	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIAL	IST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
				F	PLANNING & DE	SIGN PHASE		
It is impor	tant to note that specialist planning and design p	phase impacts v	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		sed on sensitivity data and c
			The plann			erefore mitigated at	Planning Phase.	
lone identified by specia	list			AG	RICULTURAL IMPA	ICT ASSESSMENT		
	not				AQUATIC IMPACT	ASSESSMENT		
lone identified by specia	list							
Ione identified by specia	list			A	AVIFAUNAL IMPAC	T ASSESSMENT		
one mentijied by specia	1151				BAT IMPACT AS	SESSMENT		
lone identified by specia	list							
· · · · · · · · · · · · · · · · · · ·	1				HERITAGE IMPACT	ASSESSMENT		
lone identified by specia	list				NOISE IMPACT A	SSESSMENT		
lone identified by specia	list							
				PALA	NENTOLOGICAL IMI	PACT ASSESSMENT		
one identified by specia	list			BIM	ERINE RABBIT IMP	ACT ASSESSMENT		
one identified by specia	list			, Alvi				
				SOC	IO-ECONOMIC IMP	PACT ASSESSMENT		
one identified by specia	list			TENDECT				
one identified by specia	list			IERREST	RIAL BIODIVERSITY	/ IMPACT ASSESSMENT		
<u> </u>					VISUAL IMPACT A	ASSESSMENT		
one identified by specia	list							
lone identified by specia	list				WAKE EFFEC	T STUDY		
					CONSTRUCTIO	ON PHASE		
				AG	RICULTURAL IMPA	CT ASSESSMENT		
OCCUPATION OF LAND	Agricultural land directly occupied by the	DIRECT	STUDY	MEDIUM	POSSIBLE	DEFINITE	LOW -	The allowable development
	development infrastructure will become restricted for agricultural use, with consequent potential loss	CUMULATIVE	AREA STUDY	TERM MEDIUM	POSSIBLE	DEFINITE	LOW -	and medium agricultural s capability of < 8, as this sit
	of agricultural productivity for the duration of the		AREA	TERM				be, is 2.5 ha per MW. 1
	project lifetime. The small and widely distributed	NO-GO			NO IMP/	АСТ		proposed facility of 270
	nature of the agricultural footprint of the facility means that only an insignificant proportion of the							agricultural footprint of 67 facility being assessed
	available agricultural land is impacted in this way.							agricultural footprint of
	The netential consulation equipultural inspect of							therefore confirmed th
	The potential cumulative agricultural impact of importance is a regional loss (including by							footprint of this developm the allowable limit.
	degradation) of future agricultural production							approximately eight time
	potential.							the development limits al
	Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF							
	clusters construction timelines overlap. However, it							
	is important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the							
	same standard							

same standard.

No-go alternative would result in no impact related

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
l constraints provided	by the various special	ists.

nent limit on land of low Il sensitivity with a land	REVERSIBLE	LOW -
site has been verified to This would allow the	REVERSIBLE	LOW -
70 MW to occupy an 675 hectares. The wind ed will occupy an of < 81 hectares. It is that the agricultural ment will be well within It will in fact be nes smaller than what allow.	NO IMPA	СТ

ISSUE							1	LIST REPORTS
	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
	to disturbance of agricultural system as no known construction activities are present on site.							
SOIL EROSION AND DEGRADATION	Erosion can occur as a result of the alteration of the land surface run-off characteristics, predominantly through the establishment of hard surface areas including roads. Soil erosion is completely	DIRECT	STUDY AREA	SHORT TERM	PROBABLE	MODERATE	LOW -	Mitigation measures to preve are all inherent in the project
		CUMULATIVE NO-GO	STUDY AREA	SHORT TERM	PROBABLE NO IMPA	MODERATE	LOW -	standard, best-practice for con A system of storm water man
	will be an inherent part of the road engineering on site and standard, best practice erosion control measures recommended and included in the EMPr, are likely to be effective in preventing soil erosion. Loss of topsoil can result from poor topsoil management during construction related excavations. <i>Cumulative impact, on a localised scale, would be</i> <i>moderate should the Taaibos and Soutrivier WEF</i> <i>clusters construction timelines overlap. However, it</i> <i>is important to note that the 5 WEFs and their</i> <i>associated infrastructure are proposed by the same</i> <i>developer and the EMPrs will be prepared to the</i> <i>same standard.</i> <i>No-go alternative would result in no impact related</i> <i>to disturbance of agricultural system as no known</i> <i>construction activities are present on site.</i>							prevent erosion, will be an inher engineering on site. Any occu must be attended to immediate of the erosion control system at amended to prevent further ero there. Any excavations done during phase, in areas that will be re-v of the construction phase, must 30 cm of topsoil from the rest spoils and store it in a separate excavation is back-filled, the to filled last, so that it is at the sur only be stripped in areas that ar the majority of the site, includi down areas, it will be much rehabilitation, to retain the to levelling requires significant cut be temporarily stockpiled and t cutting, so that there is a coverin entire surface.
					AQUATIC IMPACT	ASSESSMENT		
VEHICULAR MOVEMENT (TRANSPORTATION OF	Loss of freshwater vegetation, associated habitat and ecosystem services from indirect impacts;	DIRECT	LOCALISED	MEDIUM TERM	POSSIBLE	SLIGHT	LOW -	 All development footprint small as possible and vege
	and ecosystem services from indirect impacts; Transportation of construction materials can result in disturbances to soils, and increased risk of	CUMULATIVE	LOCALISED	MEDIUM	POSSIBLE	SLIGHT	LOW - MODERATE -	 All development footprint small as possible and vege limited to what is essential Retain as much indiger
(TRANSPORTATION OF CONSTRUCTION	and ecosystem services from indirect impacts; Transportation of construction materials can result			MEDIUM TERM MEDIUM	POSSIBLE	SLIGHT		 All development footprint small as possible and vege limited to what is essential Retain as much indiger possible; All vegetation removed clearing activities (specij areas need to be cleared) from the construction stockpiled) and disposed waste disposal facility; During construction infrastructure within the 1 Regulation (e.g., access spraying of non-potable chemical dust suppressant for use near freshwater of implemented to reduce du
(TRANSPORTATION OF CONSTRUCTION	and ecosystem services from indirect impacts; Transportation of construction materials can result in disturbances to soils, and increased risk of sedimentation/erosion; and Soil and stormwater contamination from oils and hydrocarbons originating from construction vehicles. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of aquatic habitats as no known</i>	CUMULATIVE		MEDIUM TERM MEDIUM	POSSIBLE	SLIGHT		 All development footprint small as possible and vege limited to what is essential Retain as much indigen possible; All vegetation removed a clearing activities (specij areas need to be cleared) from the construction stockpiled) and disposed

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION					
event soil degradation ect design and / or are	REVERSIBLE	LOW -					
onstruction sites. anagement, which will	REVERSIBLE LOW -						
therent part of the road becurrences of erosion iately and the integrity in at that point must be erosion from occurring ring the construction re-vegetated at the end bust separate the upper rest of the excavation ate stockpile. When the e topsoil must be back- surface. Topsoil should t are excavated. Across luding construction lay the topsoil in place. If cutting, topsoil should at then re-spread after ering of topsoil over the	NO IMPA	СТ					
int areas to remain as	REVERSIBLE	LOW -					
rgetation clearing to be tial;	REVERSIBLE	LOW -					
genous vegetation as	NO IMPA	СТ					
d as part of the site ecifically where large d) must be transported n site (may not be ed of at a registered of the surface e 100 m GN509 Zone of cess roads), regular e water or the use of ants, that are approved or ecosystems must be							
dust and to ensure no n within the freshwater							
cessive dust settling. It cifics as to what type of	REVERSIBLE	LOW -					
water vs. chemical dust	REVERSIBLE	LOW -					

	SY	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
DISTURBANCES TO SOILS	Exposure of soils, leading to increased runoff, and erosion, and thus increased sedimentation of the freshwater features; Increased sedimentation of the freshwater features, leading to smothering of the vegetation associated with the freshwater features; and Proliferation of alien and/or invasive vegetation as a result of disturbances. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of aquatic habitats as no known construction activities are present on site.</i>	NO-GO	AREA	TERM	NO IMPA	ACT		 suppressant) that will be uproposed development watime of assessment. Should available, it is recomfreshwater ecologist provite suitability of the use of suppressant; The freshwater feature construction footprint noroad crossings must be of areas. No construction construction personnel or withrough these freshwater approved road crossings); As far as possible, exist utilised to gain access to suffreshwater features and the NEMA / GN509 ZoR as it proponent avoid the LN3 within 100 m of watercourt All vehicle re-fuelling is specifically designated remust be located outside of GN509 ZoR; and' No vegetation may be remZoR surrounding the freshwater is planner natural buffer zone aroof features which plays a role runoff into the freshwater prevents sedimentation are surrounding the prevents sedimentation are surrounding
REMOVAL OF VEGETATION AND	Earthworks could be potential sources of sediment, which may be transported as runoff into the	DIRECT	LOCALISED	MEDIUM TERM	POSSIBLE	SLIGHT	LOW -	 Though the proposed to outside the 100 m GN509
TOPSOIL AND ASSOCIATED	downgradient freshwater ecosystem areas; Disturbances of soils leading to increased alien	CUMULATIVE	STUDY AREA	MEDIUM TERM	POSSIBLE	MODERATE	MODERATE -	indirect impacts to the r environment are likely o
STOCKPILING; GROUND-BREAKING AND EARTHWORKS RELATING TO FOUNDATIONS AND TRENCHES; MIXING AND CASTING OF CONCRETE FOR CONSTRUCTION PURPOSES; BACKFILLING OF EXCAVATED AND DISTURBED AREAS; AND MISCELLANEOUS ACTIVITIES BY CONSTRUCTION	vegetation proliferation within the terrestrial buffer zone surrounding the freshwater features, with the potential to affect the freshwater habitat; Altered runoff patterns within the local catchment of the freshwater features, potentially leading to increased erosion and sedimentation of the receiving freshwater environment; Potential impacts on the water quality of surface water runoff (when present) which may potentially enter the downgradient freshwater features and contamination of soils due to concrete casting; and Potential of backfill material entering the freshwater features, increasing the sediment loads therein.	NO-GO			NO IMP4	ACT		 particularly on the freshward downgradient of the appropriate mitigation me The contractor laydow storage facilities, and th applicable) must remain freshwater features. It recommended that these the 100 m NEMA / GN50922 features. This in itself is con measure which complies hierarchy as advocated (2013). With regards to ground outside the delineated exterior

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
e utilised as part of the		
was not available at the	NO IMPA	СТ
ould this detail become		
ommended that the		
ovide a statement on		
e of the proposed dust		
itures outside the		
not having authorised		
e considered as no-go		
tion vehicles, nor		
or vehicles may traverse		
er features (except on		
;); isting roads must be		
sites;		
areas, and material		
emain outside of the		
their associated 100 m		
it would also help the		
N3 activities triggered		
ourses;		
is to take place in		
re-fuelling areas that		
e of the 100 m NEMA /		
emoved from the 100 m		
hwater features where		
ned, as this provides a		
round the freshwater		
ole in dispersing surface		
ter features, and thus		
and erosion thereof.		
turbines are located	REVERSIBLE	LOW -
09 Zone of Regulation,		
e receiving freshwater	REVERSIBLE	LOW -
during construction,		
water features located	NO IMPA	СТ
turbines. As such		
neasures are provided.		
own areas, material		
the O&M building (if		
nain outside of the		
It is also strongly		
se be located outside		
9 ZoR of the freshwater		
considered a mitigation		
es with the mitigation		
d by the DFFE et al.		
nd-breaking activities		
extent of a freshwater		

ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEAS
PERSONNEL	Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of aquatic habitats as no known earthworks activities are present on site.							feature: During excavation topsoil and veges stockpiled separation material outside the of the freshwater fee Excavated material contaminated, and that the minimum taken up by any stor The mixture of the layers of the excav kept to a minimum, as backfill material has commenced; All exposed soils in from wind using to duration of the con prevent potentia sedimentation of features; Suitable drainage along the turbine order to ensure the pond or drain in manner into the r features. This must part of the stormw plan and be o Environmental Conto Construction of the infrastructure m disturbance to the r surrounding the free which may result if surface roughness mitigated by en concentrated runof, infrastructure con enter the freshwa installing silt traps of down gradient of footprint (until vegetation cover ha ensure no sedifi concentrated runoj the construction for It is highly recomment vegetation manage compiled during the and implemented the commencement

EASURES

REVERSABILITY/ MITIGATION

SIGNIFICANCE POST-MITIGATION

ation activities, the vegetation must be parately from other e the delineated extent er features;

terials must not be and it must be ensured mum surface area is y stockpiled materials. the lower and upper xcavated soil must be num, so as for later use erial after construction d;

ils must be protected ing tarpaulins for the construction phase to ential erosion and of the freshwater

age must be insured rbine foundations, in e that water does not n in a concentrated he nearby freshwater must be considered as rmwater management e overseen by the Control Officer (ECO);

the proposed surface may result in e natural buffer zone freshwater features t in the reduction of ess. This can be ensuring that no noff from the surface construction areas nwater features by ps or placing haybales of the construction suitable basal has been restored) to ediment laden or noff generates from footprint; and

in jootprint; and mmended that an alien anagement plan be ing the planning phase ited concurrently with ment of construction.

	SY	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE	TEMPORAL SCALE	CERTAINTY SCALE	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE-	MITIGATION MEAS
			(EXTENT)	(DURATION)			MITIGATION	
			(EXTENT)	(DURATION)	(PROBABILITY/ LIKELIHOOD)		MITIGATION	 With regards to concrete minimate of an be toxic to a chandling and disport eliminate dissifieshwater feature associated with dramatically affect both soil and get following measure to: Fresh concrete all must not be freshwater feature may be done with camp, however, minimate bound or bunder. Consideration must ready mix concrete directly onto the freshwater feature designated area riparian habitat. A other suitable plate to be provided on the concrete can be awaits placing; A washout area minimation system; Cement bags must the demarcated receptacles and the disposed of throw substance wastes states. Spilled or excessing disposed of at a succhain of custody disposed of at a succhain of custody disposed area for the natural gexcavated materia. Stockpiled materia for the natural gexcavated materia. All excavated area. to the natural gexcavated materia. Soil must be suitable all construction for suitable and construction for su
								removed from th

EASURES

REVERSABILITY/ MITIGATION

SIGNIFICANCE POST-MITIGATION

e mixing on site:

ement-related mortars o aquatic life. Proper lisposal must minimise discharges into the tures. High alkalinity with cement, can ffect and contaminate ground water. The sures must be adhered

and cement mortar e mixed near the rures. Mixing of cement within the construction r, may not be mixed on must be within a lined, nded portable mixer. must be taken to use rete;

rete shall be deposited he ground within the tures (outside of the rea) or associated at. A batter board or blatform/mixing tray is onto which any mixed be deposited whilst it

a must be designated e freshwater features, er must be treated onarged to a suitable em;

nust be disposed of in ed hazardous waste I the used bags must be prough the hazardous re stream and

ess concrete must be a suitable landfill site. ly documentation must

ng of excavated areas: erial must be used as al;

reas must be backfilled al ground level with erial; and itably compacted, and

n material must be the site upon the

		NTH <u>ESIS O</u>	F SPE <u>CIA</u>	LIST <u>IMPA</u>	CTS <u>AS EXTI</u>	RACTED FROM	THE <u>SPECIA</u>	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
								completion of con the rehabilitation Rehabilitation of the con areas:
CREATION OF NEW ROAD CROSSINGS	Earthworks and exposure of soil could result in sedimentation of the freshwater features, which	DIRECT	STUDY AREA	MEDIUM TERM	POSSIBLE	MODERATE	MODERATE -	 It is imperative that all co undertaken during the dry
WITHIN THE SOUT RIVER AND THE LOWER	may be transported as runoff into the downstream freshwater ecosystem areas and may smother	CUMULATIVE	STUDY AREA	MEDIUM	POSSIBLE	SEVERE	HIGH -	is no flow within the fresh thus no diversion of flow w
FOOTHILL TRIBUTARIES ASSOCIATED WITH THE KLEIN BRAK AND SOUT RIVER SYSTEMS AND CREATION OF NEW ROAD CROSSINGS WITHIN THE MOUNTAIN STREAM DRAINAGE LINES (NO RIPARIAN VEGETATION) AND UPPER FOOTHILL TRIBUTARIES (NO RIPARIAN VEGETATION) ASSOCIATED WITH THE KLEIN BRAK AND SOUT RIVER SYSTEMS	vegetation associated with the freshwater features; Altered water quality (if surface water is present) as a result of vehicle movement and construction activities; and Proliferation of alien and/or invasive vegetation as a result of disturbances. <i>Cumulative impact, on a localised scale, would be</i> <i>high should the Taaibos and Soutrivier WEF clusters</i> <i>construction timelines overlap. However, it is</i> <i>important to note that the 5 WEFs and their</i> <i>associated infrastructure are proposed by the same</i> <i>developer and the EMPrs will be prepared to the</i> <i>same standard.</i> <i>No-go alternative would result in no impact related</i> <i>to disturbance of aquatic habitats as no known road</i> <i>work activities are present on site.</i>	NO-GO			NO IMP4	ACT		 is also recommended that through freshwater feature upgrading rather than decrossings, where possible; The throughflow structure to ensure that the structure sound and that they are a even if a 1:100 year flood. The designs must include intermittently to ensure landscape. It is recomment qualified hydrologist be carequirements to ensure functioning of the system is a ln addition, the crossings such that should they be remain stable and do not downstream erosion and ensured that the final a appropriate wetting frequitient are maintained in the condition (with input frequirements of the freshw no activities are planned considered no-go areas. The be marked at a maximul upstream and downstream road upgrade crossing. The Right of Way would alloce.

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
construction or used in		
on process.		
construction footprint		
reas which have been ust be ripped and with indigenous		
oon as the construction		
been completed. This		
soil erosion and the gullies within the ra; and		
al area must regularly		
for alien and invasive		
cies which might have		
e to the construction disturbances.		
construction works be	REVERSIBLE	LOW -
Iry periods when there		
shwater features, and	REVERSIBLE	LOW -
would be necessary. It		
hat existing crossings	NO IMPAC	CT
tures be prioritised for		
development of new		
e;		
ires must be designed		
ures are geotechnically		
e hydraulically stable, od event was to occur.		
ude culverts installed		
ure a free draining nended that a suitably		
consulted to provide		
ant sizes and width		
sure that hydraulic		
n is maintained;		
ngs must be designed		
be overtopped, they		
not lead to excessive		
incision. It must be		
design accounts for		
quencies and patterns		
the pre-development		
from the freshwater		
ary);		
water features where		
ed to occur must be		
These no-go areas can		
num distance of 5 m		
eam of the proposed		
This 5 m construction		
allow for construction		

		NTH <u>ESIS O</u>	F S <u>PECIA</u>	LIST IMPA	CTS <u>AS EXT</u>	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
							 personal, vehicles (if applifreshwater feature crossing proposed to be constructed. The clearing of vegetation area must be kept to a unnecessary disturbance channel; The removed vegetation outside of the delineat freshwater feature. The food stockpiles must be kept to a not exceed a height of vegetation not be suitable after the construction alien/invasive vegetation must be disposed of at refuse site and may not be on site; See impact below with reand soil compaction and freshwater features. See impact above for contatto to concrete works. 	
SITE PREPARATION PRIOR TO	Earthworks and exposure of soil could result in sedimentation of the freshwater features, which	DIRECT	STUDY AREA	MEDIUM TERM	POSSIBLE	MODERATE	MODERATE -	 The construction footprint construction Right of Way
CONSTRUCTION ACTIVITIES; REMOVAL	may be transported as runoff into the downstream freshwater ecosystem areas and may smother	CUMULATIVE	STUDY AREA	MEDIUM	POSSIBLE	SEVERE	HIGH -	construction buffer (upstre of the freshwater ecosyste
OF VEGETATION AND ASSOCIATED DISTURBANCES TO SOIL; DISTURBANCES TO SOIL OF THE FRESHWATER FEATURES; MOVEMENT OF CONSTRUCTION MACHINERY/ VEHICLES WITHIN THE FRESHWATER FEATURES; AND POSSIBLE SPILLS / LEAKS FROM CONSTRUCTION VEHICLES.	vegetation associated with the freshwater ecosystem areas; and Proliferation of alien and/or invasive vegetation as a result of disturbances. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact related to disturbance of aquatic habitats as no known construction activities are present on site.</i>	NO-GO			NO IMP.	ACT		 Upgrading of the inform cognisance of the deline freshwater feature trave informal access road and close proximity to the road increased in width, the road on the side opposite of a feature remains intact; Material to be used (gravpart of the upgrading of the the freshwater features (fm from the freshwater sedimentation thereof and vegetation being impacte activities. These stockpile height of 2 m and must be using tarpaulins; The disturbed area surrou be revegetated with vegetation species a from occurring;

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
oplicable) to enter the		
sing where the road is ted;		
on within the footprint		
a minimum to avoid ce within the active		
on must be stockpiled		
ated boundary of a		
footprint areas of these		
to a minimum, and may		
of 2 m. Should the		
able for reinstatement ion phase or be		
on species, all material		
t a registered garden		
be burned or mulched		
regards to excavation		
activities within the		
ntrol measures specific		
int must be limited to a	REVERSIBLE	LOW -
ay that comprises a 5 m		
tream and downstream stem crossing) only.	REVERSIBLE	LOW -
rmal roads must take	NO IMPA	 ^ Τ
neated extent of the		
versed by the existing		
nd that located within		
ad. Should the road be		
oad must be expanded		
freshwater feature, to		
aining natural buffer		
ad and the freshwater		
avel – if applicable) as		
the existing roads must		
ne delineated extent of		
(preferably at least 32		
r feature) to prevent		
and to avoid any other		
ted by the construction		
iles may not exceed a be protected from wind		
ounding the road must		
suitable indigenous		
the establishment of		
and to prevent erosion		

	SY	SYNTHESIS OF SPECIALIST IMPACTS AS EXTRACTED FROM THE SPI						IALIST REPORTS		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES		
								 The alien vegetation management compiled by the terrestrial/botanical is highly recommended and support freshwater specialist and must be important construction; and All existing alien and invasive vegetable removed. All material must be disg a registered garden refuse site and reburned or mulched on site. With regards to excavation and soil calcivities within the freshwater equivalent of underground cabling) Although the proposed freshwater equivalent impacts have occurred, the existing gravel relatively small with no formal threstructures in most cases. The foll applicable with regards to excavation activities: During the excavation activities: During the excavation activities: During the excavation activities is oil/sediment or silt removed freshwater feature may be tastockpiled in the road reserve but of delineated extent of the freshwate These stockpiles may not exceed 2 m and their footprint must be kept to a Stockpiling of removed materials m temporary (may only be stockpiled period of construction at a particula must be disposed of at a registe disposal facility; During trenching activities, seepage be present within the trench -invariant be filled with silt and be muddy. Theis seepage must not be discharged st the river channel but through a sil area first before entering the dor reach; Excavated materials must contaminated, and it must be ensure minimum surface area is taken up. the lower and upper layers of the excavatio materials must contaminated. Furthermore, the secontaminated. Surthermore, the secontaminated. Surthermore, the secontaminated. Surthermore, the secontaminated. Surthermore, the secontaminated. Surthermore the		

REVERSABILITY/ MITIGATION

SIGNIFICANCE POST-MITIGATION

management plan as rial/botanical ecologist and supported by the d must be implemented e commencement of

vasive vegetation must must be disposed of at se site and may not be te.

