; and,</li> <li>• The need for further base stations is reduced.</li> </ul> <p>- Negative:</p> <ul style="list-style-type: none"> <li>• The mast is less aesthetically pleasing.</li> </ul>	
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:	
<p>The preferred technology alternative is to construct a freestanding Radio Mast. The mast is required by Eskom in order for the Linking Station to be able to communicate via Radio frequency to other Linking stations in the area. The Radio Mast will be made from tapered steel lattice with either a square (4 leg) or triangular (3 leg). The radio mast will be approximately up to 90m in height and will be placed within the substation footprint for the authorised 33kV/132kV Main Transmission Substation (MTS) (i.e., will be built on top of the authorised MTS).</p>	
Provide a description of any other technology alternatives investigated.	
<b>Not Applicable</b>	
Provide a motivation for the preferred technology alternative.	
<b>Not Applicable</b>	
Provide a detailed motivation if no alternatives exist.	
List the positive and negative impacts that the technology alternatives will have on the environment.	
<p><b>Positive:</b></p> <ul style="list-style-type: none"> <li>• Renewable energy source will be used.</li> </ul> <p><b>- Negative:</b></p> <ul style="list-style-type: none"> <li>• The mast will require some power from the existing electricity grid during a time when National electricity provision is compromised.</li> </ul>	
1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	
<p>Once operational, the Radio Mast will operate continuously. Routine maintenance takes place once or twice a year to ensure the optimal functioning of the mast, with emergency maintenance conducted when necessary.</p>	
Provide a description of any other operational alternatives investigated.	
<b>Not Applicable</b>	

Provide a motivation for the preferred operational alternative.	
<b>The intervals for maintenance are sufficient to ensure the mast is functioning properly. Maintenance visits will also not be excessive, preventing unnecessary disturbance to landowners</b>	
Provide a detailed motivation if no alternatives exist.	
<b>No alternative operational method exists which can perform to same function that the structure is to provide</b>	
List the positive and negative impacts that the operational alternatives will have on the environment.	
<p><b>Positive:</b></p> <ul style="list-style-type: none"> <li>• Routine maintenance will ensure the mast is functioning properly; and maintenance visits will only be conducted as needed, preventing unnecessary disturbance to land owners.</li> <li>• While operational, the mast will improve cellular reception in the area.</li> </ul> <p><b>Negative:</b></p> <ul style="list-style-type: none"> <li>• Negative impacts include the visual intrusion and the potential impacts of radiation (only if not operated according to ICNIRP standards).</li> </ul>	
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.	
<p><b>The 'No-Go' alternative is the option of not constructing the proposed Radio Mast in support of the authorised Beaufort West and Trakas Wind Farm projects, and where the status quo of the current status and/or activities on the site would prevail.</b></p> <p>Should the 'No-Go' alternative be considered, there would be no impact on the existing environmental baseline and no benefits to the local economy and affected communities will be realised. The authorised Beaufort West and Trakas Wind Farm projects would not be able to function optimally as the mast is required by Eskom in order for the Linking Station to be able to communicate via Radio frequency to other Linking stations in the area. The proposed project will ensure the authorised Beaufort West and Trakas project is suitable for development opportunities such as the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) and other public or private run procurement programmes that may arise or for sale to private entities, if enabled and/or required in the drive for an energy mix and security in South Africa. The No-go option would have negative consequences for the environment in South Africa as a whole, as the country's coal dependency would be alleviated to a lesser degree if construction of the proposed Radio Mast is not delayed. This in turn is expected to have negative socio-economic impacts for the country as a whole and is not in alignment with National Development Plan objectives in the drive for cleaner renewable energy sources. Not granting the EA will delay and possibly prevent the construction of the Proposed Radio Mast and will ultimately be detrimental to the country's aim of addressing the issue of climate change, as well as alleviating load shedding.</p> <p><b>For these reasons, the no-go option is considered to be undesirable</b></p>	
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.
<b>Not Applicable</b>	
1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.
<p><b>The preferred alternative is an approximately eighty metre (80 m) Radio Mast located on the Beaufort West Cluster of wind farm developments, near the town of Beaufort West in the Western Cape Province. (Portion 1 of Farm No. 15 of Trakaskuilen (C0610000000001500001)). The preferred site is situated at the following coordinates: 32° 55.548' S; 22° 33.268' E.</b></p>	

**(ii) "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).
<b>There are currently no "no-go" areas that have been identified. However, all excavations and clearance of vegetation should be restricted to the proposed development site.</b>

**(iii) 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.
<p><b>For each potential impact, the EXTENT (Spatial scale), INTENSITY (degree of the impact), DURATION (time scale), will be assessed by the EAP as well as the Specialists.</b></p> <p><b>The assessment of the above criteria will be used to determine the significance of each impact, with and without the implementation of the proposed mitigation measures. The scale to be used to assess these variables and to define the rating categories are tabulated in Tables below:</b></p>

**Table 1: Definitions and Criteria**

PART A: DEFINITIONS AND CRITERIA		
Determination of CONSEQUENCE	Consequence is a function of intensity, spatial extent and duration	
Determination of SIGNIFICANCE	Significance is a function of consequence and probability	
Criteria for ranking of the INTENSITY of environmental impacts	Very High	Severe change, disturbance or degradation caused to receptors. Associated with severe consequences. May result in severe illness, injury or death. Targets, limits and thresholds of concern continually exceeded. Substantial intervention will be required.
	High	Prominent change, or large degree of modification, disturbance or degradation caused to receptors or which may affect a large proportion of receptors, possibly entire species or community.
	Medium	Moderate change, disturbance or discomfort caused to receptors and/or which may affect a moderate proportion of receptors.
	Low	Minor (slight) change, disturbance or nuisance caused to receptors which is easily tolerated without intervention, or which may affect a small proportion of receptors.
	Very Low	Negligible change, disturbance or nuisance caused to receptors which is barely noticeable or may have minimal effect on receptors or affect a limited proportion of the receptors.
Criteria for ranking the DURATION of impacts	Very Short-term	The duration of the impact will be < 1 year or may be intermittent.
	Short-term	The duration of the impact will be between 1 - 5 years
	Medium-term	The duration of the impact will be Medium-term between, 5 to 10 years.
	Long-term	Long term, between 10 and 20 years. (Likely to cease at the end of the operational life of the activity)
	Permanent	The duration of the impact will be permanent
Criteria for ranking the EXTENT of impacts	Site	Impact is limited to the immediate footprint of the activity and immediate surrounds within a confined area.
	Local	Impact is confined to within the project site / area and its nearby surroundings.
	Regional	Impact is confined to the region, e.g. coast, basin, catchment, municipal region, district, etc.
	National	Impact may extend beyond district or regional boundaries with national implications.
	International	Impact extends beyond the national scale or may be transboundary.