on and soil compaction reshwater ecosystems ed with the installation

freshwater ecosystems are associated with roads, and as such the pacts have already g gravel roads are o formal through flow es. The following are s to excavation works d activities:

ion activities, any removed from the may be temporarily eserve but outside the te freshwater feature. t exceed 2 m in height, be kept to a minimum. materials may only be e stockpiled during the t a particular site) and at a registered waste

es, seepage water may nch -invariably this will muddy. Therefore, any ischarged straight into hrough a silt trapping ring the downstream

must not be ust be ensured that the is taken up. Mixture of ers of the excavated soil num, for later usage as part of rehabilitation

les, the topsoil must be ind may not be more, the soil layers

	SYI	VI HESIS U	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASU
								 must be placed in the sam topsoil returned last; Care must be taken to ensure or erosion occurs as a resul culvert crossing. Installation of mattresses and/or concrete with any culverts; All construction material (wit of prefabricated culvert str stockpiled in the laydown ar be imported to the constr required; Machinery/vehicles used t structures must be parked or surface and may not enter features; and Reno-mattresses or riprap m the outlet side of the culvert, to ensure energy dissipate concentrated runoff into freshwater feature. The ren must be installed flush with t See impact 3 above for a specific to concrete works.
				Δ	VIFAUNAL IMPACT	T ASSESSMENT		specific to concrete works.
DISPLACEMENT	Disturbance during the construction, operational	DIRECT	STUDY	SHORT	DEFINITE	MODERATELY	MODERATE -	🔺 Disturbance can be manage
	and decommissioning phases can negatively affect		AREA	TERM		SEVERE		most effectively at the design
DISTURBANCE	all avifauna on an individual or population level by	CUMULATIVE	STUDY	SHORT	DEFINITE	MODERATELY	HIGH -	important nesting, roosting a
	increasing stress, decreasing food and habitat		AREA	TERM		SEVERE		of sensitive species during s
	availability, causing displacement into potentially less suitable neighbouring environments, and	NO-GO			NO IMPA	СТ		layout design, which has been proposed development (embe
	ultimately potentially decreasing reproductive							 In order to ensure no SCCs ar
	success (Bennun et al. 2021, Jenkins et al. 2017,							the proposed disturbance for
	Madders & Whitfield 2006, Marques et al. 2021). An							commencement of co
	avoidance of the WEF at a macro scale (barrier							decommissioning activities,
	offers) and lood to displace we are hout one also lood							
	effect), can lead to displacement, but can also lead							the site conducted within the
	to no response (if the bird avoiding the WEF area							commencement of construc
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro							commencement of construc areas that require additional
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015).							commencement of construc
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as							commencement of construc areas that require additional construction and limit nego
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as potentially negative and would affect the avifauna							commencement of construc areas that require additional construction and limit nego
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as							commencement of construc areas that require additional construction and limit nego
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as potentially negative and would affect the avifauna of the PAOI for the duration of all phases. Some							commencement of construc areas that require additional construction and limit nego
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as potentially negative and would affect the avifauna of the PAOI for the duration of all phases. Some displacement is certain to occur, while some attraction may also occur, but the impact will cease with the completion of the phases and is reversible.							commencement of construc areas that require additional construction and limit nego
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as potentially negative and would affect the avifauna of the PAOI for the duration of all phases. Some displacement is certain to occur, while some attraction may also occur, but the impact will cease with the completion of the phases and is reversible. The impact severity is potentially moderately							commencement of construc areas that require additional construction and limit nego
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as potentially negative and would affect the avifauna of the PAOI for the duration of all phases. Some displacement is certain to occur, while some attraction may also occur, but the impact will cease with the completion of the phases and is reversible. The impact severity is potentially moderately severe if breeding areas of SCC are affected. This							commencement of construc areas that require additional construction and limit nego
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as potentially negative and would affect the avifauna of the PAOI for the duration of all phases. Some displacement is certain to occur, while some attraction may also occur, but the impact will cease with the completion of the phases and is reversible. The impact severity is potentially moderately severe if breeding areas of SCC are affected. This results in the significance of the impact rated as							commencement of construc areas that require additional construction and limit nego
	to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as potentially negative and would affect the avifauna of the PAOI for the duration of all phases. Some displacement is certain to occur, while some attraction may also occur, but the impact will cease with the completion of the phases and is reversible. The impact severity is potentially moderately severe if breeding areas of SCC are affected. This							commencement of construc areas that require additional construction and limit nego

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
e same order and the ensure that no scouring result of the proposed tion of riprap or gabion rete aprons associated I (with specific mention rt structures) must be wn area and must only onstruction site when		
ed to install culvert ed on the existing road enter the freshwater		
ap must be installed at ulvert/bridge structures sipation and prevent into the downstream e reno mattress/riprap with the culvert outlet. for control measures ks.		
anaged and mitigated esign stage by avoiding	ACHIEVABLE	LOW -
ting and foraging areas	ACHIEVABLE	MODERATE -

ting and foraging areas	ACHIEVABLE	MODERATE -
ring site selection and		
s been achieved for the	NO IMPA	СТ
(embedded mitigation).		
CCs are breeding within		
ce footprint prior to the		
construction or		
ities, a walkthrough of		
hin the month prior to		
nstruction can identify		
tional mitigation during		
negative impacts on		

	S Y	NTHE <u>SIS O</u>	F SPECIA	LIST I <u>MP</u> A	CTS A <u>S EXTI</u>	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of avifaunal habitats.							
DISPLACEMENT THROUGH HABITAT	According to the project description the proposed	DIRECT	STUDY AREA	LONG-TERM	DEFINITE	MODERATELY SEVERE	MODERATE -	 Reversibility is considered rehabilitation to some
LOSS	permanent development footprint is relatively	CUMULATIVE	STUDY	LONG-TERM	DEFINITE	MODERATELY	HIGH -	construction phase.
	small within the development site, some habitat loss will definitely occur. Many bird species will		AREA			SEVERE		▲ Following site selection
	persist within the operational WEF site, due to the relatively small footprint, however some avian species may be displaced from the area. Some habitat could occur due to the road and cable network and this would impact mainly on terrestrial species such as Ludwig's Bustard, Karoo Korhaan, Northern Black Korhaan. The impact of habitat loss on avifauna is negative and would affect the site directly and surrounding areas indirectly through displacement. Therefore, the spatial extent of the impact is rated as the study area. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact related to disturbance of avifaunal habitats.</i>	NO-GO			ΝΟΙΜΡΑ			marginally possible by reta indigenous vegetation as the footprint of all associ including buildings, elec- and the width and len- rehabilitating as many possible following constru Before construction and avifaunal walkthrough ca nesting and breeding sin protected until the breedin
MORTALITY FROM	Birds can collide with wind turbines and the	DIRECT	REGIONAL	LONG-TERM		SEVERE	HIGH -	Pre-construction monitori
COLLISIONS WITH TURBINES	monopoles if they do not avoid them (Kunz et al. 2007), and their ability to avoid turbines can be site-	CUMULATIVE NO-GO	REGIONAL	LONG-TERM		SEVERE	HIGH -	Practice Guidelines. A specialist raptor nest suit
I ORDINES	, species- and weather- and turbines can be site- , species- and weather- and turbine-specific (Cook et al. 2014, Drewitt & Langston 2006, Marques et al. 2014). Mortalities from collisions with turbines can vary greatly between sites (Sovacool 2009) and the effect of mortalities on the species population can vary greatly depending on the species resilience, with large-bodies, long-living species with a low reproductive rate and slow maturation rates being disproportionately affected. In addition to being more prone to collisions due to body size, even low fatality rates can have population-level effects, particularly for already heavily impacted upon SCC				ΝΟ ΙΜΡΑ			 A specialist ruptor nest surmodelling were complesed to selection of the facility site the turbine layout, as has project. The proposed turbine layout high and medium collision Eagle identified by the VEH to avoiding high flight actives species, nest buffers that Martial Eagle, Secretaryly and Pale Chanting Goshav buffers of ridgelines, wetlow

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
ed to be possible with ne degree for the	ACHIEVABLE	LOW -
	ACHIEVABLE	MODERATE -
n mitigation is only		~=
etaining as much of the source	NO IMPA	
ociated infrastructure,		
ectrical infrastructure ength of roads, and		
v disturbed areas as		
ruction.		
d decommissioning an can identify any active		
sites, which must be		
ding has concluded.		
oring in line with Best	ACHIEVABLE	MODERATE -
	ACHIEVABLE	MODERATE -
urvey and collision risk pleted prior to the	NO IMPA	CT
ite and the selection of		
as been done for this		
yout avoids all areas of		
ion risk for Verreaux's		
ERA model, in addition		
tivity buffers of priority at were identified for		
ybird, Jackal Buzzard		
awk, as well as applied		
tlands and rivers.		

	VERITY / SIGNIFICANCE MITIGATION MEA ICIAL SCALE PRE- MITIGATION
(Carrete et al. 2009, Drewitt & Langston 2006, Marques et al 2014). Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of avifaunal habitats.	 Proactive minimizing mitige are recommended management measures, artificial rock piles used minimising perching and ne within the facility, bloc implementing post-constru The painting of one turbine colour has shown to lower successfully (May et al currently being implement (in-situ) at one WEF in So mitigation is potentially proactively painting the b turbines as legally p construction, at a fraction reactive approach is highly
MORTALITY FROM In South Africa, a number of endemic and DIRECT REGIONAL LONG-TERM PROBABLE	SEVERE HIGH - A The impact can be com
COLLISIONS WITH threatened species are known to be significantly CUMULATIVE REGIONAL LONG-TERM PROBABLE	SEVERE HIGH - burying all internal overhea
POWERLINES affected by collisions (Taylor et al. 2015), including NO-GO NO IMPACT	the internal road netwo
SCC's that were recorded in the area such as	technically not possible, in
Ludwig's Bustard, Blue Crane, Secretarybird and Black Stork (Shaw et al. 2021). Ludwig's Bustard is	collisions, line markers su and static bird flight divert
particularly prone to collisions and made up 69% of	used with some success.
carcasses found under powerlines in a two year	→ Where this is not possib.
study in the Karoo (Shaw 2013). Karoo Korhaan is	overhead power line pote
also affected, but does not collide as frequently as	increases the probability o
Ludwig's Bustard, possibly due to their sedentary	in a high negative, and u
nature making them familiar with their area and	significance rating.
their smaller size increasing their maneuverability (Shaw 2013).	
Cumulative impact, on a localised scale, would be	
moderate should the Taaibos and Soutrivier WEF	
clusters construction timelines overlap. However, it	
is important to note that the 5 WEFs and their	
associated infrastructure are proposed by the same	
developer and the EMPrs will be prepared to the	
same standard. No-go alternative would result in no impact related	
to disturbance of avifaunal habitats.	
MORTALITY FROM Large birds can be electrocuted or incur electric DIRECT REGIONAL LONG-TERM MAY OCCUR	DEFINITE HIGH - A Bird electrocutions can be
ELECTROCUTIONS ON shock injuries when simultaneously contacting two CUMULATIVE REGIONAL LONG-TERM MAY OCCUR	DEFINITE HIGH - burying overhead powerlin

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
tigation measures that		
include habitat		
s, such as removing		
ised by eagle prey,		
nesting opportunities		
blade painting and		
truction monitoring.		
ine blade in a different ver collisions by raptors		
al 2020), and this is		
nented retrospectively		
South Africa. As this		
ally highly effective,		
e blades of as many		
possible prior to		
tion of the cost of a		
hly recommended.		
ompletely avoided by	ACHIEVABLE	NO IMPACT
head powerlines along	ACHIEVABLE	MODERATE -
work. Where this is		~=
, in order to minimise such as bird flappers	NO IMPA	CI
erters are being widely		
creers are being whaciy		
sible, every meter of		
otentially significantly		
y of collisions resulting		
l unacceptable impact		
be easily avoided by	EASILY ACHIEVABLE	NO IMPACT
rlines, and by creating	EASILY ACHIEVABLE	LOW -

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST	REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION		MITIGATION MEA
ELECTRICAL INFRASTRUCTURE	uninsulated energised components of differing electric potential (phase-to-phase electrocution), or when contacting an uninsulated energised component and a path to ground (phase-to-ground- electrocution) (Dwyer 2006, APLIC 2006). Because electrocutions result from birds bridging air-gaps, larger birds with larger wingspans, such as Martial Eagle, are disproportionately affected (Slater et al. 2020). Most bird electrocutions occur at relatively low and medium voltage distribution systems, rather than with transmission systems where the separations created by longer insulators and wider air- gaps around wires are larger (APLIC 2006, Bennun et al. 2020, Slater et al. 2020). <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i>	NO-GO			LIKELIHOOD) NO IMPA	ACT			separation between conc electrical potential at subst infrastructure, and by pla conductors, or by redirecti nest away from conductors et al. 2017). If all overhead powerlin exposed electrical infrast substation is of a bird-frien the impact can be complet
CUMULATIVE IMPACTS	No-go alternative would result in no impact relatedto disturbance of avifaunal habitats.Cumulative impacts assessed include the		REGIONAL	LONG-TERM		DEFINITE	HIGH -	n n A t t c c iii N	The only real mitigation ,
	combination of all the impacts discussed above for this project, which may be higher than the sum of impacts, as well as the associated two Soutrivier WEFs, the Soutrivier Solar PV Facilities and their associated OHPLs, and all known past, present and proposed projects in an area of 30 km surrounding the proposed development. In addition to the Soutrivier projects two WEFs are proposed within this radius: the Taaibos North WEF and associated OHPL, and the Taaibos South WEF and associated OHPL. All of these facilities are to ultimately connect to the Gamma MTS with one shared powerline from the Soutrivier Collector Substation to the Gamma Substation, which lowers the cumulative impact. The impacts of the cumulative projects will be negative by making a larger area of avifaunal karoo scrub habitat unavailable and of higher risk for SCC flying between Victoria West and Loxton. There is also a potential for an increased barrier effect being created by the combination of these projects, which would be a negative, regional, long- term impact. As these projects are not located on any major flyways, the probability of this occurring is however unlikely. The contribution of the Soutrivier central WEF to the cumulative impact in a 30 km radius is considered to be moderate, i.e., the cumulative	NO-GO	REGIONAL	LONG-TERM	SEVERE NO IMPA	ACT	HIGH -		minimise cumulative minimising impacts for eac during the EIA process, is Authority to ensure only pro that are practically n acceptable level, and th unacceptable negative cumulative impacts, and t implementation of author Management Progra compliance audits and enfo

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
onductors of differing bstations and electrical placing insulation over cting birds to perch or ors (APLIC 2006, Dwyer lines are buried any astructure within the rendly insulated design, letely removed.	NO IMPA	СТ
n possible in order to	DIFFICULT	MODERATE -
impacts, beyond	DIFFICULT	MODERATE -
each project separately is for the Competent projects are authorised mitigatable to an that do not lead to e impacts, including d to ensure the correct horised Environmental grammes through inforcement.	NO IMPA	

COMMUTING) phase, will negatively and indirectly impact bats by momentative to discussion of for foraging and commuting, through distrubance, and displacement (Kure tal. 2007b, Million et al. 2013). This impact is likely to hankat modification given in their greater association with physical habitat definitions over the impact by habitat modification given in their greater association with physical habitat features compared to high-flying species (e.g., Egyptian free-tailed bat). NO-GO NO IMPACT A No IMPACT No impact is likely to habitat modification given in their greater association with physical habitat features compared to high-flying species (e.g., Egyptian free-tailed bat). No-GO NO IMPACT A No IMPACT No impact their greater association with physical habitat features compared to high-flying species (e.g., Egyptian free-tailed bat). Minimise clearing of disturbance and disturbance (indirect impact) of bat roots forcet, enumer features for roots (nock) crevices, buildings) and disturbance (indirect impact) of bat roots (pock) crevices, buildings in disturbance (indirect impact) of bat roots (pock) crevices, buildings in and astroyade installation of new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can indivertently provide new roots groups and disturbance and peteritally increasing the likelihood of collisions. Herritage IMPACT Herritage IMPACT Cumulative impact, on a localised scale, would be moderate should the roats and guttriew reverse as disturb. Including aquasic habitat. Herritage IMPACT ASSESSMENT Herritage IMPACT ASSESSMENT Restore:	ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION M
Image: state of the state o		rating will remain unchanged regardless of the							
Mog o bitmature would result in on impact related to disturbance of outfound habitats. BAT IMPACT ASSESSMENT MODERATE: MODIFICATION OF SMIC MABITAT (ROOSTING, COMMUTING) Terms and other infrastructure, as well an one-and dust and informative impact tables to phase, will negatively and informative impact tables to there exists and other infrastructure, as well as an beam diablescene (Long Lee Phase, will negatively and informative impact tables to phase, will negatively and informative impact tables to the emoving habits tablescene (Long Lee Phase, will negatively and informative impact tables to phase, will negatively and informative impact tables to the emoving habits tablescene (Long Lee Phase, will negatively and informative impact tables to construction at 2025, Bennon et al. 2021, This impacts is likely to have species specific effects ulture deg species (Leg., Cape servine) are more likely to be impacted by habits amodification given their greater association with physical habits features compared to highly model abandonment. Bar martality can locur if roats which construction of WEF infrastructure could result in disturbance, and disturbance, indicate impact of bar roots (nock) ceretives, building) and disturbance (indiret impact) of bar roots (nock) new infrastructure in the landscape (Leg., buildings, turbines, road ulexit), an indiverently provide new infrastructure in the landscape (Leg., buildings, turbines, road collexit), an indiverently provide new infrastructure in the landscape (Leg., buildings, turbines, road collexit), an indiverently provide new infrastructure in the landscape (Leg., buildings, turbines, road collexit), an indiverently provide new infrastructure in the landscape (Leg., buildings, turbines, road collexit), an indiverently provide new infrastructure in the landscape (Leg., buildings, turbines, road collexit), an indiverently provide new infrastructure in the landscape (Leg., buildings, turbines		moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the							
Understanding of wijkunal habitets. BAT IMPACT ASSESSMENT MODIFICATION OF EAT HaBTAT (ROOK) COMMUTING) Vegretation clearing for access roads, turbines and anotes and dust generated during the construction plasse, will negatively and infractly impact base troweigh babtat used for foraging and commuting through babtat modification given the later of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of the sectors of sectors of the									
MODEFCATION OF FAT MABITAT (ROOSTING, COMMUTING) Vegetation clearing for access roads, turbines and bios and dust generated during the constructure, as well as noise and dust generated during the constructure, phase, will negatively and indirectly impact bats by removing habitatius deformating, through disturbance, and displacement (Kurs et al. 2007b, Millon et al. 2018, Bennun et al. 2021). This impact is likely to have species specific effects; clutter edge species (e.g., Dege sorthing habitatius features compared to high-flying species (e.g., Epythian free-tailed bat). NO impact NO impact No impact Construction of WEF Infrastructure could result in destruction (direct impact) of bat roosts (rooty which contain bats are destroyed, installation of now infrastructure in destructure, indicate a destruction, (direct impact) of bat roosts (rooty which contain bats are destroyed, installation of now infrastructure in destructure, or al destructure, could result in destruction, (direct impact) of bat roosts (rooty which contain bats are destroyed, installation of now infrastructure in destructure, indicates, patter association, indicates, and patter should be axamined for now infrastructure in the adscape (e.g., Eyption and adstructure). A Millinia et all subidities, and outcrops are potentially toroisting species (e.g., Exption and disturbance and destruc- ent effect in a destructure). A Millinia et all subidities, and outcrops are potentially toroisting species (e.g., Exption to note that dustage ere effect and adstructure in the adscape (e.g., Buildings, turbines, road culverts) can indivertently provide and where this is rees should be axamined for the adstructure in the adscape (e.g., Buildings, turbines, road culverts) can indivertently provide and potentially increasing the likelihood of collisions. A Apply good construction, Rebabilitate all									
Item Description Severe Severe Here Area Severe Here A lumit potential for balance COMMUTING) their service areas, and duter infrastructure, as well NO-GO NO-GO NO IMPACT NO IMPACT NO IMPACT NO impact and balance No impact and balanc		Vagetation clearing for access reads turbings and		CTUDY	CHORT			MODERATE	Augide
FORAGING: COMMUTING) is noise and duct generated during the construction memory in legatively and indirect impacts has to removing habitat used for foraging and commuting. CUMULATIVE STUDY AREA IONG TERM PROBABLE SEVERE Hight 1 COMMUTING) bis second during the indirect impacts of the second and indirect impacts have that as the second and indirect impacts of the second and and indirect impacts of the second and indirect impacts of the second and and and and and and and and and a						PROBABLE		WODERATE -	
removing habitu used for foraging and commuting. NO-GO NO IMPACT such that bats cannot gr. through disturbance, and displacement (Kun et al. 2021). This impact is likely to here species specific effects; clutter edge species (e.g., Capes scrotine) are more likely to be impacted by habitat modification given their greater association with physical habitat features compared to high-flying species (e.g., Egyptian free-tailed bat). Minimise Minimise clearing of disturbance and destrue on site, minimise removed disturbance and destrue on site, minimise removed disturbance and destrue and where this is registration (direct impact) of bat roots (rocky crevices, building) and disturbance (indirect impact) of bat roots (rocky crevices, building) and disturbance (indirect impact) of bat roots (roots), abandoment. Bat mortality can eccur if roots which contain bats are destroyed. Installation of new infrastructure in the landscape (e.g., buildings, turbines and potentially resultable). A Apply god construction. Cumulative impact, on a locales scale, would be moderate softwale their soand softwire WEF clusters construction direct impact) in now impact with wind turbines and potentially successing the likelihood of collisions. No construction. Cumulative impact, on a locales scale, would be moderate softwale theirs as more gap areas in their same standard. No gap atenative would result in no impact related to disturbance of but hosits. Herrtage IMPACT Relation to note that the 5 WEFS and their association for their so areas with wind turbines and destrue as construction and but predices in their source of the tables. Herrtage IMPACT						PROBABLE		HIGH -	infrastructure (e.g., bui
 through disturbance, and displacement (Kunz et al. 2007b, Million et al. 2021). This impact is likely to have species specific effects; clutter edge species (e.g., Cape serotine) are more likely to be impacted by habitat modification given their greater association with physical habitat features compared to high-flying species (e.g., Egyptian free-tailed bat). Construction of WEF infrastructure could result in disturbance and disturbance (infiret impact) of bat roosts (rocky revices, buildings) and disturbance (infiret impact) of bat roosts potentially resulting in roost abandonment. Bat mortality can occur if roots which contain bats are destroyed, installation of new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can inadvertently provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood collisions. Cumulative impact, on a localised scole, would be moderate should the Taaibos and Soutrivier WEF clusters construction intenies overlag, but the roots to the same standard. No-go alternative would result in no impact related to disturbance of bot habitatis. 	COMMUTING)			AREA					culverts) by ensuring the
2007b, Millon et al. 2018, Bennun et al. 2021). This impost is likely to be impacted by habitat modification given likely to be impacted by habitat modification given their greater association with physical habitat features compared to high-flying species (e.g., Egyptian free-tailed bab). Minimise: Minimise dearing of disturbance and destrue on site, minimise remo disturbance and destrue and where this is require struction of WEF infrastructure could result in destruction (direct impact) of bat roosts (rocky crevices, buildings) and disturbance (indirect impact) of bat roosts potentially resulting in roost abandonment. Bat mortality can occur if roosts which contain bats are destroyed, Installation of new infrastructure in the landscape (e.g., buildings, turbrines, road culteret) can indiventently provide new roosting spaces for some bat species, attracting them to a localised scale, would be moderate should the Taabos and South? WEF clusters construction, and the Taabos and South? WEF clusters construction themes order, Hower, it is inportant to note that the 5 WEFs and their asses antdard. No go oftenative would result in no impact related to disturbance of bot habitots. HERITAGE IMMACT ASSESSMENT HERITAGE IMMACT ASSESSMENT 			NO-GO			NO IMPA	АСТ		
impact is likely to have specific specific effects; no.ego areas. clutter edge species (e.g., Cape serotine) are more no.ego areas. likely to be impacted by habitat modification given their greater association with physical habitat features compared to high-flying species (e.g., Egyptian free-tailed bat). Construction of WEF infrastructure could result in disturbance (indirect impact) of bat roosts (racky crevices, buildings) and disturbance (indirect impact) of bat roosts potentially resulting in roost abandonment. Bat mortality can occur if roosts which contain bats are destroyed. Installation of new infrastructure (e.g., buildings, turbines, road culverts) can inadvertently provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. * Apply good construction. Canudative impact, on a localized scale, would be moderned south turbines and potentially increasing the likelihood of collisions. Restore: Canudative impact, on a localized scale, would be same developer and the EMPrs will be prepared to the same standard. No-go olternative would result in no impact related to the same developer and the EMPrs will be prepared to the same standard. Herntage immact assessment									
dutter edge species (e.g., Cape serotine) are more Minimise: likely to be impacted by habitat modification given Minimise claring of disturbance and destrue on site, minimise remonder geyptian free-tailed bat). Construction of WEF infrastructure could result in destruction (direct impact) of bat roots (rocky should be examined fination of crevices, buildings) and disturbance (indirect impacts potentially can occur if roots should be examined fination of new infrastructure in the landscape (e.g., buildings, Apply good construction, Apply good construction, construction, increasing the likelihood of collisons. Cumulative impoct, on a localised scale, would be moviority sound be that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPris will be prepared to the same standard. Ne go ditentative would result in no impact related to taisturbance and setsure asting in the impact should be the propered to the same standard.									
likely to be impacted by habitat modification given their greater association with physical habitat features compared to high-flying species (e.g., Egyptian free-tailed bat). Construction of WEF infrastructure could result in destruction (direct impact) of bat roost; (rocky crevices, buildings) and disturbance (indirect impact) of bat roost; postentially resulting in roost abandomment. Bat mortality can occur if roosts which contain bats are destroyed. Installation of new infrastructure in the landscape (e.g., buildings, which contain bats are destroyed. Installation of new infrastructure in the landscape (e.g., buildings, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. Cumulative impact, on a localised scale, would be some and source, roosed by the same developer and the Taolos or adsourcive WEF clusters construction mellines over(p. However, It is important to note that the 5 WEFs and their cassociated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bot habitats. HERITAGE IMPACT ASSESSMENT MERTAGE IMPACT ASSESSMENT MERTAGE IMPACT ASSESSMENT 									_
features compared to high-flying species (e.g., Egyptian free-tailed bat). on site, minimise remo disturbance and examined for study assumes that and outcrops are potential buffered since outgreats which contain bats are destroyed. Installation of new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can indevretnity provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. Cumulative impact, of note but the 5 WEFs and their associated infrastructure are proposed by the some developer and the EMPrs will be prepared to the some standard. No-go alternative would result in no impact related to disturbance of bat hobitats. MERITAGE IMPACT ASSESSMENT 									▲ Minimise clearing of
Egyptian free-tailed bat). disturbance and destruu, and where this is need and where the is anotality can occur if noots is which contain the landscape (e.g., buildings, turbines, nor a localised scale, would be moderate should the Taaibos and Southier WEF clusters construction timelines overlap. However, it is is is nortant to note that the S WEFs and their associated infrastructure are proposed by the same developer and the EMPs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bot habitats.									disturbance and destruc
Construction of WEF infrastructure could result in destruction (direct impact) of bat roots (rocky crevices, buildings) and disturbance (indirect impact) of bat roots (rocky crevices, buildings) and disturbance (indirect impact) of bat roots potentially resulting in roots abandonment. Bat mortality can occur if roots which contain bats are destroyed. Installation of new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can inadvertently provide new rootsing spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. A Apply word construction. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters controling of the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats.									disturbance and destruc
destruction (direct impact) of bat roosts (rocky crevices, buildings) and disturbance (indirect impact) of bat roosts patientially resulting in roost abandonment. Bat mortality resulting in roost abandonment. Bat mortality can occur if roosts which contain bats are destroyed. Installation of new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can indeventy provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. A poly good construction. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats.		Construction of WEF infrastructure could result in							
impact) of bat roosts potentially resulting in roost abandonment. Bat mortality can occur if roosts which contain bats are destroyed. Installation of new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can inadvertently provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions.		destruction (direct impact) of bat roosts (rocky							study assumes that al
abandonment. Bat mortality can occur if roosts features for roosting. which contain bats are destroyed. Installation of Apply good construction new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can inadvertently provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. Rehabilitate all areas disturb <i>Cumulative impact, on a localised scale, would be</i> moderate should the <i>Taaibos and Soutrivier WEF</i> clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same same standard. No-go alternative would result in no impact related to disturbance of bat habitats.									outcrops are potentially
which contain bats are destroyed. Installation of new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can inadvertently provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. Apply good construction practices to reduce em (e.g., noise, erosion, v. construction. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT									
new infrastructure in the landscape (e.g., buildings, turbines, road culverts) can inadvertently provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. practices to reduce em (e.g., noise, erosion, we construction. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT HERITAGE IMPACT ASSESSMENT		· · · · · · · · · · · · · · · · · · ·							_
turbines, road culverts) can inadvertently provide new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. (e.g., noise, erosion, we construction. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats.									
new roosting spaces for some bat species, attracting them to areas with wind turbines and potentially increasing the likelihood of collisions. construction. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats.									-
potentially increasing the likelihood of collisions. Rehabilitate all areas disturbly. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. Rehabilitate all areas disturbly. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT									
Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT									Restore:
Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. Image: Comparison of the temperature of temperature. Mo-go alternative would result in no impact related to disturbance of bat habitats. Image: MERITAGE IMPACT ASSESSMENT		potentially increasing the likelihood of collisions.							Rehabilitate all areas disturb
moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT		Cumulative impact on a localized code, would be							(including aquatic habitat).
clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT									
is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT									
developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT									
same standard. No-go alternative would result in no impact related to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT									
to disturbance of bat habitats. HERITAGE IMPACT ASSESSMENT		same standard.							
HERITAGE IMPACT ASSESSMENT									
			l	 		HERITAGE IMPACT	ASSESSMENT		
	LOSS OF HERITAGE	Construction activities pose the greatest threat to	DIRECT	STUDY	SHORT	MAY OCCUR	SLIGHT	LOW -	More significant archaeologic