**Table 2: Determining Consequence**

PART B: DETERMINING CONSEQUENCE						
		EXTENT				
		Site	Local	Regional	National	International
<b>Intensity - Very Low</b>						
DURATION	Permanent	Low	Low	Medium	Medium	High
	Long-term	Low	Low	Low	Medium	Medium
	Medium-term	Very Low	Low	Low	Low	Medium
	Short-term	Very low	Very Low	Low	Low	Low
	Very Short-term	Very low	Very Low	Very Low	Low	Low
<b>Intensity -Low</b>						
DURATION	Permanent	Medium	Medium	Medium	High	High
	Long-term	Low	Medium	Medium	Medium	High
	Medium-term	Low	Low	Medium	Medium	Medium
	Short-term	Low	Low	Low	Medium	Medium
	Very Short-term	Very low	Low	Low	Low	Medium
<b>Intensity - Medium</b>						
DURATION	Permanent	Medium	High	High	High	Very High
	Long-term	Medium	Medium	Medium	High	High
	Medium-term	Medium	Medium	Medium	High	High
	Short-term	Low	Medium	Medium	Medium	High
	Very Short-term	Low	Low	Low	Medium	Medium
<b>Intensity -High</b>						
DURATION	Permanent	High	High	High	Very High	Very High
	Long-term	Medium	High	High	High	Very High
	Medium-term	Medium	Medium	High	High	High
	Short-term	Medium	Medium	Medium	High	High
	Very Short-term	Low	Medium	Medium	Medium	High
<b>Intensity - Very High</b>						
DURATION	Permanent	High	High	Very High	Very High	Very High
	Long-term	High	High	High	Very High	Very High
	Medium-term	Medium	High	High	High	Very High
	Short-term	Medium	Medium	High	High	High
	Very Short-term	Low	Medium	Medium	High	High
		Site	Local	Regional	National	International
<b>EXTENT</b>						

**Table 3: Determining Significance**

PART C: DETERMINING SIGNIFICANCE						
PROBABILITY (to exposure of events)	Definite / Continuous	Very Low	Low	Medium	High	Very High
	Probable	Very Low	Low	Medium	High	Very High
	Possible / frequent	Very Low	Very Low	Low	Medium	High
	Conceivable	Insignificant	Very Low	Low	Medium	High
	Unlikely / improbable	Insignificant	Insignificant	Very Low	Low	Medium
		Very Low	Low	Medium	High	Very High
CONSEQUENCE						

**Table 4: Interpretation of Significance**

PART D: INTERPRETATION OF SIGNIFICANCE		
Very High -	Very High +	Represents a key factor in decision-making. In the case of adverse effects, the impact would be considered a fatal flaw unless mitigated to lower significance.
High -	High +	These beneficial or adverse effects are considered to be very important considerations and are likely to be material for the decision-making process. In the case of negative impacts, substantial mitigation will be required.
Medium -	Medium +	These beneficial or adverse effects may be important but are not likely to be key decision-making factors. The cumulative effects of such issues may become a decision-making issue if leading to an increase in the overall adverse effect on a particular resource or receptor. In the case of negative impacts, mitigation will be required.
Low -	Low +	These beneficial or adverse effects may be raised as localised issues. They are unlikely to be critical in the decision-making process but could be important in the subsequent design of the project. In the case of negative impacts, some mitigation is likely to be required.
Very Low -	Very Low +	These beneficial or adverse effects will not have an influence on the decision, neither will they need to be taken into account in the design of the project. In the case of negative impacts, mitigation is not necessarily required.
Insignificant		Any effects are beneath the levels of perception and inconsequential, therefore not requiring any consideration.

**(iv) 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. – **Noted SLR has used their own format and presented the impact assessment below.**

Alternative:	
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	
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)	

## 1. Agricultural Impacts

The agricultural impact of the proposed development is very low. An Agricultural Compliance Statement is only required to indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site and has been included as additional requirements. It must provide a substantiated statement on the acceptability, or not, of the proposed development and a recommendation on the approval, or not of the proposed development.

According to the specialist, an agricultural impact is a change to the future production potential of land. The significance of this impact is assessed as being zero because there is zero loss of future production potential as result of this development. The site has very low agricultural production. However, it effectively has zero future agricultural production potential because there is an approved substation on the site which will prevent agricultural use of the land, regardless of the proposed development.

The majority of the proposed radio mast development area have previously been assessed as part of approved developments. A specialist SSVR is considered adequate for this assessment (Refer attached in Appendix G).

- The agricultural footprint of the proposed development will occupy land that is of limited land capability and is not suitable for the production of cultivated crops. There is no scarcity of such agricultural land in South Africa and its conservation for agriculture is therefore not a priority.
- The location of the MTS radio mast, and associated infrastructure is in keeping with the allowable development limits prescribed by the agricultural protocol. These limits reflect the national need to conserve valuable agricultural land and therefore to steer, particularly renewable energy developments, onto land with low agricultural production potential.

There are no additional mitigation measures required, over and above what has already been included in the Generic EMPr for the mast as per Government Notice 435, which was published in Government Gazette 42323 on 22 March 2019.

## 2. Aquatic Impacts

The majority of the proposed radio mast area mast and have previously been assessed as part of approved developments, the specialist has undertaken an SSVR report.

No wetlands were found within the proposed development area, only the riverine features such as alluvial watercourses and with limited riparian vegetation dominated by *Vachellia karroo*, *Searsia lancea*, *Euclea undulata*, *Gymnosporia buxifolia*, *Erianthus capensis*, *Sporobolus fimbriatus*, *Cynodon incompletes*, *Eragrostis curvula*, *Erharta calcynia*, *Merxmuellera disticha*, and *Cynodon dactylon* are found near the proposed radio mast footprint.

The following impacts on the aquatic environment have been identified previously for the clearance of the substation (on which the mast will occur) and will be assessed in greater detail as follows:

### Construction & Decommissioning Phases

- Impact 1: Loss of aquatic species of special concern
- Impact 2: Damage or loss of riparian systems and disturbance of the waterbodies in the construction phase
- Impact 3: Potential impact on localised surface water quality

### Operational phase

- Impact 4: Impact on aquatic systems through the possible increase in surface water runoff on form and function - increase in sedimentation and erosion.

### Loss of aquatic species including any Species of Special Concern

<b>Issue</b>	Loss of aquatic species including any Species of Special Concern	
<b>Description of Impact</b>		
Potential loss of protected or listed aquatic species, however none were observed on site		
<b>Type of Impact</b>	Direct	
<b>Nature of Impact</b>	Negative	
<b>Phases</b>	Construction	
<b>Criteria</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Intensity</b>	Medium	Very Low
<b>Duration</b>	Medium-term	Short-term
<b>Extent</b>	Local	Site
<b>Consequence</b>	Medium	Very Low
<b>Probability</b>	Conceivable	Unlikely/ improbable
<b>Significance</b>	Low -	Insignificant
<b>Degree to which impact can be reversed</b>	If any plants are encountered these can be relocated with a limited degree of success	
<b>Degree to which impact may cause irreplaceable loss of resources</b>	Low	
<b>Degree to which impact can be mitigated</b>	High -	

<b>Issue</b>	Loss of aquatic species including any Species of Special Concern
<b>Mitigation actions</b>	
<b>The following measures are recommended:</b>	The current layout must be selected, to ensure all the observed aquatic systems will be avoided, thus avoiding this impact
<b>Monitoring</b>	
<b>The following monitoring is recommended:</b>	ECO / ESO during construction inspects the area on a regular basis (weekly) for any unique plants (mostly bulbs and succulents) that may appear during the growth seasons

**Damage or loss of riparian systems and disturbance of waterbodies in the construction / decommissioning phase**

<b>Issue</b>	Damage or loss of riparian systems and disturbance of waterbodies in the construction / decommissioning phase	
<b>Description of Impact</b>		
Construction & decommissioning could result in the loss of drainage systems that are fully functional and provide an ecosystem services within the site especially where new crossing are made or large hard engineered surfaces are placed within these systems (incl the Proposed buffer). Loss can also be include as a functional loss, through change in vegetation type via alien encroachment for example.		
<b>Type of Impact</b>	Direct	
<b>Nature of Impact</b>	Negative	
<b>Phases</b>	Construction	
<b>Criteria</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Intensity</b>	Medium	Low
<b>Duration</b>	Long-term	Short-term
<b>Extent</b>	Local	Site
<b>Consequence</b>	Medium	Low
<b>Probability</b>	Probable	Conceivable
<b>Significance</b>	Medium -	Very Low -
<b>Degree to which impact can be reversed</b>	Yes, with a significant amount of rehabilitation	
<b>Degree to which impact may cause irreplaceable loss of resources</b>	Medium	
<b>Degree to which impact can be mitigated</b>	High	
<b>Mitigation actions</b>		
<b>The following measures are recommended:</b>	<ul style="list-style-type: none"> <li>Suitable stormwater management systems must be installed along roads and other areas and monitored during the first few months of use.</li> <li>Any erosion / sedimentation must be resolved through whatever additional interventions maybe necessary (i.e., extension, energy dissipaters, spreaders, etc). This will avoid any secondary impacts that could affect downstream areas.</li> </ul>	
<b>Monitoring</b>		
<b>The following monitoring is recommended:</b>	All alien plant re-growth, which is currently low within the greater region must be monitored and should it occur, these plants must be eradicated within the project footprints and especially in areas near the proposed crossings.	

**Water quality changes (increase in sediment, organic loads, chemicals or eutrophication)**

<b>Issue</b>	Water quality changes (increase in sediment, organic loads, chemicals or eutrophication)	
<b>Description of Impact</b>		
During construction earthworks will expose and mobilise earth materials, and a number of materials as well as chemicals will be imported and used on site and may end up in the surface water, including soaps, oils, grease and fuels, human wastes, cementitious wastes, paints and solvents, etc. Any spills during transport or while works area conducted in proximity to a watercourse has the potential to affect the surrounding biota. Leaks or spills from storage facilities also pose a risk and due consideration to the safe design and management of the fuel storage facility must be given.		
<b>Type of Impact</b>	Direct	
<b>Nature of Impact</b>	Negative	



Phases	Construction	
Criteria	Without Mitigation	With Mitigation
Intensity	Medium	Low
Duration	Long-term	Short-term
Extent	Local	Site
Consequence	Medium	Low
Probability	Probable	Conceivable
Significance	Medium -	Very Low -
Degree to which impact can be reversed	Yes, with a significant amount of rehabilitation	
Degree to which impact may cause irreplaceable loss of resources	Medium	
Degree to which impact can be mitigated	High	
Mitigation actions		
The following measures are recommended:	<ul style="list-style-type: none"> <li>All liquid chemicals including fuels and oil must be stored in with secondary containment (bunds or containers or berms) that can contain a leak or spill. Such facilities must be inspected routinely and must have the suitable PPE and spill kits needed to contain likely worst-case scenario leak or spill in that facility, safely.</li> <li>Washing and cleaning of equipment must be done in designated wash bays, where rinse water is contained in evaporation/sedimentation ponds (to capture oils, grease cement and sediment).</li> <li>Mechanical plant and bowsers must not be refuelled or serviced within 100m of a river channel.</li> <li>All construction camps, lay down areas, wash bays, batching plants or areas and any stores should be more than 50 m from any demarcated water courses.</li> <li>Littering and contamination associated with construction activity must be avoided through effective construction camp management.</li> <li>No stockpiling should take place within or near a water course.</li> <li>All stockpiles must be protected and located in flat areas where run-off will be minimised and sediment recoverable.</li> </ul>	
Monitoring		
The following monitoring is recommended:	ESO monitors the site on a daily basis to ensure plant is in working order (minimise leaks), spills are prevented and if they do occur a quickly rectified.	

#### Hydrological regime or Hydroperiod changes

Issue	Hydrological regime or Hydroperiod changes (Quantity changes such as abstraction or diversion)	
Description of Impact		
Increase in hard surface areas, and roads that require stormwater management will increase through the concentration of surface water flows that could result in localised changes to flows (volume) that would result in form and function changes within aquatic systems, which are currently ephemeral. This then increases the rate of erosions and sedimentation of downstream areas.		
Type of Impact	Indirect	
Nature of Impact	Negative	
Phases	Operation	
Criteria	Without Mitigation	With Mitigation
Intensity	Medium	Medium
Duration	Long-term	Short-term
Extent	Site	Site
Consequence	Medium	Low
Probability	Probable	Conceivable
Significance	Medium -	Very Low -
Degree to which impact can be reversed	High with rehabilitation	
Degree to which impact may cause irreplaceable loss of resources	Medium	

<b>Degree to which impact can be mitigated</b>	High
<b>Mitigation actions</b>	
<b>The following measures are recommended:</b>	<ul style="list-style-type: none"> <li>• A stormwater management plan must be developed in the preconstruction phase, detailing the stormwater structures and management interventions that must be installed to manage the increase of surface water flows directly into any natural systems.</li> <li>• Effective stormwater management must include effective stabilisation (gabions and Reno mattresses) of exposed soil.</li> </ul>
<b>Monitoring</b>	
<b>The following monitoring is recommended:</b>	This stormwater control systems must be inspected on an annual basis to ensure these are functional

### 3. Terrestrial Impacts

The majority of the proposed site for the radio mast have previously been assessed as part of approved developments, a specialist compliance statement was found to be required and as such the SSVR has been appended to the previous specialist assessment undertaken in the area and considered adequate for this assessment.

The main conclusion of this site sensitivity verification is that the Karoo Dwarf Tortoise does not occur within either of the respective proposed development nodes of the Beaufort West Cluster of Wind Farms and thus by being intrinsically linked, the radio mast site too. This conclusion is based primarily on 1) the absence of suitable or optimal habitat for this species, 2) the absence of evidence of live or dead specimens during the field survey, 3) the absence of observations by two (2) tortoise experts that have worked in the general region, and 4) the absence of observations by the landowner.

Given that the project area falls within the footprint of a previously assessed and authorised project, from an ecological perspective, it would be acceptable to use the specialist reports from the Beaufort West Wind Farm 33kv / 132kv Substation, 132kv Powerline and Associated Infrastructure Project for this purpose (i.e. to cover the compliance statement requirements), as the receiving environment is not likely to have changed in the year since the previous assessment.

There are two main impacts associated with construction of the proposed radio mast infrastructure:

1. Direct loss of habitat within the footprint of the proposed infrastructure.
2. Invasion by alien invasive plant species, leading to degradation of habitat.

However, Loss of habitat within this footprint area has therefore already been granted EA.

The overall loss of habitat due to these infrastructure components is insignificant compared to other approved infrastructure components, and also to existing transformation due to urbanization, utilities and cultivation in the general area.

The main potential remaining impact is therefore due to possible invasion by alien invasive plants within the project area.

#### Loss of natural vegetation

<b>Issue</b>	Loss of natural vegetation	
<b>Description of Impact</b>		
There will be localised disturbance of natural habitat within the footprint of tower structures during the construction phase. This is evaluated only for the areas within the footprint of the proposed power line, on the basis that all other infrastructure will be located within areas where authorisation has already been obtained.		
<b>Type of Impact</b>	Direct	
<b>Nature of Impact</b>	Negative	
<b>Phases</b>	Construction	
<b>Criteria</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Intensity</b>	Medium	Low
<b>Duration</b>	Long-term	Long-term
<b>Extent</b>	Site	Site
<b>Consequence</b>	Medium	Low

<b>Probability</b>	Probable	Probable
<b>Significance</b>	Medium -	Low -
<b>Degree to which impact can be reversed</b>	The impact is partly reversible by rehabilitation of disturbed areas.	
<b>Degree to which impact may cause irreplaceable loss of resources</b>	Without mitigation of this impact, it is possible that the local footprint of construction around each tower structure will be more extensive than if the impact is controlled. This will lead to a more extensive loss of natural habitat than without mitigation. However, the diversity within the study area is relatively low and includes primarily common and widespread plant species. There would therefore be an insignificant level of irreplaceable loss of resources.	
<b>Degree to which impact can be mitigated</b>	There is significant scope for mitigation as per the recommended mitigation measures below.	
<b>Mitigation actions</b>		
<b>The following measures are recommended:</b>	Restrict activities to footprint areas, use existing maintenance and access roads, rehabilitate disturbed areas after construction, control alien invasive plant species. The presence of any species of conservation concern within the PV development area as well as along the grid connection should be checked during a preconstruction walk-through of these areas.	
<b>Monitoring</b>		
<b>The following monitoring is recommended:</b>	Annual monitoring for 3 years after construction to evaluate vegetation cover, species composition.	