ON MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
r bats to roost in project	REVERSIBLE	MODERATE -
or bats to roost in project g., buildings, turbines, road ing they are properly sealed	REVERSIBLE	MODERATE-
not gain access. activities at night. No astructure (except roads) in	ΝΟ ΙΜΡΑ	СТ
g of vegetation, minimise estruction of farm buildings removal of trees, minimise estruction of rocky outcrops, is required, these features hed for roosting bats. This hat all buildings and rocky entially roosts and must be umerous species use these ng. truction abatement control ce emissions and pollutants ion, waste) created during		
isturbed during construction tat).		
eological resources such as a	REVERSIBLE, EASILY	LOW -

	SY	NTH <u>ESIS O</u>	F S <u>PECIA</u>	LIST IMPA	CTS <u>AS EXT</u>	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE	TEMPORAL SCALE	CERTAINTY SCALE	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE-	MITIGATION ME/
			(EXTENT)	(DURATION)	(PROBABILITY/ LIKELIHOOD)		MITIGATION	
RESOURCES: STONE AGE OCCURANCES	tangible heritage resources within the cultural landscape and it is often during this Phase that		AREA STUDY	TERM SHORT AND	MAY OCCUR	SLIGHT	LOW -	rock shelter (SRCO2)and a con should managed -if ret
	heritage sites are lost. Previously undetected cultural (archaeological) layers are usually superficial, subsoil layers and that makes them easily vulnerable to destruction and the likelihood for encountering additional cultural heritage sites as the land clearing process commences, or during construction of infrastructure should be considered. <i>Cummulative impact:</i> <i>The low frequency of significant archaeological resources documented in the project area and in its immediate surroundings implies low-severity short and long-term impacts on the heritage landscape</i> <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact related to destruction of archaeological resources.</i>		AREA	LONG TERM				 construction phase (no-go devilimit the impact on the archaer low. It should be noted that grave not only occur around farmst grounds but they are also around archaeological and hist the rural areas of the Northern probability of informal human during the construction phase excluded. Monitoring activiti throughout the construction porder to avoid the destructure undetected heritage sites and <i>Cumulative impact:</i> <i>The significance of the lank heritage is bound not to course of construction decommissioning of the projects into significant of the </i>
LOSS OF HERITAGE RESOURCES:	S ignificant archaeological resources such as a rock shelter (SRC02)and a corbel building (SRC01) may	DIRECT	STUDY AREA	SHORT TERM	PROBABLE	MODERATE	MODERATE -	archaeological resources suc (SRC02) and a corbel build
ROCKSHELTER (SRc02) AND CORBEL BUILDING (SRC01)	be damaged during the construction phase.	CUMULATIVE	STUDY AREA	SHORT AND LONG TERM	MAY OCCUR	SLIGHT	LOW -	managed -if retained -duri phase (no-go development impact on the archaeological la
	The low frequency of significant archaeological resources documented in the project area and in its immediate surroundings implies low-severity short and long-term impacts on the heritage landscape Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same							

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
orbel building (SRC01)	ACHIEVABLE	
etained -during the evelopment buffer) to	REVERSIBLE	LOW – AND LOW (+)
aeological landscape to	NO IMP/	
ves and cemeteries do steads in family burial o randomly scattered istorical settlements in ern Cape Province. The an burials encountered se should thus not be ities will be required phase of the Project in ruction of previously d human burials.		
project. that archaeological initiation of research archaeological sites Heritage Impact d for developments. at archaeological sites t appropriate heritage ement procedures are ulative impact of itive.		
uch as a rock shelter Iding (SRC01) should ring the construction	REVERSIBLE	MODERATE -
: buffer) to limit the I landscape to low.	REVERSIBLE	LOW – AND LOW (+)
	NO IMP/	ACT

		NTH <u>ESIS O</u>	F S <u>PECIA</u>	LIST <u>IMPA</u>	CTS <u>AS EXT</u>	RACTED FROM	THE <u>SPECIAL</u>	.IST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	same standard. No-go alternative would result in no impact related to destruction of archaeological resources.					I		
					NOISE IMPACT A	SSESSMENT		
CONSTRUCTION NOISE: DAYTIME	Daytime ambient sound levels could range from 35 dBA to more than 72 dBA, averaging at 45 dBA.	DIRECT	LOCALISED	SHORT TERM	UNLIKELY	SLIGHT	LOW -	 The significance of the no daytime construction
DATIME	Daytime ambient sound levels are thus typical of a rural noise district most of the times, though it is	CUMULATIVE	LOCALISED	SHORT	UNLIKELY	SLIGHT	LOW -	additional mitigation recommended. Genera
	expected that introduced noises will be audible over large distances during quiet periods (during low wind conditions).	NO-GO			NO IMP/	ACT		recommended to ensure the project is minimis recommended that the a access roads t pass fur
	Various construction activities (development of access roads, laydown areas, the hard standing							residential dwellings of th
	areas, excavation of foundations, concreting of foundations and the erection of the wind turbines, other infrastructure) taking place simultaneously							
	during the day will increase ambient sound levels due to air-borne noise.							
	Depending on the location of access roads, traffic noises may be audible during passing and could change the ambient sound levels at NSR staying within 100m from (potential) access routes.							
	Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters							
	construction timelines overlap. However, it is important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.							
	No-go alternative would result in no impact related to daytime construction noise.							
CONSTRUCTION NOISE: NIGHTTIME	Night-time ambient sound levels could range between 27 dBA to more than 64 dBA, averaging at		LOCALISED	SHORT TERM	PROBABLE	MODERATE	LOW -	 The significance of the ne additional mitigation is r
	41.9 dBA. Night-time ambient sound levels are higher than expected for a rural noise district, but	CUMULATIVE	REGIONAL	SHORT TERM	PROBABLE	MODERATE	LOW -	general management me to ensure that the potenti
	this is likely due to the measurement period taking place during a period with increased wind speeds, resulting in more wind-induced noises. Ambient	NO-GO			NO IMP/	ACT		may be created due to nig noises are minimized. Pot measures would include:
	sound levels are expected to be low during period of low winds, and it is expected that introduced							 Minimizing night working within 2
	noises will be audible over large distances during quiet periods (during low wind conditions).							Work should only WTG location to night-time cumu
	Various construction activities (likely limited to the							working at night

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
noise impact is low for	REVERSIBLE	LOW -
activities and no is required or	REVERSIBLE	LOW -
ral measures are e that annoyance with ised. It is therefore applicant plan process orther than 60m from the identified NSR.	NO IMP4	ACT
oise impact is low and not required, yet some	REVERSIBLE	LOW -
easures are included atial annoyance that ight-time construction otential mitigation :	REVERSIBLE NO IMPA	LOW -
ht-time activities when 2,000m from any NSR. hly take place at one o minimize potential vulative noises (when ht within 2,000m from		

ALIST REPORTS	THE <u>SPECIA</u>	RACTE <u>D FROM</u>	CTS <u>AS EXTI</u>	LIST <u>IMPA</u>	F SPE <u>CIA</u>	NTH <u>ESIS O</u>	<u></u>	
MITIGATION MEA	SIGNIFICANCE PRE- MITIGATION	SEVERITY / BENEFICIAL SCALE	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	TEMPORAL SCALE (DURATION)	SPATIAL SCALE (EXTENT)	NATURE OF IMPACT	DESCRIPTION OF IMPACT	ISSUE
NSR); The applicant mus when night-time of taking place within NSR; and The applicant mus completion of noise a pile driving, rock excavation) during period (even though that it is highly un take place at nigh							 pouring of concrete as well as erection of WTG components) taking place simultaneously at night will increase ambient sound levels due to air-borne noise, using the criteria of the author. The projected noise levels, the change in ambient sound levels as well as the potential noise impact is defined per NSR. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact related</i> 	
		ACT ASSESSMENT		DALA			to night-time construction noise.	
Impact severity can be effer partially) mitigated through:	LOW -	MODERATE TO SEVERE	POSSIBILITY	LONG TERM	LOCALISED		Disturbance, damage, destruction or sealing-in of legally protected, scientifically valuable fossil	LOSS OF PALAEONTOLOGICAL
 Pre-construction walk-do project footprint by specia 	LOW -	MODERATE TO SEVERE	POSSIBILITY	LONG TERM	LOCALISED	CUMULATIVE	HERITAGE RESOURCES remains preserved at or beneath the ground surface within the development footprint,	
 project jootprint by spect in the Pre-Construction Pl Ongoing monitoring for substantial bedrock exceed clearance activities by ECC Phase, with safeguarding palaeontological finds vertebrate bones & tee possible specialist mitige Chance Fossil Finds Protoconte Chance Fossil Finds Protoconte finds, which may be a construction and constr							excavations during the Construction Phase. Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to loss of palaeontological resources.	
		ACT ASSESSMENT	RINE RABBIT IMP			<u>т</u>		
 Turbines and pylons should of the buffers ground riveri 	HIGH -	SEVERE	PROBABLE	SHORT	STUDY	DIRECT	The construction of roads, turbine hard-stands,	LOSS OF HABITAT
 of the buffers around river An ECO must be employed 	HIGH -	SEVERE	PROBABLE	TERM SHORT	AREA STUDY	CUMULATIVE	roads and laydown areas will result in the destruction of vegetation and top-soil within areas	
for use during construction	and the second			TERM	AREA		of potential Riverine Rabbit habitat. No turbines	

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
nust notify the NSR e activities will be thin 1,000m from the		
nust plan the poisiest activities (such pock breaking and ring the daytime ough it is expected unlikely that this may ight).		
ffectively (albeit only	IRREVERSIBLE	LOW -
down of authorized ccialist palaeontologist	IRREVERSIBLE	LOW -
r fossil remains of all cavations and surface CO during Construction g and reporting of new (notably fossil teeth) to SAHRA for gation (See appended ocol). So be partially offset by collection of new fossil ompensatory positive nticipated cumulative ntological heritage fall based largely on the fossil sites recorded nbined cluster project at the proposed Pre- Construction Phase recommended for all		
mented in full.		
uld be located outside erine habitat	REVERSIBLE	LOW -
ed to demarcate areas ion, and to ensure that	REVERSIBLE	LOW -
ies remain within the	NO IMPA	ст

	SYI	NTH <u>ESIS O</u>	F S <u>PECIA</u>	LIST <u>IMPA</u>	CTS <u>AS EXT</u>	RACTED FROM	THE <u>SPECIA</u>	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
	as High sensitivity, or their associated buffers. Furthermore, the developer should strive to reduce the amount of roads intersecting these riparian zones. If these measures are correctly implemented the total extent of habitat loss is likely to be low, and the resulting impact on the species from habitat loss would also be low.					•	•	designated area and tha activities occur outside o footprint Avoid road development th areas, where possible
	Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on the local Riverine Rabbit population.							
DISTURBANCE	The construction of roads, turbine hard-stands,	DIRECT	STUDY	SHORT	PROBABLE	SLIGHT	LOW -	An ECO must be employed
THROUGH CONSTRUCTION NOISE	roads and laydown areas will result in elevated levels of both noise and activity, which may displace	CUMULATIVE	AREA STUDY	TERM SHORT	PROBABLE	SLIGHT	LOW -	for use during construction the construction activities
	potential Riverine Rabbits out of the Aol. Mitigation		AREA	TERM				designated area and tha
MORTALITY FROM	should include minimizing noise and educating workers. If done, the potential displacement of the species from home range is likely to be very low. As there are limited areas of potentially suitable Riverine Rabbit on the site, this would be a largely minimalised, thus requiring minimal mitigation. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on the <i>local Riverine Rabbit population.</i> Roadkill is a significant source of mortality for</i>	NO-GO DIRECT	STUDY	SHORT	NO IMP/	ACT	MODERATE -	 activities occur outside of footprint Traffic and loud mach prohibited during the emorning (04:00 – 09:00) (18:00 – 22:00) Any trenches built must ha any dispersing rabbits that must be backfilled. Prohibit all employees from
ROADKILL OR	Riverine Rabbits across their range. The probability	DIRECT	AREA	TERM	POSSIBLE	JEVERE	WODERATE -	 Prohibit on employees from Prohibit open fires
BUSHMEAT HUNTING	of vehicle-related mortality in and around the Aol will increase with the added traffic, particularly	CUMULATIVE	STUDY AREA	SHORT TERM	POSSIBLE	SEVERE	MODERATE -	 Prohibit any domestic can from entering the site with
	during the construction phase. This would potentially occur within the site as well as on the nearby larger public roads (such as the R381). During operation, however, this potential impact would be significantly reduced. As Riverine Rabbit activity is 'crepuscular' (i.e., highest between dusk and dawn), traffic during these periods should be curtailed. In addition, speed limits (<40km) in all areas of potential conflict (i.e. High sensitivity) should be implemented to reduce collision risk. Finally, a limitation of roads within the drainage	NO-GO			NO IMP/	ACT		 An ECO must be employed for use during construction activitied designated area and the activities occur outside footprint Avoid road development areas, where possible Speed restrictions for (40km/h is recommended)

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
that no unauthorised		
e of the construction		
t transversing riparian		
ed to demarcate areas	REVERSIBLE	LOW -
ion, and to ensure that	REVERSIBLE	
ies remain within the	REVERSIBLE	LOW -
that no unauthorised e of the construction	NO IMPA	CT
-		-
achinery should be		
early hours of the		
0) and early evening		
have slopes that allow at fall in to escape and		
at jui in to escupe und		
om hunting	REVERSIBLE	LOW -
5		
carnivores (e.g. dogs)	REVERSIBLE	LOW -
ith employees ed to demarcate areas	NO IMPA	СТ
ion, and to ensure that		
ies remain within the that no unauthorised		
e of the construction		
nt traversing riparian		
in aversing ripariali		
all project vehicles		
d) should be in place to		

ISSUE	SYN DESCRIPTION OF IMPACT	NTHESIS OI NATURE OF	F SPECIA SPATIAL	LIST IMPA TEMPORAL	CTS AS EXTI CERTAINTY	RACTED FROM SEVERITY /	THE SPECIA SIGNIFICANCE	LIST REPORTS MITIGATION MEA
		IMPACT	SCALE (EXTENT)	SCALE (DURATION)	SCALE (PROBABILITY/ LIKELIHOOD)	BENEFICIAL SCALE	PRE- MITIGATION	
	habitat within the AoI should be considered. Bushmeat hunting and active interference with Riverine Rabbits by construction employees may also result in reduced Riverine Rabbit occurrence within the AoI. All employees should be educated thoroughly on the potential impact of hunting in the AoI, and encouraged to report any sightings of the species during construction to their line managers. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact on the</i>							reduce road kills of rabbits roads. Traffic should be early hours of the morning early evening (18:00 – 22:0 Any contractor employed work must ensure that no r are disturbed, trapped, f them and their team duri phase. Conservation-orient be built into contracts personnel, complete with non-compliance
	local Riverine Rabbit population.			soci		PACT ASSESSMENT		
TEMPORARY	During the construction phase, there will be	DIRECT	LOCAL	SHORT	DEFINITE	MODERATELY	SOME	 Maximise local employment
EMPLOYMENT	temporary employment associated with the			TERM		BENEFICIAL	BENEFITS	(the Project's direct sending
	project. It has been established that approximately 250 employment opportunities will become	CUMULATIVE	NATIONAL	SHORT TERM	DEFINITE	MODERATELY BENEFICIAL	HIGH +	Preferential Procurement Services Management Pl
these about 55% will be allocated to to semi-skilled and 15% to skilled w and lower skilled workers are usual perform electrical and civil duties excavation and casting of concrete stormwater reticulation, trenching, cable installations, structural steelwu fencing, etc.); whereas higher skilled entail Project Managers, Engineers, E Control Officers and so forth. In add employment, the construction phas positive spin-off effect on the ecor regional and national) through pro- goods and services, with indirect employment creation as result.	Cumulative impact, on a localised scale, would be HIGH should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the	NO-GO			NO IMP4	ACT		 contractors that are used. Involve the Ubuntu LM and early processes (from final possible). Determine their with regards to a labour of employment processes be stakeholders. Appoint a Community of Officer / CLO. Communicat through this one ch transparency, limit unrealis to avoid conflict.
	No-go alternative would not impact the SEIA ratings significantly.							