#### ***Invasion by alien invasive plant species***

<b>Issue</b>	Invasion by alien invasive plant species	
<b>Description of Impact</b>		
There are a variety of alien invasive plant species that occur in the general geographical area. Disturbance will promote the opportunity for invasion by any of these species. Local invasion will degrade habitat and may spread further into surrounding areas. This may lead to more extensive loss of indigenous habitat and biodiversity and long-term control issues.		
<b>Type of Impact</b>	Indirect	
<b>Nature of Impact</b>	Negative	
<b>Phases</b>	Operation	
<b>Criteria</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Intensity</b>	High	Low
<b>Duration</b>	Long-term	Long-term
<b>Extent</b>	Local	Site
<b>Consequence</b>	High	Low
<b>Probability</b>	Possible / frequent	Conceivable
<b>Significance</b>	Medium -	Very Low -
<b>Degree to which impact can be reversed</b>	The impact is reversible by implementing control measures.	
<b>Degree to which impact may cause irreplaceable loss of resources</b>	Without mitigation of this impact, it is possible that alien invasive plants will become locally established, develop dense nodes and then spread into surrounding areas. The more established they become, the more difficult it is to get rid of them and the greater the impact they will have on local ecosystems. The effect is exponential, not appearing significant at first, but suddenly becoming excessively difficult to change. At this end point, irreplaceable loss of resources is likely at a local level, and possibly more widely.	
<b>Degree to which impact can be mitigated</b>	There is significant scope for mitigation as per the recommended mitigation measures below.	
<b>Mitigation actions</b>		
<b>The following measures are recommended:</b>	Compile and implement an alien invasive control plan (prior to construction), monitor degree of invasion as well as outcome and effectiveness of control measures.	
<b>Monitoring</b>		
<b>The following monitoring is recommended:</b>	Annual monitoring for the entire operational phase, as per the recommendations of the alien invasive control plan.	

#### 4. Avifaunal Impacts

We considered the proposed project in light of our previous assessment of the 132kV grid connection and associated infrastructure (Chris van Rooyen Consulting November 2021), and our findings are as follows:

- the proposed project will not change the nature or significance of any of the impacts assessed in any significant manner.
- The proposed changes are not likely to result in any additional impacts that were not previously assessed.
- No additional management outcomes or mitigation measures in terms of avifaunal impacts would be applicable to the proposed changes.

The summary tables below indicate the overall impact significance for each phase before and after mitigation, as well as cumulative impacts, as assessed in the previous assessment of the 132kV grid connection and associated infrastructure, which is also relevant to the radio mast.

Table 1: The overall impact significance for 33 / 132kV yard of Onsite Substation, BESS, Laydown Area and O&M Building Application (relevant to the mast)

Impact	Significance rating prior to mitigation	Significance rating post mitigation
Displacement of priority species due to disturbance associated with construction of the onsite substation and associated infrastructure	Low	Very Low
Displacement of priority species due to habitat transformation associated with the operation of the onsite substation and associated infrastructure.	Low	Low
Displacement of priority species due to disturbance associated with decommissioning of the onsite substation and associated infrastructure.	Low	Very Low

#### 5. Heritage Impacts

The majority of the proposed radio mast site have previously been assessed as part of approved developments, a specialist SSVR is justified and considered adequate for this assessment.

Feedback from HWC confirming no further assessment: " *Heritage Western Cape is in receipt of the above matter received. This matter was discussed at the Heritage Officers meeting held on 1 September 2022.*

*You are hereby notified that, since there is no reason to believe that the proposed install one Radio Mast on authorized wind farms on Portion 1 of Trakas Kulen 15, Prince Albert will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required. The Chance finds procedure to be included in the environmental authorization.*

*However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately, and Heritage Western Cape must be notified without delay."*

#### 6. Palaeontological Impacts

The entire radio mast development is located in the previous authorised Beaufort West Cluster (Beaufort West 132KV-400KV Linking Station, 132KV Power Line and onsite 132KV Substation – 14-12-16-3-3-2-925-1 and Trakas 132KV-400KV Linking Station, 132KV Power Line and onsite 132KV Substation – 14-12-16-3-3-2-925-2). The geology of the authorised development as well as the proposed Beaufort West radio mast development is the same.

The overall impact rating reflected in the Palaeontological Impact Assessment report for the authorised is the same, and radio mast development and will not change as a result of the proposed radio mast and

- The geology of the authorised Beaufort West and Trakas Cluster development has not changed since the site investigations conducted in 2020 and 2021.
- A palaeontological walkdown of the Beaufort West Cluster allocated a low overall Palaeontological significance to the site as no fossils were recovered.

It is important to note that destructive impacts on palaeontological heritage usually only occur during the construction phase.

## 7. Visual Impacts

### Rating of visual impacts of Proposed Radio Mast

<b>Issue:</b>	<ul style="list-style-type: none"> <li>• <b>Potential alteration of the visual character and sense of place</b></li> <li>• <b>Potential visual impact on receptors in the study area</b></li> </ul>	
<b>Description of Impact</b>		
<ul style="list-style-type: none"> <li>• Mast in itself may be visible and unwelcome view.</li> <li>• Large construction vehicles, equipment and construction material stockpiles will alter the natural character of the study area and expose visual receptors to impacts associated with construction.</li> <li>• Construction activities may be perceived as an unwelcome visual intrusion, particularly in more natural undisturbed settings.</li> <li>• Dust emissions and dust plumes from increased traffic on gravel roads serving the construction site may evoke negative sentiments from surrounding viewers.</li> <li>• Surface disturbance during construction would expose bare soil resulting in visual scarring of the landscape and increasing the level of visual contrast with the surrounding environment.</li> <li>• Vegetation clearance required for the construction of the proposed substation is expected to increase dust emissions and alter the natural character of the surrounding area, thus creating a visual impact.</li> <li>• Temporary stockpiling of soil during construction may alter the flat landscape. Wind blowing over these disturbed areas could result in dust which would have a visual impact.</li> <li>• Potential visual pollution resulting from littering on the construction site.</li> </ul>		
<b>Type of Impact</b>	<b>Direct</b>	
<b>Nature of Impact</b>	<b>Negative</b>	
<b>Phases</b>	<b>Construction</b>	
<b>Criteria</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Intensity</b>	Medium	Low
<b>Duration</b>	Short-term	Short-term
<b>Extent</b>	Site	Site
<b>Consequence</b>	Low	Very Low
<b>Probability</b>	Probable	Probable
<b>Significance</b>	Low -	Low -
<b>Degree to which impact can be reversed</b>	Impacts are completely reversible with cessation of construction activity.	
<b>Degree to which impact may cause irreplaceable loss of resources</b>	Marginal loss of visual resources without mitigation measures.	
<b>Degree to which impact can be mitigated</b>	There is significant scope for mitigation as per the recommended mitigation measures below.	
<b>The following measures are recommended:</b>	<ul style="list-style-type: none"> <li>• Carefully plan to minimise the construction period and avoid construction delays.</li> <li>• Minimise vegetation clearing and rehabilitate cleared areas as soon as possible.</li> <li>• Maintain a neat construction site by removing rubble and waste materials regularly.</li> </ul>	

	<ul style="list-style-type: none"> <li>Position storage / stockpile areas in unobtrusive positions in the landscape, where possible.</li> <li>Make use of existing gravel access roads where possible.</li> <li>Limit the number of vehicles and trucks travelling to and from the construction site, where possible.</li> <li>Unless there are water shortages, ensure that dust suppression techniques are implemented: <ul style="list-style-type: none"> <li>on all access roads;</li> <li>in all areas where vegetation clearing has taken place;</li> <li>on all soil stockpiles.</li> </ul> </li> </ul>	
<b>The following monitoring is recommended:</b>	<ul style="list-style-type: none"> <li>Ensure that visual management measures are monitored by an ECO. This will include monitoring activities associated with visual impacts such as the siting and management of soil stockpiles, screening and dust suppression.</li> <li>Regular reporting to an environmental management team must also take place during the construction phase.</li> </ul>	
<b>Nature of cumulative impacts</b>	<ul style="list-style-type: none"> <li>Combined visual impacts from construction activities associated with the development of multiple renewable energy and grid connection infrastructure projects in the broader area could further alter the sense of place and visual character of the area; and</li> <li>Combined visual impacts from construction activities associated with the development of multiple renewable energy and grid connection infrastructure projects in the broader area could potentially exacerbate visual impacts on visual receptors.</li> </ul>	
<b>Rating of cumulative impacts</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
	Medium -	Low -

#### Rating of visual impacts of Proposed Radio Mast During Operation

<b>Issue:</b>	<ul style="list-style-type: none"> <li>Potential visual impact on receptors in the study area.</li> <li>Potential alteration of the visual character and sense of place</li> </ul>	
<b>Description of Impact</b>		
<ul style="list-style-type: none"> <li>Potential alteration of the visual character of the area;</li> <li>Potential visual intrusion resulting from power line and substation infrastructure dominating the skyline in a largely natural / rural area;</li> <li>Potential impacts of increased dust emissions from maintenance activities and related traffic;</li> <li>Potential visual effect on surrounding farmsteads;</li> <li>Potential alteration of the night time visual environment as a result of operational and security lighting at the proposed substation; and</li> <li>Potential alteration of the night time visual environment as a result of aircraft warning lights on the mast.</li> </ul>		
<b>Type of Impact</b>	<b>Direct</b>	
<b>Nature of Impact</b>	<b>Negative</b>	
<b>Phases</b>	<b>Operation</b>	
<b>Criteria</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Intensity</b>	Low	Low
<b>Duration</b>	Long-term	Long-term
<b>Extent</b>	Site	Site
<b>Consequence</b>	Low	Low
<b>Probability</b>	Probable	Probable
<b>Significance</b>	Low -	Low -
<b>Degree to which impact can be reversed</b>	Impacts are partly reversible with decommissioning of infrastructure.	
<b>Degree to which impact may cause irreplaceable loss of resources</b>	Marginal loss of visual resources without mitigation measures.	
<b>Degree to which impact can be mitigated</b>	There is limited scope for mitigation as per the recommended mitigation measures below.	
<b>The following measures are recommended:</b>	<ul style="list-style-type: none"> <li>Where possible, limit the number of maintenance vehicles using access roads.</li> <li>Where possible, limit the amount of security and operational lighting present at the on-site substation.</li> </ul>	

	<ul style="list-style-type: none"> <li>Light fittings for security at night should reflect the light toward the ground and prevent light spill.</li> <li>Buildings on the substation site should be painted with natural tones that fit with the surrounding environment.</li> <li>Non-reflective surfaces should be utilised where possible.</li> </ul>	
<b>The following monitoring is recommended:</b>	Ensure that visual management measures are monitored by an ECO. This will include monitoring activities associated with visual impacts such as the control of signage, lighting and maintenance vehicles on access roads.	
<b>Nature of cumulative impacts</b>	<ul style="list-style-type: none"> <li>Additional renewable energy and associated infrastructure developments in the broader area will alter the natural character of the study area towards a more industrial landscape and expose a greater number of receptors to visual impacts.</li> <li>Visual intrusion of multiple renewable energy and infrastructure developments may be exacerbated, particularly in more natural undisturbed settings.</li> <li>Additional renewable energy facilities in the area would generate additional traffic on gravel roads thus resulting in increased impacts from dust emissions and dust plumes.</li> <li>The night time visual environment could be altered as a result of operational and security lighting at multiple renewable energy facilities in the broader area.</li> </ul>	
<b>Rating of cumulative impacts</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
	High -	Medium -

#### Rating of visual Impacts of the proposed Radio Mast

<b>Issue:</b>	<ul style="list-style-type: none"> <li>Potential visual impact on receptors in the study area</li> <li>Potential alteration of the visual character and sense of place</li> </ul>	
<b>Description of Impact</b>		
<ul style="list-style-type: none"> <li>Vehicles and equipment required for decommissioning will alter the natural character of the study area and expose visual receptors to visual impacts.</li> <li>Decommissioning activities may be perceived as an unwelcome visual intrusion.</li> <li>Dust emissions and dust plumes from increased traffic on the gravel roads serving the decommissioning site may evoke negative sentiments from surrounding viewers.</li> <li>Surface disturbance during decommissioning would expose bare soil resulting in visual scarring of the landscape and increasing the level of visual contrast with the surrounding environment.</li> <li>Temporary stockpiling of soil during decommissioning may alter the flat landscape. Wind blowing over these disturbed areas could result in dust which would have a visual impact.</li> </ul>		
<b>Type of Impact</b>	<b>Direct</b>	
<b>Nature of Impact</b>	<b>Negative</b>	
<b>Phases</b>	<b>Decommissioning</b>	
<b>Criteria</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Intensity</b>	Medium	Low
<b>Duration</b>	Short-term	Short-term
<b>Extent</b>	Site	Site
<b>Consequence</b>	Low	Very Low
<b>Probability</b>	Probable	Probable
<b>Significance</b>	Low -	Low -
<b>Degree to which impact can be reversed</b>	Impacts are completely reversible with cessation of decommissioning activity.	
<b>Degree to which impact may cause irreplaceable loss of resources</b>	Marginal loss of visual resources without mitigation measures.	
<b>Degree to which impact can be mitigated</b>	There is significant scope for mitigation as per the recommended mitigation measures below.	