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
its killed on the project e reduced during the ng (04:00 – 09:00) and 2:00) yed for development orabbit or hare species , hunted or killed by uring the construction entated clauses should cts for construction th penalty clauses for		
nent and local content ding area) through the	DIFFICULT	SOME BENEFITS
nt Plan and Contractor Plan (CSMP) for all	DIFFICULT	HIGH +
and PKSDM from the hancial close already if heir existing processes or desk and streamline between the various or Employer Relations cate with communities channel to ensure alistic expectations and		

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
LOCAL PROCUREMENT	In order to meet or better targets set by the DMRE, the Developer is aiming for approximately 40% of	DIRECT	NATIONAL	SHORT TERM	DEFINITE	MODERATELY BENEFICIAL	MODERATE +	 Maximise local content procuring from the local
	total capital expenditure to be local. It is anticipated that many of the high-technology turbine components would be imported and that other technical components will be sourced from larger industrial areas in other parts of the province / country. Even though the Preferential Procurement Policy will only be formulated closer to the time, positive impacts on local and national economies are 'definite' since 25% of the DMRE scorecard is based on local content. <i>Cumulative impact, on a localised scale, would be</i> <i>HIGH should the Taaibos and Soutrivier WEF</i> <i>clusters construction timelines overlap. However, it</i> <i>is important to note that the 5 WEFs and their</i> <i>associated infrastructure are proposed by the same</i> <i>developer and the EMPrs will be prepared to the</i> <i>same standard.</i>	CUMULATIVE	NATIONAL	SHORT TERM	DEFINITE	MODERATELY BENEFICIAL	HIGH +	areas as far as possible.
		NO-GO			NO IMP/	ACT		 (directly and indirectly resuch as transport, laur Communicate this to the LED Units at least 4 month process commencing in a prepare. Include minimum thresholocal employment, BBEEE targets, local services pro
INDUCED LOCAL	significantly. Expenditure during construction and the increase in	DIRECT	NATIONAL	SHORT	DEFINITE	SLIGHTLY	LOW +	 Maximise the Project's loc
ECONOMIC IMPACTS	household earnings due to temporary employment result in various induced economic impacts and spin-offs for the local and regional economies, such	CUMULATIVE	NATIONAL	TERM SHORT TERM	DEFINITE	BENEFICIAL SLIGHTLY BENEFICIAL	LOW +	possible.
	 as: Business opportunities for the service and manufacturing industries (locally and nationally), e.g. transport, Personal Protective Equipment, maintenance work, general consumables, civil works; Wages that are spent locally and a general improvement of income levels with higher spending benefits and spin-offs for local businesses, retail, sales, leisure and hospitality, real estate, etc.; Local accommodation facilities that house the workers sourced from outside the direct Project sending area and spin-offs for the tourism industry. Since at least 20% of the South African workforce has to be residents from local communities a large portion of these induced impacts will manifest locally. Definite positive impacts of 'low significance' will manifest. Wallet loose b Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their 	NO-GO			NO IMP/			

REVERSABILITY/ MITIGATION ACHIEVABLE ACHIEVABLE NO IMPA	SIGNIFICANCE POST- MITIGATION MODERATE + HIGH +
ACHIEVABLE	HIGH +
VERY DIFFICULT	LOW +
VERY DIFFICULT	LOW +
NO IMPA	ст
	VERY DIFFICULT VERY DIFFICULT NO IMPA

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would not impact the SEIA ratings			-		-	-	
TRAINING / SKILLS	significantly. An important outcome of training and skills	DIRECT	REGIONAL	SHORT	DEFINITE	SLIGHTLY	LOW +	 Where feasible, the Development
DEVELOPMENT	development is that it increases the employability			TERM		BENEFICIAL		 Make the skill requirent
	of a region's workforce, resulting in enhanced	CUMULATIVE	REGIONAL	SHORT	DEFINITE	SLIGHTLY	MODERATE +	municipalities in advance
	economic opportunities and thus addressing			TERM		BENEFICIAL		analysis of the available la
	poverty alleviation over the medium to long term. During the construction phase the following	NO-GO			NO IMP/	ACT		 Implement a SMME programme and do certi
	training initiatives would usually take place:							how to tender, understan
	 On-site training so that workers can safely 							business skills, etc.) at le
	perform their duties; and							inviting SMMEs to tend
	▲ Training by contractors to maintain their own							relevant LED Units in the p
	BBEEE level, such as health and safety							 Do a Value-chain analysis
	legislation training, first aid, fire-fighting,							(directly and indirectly rela
	construction skills, basic electrical training, quality management, legal compliance or							and communicate this t municipalities in advance
	business skills.							prepared and equipped
	Consultation with the affected local and district							tender process.
	municipalities however identified a great need for							 Require larger contractors
	training and capacity building as most of the							SMMEs to train and trans
	workers and SMME's on their databases are poorly							this in their respective CSN
	educated with limited skills. These constraints							 Implement on-the-job tr
	result in gaps between the Developers' requirements and the local communities' / SMME's							workers.Capacitate the local gover
	abilities to provide the required services. It would							involving them as early
	thus be to the advantage of the Project if on-the-job							Project; remain transpar
	training is implemented, especially for unskilled							processes.
	workers.							▲ Negotiate a MoU with t
	Cumulative impact, on a localised scale, would be							that each role-player is
	low should the Taaibos and Soutrivier WEF clusters							roles, responsibilities an
	construction timelines overlap. However, it is							Project processes.
	important to note that the 5 WEFs and their associated infrastructure are proposed by the same							 Establish an EMC or sin duration of construction to
	developer and the EMPrs will be prepared to the							and transparency. Meml
	same standard.							Forum to meet on a quar
								issues that may arise duri
	No-go alternative would not impact the SEIA ratings							construction period (if fea
	significantly.			1	1	1		
EMPLOYMENT EQUITY	Statistics obtained from the IP4 overview (DMRE,	DIRECT	REGIONAL	SHORT	DEFINITE	MODERATELY	LOW +	▲ Obtain inputs from the
	December 2021) indicate that during the construction phases, Black South African citizens,		DECIONAL		DEEINIITE	SEVERE		municipalities on the Procurement strategy and
	Youths and rural local communities have primarily	CUMULATIVE	REGIONAL	SHORT TERM	DEFINITE	MODERATELY SEVERE	LOW +	Procurement strategy and Plan to be implemented.
	been the beneficiaries of RE projects, as they	NO-GO			NO IMP/			 Set targets for the employed.
	respectively represent 81%, 44% and 48% of total							women and the disable
	job opportunities created by IPP's to date.							CSMPs.
	However, woman and the disabled could still be							
	significantly empowered as they represent a mere							

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
		-
eloper should: ements clear to the	ACHIEVABLE	MODERATE +
nce and do a skills labour force.	ACHIEVABLE	MODERATE +
skills development rtification (training on anding contracts, basic least 4 months prior nder and involve the e programmes. sis of services required elated to construction) to local and district nee so that they are d to take part in the ors to work with small nsfer skills and include SMP's. training for unskilled rernment structures by ly as possible in the arent throughout the the municipalities so s clearly aware of its and timelines in the similar Forum for the n to aid communication mbers of the EMC / arterly basis to discuss uring the course of the easible).	NO IMP/	
he local and district	ACHIEVABLE	MODERATE +
e contents of the nd Employment Equity	ACHIEVABLE	MODERATE +
mployment of Youth, led in the respective	NO IMP/	ACT

						RACTED FROM		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	10% and 0.4% of total jobs created. Pre-mitigation positive impacts of employment equity will hold benefits of 'low overall significance' if only the DMRE's minimum requirements are implemented. With mitigation, the intensity of the impact will increase, and the overall significance can be increased to hold 'moderate benefits'.							
	Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would not impact the SEIA ratings							
IMPACTS ASSOCIATED	significantly. Negative impacts that could manifest for local	DIRECT	REGIONAL	SHORT	PROBABLE	MODERATELY	MODERATE -	Employment / Temporary cons
WITH AN INFLUX OF	communities and the local and district		DECIONAL	TERM		SEVERE	MODERATE	- · · ·
JOBSEEKERS / TEMPORARY	municipalities due to an influx of jobseekers / temporary construction workers include:	CUMULATIVE	REGIONAL	SHORT TERM	PROBABLE	MODERATELY SEVERE	MODERATE -	-
CONSTRUCTION	Conflict between locals and 'outsiders' if the	NO-GO			NO IMPA			
	 Conflict due to cultural differences; Increase in the size and number of informal settlements and additional pressure on local government for housing and related services; Increase in the unemployment rate if jobseekers and/or workers do no return to their places of residence post construction; Unwanted pregnancies, an increase in HIV/AIDS and other sexually transmitted diseases (STDs) and additional pressure on health care services; An increase in single parent households and a subsequent reliance on social grants; An increase in drug and alcohol abuse and other social issues should unemployment levels increase. Poor conduct of construction workers and inadequate management of the construction site could result in health and safety risks for landowners that include: Unauthorized access / trespassing resulting in theft, stock poaching, safety and security issues as well as potential damage to the veld and natural grazing; Fire hazards at the construction site and the possibility of fires spreading and damaging surrounding farmland and infrastructure; Pollution problems, flies, rodents and pests and 							 Employment / Temporary constant Clearly identify the beneficiabour sending area employment strategy in constant of the sending area employment strategy in the sending area employment strategy in the sending area is the sending area of the sending area of the sending plan: (i) no worker housed on site or in settlements; (ii) allow wor nearby time to return aregular intervals or over with a sending area of the social for the sending area of the sendin

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
nstruction workers:	ACHIEVABLE	LOW -
eficiary communities / and compile the	ACHIEVABLE	LOW -
collaboration with the LED Units. contractors and sub- rce labour through the stration database and target communities. mmunication channels s and the Employer	NO IMPAC	CT
inrealistic expectations munities and workers employment, skills curement and so forth. through the Ward EMC / Forum. porary workers at the on site.		
I Management Plan's provide a transport and kers are allowed to be informal housing / porkers that do not live to their families at weekends. n site after shifts.		
d that the Developer vareness Campaign for uses on sexual health, and related social ironmental health:		
-		

ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES
	 possible contamination of water resources (insufficient sanitation facilities, littering and refuse) and so forth. In terms of security, landowners and community members could easily consider this construction project as the catalyst should local crime levels and stock theft increase and affect their quality of life. Landowners in and around the study area describe their environment as extremely safe and peaceful with minimal / low levels of crime. Impacts that relate to an influx of construction workers would increase if contractors and subcontractors refrain from using the labour desk and prefer to bring in their own workforce. The Developer's commitment to maximize local labour, design the recruitment process in conjunction with the municipalities and implement relevant security measures for the duration of construction is thus essential. <i>Cumulative impact, on a localised scale, would be MODERATE should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would not impact the SEIA ratings significantly.</i> 							 24-hour security, demarcate and construction site (if possible), mate to be secured, access control trespassing of workers outside construction areas. Join the local community policing similar initiative for the du construction. Keep the local SAPS, other emergene Ward Councillors, landowners arelevant stakeholders informed a construction progress and time-lines. Develop a Fire / Emergency Manage in conjunction with affected and ne landowners. Dispose of the various types generated in the appropriate relicensed waste landfill sites at regula Comply with the waste manage compiled for the construction phase. Display "danger" warning signs and access" signs at all potential acces and along the periphery of the coareas in English and the local langua. If water for construction is obtain natural water resource, comply with Use Licence conditions for the duratic construction phase. Awareness / community engagemera Keep open communication channel landowners and address any potentia a matter of priority. Make contact details of the main and procedures to lodge complaint to landowners and the local coareares interference to the construction simmediately should issues arise. Consult with surrounding landown livestock, private residences a infrastructure could be affected by and other impacts that result fr movement and general construction

REVERSABILITY/ MITIGATION

SIGNIFICANCE POST-MITIGATION

nd fence the naterial stores rol and no designated

ing forum or duration of

ency services, and other about the nes.

agement Plan neighbouring

es of waste manner at gular intervals. agement plan ase.

and "no public cesses, paths construction guages.

ained from a vith the Water uration of the

ovisions of the Act No. 85 of ncy and Safety ation of the

nent:

nnels with the ential issues as

ain contractor aints available communities and EMC /

book available on site and act

wners whose and other by dust, noise from traffic tion activities. a land use I landowners

		NTH <u>ESIS O</u>	F S <u>PECIA</u>	LIST <u>IMPA</u>	CTS <u>AS EXT</u>	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME.
				1		I		 to protect livestock an addresses restricted acce when farm gates are open forth. Rehabilitate the veld to in construction.
LAND USE IMPACTS	Main land uses in the study area pertain to livestock	DIRECT	LOCALISED	SHORT	DEFINITE	SLIGHT	LOW -	 Rehabilitate the veld to its
	farming (mainly sheep and goat) and grazing for game. The land has a long term grazing capacity of	CUMULATIVE	LOCALISED	TERM SHORT	DEFINITE	SLIGHT	LOW -	construction.
	24 to 28 hectares per large stock unit (LSU). Small patches of cultivation can be found along water courses and in close proximity to farmsteads. Farms are also used for residential and leisure purposes, albeit farmsteads are scattered and dispersed and the nearest farmstead is located about 1 km from a turbine. No direct impacts on residential land uses are therefore foreseen. For the duration of the short-term construction period no grazing is possible at the construction site/s. Should 32 turbines be constructed, the area cleared of vegetation for construction amounts to 124.68 ha (4.5 LSU), which has a negligible direct impact on grazing land uses. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would not impact the SEIA ratings</i>	NO-GO		TERM	NO IMP			
INTRUSION IMPACTS	significantly. Intrusion impacts could indirectly impact agricultural land uses, thereby having a negative	DIRECT	STUDY AREA	SHORT TERM	DEFINITE	MODERATELY SEVERE	MODERATE -	 Comply with the EMPr req any potential noise and due
	effect on incomes of landowners, such as:	CUMULATIVE	STUDY	SHORT	DEFINITE	MODERATELY SEVERE	MODERATE -	 Proper planning, r rehabilitation of all constr
	 Negligent construction workers that do not close / lock farm gates resulting in animals that go missing and/or mix with animals in different breeding groups / cycles, potentially introducing diseases into herds; Livestock that is killed on access roads if drivers do not adhere to speed limits and traffic rules; Dust that impact the quality of wool and/or dust that settle on grazing land and have an impact on livestock carrying capacity; Possible noise impacts; and Construction activities that hamper the farmers' access to their own farms. The increase in traffic could result in the 	NO-GO		,	NO IMP/			 the visual impacts of the cas proposed in the VIA Environmental, October 20 Implement all mitigation m Discuss construction timel so that grazing of livestoch from construction areas. Collaborate with the management agencies wh required and advertise of advance. Impose penalties for reck to enforce compliance to the second seco

REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
VERY DIFFICULT	LOW -
VERY DIFFICULT	LOW -
DIFFICULT	MODERATE -
DIFFICULT	MODERATE -
	СТ
	MITIGATION VERY DIFFICULT VERY DIFFICULT NO IMPAGE DIFFICULT

ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	RACTED FROM SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
HEALTH AND SAFETY	degradation of road surfaces and speeding / negligent drivers could cause accidents and fatalities, subsequently placing pressure on local emergency, disaster management and health care services (fire, ambulance, police services, etc.). Abnormal vehicles that transport large project infrastructure could also necessitate intermittent road closures. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would not impact the SEIA ratings significantly.</i>	DIRECT	LOCALISED	SHORT	MAY OCCUR	SEVERE	MODERATE -	 Ensure implementation of
RISKS FOR WORKERS	community are possible to manifest. Community	DIRECT	LOCALISED	TERM	MAT OCCOR	JEVERE	WODERATE -	Occupational Health and S
	health and safety risks are associated with the inflow of workers. The Occupational Health and	CUMULATIVE	LOCALISED	SHORT TERM	MAY OCCUR	SEVERE	MODERATE -	of 1993) and adhere to
	Safety Act (Act No. 85 of 1993) makes provision for	NO-GO			NO IMP/	ACT		construction phase.
	 the health and safety of workers at construction sites. These risks are broadly associated with: Construction related accidents due to structural safety of Project infrastructure, possibly resulting in fatalities; Dust generation and air pollution resulting in respiratory diseases; High ambient noise levels caused by machinery and construction equipment, resulting in loss of hearing or other similar health issues; Dehydration, sunburn and related issues for workers due to unsafe and insufficient drinking water and high temperatures during summer months; and An increase in HIV/AIDS and other STDs due to prostitution activities and temporary sexual relationships with local women and unwanted pregnancies that place further pressure on Basic Health Care Services. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> 							of 1993) and adhere to Safety plan procedures fo
						IMPACT ASSESSMENT		
POTENTIAL	Permanent or temporary loss of indigenous	DIRECT	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	 Blanket clearing of vegeta

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
of the provisions of the I Safety Act (Act No. 85	ACHIEVABLE	LOW -
o the Emergency and for the duration of the	ACHIEVABLE	MODERATE -
of employees through t is also recommended mbarks on a Social or the workforce that health, unwanted social issues. a housing plan that orkers that do not live eir families at regular ds. rinking water and instil keep workers hydrated. ablution facilities ets, etc.) at strategic ed regularly. ice, emergency and ormed of construction	NO IMPA	
tation must be limited	DIFFICULT	LOW -

	SY	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
TERRESTRIAL	vegetation cover because of site clearing. Site	CUMULATIVE	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	to the site. No clearing
BIODIVERSITY IMPACTS	clearing before construction will result in the blanket clearing of vegetation within the affected	NO-GO			NO IMPA	АСТ		footprint required for a
VEGETATION POTENTIAL TERRESTRIAL BIODIVERSITY IMPACTS FLORA SPECIES	 blanket clearing of vegetation within the affected footprint. Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on vegetation. Loss of flora species of special concern during preconstruction site clearing activities. Several special of concern are known from surrounding areas, which could be destroyed during site preparation. Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the 	DIRECT	LOCALISED	PERMANENT PERMANENT	DEFINITE DEFINITE NO IMPA	SLIGHT SLIGHT ACT	LOW - LOW -	
	same standard. No-go alternative would result in no impact on floral species.							
POTENTIAL TERRESTRIAL	Susceptibility of post construction disturbed areas to invasion by exotic and alien invasive species and	DIRECT	LOCALISED	SHORT TERM	DEFINITE	SLIGHT	LOW -	 Alien trees and weeds m the site as per CARA/ NEN
BIODIVERSITY IMPACTS	removal of exotic and alien invasive species during construction. Post construction disturbed areas	CUMULATIVE	LOCALISED	SHORT	DEFINITE	SLIGHT	LOW -	 A suitable weed and management plan to
ALIEN INVASIVE SPECIES	 having no vegetation cover are often susceptible to invasion by weedy and alien species, which can not only become invasive but also prevent natural flora from becoming established. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact on alien invasive species.</i> 				NO IMPA	ACT		 construction and operatic After clearing and construction and appropriate cover crosshould natural re-establis take place in a timely m road verges. This will also
POTENTIAL TERRESTRIAL	Susceptibility of some areas to erosion because of construction related disturbances. Removal of	DIRECT	LOCALISED	SHORT TERM	POSSIBLE	SLIGHT	LOW -	 Suitable measures must areas that are susceptib
BIODIVERSITY IMPACTS	vegetation cover and soil disturbance may result in some areas being susceptible to soil erosion after	CUMULATIVE	LOCALISED	SHORT TERM	POSSIBLE	SLIGHT	LOW -	must be rehabilitated, and planted once construction
EROSION		NO-GO			NO IMPA	АСТ		 Topsoil must be strip separately and replaced of

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
g outside of required	DIFFICULT	LOW -
construction to take iped and stockpiled eparation and replaced revegetation will take ydown areas requiring cated within already possible, or away from reas and other sensitive).	NO IMPA	ст
scue is recommended	REVERSIBLE	LOW -
	REVERSIBLE	LOW -
must be removed from MBA requirements.	REVERSIBLE	LOW -
alien invasive plant be implemented in	REVERSIBLE	LOW -
ion phases. truction is completed, rop may be required, ishment of grasses not nanner, such as along to minimise dust.	NO IMPA	CT
st be implemented in ible to erosion. Areas	REVERSIBLE	LOW -
nd a suitable cover crop on is completed.	REVERSIBLE	LOW -
pped and stockpiled on completion.	ΝΟ ΙΜΡΑΟ	СТ

		-		-		RACTED FROM			
ISSUE	DESCRIPTION OF IMPACT	NATURE OF	SPATIAL	TEMPORAL	CERTAINTY	SEVERITY /	SIGNIFICANCE	MITIGATION ME	
		IMPACT	SCALE	SCALE	SCALE	BENEFICIAL SCALE	PRE-		
			(EXTENT)	(DURATION)	(PROBABILITY/ LIKELIHOOD)		MITIGATION		
	completion of the activity.				LIKELINOODJ			If natural vegetation re-es	
								occur, a suitable grass mu	
	Cumulative impact, on a localised scale, would be								
	low should the Taaibos and Soutrivier WEF clusters								
	construction timelines overlap. However, it is								
	important to note that the 5 WEFs and their								
	associated infrastructure are proposed by the same								
	developer and the EMPrs will be prepared to the								
	same standard. No-go alternative would result in no impact on								
	erosion.								
POTENTIAL	Disturbances to ecological processes: Activity may	DIRECT	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	 Blanket clearing of vegeto 	
TERRESTRIAL	result in disturbances to ecological processes such	CUMULATIVE	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	to the development footp	
BIODIVERSITY IMPACTS	as fragmentation (road, etc).	NO-GO			NO IMP/	ACT		be cleared must be dema	
ECOLOGICAL PROCESSES	Cumulative impact, on a localised scale, would be							clearing commences.	
	low should the Taaibos and Soutrivier WEF clusters								
	construction timelines overlap. However, it is								
	important to note that the 5 WEFs and their								
	associated infrastructure are proposed by the same								
	developer and the EMPrs will be prepared to the								
	same standard.								
	No-go alternative would result in no impact on								
DOTENTIAL	ecological processes.	DIDEAT	10011055						
POTENTIAL TERRESTRIAL	Aquatic and Riparian processes: Diversion and increased velocity of surface water flows – Changes	DIRECT CUMULATIVE	LOCALISED LOCALISED	PERMANENT PERMANENT	DEFINITE DEFINITE	MODERATE MODERATE	MODERATE - MODERATE -	 Suitable structures to watercourse crossings the 	
BIODIVERSITY IMPACTS	to the hydrological regime and increased potential	NO-GO	LOCALISED	PERIVIAINEINT	NO IMP/		WODERATE -	 Stormwater discharge int 	
BIODIVERSITY INIT ACTS	for erosion. Impact of changes to water quality. Loss	10-00						protected against erosion	
AQUATIC AND	of riparian vegetation / aquatic habitat. Loss of							, ,	
RIPARIAN PROCESSES	species of special concern.								
	Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF								
	clusters construction timelines overlap. However, it								
	is important to note that the 5 WEFs and their								
	associated infrastructure are proposed by the same								
	developer and the EMPrs will be prepared to the								
	same standard.								
	No-go alternative would result in no impact on								
POTENTIAL	aquatic and riparian processes.	DIRECT	LOCALISED	PERMANENT	DEFINITE	SLIGHT		Displicit classing of veget	
TERRESTRIAL	Loss of Faunal Habitat: Activity may result in the loss of habitat for faunal species, which could result in		LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW - LOW -	 Blanket clearing of veget to the construction footpr 	
BIODIVERSITY IMPACTS	disturbance and displacement of faunal species.	NO-GO	LOCALISED	FERMANENT	NO IMP/			 Rocky outcrop areas c 	
								Habitat to be avoided as j	
FAUNAL HABITAT	Cumulative impact, on a localised scale, would be XX							 It is important that clearing 	
	should the Taaibos and Soutrivier WEF clusters							to the minimum and tak	
	construction timelines overlap. However, it is							manner, where applic smaller animal species and prevents wind and	
	important to note that the 5 WEFs and their								
	associated infrastructure are proposed by the same								
	developer and the EMPrs will be prepared to the							cleared areas.	
	same standard.								
	No-go alternative would result in no impact on XX.								