<p><b>The following measures are recommended:</b></p>	<ul style="list-style-type: none"> <li>• All infrastructure that is not required post-decommissioning should be removed.</li> <li>• Carefully plan to minimize the decommissioning period and avoid delays.</li> <li>• Maintain a neat decommissioning site by removing rubble and waste materials regularly.</li> <li>• Position storage / stockpile areas in unobtrusive positions in the landscape, where possible.</li> <li>• Ensure that dust suppression procedures are maintained on all gravel access roads throughout the decommissioning phase.</li> <li>• All cleared areas should be rehabilitated as soon as possible.</li> <li>• Rehabilitated areas should be monitored post-decommissioning and remedial actions implemented as required.</li> </ul>	
<p><b>The following monitoring is recommended:</b></p>	<ul style="list-style-type: none"> <li>• Ensure that procedures for the removal of structures and stockpiles during decommissioning are implemented, including recycling of materials.</li> <li>• In addition, it must be ensured that rehabilitation of the site to a visually acceptable standard is undertaken.</li> </ul>	
<p><b>Nature of cumulative impacts</b></p>	<ul style="list-style-type: none"> <li>• Combined visual impacts from decommissioning activities associated with multiple renewable energy and grid connection infrastructure projects in the broader area could further alter the sense of place and visual character of the area; and</li> <li>• Combined visual impacts from decommissioning activities associated with the development of multiple renewable energy and grid connection infrastructure projects in the broader area could potentially exacerbate visual impacts on visual receptors.</li> </ul>	
<p><b>Rating of cumulative impacts</b></p>	<p><b>Without Mitigation</b></p>	<p><b>With Mitigation</b></p>
	<p>Medium -</p>	<p>Low -</p>



Specialist	Phase/s	Issue	Description of Impact	Impact Rating	
				Without Mitigation	With Mitigation
<b>Agriculture</b>	<b>Pre-Construction Construction Operation Decommissioning</b>	Although an Agricultural Compliance Statement is not required to formally rate agricultural impacts, it is hereby confirmed that the agricultural impact of the proposed development is very low. An Agricultural Compliance Statement is only required to indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site. It must provide a substantiated statement on the acceptability, or not, of the proposed development and a recommendation on the approval, or not of the proposed development.		<b>Low -</b>	<b>Low -</b>
<b>Avifauna</b>	<b>Construction</b>	Damage or loss of riparian systems and disturbance of waterbodies in the construction / decommissioning phase	Construction & decommissioning could result in the loss of drainage systems that are fully functional and provide an ecosystem service within the site especially where new crossings are made or large hard engineered surfaces are placed within these systems (including the Proposed buffer). Loss can also include a functional loss, through change in vegetation type via alien encroachment for example.	<b>Medium -</b>	<b>Very Low -</b>
	<b>Decommissioning</b>	Water quality changes (increase in sediment, organic loads, chemicals or eutrophication)	During construction & decommissioning earthworks will expose and mobilise earth materials, and a number of materials as well as chemicals will be imported and used on site and may end up in the surface water, including soaps, oils, grease and fuels, human wastes, cementitious wastes, paints and solvents, etc. Any spills during transport or while works area conducted in proximity to a watercourse has the potential to affect the surrounding biota. Leaks or spills from storage facilities also pose a risk and due consideration to the safe design and management of the fuel storage facility must be given.	<b>Medium -</b>	<b>Very Low -</b>
	<b>Operation</b>	Hydrological regime or Hydroperiod changes (Quantity changes such as abstraction or diversion)	Increase in hard surface areas, and roads that require stormwater management will increase through the concentration of surface water flows that could result in localised changes to flows (volume) that would result in form and function changes within aquatic systems, which are currently ephemeral. This then increases the rate of erosions and sedimentation of downstream areas.	<b>Medium -</b>	<b>Very Low -</b>
<b>Terrestrial Ecology</b>	<b>Construction Decommissioning</b>	Loss of natural vegetation	There will be localised disturbance of natural habitat within the footprint of tower structures during the construction phase. This is evaluated only for the areas within the footprint of the proposed power line, on the basis that all other infrastructure will be located within areas where authorisation has already been obtained.	<b>Medium -</b>	<b>Low -</b>
	<b>Operation</b>	Invasion by alien invasive plant species	There are a variety of alien invasive plant species that occur in the general geographical area. Disturbance will promote the opportunity for invasion by any of these species. Local invasion will	<b>Medium -</b>	<b>Very Low -</b>

Specialist	Phase/s	Issue	Description of Impact	Impact Rating	
				Without Mitigation	With Mitigation
			degrade the habitat and may spread further into surrounding areas. This may lead to more extensive loss of indigenous habitat and biodiversity and long-term control issues.		
Avifauna	Construction	Displacement of priority species	Displacement of priority species due to disturbance associated with construction of the onsite substation and associated infrastructure	Low -	Very Low
	Operation	Displacement of priority species	Displacement of priority species due to habitat transformation associated with the operation of the onsite substation and associated infrastructure.	Low -	Low -
	Decommissioning	Displacement of priority species	Displacement of priority species due to habitat transformation associated with the operation of the onsite substation and associated infrastructure.	Low -	Very Low
Heritage/ Palaeontology	Construction Decommissioning	Destruction of fossil heritage	-	Low-	Low -
Visual	Construction	Potential visual impact on receptors in the study area	<ul style="list-style-type: none"> <li>Large construction vehicles, equipment and construction material stockpiles will alter the natural character of the study area and expose visual receptors to impacts associated with construction.</li> <li>Construction activities may be perceived as an unwelcome visual intrusion, particularly in more natural undisturbed settings.</li> <li>Dust emissions and dust plumes from increased traffic on gravel roads serving the construction site may evoke negative sentiments from surrounding viewers.</li> <li>Surface disturbance during construction would expose bare soil resulting in visual scarring of the landscape and increasing the level of visual contrast with the surrounding environment.</li> <li>Vegetation clearance required for the construction of the proposed substation is expected to increase dust emissions and alter the natural character of the surrounding area, thus creating a visual impact.</li> <li>Temporary stockpiling of soil during construction may alter the flat landscape. Wind blowing over these disturbed areas could result in dust which would have a visual impact.</li> </ul>	Low -	Low -
	Operation		<ul style="list-style-type: none"> <li>Carefully plan to minimise the construction period and avoid construction delays.</li> <li>Minimise vegetation clearing and rehabilitate cleared areas as soon as possible.</li> </ul>	High -	Medium -

Specialist	Phase/s	Issue	Description of Impact	Impact Rating	
				Without Mitigation	With Mitigation
			<ul style="list-style-type: none"> <li>• Maintain a neat construction site by removing rubble and waste materials regularly.</li> <li>• Position storage / stockpile areas in unobtrusive positions in the landscape, where possible.</li> <li>• Make use of existing gravel access roads where possible.</li> <li>• Limit the number of vehicles and trucks travelling to and from the construction site, where possible.</li> <li>• Unless there are water shortages, ensure that dust suppression techniques are implemented:               <ul style="list-style-type: none"> <li>○ on all access roads;</li> <li>○ in all areas where vegetation clearing has taken place;</li> <li>○ on all soil stockpiles.</li> </ul> </li> </ul>		
	<b>Decommissioning</b>		<ul style="list-style-type: none"> <li>• Vehicles and equipment required for decommissioning will alter the natural character of the study area and expose visual receptors to visual impacts.</li> <li>• Decommissioning activities may be perceived as an unwelcome visual intrusion.</li> <li>• Dust emissions and dust plumes from increased traffic on the gravel roads serving the decommissioning site may evoke negative sentiments from surrounding viewers.</li> <li>• Surface disturbance during decommissioning would expose bare soil resulting in visual scarring of the landscape and increasing the level of visual contrast with the surrounding environment.</li> <li>• Temporary stockpiling of soil during decommissioning may alter the flat landscape. Wind blowing over these disturbed areas could result in dust which would have a visual impact.</li> </ul>	<b>Low -</b>	<b>Low -</b>