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
establishment does not nust be applied.		
tation must be limited	DIFFICULT	LOW -
print, and the area to arcated before any	DIFFICULT NO IMPAC	LOW -
bo constructed st		
be constructed at	REVERSIBLE	LOW -
nat do not alter flows. nto watercourses to be n.	REVERSIBLE NO IMPAG	
tation must be limited	DIFFICULT	LOW -
print required.	DIFFICULT	LOW -
and Riverine Rabbit far as possible. ring activities are kept ake place in a phased able. This allows any o move into safe areas water erosion of the	ΝΟ ΙΜΡΑ	СТ

	SY	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
POTENTIAL TERRESTRIAL BIODIVERSITY IMPACTS FAUNAL PROCESSES	Impacts to faunal processes because of the activity such as erection of barriers to movement. <i>Cumulative impact, on a localised scale, would be XX</i> <i>should the Taaibos and Soutrivier WEF clusters</i> <i>construction timelines overlap. However, it is</i> <i>important to note that the 5 WEFs and their</i> <i>associated infrastructure are proposed by the same</i> <i>developer and the EMPrs will be prepared to the</i> <i>same standard.</i> <i>No-go alternative would result in no impact on XX.</i>	DIRECT CUMULATIVE NO-GO	LOCALISED	PERMANENT		MODERATE MODERATE ACT	LOW - LOW -	 The habitats and microhal project site are not unique in the general area, her associated with the footp significance if mitigation micro. Small mammals within around the affected area and likely to be transient it most likely vacate the arc commences. As with all cois a latent risk that the accidental mortalities. Sumade to reduce this risk. special concern is low, at there will be any impact the species because of the act is compared to mammals, a could arise. It is recommisearch and rescue be construction commences, has shown that there mortalities as these species thus move onto site of underway. A retile handled such circumstances. Should any amphibian between wetland areas appropriate measures (it suspending works in the of the such circumstances).
POTENTIAL TERRESTRIAL BIODIVERSITY IMPACTS FAUNAL SPECIES	Loss of faunal SSC due to construction activities: Activities associated with bush clearing, killing of perceived dangerous fauna, may lead to increased mortalities among faunal species. <i>Cumulative impact, on a localised scale, would be</i> <i>moderate should the Taaibos and Soutrivier WEF</i> <i>clusters construction timelines overlap. However, it</i> <i>is important to note that the 5 WEFs and their</i>	DIRECT CUMULATIVE NO-GO	LOCALISED	PERMANENT PERMANENT	DEFINITE DEFINITE NO IMP	MODERATE MODERATE	MODERATE - MODERATE -	 A pre-commencement fau is recommended. Respective permits to be of No animals are to be han the course of operations. Workers are NOT allowed species.
POTENTIAL RISKS TO FAUNA SPECIES OF CONSERVATION CONCERN: HABITAT LOSS,	associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on faunal species. The development may fragment an already highly fragmented landscape which may create barriers to geneflow where subpopulations are disconnected and isolated. Roads and fences can affect the quality and quantity of available habitat, most notably through fragmentation, creating barriers to	DIRECT CUMULATIVE NO-GO	LOCALISED LOCALISED	PERMANENT PERMANENT	DEFINITE DEFINITE NO IMP	MODERATE MODERATE ACT	MODERATE - MODERATE -	 Minimising the project j existing roads and disturb technically possible. Locate developments an sensitive habitats, this incl buffer zones for turbi

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
abitats present on the	DIFFICULT	LOW -
ue and are widespread	DIFFICULT	LOW -
ence the local impact tprint would be of low measures are adhered	ΝΟ ΙΜΡ	ACT
the habitat on and a are generally mobile		
t to the area. They will		
area once construction		
construction sites there		
there will be some		
Specific measures are		
The risk of species of		
and it is unlikely that		
to populations of such ctivity.		
rds are less mobile		
and some mortalities		
mended that a faunal		
e conducted before		
s, although experience		
could still be some		
ies are mobile and may		
once construction is		
ler should be on call for		
n migrations occur		
s during construction,		
(including temporarily		
affected area) should		
		1011/
unal search and rescue	DIFFICULT DIFFICULT	LOW - LOW -
obtained beforehand.	NO IMP	
armed or killed during		
ed to snare any faunal		
footprint by utilising	DIFFICULT	LOW -
rbed areas as much as	DIFFICULT	LOW -
	NO IMP	
away from identified		
cludes no go zones and		
bine pads, electrical		

	SYI	NTH <u>ESIS O</u>	F S <u>PECIA</u>	LIST <u>IMPA</u>	CTS AS <u>EXT</u>	RACTED FROM	THE SPECIA	LIST <u>REPC</u>	RTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION		MITIGATION ME
DEGRADATION AND FRAGMENTATION POTENTIAL RISKS TO FAUNA SPECIES OF CONSERVATION CONCERN: DISTURBANCE	 animal movement. Erosion from construction may degrade the habitat and direct loss of habitat will occur due to necessity of access roads. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact on habitat loss, degradation and fragmentation with regards to faunal species.</i> Disturbance will be primarily in the form of visual and noise effects as well as general human activities. Visual stimuli from movements of the turbine blades may cause a disturbance which may be far reaching due to the site being open and unobscured. Noise effect from construction and 	DIRECT CUMULATIVE NO-GO	LOCALISED	PERMANENT PERMANENT	DEFINITE DEFINITE NO IMPA	MODERATE MODERATE	MODERATE - MODERATE -	 construct. Implemer erosion co Careful pl length oj habitats identified may creat Establish barriers o physical b Develop managen Implemer measures reduce no Temporal restriction turbine o 	anning of road la f roads traversi and rocky ridg as Very high or la te barriers and fr wildlife passe are found; this p parriers such as ro and implement <u>nent plan.</u> nting adequate i, including the pise output from (curtailment) re n strategies car operation during
	associated human activities during this phase is highly probable. This impact will reduce once the WEF is operational however there will be continued noise pollution from turbines from both the hub and the swish of the blades. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on disturbance of faunal species of conservation concern.</i>							 condition where a during the Targeted wind fac turbines where a This may windspee generate during ge noise dur Minimise animals a Minimize construct within 10 habitats. 	s when wildlife negative impa e monitoring pro operational tim cility managers under certain negative impact y require chan d at which turbin energy (cut-in sp entle wind and ing periods of low development l light pollutio t night;
POTENTIAL RISKS TO	There is an increased collision risk from increased	DIRECT	LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -		planning of road
FAUNA SPECIES OF CONSERVATION	traffic levels at the site and in the general area. This impact is likely to be of highest concern during	CUMULATIVE NO-GO	LOCALISED	PERMANENT		MODERATE	MODERATE -	-	nat traverses th bitats that have
CONSERVATION CONCERN: MORTALITY FROM ROAD COLLISION	impact is likely to be of highest concern during construction but is also expected during the operational phase. Roads and roadsides may attract SCC such as Riverine Rabbits and Karoo Dwarf Tortoises due to verge edge enhancement of vegetation and roads may be used to facilitate movement, thus further increasing collision risks. Access roads that traverse riverine habitats require careful planning and monitoring to reduce risk of	NO-GO			NO IMP/	401		Very high Use existi Roadkill r and exter habitats Monitorir construct construct	or high sensitivi ng roads as muc nonitoring progr rnal public road and wildlife ng programs mus ion phase and ion and post-cou d over different s

REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
DIFFICULT	LOW -
	LOW -
NO IMPAG	
	-1
DIFFICI II T	LOW -
	LOW -
NO IMPAG	
	DIFFICULT DIFFICULT NO IMPAC

ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEAS
	rabbit mortality. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on faunal species in relation to road collision mortality.							 Pre-construction road platarget sites for wildlife considered process and with pre-commonitoring findings. We structures must be made in road planner, construction wildlife biologist. This is geneffective than retro fixing extensional program. Assess efficiency of road pproaches via a post-implemonitoring program. Implementation of speed internal access WEF roads (external public roads (60km). Reduced speed limits of 30 (both internal and externad Very high sensitivity areas in riverine habitat, koppies ar may harbour sensitive spe have higher species diversity. Wildlife warning signage an measures where roads crooking sensitivity areas. Education and awareness of and their habitat must for induction procedures to awareness, respect and respect the environment for all staff. Inductions on safe wildlife proceedures to reduce possible injury and roads. There is higher risk of collisare more active which is the afternoon to early morning. a low speed limit (30km implemented. Night-time avoided as much as possibl speed needs to be reduce avoid collisions. Lagomorph rabbits) often freeze in head headlights to be momentaallow the animal to move of Reduced speeds also need to during reduced visibility conditions that have been of Induction must include vehicle/wildlife collision or the appointed Roadkill monit.

EASURES

REVERSABILITY/ MITIGATION

SIGNIFICANCE POST-MITIGATION

planning to identify e crossing structures dered during the EIA e-construction roadkill Wildlife crossing de in consultation with uction manager and s generally more cost g existing roads.

roadkill mitigation nplementation roadkill

eed limits on both ds (40km/h) as well as Dkm/h).

f 30km/h where roads ernal) cross High and as identified; including as and ecotones which species and generally ersity and abundance e and speed reduction

cross High and Very

ess campaigns on SCC of form part of staff to help increase responsibility towards staff and contractors.

ife passing and driving and roadkill alongside

collision when animals is typically from late ing. During these times 0km/h) needs to be ne driving should be ssible but if necessary, duced significantly to orph species (hares and headlights and require entarily turned off to e off the road.

ed to be implemented ility such as misty on observed on the site. de reporting of any n or found roadkill to nonitoring personnel. slow-moving species,

f Tortoises, during the IUCN guidelines for

	SY	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST REPORTS		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
								translocation of sensitive species should be consulted. Tortoises will need to be carefully relocated and provided shelter and water-rich food as well as monitoring of threatened species to ensure of their survival. Should a subpopulation be found further consultations with a herpetologist will be required for appropriated mitigation.		
POTENTIAL RISKS TO	The cumulative impact is of concern, given the fact	DIRECT	LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	→ It is important to evaluate the consequences of	DIFFICULT	LOW -
FAUNA SPECIES OF	that the renewable-energy industry is rapidly		LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	each development before the next is begun.	DIFFICULT	LOW -
CONSERVATION	expanding in South Africa. The local fauna is already	NO-GO			NO IMPA	СТ		 Use a precautionary approach and aim to minimize pagative effects even when the 	NO IMP	ACT
CONCERN:	impacted and threatened by past and current land use and the combination of these existing							minimise negative effects even when the effects are not fully known.		
CUMULATIVE IMPACT	anthropogenic impacts with planned developments							 Ensure the construction phase is done in as 		
	may impact the local fauna with unexpectedly large							short a period as possible and avoid breeding		
	effects. Cumulative effects can also result where							season, typically in the spring after good rains.		
	the construction phase occurs at several locations simultaneously or if a new project begins							 Construction needs to be done during daytime, avoiding noise and disturbance when faunal 		
	construction immediately following the completion							communities are most likely active, particularly		
	of another. Cumulative effects can cause a small							where the construction is in proximity to their		
	localized effect (which may have a limited effect on							habitat. Sensitive habitats near construction		
	its own) to have a significant impact on population							will need to be clearly marked.		
	level as there may be thresholds where the cumulative effects increase disproportionally.							 Relating construction phase of the development with neighbouring developments 		
	cumulative effects increase disproportionally.							and farming activity to ensure construction		
	Cumulative impact, on a localised scale, would be							does not begin immediately after the		
	moderate should the Taaibos and Soutrivier WEF							completion of another or simultaneously.		
	clusters construction timelines overlap. However, it							 The developer instigates a proactive mitigation 		
	is important to note that the 5 WEFs and their associated infrastructure are proposed by the same							measure by initiating a multi-stakeholder dialogue at a workshop to clarify these		
	developer and the EMPrs will be prepared to the							concerns and how they might be taken forward		
	same standard.							and co-funded. The aim of this mitigation is to		
	No-go alternative would result in no impact from a							reduce current impacts that threaten the		
	cumulative faunal species of conservation concern							survival of SCC populations. We recommend a		
	loss perspective.							biodiversity wildlife corridor approach whereby		
								protecting sensitive habitats is made a priority. This may include species refuge areas where no		
								form of indiscriminate wildlife killing/snaring is		
								allowed, no or highly reduced livestock grazing,		
								and no pest control including locust spraying is		
								carried out.		
								 Poaching and the use of hunting dogs at site is prohibited. 		
POTENTIAL RISKS TO	The effect of the wind farm on one species may	DIRECT	LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	▲ Initiate a general Fauna Biodiversity	DIFFICULT	LOW -
FAUNA SPECIES OF	have indirect cascading effects (knock on effect) on	CUMULATIVE		PERMANENT	DEFINITE	MODERATE	MODERATE -	Monitoring program	DIFFICULT	LOW -
CONSERVATION	other species within the same community due to	NO-GO			NO IMPA	СТ		A Fauna Biodiversity program must be initiated	NO IMP	ACT
CONCERN:	ecological relations to one another. This means that							pre-construction to have baseline population		
CASCADING IMPACT	an effect on one species may in turn affect many others within the same ecosystem. Cascading							status and monitoring must be ongoing post- construction to identify any changes in		
ACROSS TROPHIC	effects may be complex and unpredictable as it may							occupancy in certain species' population which		
LEVELS	be the result of different types of interactions							may in turn indirectly impact other fauna		
	including competition, predation, parasitism, or							populations.		

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	symbiosis. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no cascading impact across the trophic levels due to the proposed WEF					, 		We recommend the use of methods including and no trapping in diverse habite trapping for SCC; small with the use of Sherma Conservation Scent Dete assist in detecting SCC.
					VISUAL IMPACT A			
POTENTIAL VISUAL IMPACT OF	During the construction period, there will be an increase in heavy vehicles utilising the roads to the	DIRECT	LOCALISED	SHORT TERM	PROBABLE	SEVERE	HIGH -	 Ensure that vegetation removed during the const
CONSTRUCTION ON SENSITIVE VISUAL	construction sites that may cause, at the very least, a visual nuisance to other road users and	CUMULATIVE	LOCALISED	SHORT TERM	POSSIBLE	SEVERE	HIGH -	 Reduce the construction p logistical planning
RECEPTORS IN CLOSE PROXIMITY TO THE FACILITY	 landowners in the area in close proximity (within 5km). Within the region, dust as a result of construction activities may also be visible, as such it will result in a visual impact occurring during construction. This impact is likely to be of high significance before mitigation and moderate significance post mitigation on the identified sensitive visual receptors within this zone: Users of the various secondary roads Residents of the following homesteads: Stoeifontein The following homesteads are located on farm portions earmarked for the Victoria West WEF, thereby reducing the probability of this impact occurring on these specific receptors (i.e. it is assumed that these landowners are supportive of WEF developments and their associated visual impacts): Liebenbergsdam Soutrivier Bonnievale Cumulative impact, on a localised scale, would be high should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no visual impacts related to construction activities. 				NO IMPA	ACT		 implementation of resourd. Plan the placement of temporary construction order to minimise vegeta already disturbed areas) vegeta and vegeta and vegeta and vegeta and vegeta and vegeta area (if not removed daily) regularly at licensed wast Reduce and control con approved dust suppression when required (i.e., when apparent). Restrict construction active whenever possible in ord impacts. Rehabilitate all disturbed after the completion of conditional disturbed after the completion disturbed after the completind disturbed after the completion disturbed after the completio

MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
se of multiple monitoring d not limited to; camera abitats, targeted camera nall mammal monitoring rman traps; the use of Detection Dog teams to		
ion is not unnecessarily porstruction period.	MODERATE	MODERATE -
on period through careful g and productive cources.	MODERATE	MODERATE-
of lay-down areas and on equipment camps in getation clearing (i.e., in as) wherever possible. The sea and movement of a and vehicles to the on site and existing access e, litter, and disused is are appropriately stored ily) and then disposed waste facilities. construction dust using ression techniques as and whenever dust becomes activities to daylight hours order to reduce lighting rbed areas immediately of construction works.		

				1	_	RACTED FROM		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	•				WAKE EFFECT	T STUDY		
lone identified by specia	list							
				46	OPERATIONA GRICULTURAL IMPA			
OCCUPATION OF LAND	Agricultural land directly occupied by the	DIRECT	STUDY	MEDIUM	POSSIBLE	DEFINITE	LOW -	▲ The allowable developmen
	development infrastructure will become restricted		AREA	TERM				and medium agricultural s
	for agricultural use, with consequent potential loss of agricultural productivity for the duration of the	CUMULATIVE	STUDY AREA	MEDIUM TERM	POSSIBLE	DEFINITE	LOW -	capability of < 8, as this s be, is 2.5 ha per MW.
	project lifetime. The small and widely distributed	NO-GO			NO IMPA			proposed facility of 270
	nature of the agricultural footprint of the facility				_			agricultural footprint of 62
	means that only an insignificant proportion of the							facility being assessed
	available agricultural land is impacted in this way.							agricultural footprint of therefore confirmed th
	The potential cumulative agricultural impact of							footprint of this developm
	importance is a regional loss (including by							the allowable limit. I
po Cu mo clu	degradation) of future agricultural production							approximately eight time
	potential.							the development limits al
	Cumulative impact, on a localised scale, would be							
	moderate should the Taaibos and Soutrivier WEF							
	clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same							
	developer and the EMPrs will be prepared to the							
	same standard.							
	No-go alternative would result in no impact related to disturbance of agricultural system as no known							
	construction activities are present on site.							
SOIL EROSION AND	Erosion can occur as a result of the alteration of the	DIRECT	STUDY	SHOPT	PROBABLE	MODERATE	LOW -	Mitigation measures to prev
DEGRADATION	land surface run-off characteristics, predominantly	DIRECT	AREA	SHORT TERM	TRODADLE	MODERATE		are all inherent in the project
	through the establishment of hard surface areas	CUMULATIVE	STUDY	SHORT	PROBABLE	MODERATE	LOW -	standard, best-practice for cor
	including roads. Soil erosion is completely		AREA	TERM				. A sustain of stains
	preventable. The storm water management that will be an inherent part of the road engineering on	NO-GO	-			that will occur to	-	• A system of storm which will prevent erosion, wi
	site and standard, best practice erosion control				• • •	sed development. Th nfall, which is likely to	-	of the road engineering on sit
	measures recommended and included in the EMPr,			•	-	will come under incre		erosion must be attended to
	are likely to be effective in preventing soil erosion.					the no-go option wo	•	integrity of the erosion contro
	Loss of topsoil can result from poor topsoil management during construction related		proposed of	development f	from contributing	g to the environmer	ntal, social and	must be amended to prevent occurring there.
	excavations.			enefits associa	ited with the deve	lopment of renewable	energy in South	 ▲ Any excavations
			Africa.					construction phase, in a
	Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF							vegetated at the end of the
	clusters construction timelines overlap. However, it							must separate the upper the rest of the excavation
	is important to note that the 5 WEFs and their							a separate stockpile. Wh
	associated infrastructure are proposed by the same							back-filled, the topsoil mu
	developer and the EMPrs will be prepared to the							so that it is at the surface
	same standard. No-go alternative would result in no impact related							be stripped in areas that a the majority of the site, in
	to disturbance of agricultural system as no known							lay down areas, it will be

MEASURES

REVERSABILITY/ MITIGATION

ent limit on land of low	REVERSIBLE	LOW -					
l sensitivity with a land							
site has been verified to	REVERSIBLE	LOW -					
This would allow the							
70 MW to occupy an	NO IMPACT						
675 hectares. The wind							
ed will occupy an							
of < 81 hectares. It is							
that the agricultural							
ment will be well within							
It will in fact be							
nes smaller than what							
allow.							
event soil degradation	REVERSIBLE	LOW -					
ect design and / or are	NEVENSIDEE						
onstruction sites.	REVERSIBLE	LOW -					
Unstruction sites.	NEVENSIDEE						
n water management,	NO IMPA	<u></u>					
will be an inherent part							
site. Any occurrences of							
o immediately and the							
rol system at that point							
nt further erosion from							
it juither crosion from							
s done during the							
areas that will be re-							
the construction phase,							
r 30 cm of topsoil from							
on spoils and store it in							
When the excavation is							
nust be back-filled last,							
ce. Topsoil should only							
t are excavated. Across							
including construction							
be much more effective							
ain the topsoil in place.							

	511						THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES
								If levelling requires significant cutting, topsoil should be temporarily stockpiled and then re- spread after cutting, so that there is a covering of topsoil over the entire surface.
INCREASED FINANCIAL SECURITY FOR FARMING	Reliable and predictable income will be generated by the farming enterprises through the lease of the	DIRECT	STUDY AREA	SHORT TERM	PROBABLE	MODERATE	LOW +	
OPERATIONS	land to the energy facility. This is likely to increase their cash flow and financial security and could	CUMULATIVE	STUDY AREA	SHORT TERM	PROBABLE	MODERATE	LOW +	
	improve farming operations and productivity through increased investment into farming.	NO-GO			NO IMPA	ст		
	Cumulative impact, on a localised scale, would be LOW should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of agricultural system as no known construction activities are present on site.							
IMPROVED SECURITY AGAINST STOCK THEFT	Improved security against stock theft and other crime due to the presence of security infrastructure	DIRECT	STUDY AREA	SHORT TERM	POSSIBLE	SLIGHT	LOW +	
AND OTHER CRIME	and security personnel at the energy facility.	CUMULATIVE	STUDY	SHORT	POSSIBLE	SLIGHT	LOW +	
	Cumulative impact, on a localised scale, would be LOW should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of agricultural system as no known construction activities are present on site.	NO-GO			NO IMPA	СТ		
					AQUATIC IMPACT A	ASSESSMENT		
PROACTIVE	No direct impacts perceived.	DIRECT	LOCALISED	LONG TERM	UNLIKELY	SLIGHT	LOW -	▲ No indiscriminate movement of construction
MONITORING TO ENSURE STRUCTURAL	Consulation important on a localized and a would be	CUMULATIVE	LOCALISED	LONG TERM	UNLIKELY	SLIGHT	LOW -	equipment through the freshwater features
ENSURE STRUCTURAL	Cumulative impact, on a localised scale, would be	NO-GO			ΝΟ ΙΜΡΑ	СТ		may be permitted during standard operational activities or maintenance activities. Use must
	low should the Tagihas and Soutrivier WEE clusters							
INTEGRITY IS	low should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely.							be made of the existing freshwater ecosystem
	low should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and							be made of the existing freshwater ecosystem crossings only;
INTEGRITY IS MAINTAINED AND TO	operational timelines overlap, which is likely.							
INTEGRITY IS MAINTAINED AND TO IDENTIFY EARLY SIGNS	operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to							 crossings only; Vehicles used in the development site must be regularly washed (on a non-permeable surface
INTEGRITY IS MAINTAINED AND TO IDENTIFY EARLY SIGNS	operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.							 crossings only; Vehicles used in the development site must be regularly washed (on a non-permeable surface or off-site) to avoid the dispersal of seeds on
INTEGRITY IS MAINTAINED AND TO IDENTIFY EARLY SIGNS	operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related							 crossings only; Vehicles used in the development site must be regularly washed (on a non-permeable surface or off-site) to avoid the dispersal of seeds on any alien or invasive species into the freshwater
INTEGRITY IS MAINTAINED AND TO IDENTIFY EARLY SIGNS	operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.	DIRECT	LOCALISED	LONG TERM	POSSIBLE	SLIGHT	LOW -	 crossings only; Vehicles used in the development site must be regularly washed (on a non-permeable surface or off-site) to avoid the dispersal of seeds on

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
nificant cutting, topsoil stockpiled and then re- that there is a covering e surface.		
,	ACHIEVABLE	LOW +
	ACHIEVABLE	LOW +
	NO IMP <i>i</i>	ACT
	ACHIEVABLE	LOW +
	ACHIEVABLE	LOW +
	NO IMP <i>i</i>	ACT
ement of construction e freshwater features	REVERSIBLE REVERSIBLE	LOW - LOW -
g standard operational ce activities. Use must freshwater ecosystem velopment site must be non-permeable surface e dispersal of seeds on cies into the freshwater	NO IMPA	
up of debris and excess identified and when	REVERSIBLE	LOW -

REVERSIBLE

LOW -

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
AND	load) and turbulent flows when surface water is present; Higher flood peaks into the freshwater	NO-GO	AREA		NO IMP/	 ΔCT		removed by hand to prev and potential damage to in
AND DISTURBANCE TO THE VEGETATION WITHIN AND SURROUNDING THE FRESHWATER FEATURES.	features due to reduced surface roughness in the freshwater features. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely.</i> <i>However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact related to disturbance of freshwater features.</i>	NU-GU						 Routine maintenance of a undertaken to ensure that flow and subsequent erosic road crossings/instream i maintenance activities m undertaken after high rainf Stormwater runoff from must be monitored (by the ensure it does not result freshwater features. Stonallowed to diffusely splandscape, by ensuring roughness in the freshwate vegetation and rocky areas Maintenance vehicles m dedicated access roads an movement in the freshwate permitted; During periodic maintenan roads, monitoring for undertaken; and Should erosion be observed crossings/instream infrast must be rehabilitated by gully and revegetation. Use rocks collected from the sinfill any area prone to eros must be sustainably sourced surrounding freshwater
				Δ	VIFAUNAL IMPAC	TASSESSMENT		rivers in the local area).
DISPLACEMENT THROUGH	Disturbance during the construction, operational and decommissioning phases can negatively affect	DIRECT	STUDY AREA	LONG-TERM	DEFINITE	SLIGHT	LOW -	 Disturbance can be mana most effectively at the designation
DISTURBANCE	all avifauna on an individual or population level by increasing stress, decreasing food and habitat	CUMULATIVE	STUDY AREA	SHORT TERM	DEFINITE	MODERATELY SEVERE	HIGH -	important nesting, roosting of sensitive species during
	availability, causing displacement into potentially	NO-GO		1	NO IMP/			layout design, which has be

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
revent future flooding		
b infrastructure; of the roads must be pat no concentration of posion occurs due to the minfrastructure. Such must specifically be ainfall events; m the road crossings the O&M Manager, to sult in erosion of the Stormwater must be spread across the ng adequate surface vater feature (through eas); must make use of and no indiscriminate water features may be nance activities of the r erosion must be ved, caused by the road rastructure, the area by infilling the erosion thereof with suitable Jse can also be made of e surrounding area to prosion (however, these reed not taken from the er features including	NO IMPAG	T
anaged and mitigated esign stage by avoiding	ACHIEVABLE	LOW -
ting and foraging areas ring site selection and	ACHIEVABLE	MODERATE -
s been achieved for the		

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIAL	IST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
	 less suitable neighbouring environments, and ultimately potentially decreasing reproductive success (Bennun et al. 2021, Jenkins et al. 2017, Madders & Whitfield 2006, Marques et al. 2021). An avoidance of the WEF at a macro scale (barrier effect), can lead to displacement, but can also lead to no response (if the bird avoiding the WEF area does not alter it's habitat use otherwise) (Laranjeiro et al. 2018, May 2015). The impact of disturbance on avifauna is rated as potentially negative and would affect the avifauna of the PAOI for the duration of all phases. Some displacement is certain to occur, while some attraction may also occur, but the impact will cease with the completion of the phases and is reversible. The impact severity is potentially moderately severe if breeding areas of SCC are affected. This results in the significance of the impact rated as potentially moderate negative before mitigation for the construction and decommissioning phases and as low negative for the operational phase. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact related to disturbance of avifaunal habitats.</i> 							proposed development (em In order to ensure no SCCs the proposed disturbance fr commencement of decommissioning activities the site conducted within commencement of constrareas that require addition construction and limit ne sensitive species.
DISPLACEMENT THROUGH HABITAT	According to the project description the proposed	DIRECT	STUDY AREA	LONG-TERM	DEFINITE	MODERATELY SEVERE	MODERATE -	 Reversibility is considered rehabilitation to some
LOSS	permanent development footprint is relatively small within the development site, some habitat	CUMULATIVE	STUDY AREA	LONG-TERM	DEFINITE	MODERATELY SEVERE	HIGH -	construction phase.
	loss will definitely occur. Many bird species will persist within the operational WEF site, due to the relatively small footprint, however some avian species may be displaced from the area. Some habitat could occur due to the road and cable network and this would impact mainly on terrestrial species such as Ludwig's Bustard, Karoo Korhaan, Northern Black Korhaan. The impact of habitat loss on avifauna is negative and would affect the site directly and surrounding areas indirectly through displacement. Therefore, the spatial extent of the impact is rated as the study area.	NO-GO			NO IMPA			 marginally possible by retaining indigenous vegetation as particular the footprint of all association including buildings, election and the width and lenger rehabilitating as many of possible following construction and a avifaunal walkthrough can nesting and breeding site protected until the breeding

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
embedded mitigation). Cs are breeding within e footprint prior to the construction or ries, a walkthrough of in the month prior to struction can identify onal mitigation during negative impacts on		
ed to be possible with ne degree for the	ACHIEVABLE	LOW -
n mitigation is only	ACHIEVABLE	MODERATE -
etaining as much of the spossible, minimising ociated infrastructure, ectrical infrastructure ength of roads, and disturbed areas as ruction. decommissioning an can identify any active sites, which must be ding has concluded.	NO IMPA	CT

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTR	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
MORTALITY FROM COLLISIONS WITH TURBINES	clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of avifaunal habitats. Birds can collide with wind turbines and the monopoles if they do not avoid them (Kunz et al. 2007), and their ability to avoid turbines can be site- , species- and weather- and turbine-specific (Cook et al. 2014, Drewitt & Langston 2006, Marques et al. 2014). Mortalities from collisions with turbines can vary greatly between sites (Sovacool 2009) and the effect of mortalities on the species population can vary greatly depending on the species resilience, with large-bodies, long-living species with a low reproductive rate and slow maturation rates being disproportionately affected. In addition to being more prone to collisions due to body size, even low fatality rates can have population-level effects, particularly for already heavily impacted upon SCC (Carrete et al. 2009, Drewitt & Langston 2006, Marques et al 2014). Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of avifaunal habitats.	DIRECT CUMULATIVE NO-GO	REGIONAL REGIONAL	LONG-TERM LONG-TERM	LIKELIHOOD)	SEVERE SEVERE CT	HIGH - HIGH -	 Pre-construction monitori Practice Guidelines. A specialist raptor nest sur modelling were comple selection of the facility site the turbine layout, as has project. The proposed turbine layo high and medium collision Eagle identified by the VEH to avoiding high flight activ species, nest buffers that Martial Eagle, Secretaryl and Pale Chanting Goshav buffers of ridgelines, wetlo Proactive minimizing mitig are recommended management measures, artificial rock piles use minimising perching and r within the facility, bl implementing post-constru- tion The painting of one turbin colour has shown to lower successfully (May et al currently being impleme (in-situ) at one WEF in S mitigation is potentiall
	In Couth Africa a number of andorsia and	DIRECT	PECIONAL		DDDDADLE	crurpr		proactively painting the turbines as legally construction, at a fraction reactive approach is highl
MORTALITY FROM COLLISIONS WITH POWERLINES	In South Africa, a number of endemic and threatened species are known to be significantly affected by collisions (Taylor et al. 2015), including	DIRECT CUMULATIVE	REGIONAL REGIONAL	LONG-TERM LONG-TERM	PROBABLE PROBABLE	SEVERE SEVERE	HIGH - HIGH -	 The impact can be con burying all internal overhe the internal road netw

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
pring in line with Post	ACHIEVARIE	MODERATE
oring in line with Best	ACHIEVABLE ACHIEVABLE	MODERATE - MODERATE -
survey and collision risk	NO IMPA	
pleted prior to the		
ite and the selection of		
has been done for this		
yout avoids all areas of		
ion risk for Verreaux's		
ERA model, in addition		
tivity buffers of priority		
at were identified for		
rybird, Jackal Buzzard		
awk, as well as applied		
tlands and rivers.		
tigation measures that		
include habitat s, such as removing		
ised by eagle prey,		
d nesting opportunities		
blade painting and		
truction monitoring.		
ine blade in a different		
ver collisions by raptors		
al 2020), and this is		
nented retrospectively		
South Africa. As this		
ally highly effective,		
e blades of as many		
possible prior to		
tion of the cost of a		
hly recommended.		
ompletely avoided by	ACHIEVABLE	NO IMPACT
head powerlines along	ACHIEVABLE	MODERATE -
work. Where this is		

	SYI	NTHESIS O	F SPECIAI	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
	SCC's that were recorded in the area such as Ludwig's Bustard, Blue Crane, Secretarybird and Black Stork (Shaw et al. 2021). Ludwig's Bustard is particularly prone to collisions and made up 69% of carcasses found under powerlines in a two year study in the Karoo (Shaw 2013). Karoo Korhaan is also affected, but does not collide as frequently as Ludwig's Bustard, possibly due to their sedentary nature making them familiar with their area and their smaller size increasing their maneuverability (Shaw 2013). <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of avifaunal habitats.</i>	NO-GO			NO IMPA	ACT		 technically not possible, in collisions, line markers su and static bird flight divert used with some success. Where this is not possib overhead power line pote increases the probability of in a high negative, and u significance rating.
MORTALITY FROM ELECTROCUTIONS ON ELECTRICAL INFRASTRUCTURE	Large birds can be electrocuted or incur electric shock injuries when simultaneously contacting two uninsulated energised components of differing electric potential (phase-to-phase electrocution), or when contacting an uninsulated energised component and a path to ground (phase-to-ground- electrocution) (Dwyer 2006, APLIC 2006). Because electrocutions result from birds bridging air-gaps, larger birds with larger wingspans, such as Martial Eagle, are disproportionately affected (Slater et al. 2020). Most bird electrocutions occur at relatively low and medium voltage distribution systems, rather than with transmission systems where the separations created by longer insulators and wider air- gaps around wires are larger (APLIC 2006, Bennun et al. 2020, Slater et al. 2020). <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to disturbance of avifaunal habitats.</i>	DIRECT CUMULATIVE	REGIONAL	LONG-TERM	MAY OCCUR MAY OCCUR	DEFINITE DEFINITE	HIGH - HIGH -	 Bird electrocutions can be burying overhead powerlin separation between condelectrical potential at subst infrastructure, and by plac conductors, or by redirectinest away from conductors et al. 2017). If all overhead powerlin exposed electrical infrast substation is of a bird-frien the impact can be completed.
CUMULATIVE IMPACTS	Cumulative impacts assessed include the combination of all the impacts discussed above for this project, which may be higher than the sum of	DIRECT CUMULATIVE	REGIONAL REGIONAL	LONG-TERM LONG-TERM		DEFINITE DEFINITE	HIGH - HIGH -	 The only real mitigation p minimise cumulative minimising impacts for eac

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
p, in order to minimise such as bird flappers erters are being widely ssible, every meter of potentially significantly y of collisions resulting d unacceptable impact	NO IMPA	ΛСТ
be easily avoided by	EASILY ACHIEVABLE	NO IMPACT
rlines, and by creating	EASILY ACHIEVABLE	LOW -
onductors of differing bstations and electrical blacing insulation over ecting birds to perch or ors (APLIC 2006, Dwyer rlines are buried any astructure within the iendly insulated design, letely removed.	NO IMPA	ACT
n possible in order to	DIFFICULT	MODERATE -
impacts, beyond each project separately	DIFFICULT	MODERATE -

ISSUE	DESCRIPTION OF IMPACT	NATURE OF	SPATIAL	TEMPORAL	CERTAINTY	SEVERITY /	SIGNIFICANCE	MITIGATION MEA
		ІМРАСТ	SCALE (EXTENT)	SCALE (DURATION)	SCALE (PROBABILITY/ LIKELIHOOD)	BENEFICIAL SCALE	PRE- MITIGATION	
	impacts, as well as the associated two Soutrivier WEFs, the Soutrivier Solar PV Facilities and their associated OHPLs, and all known past, present and proposed projects in an area of 30 km surrounding the proposed development. In addition to the Soutrivier projects two WEFs are proposed within this radius: the Taaibos North WEF and associated OHPL, and the Taaibos South WEF and associated OHPL. All of these facilities are to ultimately connect to the Gamma MTS with one shared powerline from the Soutrivier Collector Substation to the Gamma Substation, which lowers the cumulative impact. The impacts of the cumulative projects will be negative by making a larger area of avifaunal karoo scrub habitat unavailable and of higher risk for SCC flying between Victoria West and Loxton. There is also a potential for an increased barrier effect being created by the combination of these projects, which would be a negative, regional, long- term impact. As these projects are not located on any major flyways, the probability of this occurring is however unlikely. The contribution of the Soutrivier central WEF to the cumulative impact in a 30 km radius is considered to be moderate, i.e., the cumulative impact will be lower but the cumulative significance rating will remain unchanged regardless of the Soutrivier Central WEF being constructed or not. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related</i>	NO-GO			NO IMP	ACT		during the EIA process, is Authority to ensure only pro that are practically n acceptable level, and the unacceptable negative cumulative impacts, and to implementation of author Management Progra compliance audits and enfo
	to disturbance of avifaunal habitats.				BAT IMPACT AS	SSESSMENT		
BAT FATALITY	Bat mortality (direct impact) through collisions with	DIRECT	STUDY	LONG TERM	PROBABLE	SEVERE	HIGH -	Avoid:
	wind turbine blades is the principal impact of wind energy facilities on bats (Cryan and Barclay 2009,		AREA					 No placement of turbines w
	Arnett et al. 2016).	CUMULATIVE	STUDY AREA	LONG TERM	PROBABLE	SEVERE	HIGH -	Minimise:
	Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will	NO-GO			NO IMP.	ACT		avoid impacts to lower f clutter-edge species (e.g., o long-fingered bat) Minimise the rotor diamete Turbine blades must be fea technique should be used

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
is for the Competent projects are authorised mitigatable to an that do not lead to e impacts, including d to ensure the correct horised Environmental grammes through nforcement.	NO IMPA	CT
rs within no-go areas.	REVERSIBLE	MODERATE -
ade sweep of 30 m to	REVERSIBLE	MODERATE -
r flying bats such as 1., Cape serotine, Natal	ΝΟ ΙΜΡΑΟ	CT
eter feathered, or a similar sed, to prevent free-		

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	be prepared to the same standard. No-go alternative would result in no impact related to bats.							 wheeling below the turbin Implement post-cons monitoring and apply add deterrents if fatality threst
LIGHT POLLUTION	Construction of infrastructure will increase ecological light pollution from artificial lighting	DIRECT AND INDIRECT	STUDY AREA	LONG TERM	PROBABLE	SLIGHT	LOW -	Avoid: No placement of substations
	associated with the substation and other operational and maintenance buildings associated	CUMULATIVE	STUDY AREA	LONG TERM	PROBABLE	SEVERE	HIGH -	maintenance buildings within Minimise:
and can cause direct mortality of inse the prey base for bats, especially bat are light-phobic. These species m displaced from previous foraging a lighting. Other bat species forage an attracted by higher numbers of insec bring these species into the vicinity of	dynamics (Horváth et al. 2009). Lighting attracts and can cause direct mortality of insects, reducing the prey base for bats, especially bat species that are light-phobic. These species may also be displaced from previous foraging areas due to lighting. Other bat species forage around lights, attracted by higher numbers of insects. This may bring these species into the vicinity of the project and indirectly increase the risk of collision with wind	NO-GO			NO IMP/	ACI		 Use as little lighting as poor of motion-sensor lighting using hoods, increase space units, and using low inte 1992, Stone 2012).
	Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to bats.							
	· · · · · · ·				HERITAGE IMPACT			
LOSS OF HERITAGE RESOURCES: STONE AGE	impact on previously undetected archaeological sites, human burials and the cultural landscape	DIRECT	STUDY AREA	SHORT TERM	MAY OCCUR	SLIGHT	LOW -	It is understood that no new ar and/or impacted during the op
OCCURANCES	might occur as a result of operational activities (site access, movement, maintenance, trespassing, natural elements, hazards etc).	CUMULATIVE NO-GO	STUDY AREA	SHORT AND LONG TERM	MAY OCCUR	SLIGHT	LOW -	project and the risk and severit should decrease once the proj
	Cummulative impact: The low frequency of significant archaeological resources documented in the project area and in its immediate surroundings implies low-severity short and long-term impacts on the heritage landscape Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to destruction of archaeological resources.							 Furthermore, the majority of si and heritage significance recorded and/or assessed in pro- <i>Cumulative impact:</i> The significance of the lan heritage is bound not to course of construction decommissioning of the pro- k lt should be noted a knowledge and the ini projects into significant of often result from Assessments conducted Provided that significant are conserved and that

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
ine cut-in speed. nstruction fatality Iditional curtailment or esholds are exceeded.		
s and operational and	REVERSIBLE	LOW -
n no-go areas.	REVERSIBLE	MODERATE -
possible, maximise use ng, avoid sky-glow by pacing between lighting tensity lighting (Rydell	NO IMPA	CT
areas will be disturbed	EASILY REVERSIBLE	LOW -
operations phase of the		
rity of heritage impacts ojects activate.	REVERSIBLE	LOW – AND LOW (+)
sites of archaeological would have been preceding phases.	NO IMPAC	
andscape in terms of its to change during the ion, operation and project. that archaeological initiation of research t archaeological sites Heritage Impact d for developments. nt archaeological sites t appropriate heritage		

	SY	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
				1		1		mitigation and managen followed, the cumul development can be posit
LOSS OF HERITAGE RESOURCES:	impact on previously undetected archaeological sites, human burials and the cultural landscape	DIRECT	STUDY AREA	SHORT TERM	PROBABLE	MODERATE	LOW -	It is understood that no new a and/or impacted during the op
ROCKSHELTER (SRc02) AND CORBEL BUILDING (SRC01)	might occur as a result of operational activities (site access, movement, maintenance, trespassing, natural elements, hazards etc).	CUMULATIVE	STUDY AREA	SHORT AND LONG TERM	MAY OCCUR	SLIGHT	LOW -	project and the risk and severit should decrease once the proj
	Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related	NO-GO						Furthermore, the majority of s and heritage significance recorded and/or assessed in During the Operations Phase, management measures for the and a corbel building (SRC01) retained -should be tracked site monitoring will be require
	to destruction of archaeological resources.				NOISE IMPACT A	SSESSMENT		
DAYTIME OPERATION	WTG will only operate during period with increased	DIRECT	LOCALISED	LONG TERM	UNLIKELY	SLIGHT	LOW -	▲ The significance of the no
OF WTG CONSIDERING THE WORST-CASE SPL	 winds, when ambient sound levels are higher than periods with no or low winds. As discussed and motivated in Section 6.4 of the Noise Impact Assessment (as proposed in Table 6-2 and illustrated in Figure 4-28), ambient sound levels will likely be higher, with this assessment assuming an ambient sound level of 41.5 dBA. Numerous WTG of the Soutrivier Central WEF operating simultaneously during the day will increase ambient sound levels due to air-borne noise from the WTG. The projected noise levels and the change in ambient sound levels is defined for the identified NSR in Appendix F, Table 4 of the Noise Impact Assessment. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> <i>No-go alternative would result in no impact related to daytime operational noise.</i> 	CUMULATIVE NO-GO	LOCALISED	LONGTERM	UNLIKELY NO IMP/	ACT	LOW -	no additional mitigation is
NIGHT-TIME OPERATION OF WTG CONSIDERING THE WORST-CASE SPL	WTG will only operate during period with increased winds, when ambient sound levels are higher than periods with no or low winds. As discussed and motivated in Section 6.4 of the Noise Impact Assessment (as proposed in Table 6-2 and illustrated in Figure 4-29), ambient sound levels will	DIRECT CUMULATIVE NO-GO	LOCALISED LOCALISED	LONG TERM LONGTERM	UNLIKELY UNLIKELY NO IMP/	SLIGHT SLIGHT ACT	LOW - LOW -	 The significance of the non- no additional mitigation is though future noise-moni- recommended.

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
ement procedures are ulative impact of sitive.		
areas will be disturbed operations phase of the rity of heritage impacts	REVERSIBLE	LOW -
ojects activate. f sites of archaeological	REVERSIBLE	LOW – AND LOW (+)
would have been in preceding phases. se, the continuation of he rock shelter (SRCO2) 1) -should the sites be d and continuous ECO red.	NO IMPA	СТ
noise impact is low and	REVERSIBLE	LOW -
is recommended.	REVERSIBLE	LOW -
oise impact is low and	REVERSIBLE	LOW -
n is recommended, nitoring is	REVERSIBLE	LOW -

ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
	likely be higher with this assessment assuming an ambient sound level of 41.5 dBA.									
	Numerous WTG of the Soutrivier Central WEF operating simultaneously at night will increase ambient sound levels due to air-borne noise from the WTG. The projected noise levels, the change in ambient sound levels as well as the potential noise impact is defined per NSR in Appendix F, Table 5 (using the criteria of the author/EARES) of the Noise Impact Assessment. It is expected that the sounds from the operating WTG may be audible at night.									
	Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to									
	the same standard. No-go alternative would result in no impact related to night-time operational noise.									

None identified by specialist

				RIVE	RINE RABBIT IMP	ACT ASSESSMENT		
DISTURBANCE	During operation, the turbines will generate noise	DIRECT	STUDY	SHORT	POSSIBLE	MODERATE	MODERATE -	 Turbines and pylons sh
THROUGH NOISE	which may have a negative impact on Riverine		AREA	TERM				of the buffers around r
POLLUTION	Rabbit activity and ecology. Wind turbines generate	CUMULATIVE	STUDY	SHORT	POSSIBLE	MODERATE	MODERATE -	▲ Given the lack of kn
	noise within the audible range as well as low-		AREA	TERM				buffer sizes to effe
	frequency "infrasound". Such noise may reduce the	NO-GO		•	NO IMPA	СТ		impacts on the species,
	species' ability to detect predators, or may result in							on the site in the fut
	elevated stress levels. Although there is little							should be instigated an
	mitigation possible for turbine noise, the potential							effect of the turbines o
	Riverine Rabbit habitat on the plateau has been							
	buffered by a minimum of 350m, which would							
	reduce the potential significance of this impact.							
	Given the distance between the turbines and High							
	sensitivity zones, it is assumed, with a low level of							
	certainty, that this impact would be of generally low							
	magnitude							
	Cumulative impact, on a localised scale, would be							
	low should the Taaibos and Soutrivier WEF clusters							
	operational timelines overlap, which is likely.							
	However, it is important to note that the 5 WEFs and							
	their associated infrastructure are proposed by the							
	same developer and the EMPrs will be prepared to							
	the same standard.							
	No-go alternative would result in no impact on the							
	local Riverine Rabbit population.							
DEGRADATION OF	The construction of roads, turbine hard-stands,	DIRECT AND	STUDY	MEDIUM	POSSIBLE	SEVERE	MODERATE -	🔺 Implement a Site Eros
HABITAT BY EROSION	roads and laydown areas etc. will result in the	INDIRECT	AREA	TERM				Control Plan to prevent
	destruction of currently intact vegetation, which	CUMULATIVE	STUDY	MEDIUM	POSSIBLE	SEVERE	MODERATE -	areas impacting downs

ould be located outside iverine habitat	REVERSIBLE	LOW -
owledge on adequate ctively mitigate noise	REVERSIBLE	LOW -
, if a population is found ure, a research project d funded to monitor the n the species		
sion Management and erosion from high-lying	REVERSIBLE	LOW -
stream ecosystems	REVERSIBLE	LOW -

	SYI	NTH <u>ESIS O</u>	F SPE <u>CIA</u>	LIST IMPA	CTS AS <u>EX</u> T	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	 may lead indirectly to soils being exposed and facilitating erosion. Erosion leads to river degradation through increased runoff and siltation processes. If erosion control is implemented, the resulting impact from erosion and would also be low. Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. 	NO-GO	AREA	TERM	NO IMP	ACT		
	No-go alternative would result in no impact on the							
	local Riverine Rabbit population.			SOC	IO-ECONOMIC IME	PACT ASSESSMENT		
NEW EMPLOYMENT AND ECONOMIC	Direct and indirect employment opportunities will manifest during the operational lifespan of the	DIRECT	REGIONAL	LONG TERM	DEFINITE	MODERATELY BENEFICIAL	MODERATE +	 Maximise local employme (from the local and dis
IMPACTS	Project and result in an increase in household earnings and improved livelihoods for the affected	CUMULATIVE	REGIONAL	LONG TERM	DEFINITE	MODERATELY BENEFICIAL	MODERATE +	wherever possible.
	 households through salaries and wages. WEF Projects of this nature employ between ten to fifteen permanent workers, of which about 50% would be skilled (Operations Manager, technicians, electricians, engineers, mechanics, Health & Safety Officer, etc.) and 50% semi-skilled (security, site maintenance, etc.). Temporary workers would be sourced through service providers to perform contract maintenance work such as civil works, site maintenance, site clearing to minimise the potential of veld fires, painting of buildings, plumbing and so forth. Job creation as a result of the funding spent on SED projects, such as construction / infrastructure projects, literacy / education programmes, sport development, etc. Indirect and induced employment created through procurement of components, equipment, goods and services to maintain the infrastructure and access roads. In additional to employment, economic impacts will manifest for the local and national economies through the manufacturing and services industries. Furthermore, agricultural land will be rezoned for renewable energy purposes, thereby increasing farm values and resulting in higher payable taxes for the local municipality. Induced economic impacts will realise locally and regionally through employment and procurement 	NO-GO			NO IMP/	ACT		employment, service pro required for maintenant municipal LED Units.