## 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.
<b>Refer to impact assessment above which includes summaries of the impacts. The EMPr (Appendix H includes the management measures to carry forward for the proposed project). An EMPr should be implemented as part of the proposed development, and the document should form part of the tender documentation.</b>	
2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr
<b>Refer to Appendix H and Impact assessment above.</b>	
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.
<b>None</b>	
4.	Explain how the proposed development will impact the surrounding communities.
<b>Jobs will be provided through the implementation of the overall project.</b>	
<p>The EAPs and specialists, through the interrogation of planning documents and, where these planning documents are not available - using best judgment, have considered the anticipated needs and interests of the <u>broader community</u>. In summary, supporting grid connection infrastructure for wind energy facilities is desirable as it:</p> <ul style="list-style-type: none"> <li>• Creates a more sustainable economy by promoting South Africa's energy policy towards energy diversification.</li> <li>• Reduces the demand on scarce resources such as water by promoting energy generating facilities which are less resource intensive.</li> <li>• Assists in meeting international commitments to carbon emission targets in line with global climate change commitments.</li> <li>• Reduces pollution by using 'cleaner' energy generating mechanisms and reducing the demand on carbon-based fuels.</li> <li>• Promotes local economic development by creating jobs and promoting skills development.</li> <li>• Enhances energy security by assisting in diversifying generation (since the project will service authorised wind energy facilities).</li> </ul> <p>The proposed radio mast is required by Eskom Holdings Ltd in order for the authorised Linking Station to be able to communicate via Radio frequency to other Linking stations in the area.</p>	
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.
<b>Climate Change is not expected to affect the proposed development.</b>	
6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.
<b>No conflicting recommendations.</b>	
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.
<b>Specialist recommendations and associated impacts have been addressed in the EMPr which will become a binding document for the contractor prior to construction.</b>	
8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.
<p>As far as possible the recommended mitigation measures have endeavoured to either avoid or minimise impacts. Impacts are expected to be low enough that 'offsetting' will not be necessary. Impacts such as pollution, loss of important species, fire and loss of heritage resources can be avoided through application of the recommended mitigation measures. Impacts identified can be minimised through applying mitigation measures. Where necessary disturbed areas around the development footprint will be restored.</p> <p>Mitigation measures have taken into account the design of the development, the size of the development footprint and the management and timing of activities to avoid and minimise impacts.</p>	

## SECTION J: GENERAL

### (I) Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.
<p>In terms of Section 31 (n) of NEMA, the EAP is required to provide an opinion as to whether the activity should or should not be authorised. In this section, a qualified opinion is ventured, and in this regard SLR believes that sufficient information is available for WC DEADP to take a decision.</p>	

Furthermore, it is the opinion of the EAP that based on the findings of the BA, that the proposed development should be granted an EA and allowed to proceed, provided the following conditions are adhered to:

All feasible and practical mitigation measures recommended by the various specialists must be incorporated into the Generic Environmental Management Programmes (EMPr) if it is not provided for, and implemented, where applicable;

Where applicable, monitoring should be undertaken to evaluate the success of the mitigation measures recommended by the various specialists.

The EAP, is therefore of the view that:

- The site location and project description can be authorised based on the findings of the suite of specialist assessments;
- The Radio Mast has been identified as environmentally acceptable and will not result in significant impacts, provided that the recommended mitigation measures are implemented and the placement of these sites avoids the identified sensitive and 'no-go' areas;
- A cumulative impact assessment of similar developments in the area was undertaken by the respective specialists. Based on their findings, the cumulative impacts associated with the proposed development can be kept low after the implementation of mitigation measures and no fatal flaws have been identified and thus the proposed development should proceed from a cumulative impact assessment perspective; and
- Through the implementation of mitigation measures, together with adequate compliance monitoring, auditing and enforcement thereof by the appointed Environmental Control Officer (ECO) as well as the competent authority, the potential detrimental impacts associated with the proposed development can be mitigated to acceptable levels.

The proposed construction of an approximately 90 m lattice Radio Mast will not affect any sensitive environmental areas. The greatest negative impact of the proposed development, once operational, will be the visual impact on the surrounding areas. Health impacts, associated with radiation from radio masts, are also of major concern. The proposed mitigation measures with regards to health impacts will ensure that the proposed mast operates within acceptable radiation levels. The mast must operate within the standards as set out by the International Commission on Non-Ionising Radiation Protection (ICNIRP) in order to mitigate these impacts.

Furthermore, the Mast will be required to meet the most recent standards as published by the World Health Organisation, the International Committee on Non-Ionising Radiation Protection and the Independent Communication Authority of South Africa.

Construction phase:

- The construction phase of the proposed telecommunications mast will last approximately 6 to 12 months.
- During the construction period typical impacts associated with construction, such as noise and visual impacts will be experienced. Construction activities pose health and safety risks to the workers and surrounding community. By implementing mitigation measures these risks can be lowered to acceptable levels.
- Due the fact that the proposed development is to be situated on a section of land that has been completely transformed and does not contain sensitive environmental features, construction activity will not contribute to a cumulative loss of sensitive habitat or important conservation areas. Accordingly, the impact of the development on the geographical, physical and biological aspects of the area will be low to negligible.
- Given the small scale, location and the already transformed nature of the site, it is highly unlikely that archaeological artefacts or remains will be disturbed during the construction phase of the proposed project. However, should any human burials be uncovered or exposed during earthworks or excavations the nature of the impact would be negative.
- There will be normal construction noise associated with such an activity, which will last for the duration of construction period. With the small scale of the proposed development, construction only taking place during normal working hours, potential disturbance impacts during the construction phase are expected to be low.

Operational phase:

- Visual impact. The 90 m lattice mast will create a visual intrusion to people in the surrounding area.
- The mast will give off radiation and this could cause health issues; the mast therefor needs to operate according internationally acceptable standards.

Decommissioning phase:

- Should the proposed Radio Mast be decommissioned, impacts associated with decommissioning activities will be experienced, such as noise, visual and possibly traffic impacts.
- The negative visual impacts of the proposed mast will be removed and the mast will no longer pose a health risk.

Impact conclusion:

The overall impact of the proposed Radio Mast and associated infrastructure on the receiving environment during construction, operation and decommissioning after mitigation will be LOW.

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)
	<b>Refer attached on Appendix B2.</b>
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.

<p><b>Positive Impacts:</b></p> <ul style="list-style-type: none"> <li>• The authorised Beaufort West and Trakas Wind Farm projects would be able to function optimally as the mast is required by Eskom in order for the Linking Station to be able to communicate via Radio frequency to other Linking stations in the area.</li> <li>• South Africa, as a country's coal dependency would be alleviated to a lesser degree if construction of the proposed Radio Mast is not delayed. This in turn is expected to have negative socio-economic impacts for the country as a whole.</li> <li>• Alignment with National Development Plan objectives in the drive for cleaner renewable energy sources. Not granting the EA will delay and possibly prevent the construction of the Proposed Radio Mast and will ultimately be detrimental to the country's aim of addressing the issue of climate change, as well as alleviating load shedding</li> </ul> <p><b>Negative Impacts:</b></p> <ul style="list-style-type: none"> <li>• Temporary disturbances resulting from construction activities.</li> <li>• Visual intrusion during construction, operation and decommissioning.</li> <li>• Potential health impacts if standards are not adhered to.</li> </ul>
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**(II) 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
<p><b>In accordance with Appendix 4 of the EIA Regulations, 2014 (as amended), a draft EMPr has been included within the DBAR. The draft EMPr includes the impact management measures formulated by the various specialists and the recording of the proposed impact management outcomes for the development have also been included in the draft EMPr.</b></p> <p><b>The draft EMPr provides suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored. The relevant management plans have also been incorporated into the draft EMPr (where required), which will assist in this regard.</b></p>	
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.
<p><b>None.</b></p>	
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.
<p><b>Considering the proposed site has been extensively surveyed and assessed previously, the proposed site for the radio mast contains no fatal flaws that should prevent the proposed project from proceeding. In light of this, it is the EAP's reasoned opinion that authorisation be granted and that the layout being proposed as part of this BA process also be authorised (provided there are no concerns raised during the public participation process).</b></p>	
2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.
<p><b>The assessment has been based on information sourced and provided by the Applicant, site visits conducted, specialist findings and the application of an assessment criteria. The EAP is of the opinion that the assessment method applied is acceptable. SLR assumes that:</b></p> <ol style="list-style-type: none"> <li><b>1. All information provided by the applicant is accurate and unbiased;</b></li> <li><b>2. Refer to specialist assumptions and limitations in relevant appended reports.</b></li> </ol>	
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.
<p><b>The environmental authorisation should be valid for a period of 5 to 10 years. It is anticipated that the construction period will however commence shortly after authorization.</b></p>	