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
	NO IMPAC	CT
nent and procurement district municipalities)	DIFFICULT	MODERATE +
to obtain temporary	DIFFICULT	MODERATE +
roviders, SMME's etc. ince work, with the	NO IMPAC	T

	SYI	NTH <u>ESIS O</u>	F SPE <u>CIA</u>	LIST <u>IMPA</u>	CTS <u>AS EXT</u>	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION M
	and as a result more benefits for retail sales, leisure and hospitality, real estate, etc. will occur as more money circulates in the local economy.							
	Cumulative impact, on a localised scale, would be MODERATE should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would not impact the SEIA ratings significantly							
INCREASE IN LIVELIHOODS FOR	During the operational period the IPP will sign a long-term lease agreement with the affected	DIRECT	LOCALISED	LONG TERM	DEFINITE	MODERATELY BENEFICIAL	MODERATE +	 Consider the potential i taxes when lease agree
DIRECTLY BENEFITTING	landowners where turbines (up to 32) and associate infrastructure are located, thereby compensating	CUMULATIVE	LOCALISED	LONG TERM	DEFINITE	MODERATELY BENEFICIAL	MODERATE +	with landowners.
	them through an annual fee. Details of the option- to-lease agreements are confidential. However, the compensation will increase the landowners' incomes and revenue and can be used to further invest in their properties, increase productivity and employment, or improve financial security. It is however also worth noting that the rezoning of agricultural land for renewable energy infrastructure purposes usually results in higher payable property taxes, which, if not considered during the negotiation process, could result in a negative trade-off for landowners. <i>Cumulative impact, on a localised scale, would be MODERATE should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. <i>No-go alternative would result in no impact on XX.</i></i>	NO-GO	BECLONIAL					
SOCIO-ECONOMIC CONTRIBUTION /	A needs assessment will be done with the affected parties (municipalities, beneficiary communities,	DIRECT	REGIONAL	LONG TERM	DEFINITE	SLIGHTLY BENEFICIAL	LOW +	 Involve the local and dis Units in all processes wh
COMMUNITY DEVELOPMENT	etc.) to identify suitable projects for SED and ED, which is usually aligned with IDP and LED priorities.	CUMULATIVE	REGIONAL	LONG TERM	DEFINITE	SLIGHTLY BENEFICIAL	LOW +	 and suitable candidate training programmes are Make gender and You outcome of the needs a these groups are targete In conjunction with othe in the RE corridor / RE Zo a Forum (or similar str community developmen quarterly basis to provid transparency. Ensure further transparency
	Once the identified beneficiaries have been evaluated according to stringent evaluation criteria a contract is entered with them for the specified duration of the projects. Monitoring is done to ensure that the projects deliver as per their proposals. The IPP is required to report quarterly to the DMRE's Independent Power Producer Office (IPPO), which allows the IPPO to monitor use of SED and ED funds as committed by the Project (approximately	NO-GO			NO IMP#	ACT		

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
ncrease in rates and nents are negotiated	VERY DIFFICULT	MODERATE +
	VERY DIFFICULT	MODERATE +
	NO IMPAG	CT
trict municipalities' LED en SED and ED projects	ACHIEVABLE	MODERATE +
s for projects and/or e identified.	ACHIEVABLE	MODERATE +
uth issues a specific	NO IMPAC	СТ
analysis to ensure that ed.		
er IPP's in the region or		
one set up and establish ructure) to coordinate		
it initiatives. Meet on a		
le feedback and ensure		
arency and effective		

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTH	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
	 2.1% of revenue), as well as monitor the impact such contributions have on the communities through funding of existing projects and enterprises. Consultation with municipal stakeholders for this Project and for previous RE projects in other provinces identified the need for: More transparency during the annual monitoring processes so that it is clear for municipalities whether the budget allocated towards SED and ED has been used adequately; A greater commitment to link with the LED initiatives already identified in the IDP; Coordination between SED and ED initiatives of the various RE projects in the region through a central Forum or similar structure so that initiatives are not duplicated. This will also enable the implementation of larger projects that will have a greater impact for the region. <i>Cumulative impact, on a localised scale, would be MODERATE should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard.</i> No-go alternative would not impact the SEIA ratings significantly. 							 information sharing associated websites, emmunicipal noticeboards, if and meetings and existing of used by the various wards. Become involved in loc address existing backlog establishment and training Unit / Response Team for emergencies (e.g. with w farmers), hospital suppor training of staff where shortages, etc.) and so forth community based needs ar Link with existing NGO's a projects but make it a reat targets) for the estab community-driven develop for NGO's to assist in skill new groups and processes.
TRAINING / SKILLS DEVELOPMENT /	Training and skills development initiatives during operations are likely to occur in the following ways:	DIRECT	REGIONAL	LONG TERM	MAY OCCUR	SLIGHTLY BENEFICIAL	LOW +	 Identify existing NGO's to a skills transfer to communit
CAPACITY BUILDING	Formal and on-the-job training for permanent and temporary employees to allow them to perform	CUMULATIVE	REGIONAL	LONG TERM	MAY OCCUR	SLIGHTLY BENEFICIAL	LOW +	 Link with existing training programmes for SMME de
	 Training / enployees to allow them to perform their tasks safely and adequately; Training / education programmes through ED contributions; Offering of bursaries and internships; Skills development and capacity building of municipal Officials during the negotiation processes and stakeholder relations. The implementation and operation of RE projects require local government involvement to assist with managing stakeholder and community relations. This poses various challenges, as there might be shortfalls in terms of capacity and management experience within the municipalities. Emphasis is therefore again placed on the involvement of local government throughout operations to enable the Officials to gain experience and develop skills that will be to the advantage of the Project as well as for the municipalities over the 	NO-GO			NO IMPA	ACT		 done by municipal LED Unit In collaboration with other the region, establish a SI training centre to coordinat SMMEs and individuals. institutions such as Unive Education and Training increase the impact of development in the region.

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
through industry emailed newsletters, s, information events ag community channels ds. local initiatives that klogs, such as the ning of an Emergency for fire prevention and n volunteers such as port (e.g. equipment, ere there are staff orth to ensure that real s are met. 's and pre-established requirement (and set cablishment of new lopment processes and skills transfer to these ses.		
o assist in training and nities and Officials.	ACHIEVABLE	MODERATE +
ining workshops and development that are	ACHIEVABLE	MODERATE +
Units. her IPPs operational in SMME "Village" and inate training efforts of ils. Link with bigger iversities and Further g (FET) institutes to of training and skills on.	NO IMPA	CT

	SYI	NTHE <u>SIS O</u>	F SPECIA	LIST IMP <u>A</u>	CTS A <u>S EXT</u>	RACTED FROM	THE SPECIAL	.IST REPORTS	
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES	R
	long-term. Cumulative impact, on a localised scale, would be LOW should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would not impact the SEIA ratings significantly.								
LAND USE IMPACTS	The total footprint of the turbines and ancillary infrastructure is 76.68 ha post-construction. With a grazing capacity of 26 to 28 hectares per LSU, the loss in land amounts to a loss of only about 2.7 LSU. No high potential agricultural or cultivated land will be lost. <i>Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same davalance.</i>	DIRECT CUMULATIVE NO-GO	LOCALISED	LONG TERM	UNLIKELY UNLIKELY NO IMPA	SLIGHT SLIGHT ACT	LOW - LOW -	 None suggested 	
IMPACTS ON LAND VALUES	developer and the EMPrs will be prepared to the same standard.No-go alternative would not impact the SEIA ratings significantly.Incomes earned through long-term lease agreements will have an economic benefit and	DIRECT	STUDY AREA	LONG TERM	MAY OCCUR	SLIGHT	LOW -	 None suggested 	Vi
	could increase farmland values and returns for the duration of operations. However, impacts on farmland values remain an inconclusive topic, since emotional factors and negative perceptions associated with the wind farm facility (such as aesthetics, visual impacts, noise, sense of place and so forth) could affect individual prospective buyers' interests and possibly prolong sales periods, which could be to the detriment of land values. In addition to negative perceptions, other variables such as the impact on land uses, location, proximity of wind turbines and lease agreement terms can have a significant impact on the marketability of rural land holdings (Peardon, 2013). It is thus the opinion of the SEIA Specialist that negative impacts on land values during the operational phase of the Soutrivier Central WEF are unlikely, but that individual negative perceptions towards the infrastructure could affect property sales negatively in terms of possible prolonged sale	NO-GO	STUDY AREA	LONG TERM	MAY OCCUR NO IMPA	ACT	LOW -		

MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCI POST- MITIGATION
None suggested		LOW -
	VERY DIFFICULT NO IMP	LOW - ACT
None suggested	VERY DIFFICULT	LOW -
	VERY DIFFICULT	LOW -
	NO IMP.	ACT

	SY	NTH <u>ESIS O</u>	F S <u>PECIA</u>	LIST <u>IMPA</u>	CTS <u>AS EXT</u>	RACTED FROM	THE <u>SPECIA</u>	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	periods and fewer buyers' interests.							
	Cumulative impact, on a localised scale, would be							
	low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is							
	important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same							
	developer and the EMPrs will be prepared to the							
	same standard.							
	No-go alternative would not impact the SEIA ratings							
	significantly.			1	1	1	1	
IMPACTS ON TOURISM	Should impacts on tourism as a result of this project	DIRECT	STUDY	LONG TERM	MAY OCCUR	SLIGHT	LOW -	 Should the affected touri
	manifest, it will likely be due to visual impacts and		AREA					raise complaints and/or o
	impacts on sense of place. At this stage tourism in	CUMULATIVE	STUDY	LONG TERM	MAY OCCUR	SLIGHT	LOW -	with them and consider t
	the PKSDM district contributes 15.6% to the provincial GVA, of which the Ubuntu LM is only a	NO-GO	AREA		NO IMP/			turbine/s that they perce problematic.
	small contributor.	NO-GO						problematic.
	Only one accommodation / tourism establishments							
	has been identified in the study area, i.e.							
	Meltonwold, a historical Karoo Guest Farm located							
	about 8 km north of the nearest wind turbine. The							
	VIA (Nuleaf, October 2022) determined that the							
	potential visual impact on sensitive receptors							
	within the local area (5 – 10 km offset) is likely to be of high significance.							
	Cumulative impact, on a localised scale, would be							
	low should the Taaibos and Soutrivier WEF clusters							
	construction timelines overlap. However, it is							
	important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same							
	developer and the EMPrs will be prepared to the							
	same standard.							
	No-go alternative would not impact the SEIA ratings							
IMPACTS ON SENSE OF	significantly. The Project is located in an area with low crime	DIRECT	STUDY	LONG TERM	PROBABLE	MODERATE SEVERE	MODERATE -	 Implement an effective Li
PLACE	levels and has an overall feeling of solitude and	DIRECT	AREA	LONG TERM	PRODADLE	WODERATE SEVERE	WODERATE -	programme in collab
1 2 1 0 2	stillness. The social impact associated with the long-	CUMULATIVE	STUDY	LONG TERM	PROBABLE	MODERATE SEVERE	MODERATE -	landowners.
	term impact on the sense of place for this WEF		AREA					 Implement all mitigatio
	project would thus relate to a potential change in	NO-GO		•	NO IMP/	ACT		measures as proposed
	the landscape character, intrusion impacts and any							 Rehabilitate the veld to
	changes to the safety and social surroundings of							the operational phase.
	community members.							
	Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters							
	construction timelines overlap. However, it is							
	important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same							
	developer and the EMPrs will be prepared to the							
	same standard.							
	No-go alternative would not impact the SEIA ratings							
	significantly.							

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
ism establishment concerns, consult	VERY DIFFICULT	LOW -
to remove the eive could be	VERY DIFFICULT	LOW -
and Use Management poration with the	VERY DIFFICULT	MODERATE -
on and management	VERY DIFFICULT	MODERATE -
its original state post		

	SYI	NTHESIS O	F SPECIAI	LIST IMPA	CTS AS EXTR	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES
INTRUSION IMPACTS	The NIA (de Jager, October 2022) rated both	DIRECT	STUDY	LONG TERM	PROBABLE	MODERATE SEVERE	MODERATE -	 Implement an effective Land Use Management
	daytime and night-time operational activities (noises form wind turbines) when considering the worst-case scenario with a low negative	CUMULATIVE	AREA STUDY AREA	LONG TERM	PROBABLE	MODERATE SEVERE	MODERATE -	programme (procedures when gates are opened and closed, road maintenance, methods to address potential veld fires, no-go
	significance. The VIA (Nuleaf Planning & Environmental, October 2022) rated the visual impact on visual receptors in close proximity (within 5km) with a very high negative significance and those located between 5 and 20 km ranging from between high and moderate negative significance. The visual impact of shadow flicker is rated with a moderate significance. Traffic on local access roads will not increase significantly as maintenance and repairs to infrastructure will be done intermittently. <i>Cumulative impact, on a localised scale, would be XX should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would not impact the SEIA ratings</i>	NO-GO			NO IMPA	CT		 areas, etc.) in collaboration with the landowners. Implement all mitigation and management measures as proposed in the VIA and NIA Specialist reports.
CONTRIBUTION TO	significantly. The proposed Soutrivier Central WEF will generate	DIRECT	NATIONAL	LONG TERM	DEFINITE	SLIGHTLY	MODERATE +	 None suggested.
NATIONAL POWER SUPPLY	electricity and enhance the reliability and stability of supply that would contribute to economic development in the country as a whole.	CUMULATIVE	NATIONAL	LONG TERM	DEFINITE	BENEFICIAL SLIGHTLY BENEFICIAL	MODERATE +	
	Cumulative impact, on a localised scale, would be MODERATE should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would not impact the SEIA ratings significantly.	NO-GO						
POTENTIAL	Permanent or temporary loss of indigenous	DIRECT	LOCALISED	TERRESTR PERMANENT	IAL BIODIVERSITY DEFINITE	IMPACT ASSESSMENT SLIGHT	LOW -	 Blanket clearing of vegetation must be limited
TERRESTRIAL	vegetation cover because of site clearing. Site	CUMULATIVE	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	to the site. No clearing outside of required
BIODIVERSITY IMPACTS	clearing before construction will result in the blanket clearing of vegetation within the affected	NO-GO			NO IMPA	ст		footprint required for construction to take place.
VEGETATION	footprint. Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their							 Topsoil must be striped and stockpiled separately during site preparation and replaced on completion where revegetation will take place. Any site camps and laydown areas requiring clearing must be located within already
	associated infrastructure are proposed by the same							disturbed areas as far as possible, or away from

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
Land Use Management es when gates are	VERY DIFFICULT	MODERATE -
road maintenance, rential veld fires, no-go aboration with the	VERY DIFFICULT	MODERATE -
on and management in the VIA and NIA		
	VERY DIFFICULT	MODERATE +
	VERY DIFFICULT	MODERATE +
tation must be limited	DIFFICULT	LOW -
g outside of required	DIFFICULT	LOW -
construction to take	NO IMPA	
iped and stockpiled eparation and replaced revegetation will take vdown areas requiring		
cated within already		

ISSUE	DESCRIPTION OF IMPACT	NATURE OF	SPATIAL	TEMPORAL	CERTAINTY	RACTED FROM SEVERITY /	SIGNIFICANCE	MITIGATION ME
		ІМРАСТ	SCALE (EXTENT)	SCALE (DURATION)	SCALE (PROBABILITY/ LIKELIHOOD)	BENEFICIAL SCALE	PRE- MITIGATION	
	developer and the EMPrs will be prepared to the				LIKELIIIOOD			watercourses, alluvial arec
	same standard.							features (rocky outcrops).
	No-go alternative would result in no impact on							
	vegetation.							
POTENTIAL	Loss of flora species of special concern during pre-	DIRECT	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	 A flora search and resc
TERRESTRIAL BIODIVERSITY IMPACTS	construction site clearing activities. Several special of concern are known from surrounding areas,	CUMULATIVE NO-GO	LOCALISED	PERMANENT	DEFINITE NO IMPA	SLIGHT	LOW -	 before commencement. Respective permits to be o
	which could be destroyed during site preparation.	NO-GO						
FLORA SPECIES								
	Cumulative impact, on a localised scale, would be							
	low should the Taaibos and Soutrivier WEF clusters							
	construction timelines overlap. However, it is							
	important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same							
	developer and the EMPrs will be prepared to the same standard.							
	No-go alternative would result in no impact on floral							
	species.							
POTENTIAL	Susceptibility of post construction disturbed areas	DIRECT	LOCALISED	SHORT	DEFINITE	SLIGHT	LOW -	 Alien trees and weeds mu
TERRESTRIAL	to invasion by exotic and alien invasive species and			TERM				the site as per CARA/ NEM
BIODIVERSITY IMPACTS	removal of exotic and alien invasive species during	CUMULATIVE	LOCALISED	SHORT	DEFINITE	SLIGHT	LOW -	 A suitable weed and a
	construction. Post construction disturbed areas			TERM				management plan to
LIEN INVASIVE SPECIES	having no vegetation cover are often susceptible to	NO-GO			NO IMPA	ACT		construction and operatio
	invasion by weedy and alien species, which can not only become invasive but also prevent natural flora							 After clearing and constr an appropriate cover cro
	from becoming established.							should natural re-establish
								take place in a timely mo
	Cumulative impact, on a localised scale, would be							road verges. This will also
	low should the Taaibos and Soutrivier WEF clusters							
	construction timelines overlap. However, it is							
	important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same							
	developer and the EMPrs will be prepared to the same standard.							
	No-go alternative would result in no impact on alien							
	invasive species.							
POTENTIAL	Susceptibility of some areas to erosion because of	DIRECT	LOCALISED	SHORT	POSSIBLE	SLIGHT	LOW -	→ Suitable measures must
TERRESTRIAL	construction related disturbances. Removal of			TERM				areas that are susceptib
BIODIVERSITY IMPACTS	vegetation cover and soil disturbance may result in	CUMULATIVE	LOCALISED	SHORT	POSSIBLE	SLIGHT	LOW -	must be rehabilitated, and
	some areas being susceptible to soil erosion after			TERM				planted once construction
EROSION	completion of the activity.	NO-GO			NO IMPA	ACT		 Topsoil must be stripp congrately and replaced a
	Cumulative impact, on a localised scale, would be							separately and replaced
	low should the Taaibos and Soutrivier WEF clusters							occur, a suitable grass mu
	construction timelines overlap. However, it is							
	important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same							
	developer and the EMPrs will be prepared to the							
	same standard.							
	No-go alternative would result in no impact on							
DOTENTIAL	erosion.	DIRECT			DEFINITE	SUCUT		
POTENTIAL	Disturbances to ecological processes: Activity may	DIRECT	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	L

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST-
		MITIGATION
eas and other sensitive).		
scue is recommended	EASY	LOW -
	EASY	LOW -
e obtained beforehand.	ΝΟ ΙΜΡΑΟ	CT
nust be removed from MBA requirements. alien invasive plant be implemented in ion phases. struction is completed, rop may be required, ishment of grasses not manner, such as along to minimise dust.	EASY	LOW -
	EASY	LOW -
	NO IMPAC	CT
st be implemented in ible to erosion. Areas	EASY	LOW -
nd a suitable cover crop on is completed.	EASY	LOW -
pped and stockpiled on completion. establishment does not nust be applied.	ΝΟ ΙΜΡΑΟ	CT
	DIFFICULT	LOW -

	SY	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
TERRESTRIAL	result in disturbances to ecological processes such	CUMULATIVE	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	 Blanket clearing of veget
BIODIVERSITY IMPACTS ECOLOGICAL PROCESSES	as fragmentation (road, etc). Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters	NO-GO			NO IMP	ACT		to the development footp be cleared must be dema clearing commences.
	construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on ecological processes.							
POTENTIAL	Aquatic and Riparian processes: Diversion and	DIRECT	LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	▲ Suitable structures to
TERRESTRIAL	increased velocity of surface water flows – Changes		LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	watercourse crossings the
BIODIVERSITY IMPACTS	to the hydrological regime and increased potential	NO-GO			NO IMP			 Stormwater discharge int
	for erosion. Impact of changes to water quality. Loss							protected against erosion
AQUATIC AND RIPARIAN PROCESSES	of riparian vegetation / aquatic habitat. Loss of species of special concern.							
	Cumulative impact, on a localised scale, would be							
	moderate should the Taaibos and Soutrivier WEF							
	clusters construction timelines overlap. However, it							
	is important to note that the 5 WEFs and their							
	associated infrastructure are proposed by the same							
	developer and the EMPrs will be prepared to the same standard.							
	No-go alternative would result in no impact on							
	aquatic and riparian processes.							
POTENTIAL	Loss of Faunal Habitat: Activity may result in the loss	DIRECT	LOCALISED	PERMANENT	DEFINITE	SLIGHT	LOW -	 Blanket clearing of veget
TERRESTRIAL	of habitat for faunal species, which could result in			PERMANENT	DEFINITE	SLIGHT	LOW -	to the construction footp
BIODIVERSITY IMPACTS	disturbance and displacement of faunal species.	NO-GO			NO IMP			 Rocky outcrop areas of
								Habitat to be avoided as
FAUNAL HABITAT	Cumulative impact, on a localised scale, would be							 It is important that clear
	LOW should the Taaibos and Soutrivier WEF clusters							to the minimum and tai
	construction timelines overlap. However, it is							manner, where applical
	<i>important to note that the 5 WEFs and their associated infrastructure are proposed by the same</i>							smaller animal species to and prevents wind and
	developer and the EMPrs will be prepared to the							cleared areas.
	same standard.							
	No-go alternative would result in no impact on							
	faunal habitat.							
POTENTIAL	Impacts to faunal processes because of the activity	DIRECT	LOCALISED	PERMANENT	DEFINITE	MODERATE	LOW -	 The habitats and microhometer
TERRESTRIAL	such as erection of barriers to movement.	CUMULATIVE	LOCALISED	PERMANENT	DEFINITE	MODERATE	LOW -	project site are not uniqu
BIODIVERSITY IMPACTS		NO-GO			NO IMP	ACT		in the general area, he
	Cumulative impact, on a localised scale, would be							associated with the foot
FAUNAL PROCESSES	LOW should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is							significance if mitigation to.
	important to note that the 5 WEFs and their							Lo. ▲ Small mammals within
	associated infrastructure are proposed by the same							around the affected area
	developer and the EMPrs will be prepared to the							and likely to be transient
	same standard.							most likely vacate the a
	No-go alternative would result in no impact on							commences. As with all co

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
tation must be limited	DIFFICULT	LOW -
print, and the area to arcated before any	NO IMPA	
he constructed at	EACV.	
be constructed at hat do not alter flows.	EASY EASY	LOW - LOW -
nto watercourses to be	NO IMPA	ст
etation must be limited	DIFFICULT	LOW -
print required.	DIFFICULT	LOW -
and Riverine Rabbit far as possible. ring activities are kept ake place in a phased able. This allows any o move into safe areas water erosion of the	NO IMPA	
nabitats present on the	DIFFICULT	LOW -
ue and are widespread	DIFFICULT	LOW -
ence the local impact tprint would be of low measures are adhered the habitat on and a are generally mobile t to the area. They will area once construction	ΝΟ ΙΜΡΑ	СТ
construction sites there		

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTI	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEA
	faunal procesess.							 is a latent risk that the accidental mortalities. Spemade to reduce this risk. The special concern is low, and there will be any impact to species because of the action species because of the action compared to mammals, and could arise. It is recommended arise. It is recommended arise and rescue be construction commences, and has shown that there comortalities as these species thus move onto site of underway. A retile handler such circumstances. A Should any amphibian between wetland areas of appropriate measures (in suspending works in the approprimented.
POTENTIAL	Loss of faunal SSC due to construction activities:	DIRECT	LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	▲ A pre-commencement faun
TERRESTRIAL BIODIVERSITY IMPACTS	Activities associated with bush clearing, killing of perceived dangerous fauna, may lead to increased	CUMULATIVE	LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	is recommended.
FAUNAL SPECIES	mortalities among faunal species. Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on faunal species.	NO-GO			NO IMP4			 Respective permits to be o No animals are to be har the course of operations. Workers are NOT allowed species.
POTENTIAL RISKS TO	The development may fragment an already highly	DIRECT	LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	 Minimising the project for ovisting roads and disturb.
FAUNA SPECIES OF CONSERVATION	fragmented landscape which may create barriers to geneflow where subpopulations are disconnected	CUMULATIVE NO-GO	LOCALISED	PERMANENT	DEFINITE NO IMPA	MODERATE	MODERATE -	existing roads and disturbe technically possible.
CONCERN: HABITAT LOSS, DEGRADATION AND FRAGMENTATION	and isolated. Roads and fences can affect the quality and quantity of available habitat, most notably through fragmentation, creating barriers to animal movement. Erosion from construction may degrade the habitat and direct loss of habitat will occur due to necessity of access roads. <i>Cumulative impact, on a localised scale, would be</i> <i>moderate should the Taaibos and Soutrivier WEF</i> <i>clusters construction timelines overlap. However, it</i> <i>is important to note that the 5 WEFs and their</i> <i>associated infrastructure are proposed by the same</i> <i>developer and the EMPrs will be prepared to the</i> <i>same standard.</i>							 Locate developments aw sensitive habitats, this inclu buffer zones for turbin substations and housing j construction laydown area. Implementing adequate erosion control. Careful planning of road lay length of roads traversin habitats and rocky ridge identified as Very high or h may create barriers and fro Establish wildlife passes barriers are found; this p