**(iii) Water**

<p>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.</p>
<p><b>The proposed development will not use water during its operational phase. Water minimisation measures have been included in the EMPr for the construction phase, such as using non-potable (treated) water for dust suppression during the construction phase.</b></p>

**(iv) Waste**

<p>Explain what measures have been taken to reduce, reuse or recycle waste.</p>
<p><b>The proposed activity will produce a small amount of waste during the construction phase. Waste minimisation measures have been provided in the Environmental Management Programme (EMPr). General Waste would be managed on site in accordance</b></p>

with the principles of the waste management hierarchy. Non-hazardous solid waste components will comprise spoil from construction-related activities, general domestic waste (i.e. wooden pallets, building rubble, cement bags, cardboards, etc.). Contractors will be required as per specifications in the EMPr to manage all solid waste and ensure that it is disposed appropriately.

**(v) Energy Efficiency**

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

**All equipment will be maintained in good working order at all times. Any faults will be dealt with immediately and repaired as soon as possible.**

## SECTION K: DECLARATIONS

### DECLARATION OF THE APPLICANT

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

I..... **Rebecca Thomas** ....., ID number ..... [REDACTED] .....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) 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;
- (ii) I am aware of my general duty of care in terms of Section 28 of the NEMA;
- (iii) 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;
- (iv) I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
  - a. meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
  - b. 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 –
  - .1 costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
  - .2 costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
  - .3 Legitimate costs in respect of specialist(s) reviews; and
  - .4 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.



**10 November 2022**

Signature of the Applicant:

Date:

**Beaufort West Wind Farm (Pty) Ltd**

Name of company (if applicable):



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

I ..... **Stuart Heather-Clark** ....., EAPASA Registration number .....**2019/613**..... 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:
  - .1 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
  - .2 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;



**10 November 2022**

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Signature of the EAP:

Date:

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**SLR Consulting (South Africa) (Pty) Ltd**

Name of company (if applicable):

**DECLARATION OF THE REVIEW EAP – NOT APPLICABLE**

I....., EAPASA Registration number ..... as the appointed Review EAP hereby declare/affirm that:

- I have reviewed all the work produced by the EAP;
- I have reviewed the correctness of the information provided as part of this Report;
- I meet all of the general requirements of EAPs as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the specialist (if any), the review specialist (if any), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; 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: \_\_\_\_\_ Date: \_\_\_\_\_

Name of company (if applicable): \_\_\_\_\_

**DECLARATION OF THE SPECIALIST**

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

I ....., as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - .1 other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - .2 am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

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Signature of the EAP:

Date:

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Name of company (if applicable):

**DECLARATION OF THE REVIEW SPECIALIST – NOT APPLICABLE**

I \_\_\_\_\_, as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s);
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; 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: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_  
Name of company (if applicable): \_\_\_\_\_

**DECLARATION OF THE SPECIALIST**

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

I ...Simon Todd....., as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



**10 November 2022**

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Signature of the EAP:

Date:

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3Foxes Biodiversity Solutions  
Name of company (if applicable):

**DECLARATION OF THE REVIEW SPECIALIST**

I ....., as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s):
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

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Signature of the EAP:

Date:

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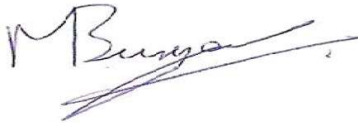
Name of company (if applicable):

## DECLARATION OF THE SPECIALIST

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

I Marius Burger, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



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Signature of the EAP:

10 November 2022  
Date:

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Marius Burger, trading as Sungazer Faunal Surveys

Name of company (if applicable):

**DECLARATION OF THE REVIEW SPECIALIST**

I ....., as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s);
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

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Signature of the EAP:

Date:

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Name of company (if applicable):



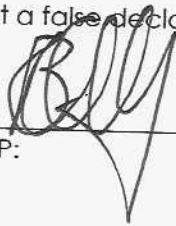
## DECLARATION OF THE SPECIALIST

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

I .....Dr Brian Colloty..... as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - ~~○ am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);~~
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Signature of the EAP:



7/11/2022  
Date:

EnviroSci (Pty) Ltd

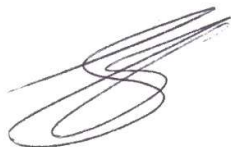
Name of company (if applicable):

**DECLARATION OF THE SPECIALIST**

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

I Graham A Young, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



2 November 2022

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Signature of the EAP:

Date:

Graham Young Landscape Architect

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Name of company (if applicable):

**DECLARATION OF THE REVIEW SPECIALIST**

I ....., as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s);
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

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Signature of the EAP:

Date:

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Name of company (if applicable):

## DECLARATION OF THE SPECIALIST

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

I, **Johann Lanz**, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent:
  - other than fair remuneration for work performed/to be 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
  - ~~am not independent, but another specialist that meets the general requirements set out in Regulation 13 have been appointed to review my work (Note: a declaration by the review specialist must be submitted);~~
- in terms of the remainder of the general requirements for a specialist, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- have disclosed/will disclose, to the applicant, the Department and interested and affected parties, all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Signature of the specialist:



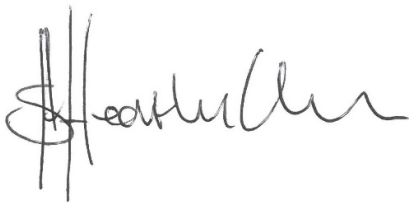
Date: **3 November 2022**

Name of company: **Johann Lanz – soil scientist (sole proprietor)**

**DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (“EAP”)**

I .....**Stuart Heather-Clark**....., EAPASA Registration number .....**2019/613**..... as the appointed EAP hereby declare/affirm the correctness of the information provided or to be provided as part of this application, and that:

- in terms of the general requirement to be independent:
  - other than fair remuneration for work performed/to be 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
  - 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/will disclose, 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/will ensure that information containing all relevant facts in respect of the application was/will be distributed or was/will be 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/will be provided with a reasonable opportunity to participate and to provide comments;
- I have ensured/will ensure that the comments of all interested and affected parties were/will be considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured/will ensure the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept/will keep a register of all interested and affected parties that participated in the public participation process;
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;



**31 October 2022**

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Signature of the EAP:

Date:

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**SLR CONSULTING SOUTH AFRICA (PTY) LTD**

Name of company (if applicable):

## DECLARATION OF THE SPECIALIST

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

We, Chris van Rooyen and Albert Froneman, as the appointed Specialists hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise our objectivity; or
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- We have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- We am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

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Signature of the Specialists:

Date: 10 November 2022

Afrimage Photography (Pty) Ltd t/a Chris van Rooyen Consulting

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Name of company (if applicable):