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
there will be some Specific measures are and it is unlikely that to populations of such ctivity. rds are less mobile and some mortalities mended that a faunal be conducted before s, although experience could still be some ies are mobile and may once construction is ler should be on call for an migrations occur s during construction, (including temporarily e affected area) should		
unal search and rescue	DIFFICULT	LOW -
e obtained beforehand. armed or killed during ed to snare any faunal	DIFFICULT NO IMPAC	LOW -
footprint by utilising	DIFFICULT	LOW -
rbed areas as much as away from identified cludes no go zones and bine pads, electrical g facilities as well as eas. the dust control and a layout to minimise the rsing through riverine dges that have been r high sensitivity which fragment habitats. ses, where artificial	DIFFICULT NO IMPAC	LOW -
particularly refers to		

ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
	No-go alternative would result in no impact on habitat loss, degradation and fragmentation with regards to faunal species.							 physical barriers such as roads and fences. Develop and implement a site-specific spill management plan. 		
POTENTIAL RISKS TO	Disturbance will be primarily in the form of visual	DIRECT	LOCALISED		DEFINITE	MODERATE	MODERATE -	 Implementing adequate noise reduction 	DIFFICULT	LOW -
FAUNA SPECIES OF	-	CUMULATIVE	LOCALISED	PERMANENT	DEFINITE	MODERATE	MODERATE -	measures, including the use of insulation to	DIFFICULT	LOW -
CONSERVATION	activities. Visual stimuli from movements of the	NO-GO			NO IMPA	СТ		reduce noise output from turbine hubs.	NO IMI	PACT
CONCERN:	turbine blades may cause a disturbance which may be far reaching due to the site being open and							 Temporal (curtailment) restrictions. Temporal restriction strategies can focus on altering 		
DISTURBANCE	unobscured. Noise effect from construction and							turbine operation during times or weather		
DISTONDANCE	associated human activities during this phase is							conditions when wildlife is most active or		
	highly probable. This impact will reduce once the							where a negative impact has been found		
	WEF is operational however there will be continued							during the monitoring program.		
	noise pollution from turbines from both the hub							 Targeted operational timing by working with 		
	and the swish of the blades.							wind facility managers to target specific		
								turbines under certain weather conditions		
	Cumulative impact, on a localised scale, would be							where a negative impact has been identified.		
	moderate should the Taaibos and Soutrivier WEF							This may require changing the minimum		
	clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their							windspeed at which turbines begin to turn and generate energy (cut-in speed) so that they idle		
	associated infrastructure are proposed by the same							during gentle wind and in so doing reduce		
	developer and the EMPrs will be prepared to the							noise during periods of low ambient noise.		
	same standard.							 Minimise development lighting in order to 		
	No-go alternative would result in no impact on							minimise light pollution, disturbance to		
	disturbance of faunal species of conservation							animals at night;		
	concern.							 Minimize noise disturbance during 		
								constructions where construction takes place		
								within 1000 m of Very high and high sensitivity		
								habitats. Restricting noise to daytime (9 am – 4 pm) periods when most fauna are less active.		
POTENTIAL RISKS TO	There is an increased collision risk from increased	DIRECT		PERMANENT	DEFINITE	MODERATE	MODERATE -	 Careful planning of roads to minimise the 	DIFFICULT	LOW -
FAUNA SPECIES OF	traffic levels at the site and in the general area. This			PERMANENT	DEFINITE	MODERATE	MODERATE -	length that traverses through riverine and	DIFFICULT	LOW -
CONSERVATION	impact is likely to be of highest concern during	NO-GO	LOCALISED		NO IMPA			rocky habitats that have been identified as	NO IMI	
CONCERN:	construction but is also expected during the					••		Very high or high sensitivity.		
	operational phase. Roads and roadsides may attract							 Use existing roads as much as possible. 		
MORTALITY FROM	SCC such as Riverine Rabbits and Karoo Dwarf							 Roadkill monitoring program on both internal 		
ROAD COLLISION	Tortoises due to verge edge enhancement of							and external public roads targeting sensitive		
	vegetation and roads may be used to facilitate							habitats and wildlife corridors. Roadkill		
	movement, thus further increasing collision risks.							Monitoring programs must be initiated at pre-		
	Access roads that traverse riverine habitats require careful planning and monitoring to reduce risk of							construction phase and continued during		
	rabbit mortality.							construction and post-construction as well as conducted over different seasons.		
	Tassit mortanty.							 Pre-construction road planning to identify 		
	Cumulative impact, on a localised scale, would be							target sites for wildlife crossing structures		
	moderate should the Taaibos and Soutrivier WEF							which should be considered during the EIA		
	clusters construction timelines overlap. However, it							process and with pre-construction roadkill		
	is important to note that the 5 WEFs and their							monitoring findings. Wildlife crossing		
	associated infrastructure are proposed by the same							structures must be made in consultation with		
	developer and the EMPrs will be prepared to the							road planner, construction manager and		
	same standard.							wildlife biologist. This is generally more cost		
	No-go alternative would result in no impact on							effective than retro fixing existing roads.		
	faunal species in relation to road collision mortality.							 Assess efficiency of roadkill mitigation 		
			1					approaches via a post-implementation roadkill		

		NTHESIS O	E SPECIA	LIST IMPA	CTS AS EXT	RACTED FROM	THE SPECIA	LIST_REPORTS		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE	CERTAINTY SCALE	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
POTENTIAL RISKS TO	The cumulative impact is of concern, given the fact	DIRECT		PERMANENT	DEFINITE	MODERATE	MODERATE -	 monitoring program. Implementation of speed limits on both internal access WEF roads (40km/h) as well as external public roads (60km/h). Reduced speed limits of 30km/h where roads (both internal and external) cross High and Very high sensitivity areas identified; including riverine habitat, koppies and ecotones which may harbour sensitive species and generally have higher species diversity and abundance Wildlife warning signage and speed reduction measures where roads cross High and Very high sensitivity areas. Education and awareness campaigns on SCC and their habitat must form part of staff induction procedures to help increase awareness, respect and responsibility towards the environment for all staff and contractors. Inductions on safe wildlife passing and driving to reduce possible injury and roadkill alongside roads. There is higher risk of collision when animals are more active which is typically from late afternoon to early morning. During these times a low speed limit (30km/h) needs to be implemented. Night-time driving should be avoided as much as possible but if necessary, speed needs to be reduced significantly to avoid collisions. Lagomorph species (hares and rabbits) often freeze in headlights and require headlights to be momentarily turned off to allow the animal to move off the road. Reduced speeds also need to be implemented during reduced visibility such as misty conditions that have been observed on the site. Induction must include reporting of any vehicle/wildlife collision or found roadkill to the appointed Roadkill monitoring personnel. Search and rescue of slow-moving species, specifically Karoo Dwarf Tortoises, during the construction phase. IUCN guidelines for translocation of sensitive species should be consulted. Tortoises will need to be carefully relocated and provided shelter and water-rich food as well as monitoring of threatened species to ensure of th	DIFFICULT	10Ψ -
FAUNA SPECIES OF	that the renewable-energy industry is rapidly	CUMULATIVE		PERMANENT		MODERATE	MODERATE -	each development before the next is begun.	DIFFICULT	LOW -
CONSERVATION	expanding in South Africa. The local fauna is already	NO-GO	<u> </u>		NO IMPA	ACT		↓ Use a precautionary approach and aim to	NO IMP/	ACT

	SY	NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTR	RACTED FROM	THE SPECIA	LIST REPORTS		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
CONCERN: CUMULATIVE IMPACT	impacted and threatened by past and current land use and the combination of these existing anthropogenic impacts with planned developments may impact the local fauna with unexpectedly large effects. Cumulative effects can also result where the construction phase occurs at several locations simultaneously or if a new project begins construction immediately following the completion of another. Cumulative effects can cause a small localized effect (which may have a limited effect on its own) to have a significant impact on population level as there may be thresholds where the cumulative effects increase disproportionally. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. <i>No-go alternative would result in no impact from a cumulative faunal species of conservation concern loss perspective.</i></i>				LIKELIHOOD)			 minimise negative effects even when the effects are not fully known. Ensure the construction phase is done in as short a period as possible and avoid breeding season, typically in the spring after good rains. Construction needs to be done during daytime, avoiding noise and disturbance when faunal communities are most likely active, particularly where the construction is in proximity to their habitat. Sensitive habitats near construction will need to be clearly marked. Relating construction phase of the development with neighbouring developments and farming activity to ensure construction does not begin immediately after the completion of another or simultaneously. The developer instigates a proactive mitigation measure by initiating a multi-stakeholder dialogue at a workshop to clarify these concerns and how they might be taken forward and co-funded. The aim of this mitigation is to reduce current impacts that threaten the survival of SCC populations. We recommend a biodiversity wildlife corridor approach whereby protecting sensitive habitats is made a priority. This may include species refuge areas where no form of indiscriminate wildlife killing/snaring is allowed, no or highly reduced livestock grazing, and no pest control including locust spraying is 		
								 carried out. Poaching and the use of hunting dogs at site is prohibited. 		
POTENTIAL RISKS TO FAUNA SPECIES OF CONSERVATION CONCERN: CASCADING IMPACT ACROSS TROPHIC LEVELS	The effect of the wind farm on one species may have indirect cascading effects (knock on effect) on other species within the same community due to ecological relations to one another. This means that an effect on one species may in turn affect many others within the same ecosystem. Cascading effects may be complex and unpredictable as it may be the result of different types of interactions including competition, predation, parasitism, or symbiosis. <i>Cumulative impact, on a localised scale, would be moderate should the Taaibos and Soutrivier WEF clusters construction timelines overlap. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no cascading impact across the trophic levels due to the proposed</i>		LOCALISED		DEFINITE DEFINITE NO IMPA	MODERATE MODERATE .CT	MODERATE - MODERATE -	 Initiate a general Fauna Biodiversity Monitoring program A Fauna Biodiversity program must be initiated pre-construction to have baseline population status and monitoring must be ongoing post- construction to identify any changes in occupancy in certain species' population which may in turn indirectly impact other fauna populations. We recommend the use of multiple monitoring methods including and not limited to; camera trapping in diverse habitats, targeted camera trapping for SCC; small mammal monitoring with the use of Sherman traps; the use of Conservation Scent Detection Dog teams to assist in detecting SCC. 	DIFFICULT DIFFICULT NO IMPA	LOW - LOW - ACT

ISSUE	DESCRIPTION OF IMPACT	NATURE OF	SPATIAL	TEMPORAL	CERTAINTY	RACTED FROM SEVERITY /	SIGNIFICANCE	MITIGATION MEA
ISSUE	DESCRIPTION OF IMPACT	IMPACT	SCALE (EXTENT)	SCALE (DURATION)	SCALE (PROBABILITY/ LIKELIHOOD)	BENEFICIAL SCALE	PRE- MITIGATION	
	WEF.				LIKELINOODJ			
			I	1	VISUAL IMPACT	ASSESSMENT		
POTENTIAL VISUAL	The visual impacts of facility operations on sensitive		VERY HIGH -	▲ Retain / re-establish and				
IMPACT OF FACILITY	visual receptors (i.e., residents of homesteads, as	CUMULATIVE	LOCALISED	LONG TERM	DEFINITE	SEVERE	VERY HIGH -	vegetation in all area
OPERATIONS ON SENSITIVE VISUAL	well as, observers travelling along the secondary road) in close proximity to the proposed Soutrivier	NO-GO			NO IMP/	ACI		 development footprint. Maintain the general appe
RECEPTORS IN CLOSE	Central WEF (within 5km) is expected to be of very							as a whole.
PROXIMITY (< 5KM) TO	high significance.							 Monitor rehabilitated are
THE PROPOSED								remedial action as and wh
DEVELOPMENT	Sensitive visual receptors within this zone include:							
	Users of the various secondary roads							
	 Residents of the following homesteads: Stoeifontein 							
	The following homesteads are located on farm							
	portions earmarked for the Victoria West WEF,							
	thereby reducing the probability of this impact							
	occurring on these specific receptors (i.e. it is							
	assumed that these landowners are supportive of							
	WEF developments and their associated visual							
	impacts): Liebenbergsdam							
	 Soutrivier 							
	 Bonnievale 							
	Cumulative impact, on a localised scale, would be very high should the Taaibos and Soutrivier WEF							
	clusters operational timelines overlap, which is							
	likely. However, it is important to note that the 5							
	WEFs and their associated infrastructure are							
	proposed by the same developer and the EMPrs will							
	be prepared to the same standard.							
	No-go alternative would result in no impact on							
POTENTIAL VISUAL	<i>sensitive visual receptors.</i> The visual impact of facility operations on sensitive	DIRECT	STUDY	LONG TERM	DEFINITE	SEVERE	HIGH -	 Retain / re-establish and n
IMPACT OF FACILITY	visual receptors (i.e. users of the various secondary		AREA					natural features and r
OPERATIONS ON	roads and residents of homesteads) within the local	CUMULATIVE	STUDY	LONG TERM	DEFINITE	SEVERE	HIGH -	vegetation in all areas ou
SENSITIVE VISUAL	area (between 5 - 10km offset) is expected to be of		AREA					footprint.
RECEPTORS WITHIN THE LOCAL AREA (BETWEEN	high significance.	NO-GO			NO IMP	ACT		 Retain natural pockets (other sensitive vegetation
5 - 10KM)	Sensitive visual receptors within this zone include:							within the property and alo
SURROUNDING THE	 Users traveling along the various secondary 							 Dust suppression technique
PROPOSED	roads, potential visibility is however scattered							at all times during the sit
DEVELOPMENT	along the length of these roads and visual							operational phases.
	intrusion where possible will be brief.							 Access roads will require
	 Residents of the following homesteads: Moltonwold 							suppression management
	 Meltonwold Stoeifontein 							regular wetting and/or the chemicals that will retain r
	 Stoenontein Wolwefontein 							surface.
	 Grootfontein 							 Downscaling of operations
								 Keeping infrastructure at n
	The following homesteads are located on farm							 Introducing landscaping
	portions earmarked for the Victoria West WEF,							vegetating berms.

IEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
and maintain natural	VERY DIFFICULT	VERY HIGH -
eas outside of the	VERY DIFFICULT	VERY HIGH -
pearance of the facility	ΝΟ ΙΜΡΑ	СТ
areas, and implement when required.		
d maintain large trees, noteworthy natural	VERY DIFFICULT	HIGH -
outside of the activity	VERY DIFFICULT	HIGH -
s (wetland, river and tion zones) as buffers along the perimeter. ques should be in place site development and tire an effective dust nt programme, such as the use of non-polluting in moisture in the road	NO IMPA	СТ
ns. t minimum heights. g measures such as		

	SYI	NTHESIS O	F SPECIA	LIST IMPA	CTS <u>AS EXT</u>	RACTED FROM	THE SPECIA	LIST REPORTS
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION ME
	 thereby reducing the probability of this impact occurring on these specific receptors (i.e. it is assumed that these landowners are supportive of WEF developments and their associated visual impacts): Oppermanskraal Slypfontein Cumulative impact, on a localised scale, would be high should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on sensitive visual receptors. 							 Avoid the use of highly refine the painted in natural soft color in with the environment. Maintain the general appear a whole. Lighting should be kept to a possible. Install light fixtures that directed illumination to refine beyond the immediate surfactor of the activity is exposed to refine the activity of the site and us activated on movement.
POTENTIAL VISUAL IMPACT OF FACILITY	The visual impact of facility operations on sensitive visual receptors (i.e. users of the various secondary	DIRECT	STUDY AREA	LONG TERM	PROBABLE	MODERATE	MODERATE -	 Retain / re-establish and in natural features and in
OPERATIONS ON SENSITIVE VISUAL	road, arterial R63 and the national N12 road, visitors to region, and residents of homesteads)	CUMULATIVE	STUDY AREA	LONG TERM	PROBABLE	MODERATE	MODERATE -	vegetation in all areas ou footprint.
DISTRICT (BETWEEN 10 - 20KM) SURROUNDING THE PROPOSED DEVELOPMENT	 within the district (between 10 - 20km offset) is expected to be of moderate significance. Sensitive visual receptors within this zone include: Users traveling along portions of the N12, R63 and various secondary roads, potential visibility is however scattered along the length of these roads and visual intrusion where possible will be brief. Residents of the following homesteads: Meltonwold Suikerkolk Grasaar Blomfontein Jakkalsfontein Maanhaarspoort Houdenbek Sterkfontein Oorlogsfontein Abramskraal Brakvlei Wagenaarskraal Brakfontein 							 other sensitive vegetatio within the property and all Dust suppression techniqu at all times during the si operational phases. Access roads will require suppression management regular wetting and/or the chemicals that will retain surface. Downscaling of operations Keeping infrastructure at r Introducing landscaping vegetating berms. Avoid the use of highly refit Metal surfaces, where th painted in natural soft color in with the environment. Maintain the general apper a whole. Lighting should be kept to of possible. Install light fixtures that directed illumination to refit beyond the immediate surfices of the activity is exposed to refit beyone to refit be to refit beyone to ref
	The following homesteads are located on farm portions earmarked for the Victoria West WEF, thereby reducing the probability of this impact							the activity is exposed

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
eflective material. they occur, should be plours that would blend pearance of the site as to a minimum wherever hat provide precisely reduce light "spillage" urrounds of the activity ant where the edge of presidential properties. ots should be directed minating the sky. urity lighting along the		
use only lights that are d maintain large trees,	VERY DIFFICULT	MODERATE -
noteworthy natural outside of the activity	VERY DIFFICULT	MODERATE -
s (wetland, river and tion zones) as buffers along the perimeter. ques should be in place site development and	ΝΟ ΙΜΡΑΟ	CT
iire an effective dust nt programme, such as he use of non-polluting in moisture in the road		
ons. t minimum heights. g measures such as		
eflective material. they occur, should be plours that would blend pearance of the site as		
o a minimum wherever		
hat provide precisely reduce light "spillage" urrounds of the activity ant where the edge of presidential properties. hts should be directed minating the sky.		

		NTHESIS O	F SPECIA	LIST IMPA	CTS AS EXTR	ACTED FROM	THE SPECIAL	LIST REPORTS		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
	 occurring on these specific receptors (i.e. it is assumed that these landowners are supportive of WEF developments and their associated visual impacts): Oppermanskraal Stampfontein Oorlogsfontein Slypfontein 							Avoid high pole top security lighting along the periphery of the site and use only lights that are activated on movement.		
	moderate should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on sensitive visual receptors.									
POTENTIAL VISUAL	The visual impact of facility operations on sensitive	DIRECT	REGIONAL	LONG TERM	UNLIKELY	MODERATE	LOW -	 Retain / re-establish and maintain large trees, 	VERY DIFFICULT	LOW -
IMPACT OF FACILITY		CUMULATIVE	REGIONAL	LONG TERM	UNLIKELY	MODERATE	LOW -	natural features and noteworthy natural	VERY DIFFICULT	LOW -
OPERATIONS ON	roads, visitors to the region, and residents of	NO-GO			NO IMPA	СТ		vegetation in all areas outside of the activity	NO IMPAC	T
SENSITIVE VISUAL	homesteads) within the region (beyond the 20km							footprint.		
								▲ Retain natural pockets (wetland, river and other consistive vegetation zones) as buffers		
REGION (> 20KM)	Sensitive visual receptors within this zone include:							other sensitive vegetation zones) as buffers		
	 Users traveling along portions of the N12, R63, D281 and various secondary roads, potential 							within the property and along the perimeter.		
	R381 and various secondary roads, potential visibility is however scattered along the length							 Dust suppression techniques should be in place at all times during the site development and 		
	of these roads and visual intrusion where							at all times during the site development and operational phases.		
	possible will be brief.							 Access roads will require an effective dust 		
	 Residents of various homesteads (refer to 							suppression management programme, such as		
	Section 6.6 of the VIA for a full list).							regular wetting and/or the use of non-polluting		
	section of on the virtual and isty.							chemicals that will retain moisture in the road		
	The following homesteads are located on farm							surface.		
	portions earmarked for the Victoria West WEF,							 Downscaling of operations. 		
	thereby reducing the probability of this impact							★ Keeping infrastructure at minimum heights.		
	occurring on these specific receptors (i.e. it is							 Introducing landscaping measures such as 		
	assumed that these landowners are supportive of							vegetating berms.		
	WEF developments and their associated visual							Avoid the use of highly reflective material.		
	impacts):							 Metal surfaces, where they occur, should be minted in network off colours that would blond 		
	BoshoekSpes Bona							painted in natural soft colours that would blend in with the environment.		
	Spes BonaStampfontein							 Maintain the general appearance of the site as 		
	 Boschrug 							a whole.		
	 Blindefontein 							 Lighting should be kept to a minimum wherever 		
	 Drupfontein 							possible.		
	 Middlewater 							 Install light fixtures that provide precisely 		
	 Oorlogsfontein 							directed illumination to reduce light "spillage" beyond the immediate surrounds of the activity		
	Cumulative impact, on a localised scale, would be							- this is especially relevant where the edge of		
	low should the Taaibos and Soutrivier WEF clusters							the activity is exposed to residential properties.		
	operational timelines overlap, which is likely.							 Wherever possible, lights should be directed 		
	However, it is important to note that the 5 WEFs and							downwards to avoid illuminating the sky.		

 Here associated infrativiture one proposed by the same should be propied or addite EXRS, will be propied or addite EXRSS, will be propied or addite EXRSS, will be propied or addite EXRSSS, will be propied or addite EXRSSS, will be propied or addite EXRSSS, will be propied or addite EXRSSSS, will be propied or addite EXRSSSSSSS, will be propied or addite EXRSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS		MITIGATION
IMPACT OF OPERATIONAL ISSURTIVE VISION INDUMBER INTER INDUMBER ISSURTIVE VISION INDUMEER ISSURTIVE VISION INDUMEERING VISION ISSUET VISION ISSUET VISION INDUMEERING VISION ISSUET VISION ISSUET VISION INDUMEERING VISION ISSUET VISION ISSUET VISION ISSUET VISION ISSUET VISION INDUMEERING VISION VISIONO		
OPERATIONAL Ights for Max Toges Into any light respans and gizer from the security sense of place and rural makines of the local area increases its sensitivity to such lighting for the deal area increases its sensitivity to such lighting intrusions. No IMPACT The possibility of limiting aircraft warning black and rural senses its sensitivity to such lighting intrusions. Another source of glare light is the aircraft warning lights mouthed on top of the hub of the wind turbines. While these lights are less aggraving due to the cond-down relations pecially be to the duration of the hub of the wind turbines. While these lights are less aggraving lights and the potential to evisible from a greater distance then general potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then general potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then egreenal potential to be visible from a greater distance then egreenal potential to militigate their visual impacts is low. The possibility of limiting aircraft warring lights and the potential to militigate their visual the overall impact, is recommended to be investigated. Some ground-breaking new technology in the development of stributing lights that only activate when an aircraft is detected and the predicting the overall impact, is recommended to be investigated and implemented by the project proponent, if available and permissible by the CAA. Thi	MODERATE	MODERATE -
GHTING AT NIGHT ON SINSITIVE VUSC SINSITIVE VUSC SINSITIVE VUSC REGION and after-hours operational lighting for the facility will have some significance. In addition, the remote sense of place and rural ambiance of the local area increases its sensitivity to such lighting intrusions. to the turbines on the perimeter according to cAA requirements, thereby reducing the ovecall impacts. Another source of glare light is the aircraft warning lights mounted on top of the hub of the wind turbines. While these lights are liess aggravating due to the tone-down reduct ool wine the down the period local colur, they do have the potential to be visible from a greater distance them general operational lighting, especially due to the strobing effect of the lights, a function specially designed to stract the visual impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the visiting the potential to mispate their visual impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the the ovecall impact, is recommended to be investigated. Make use of number and theretores on a security lights to the turbines on the perimeter according to CAA requirements, thereby reducing the transpace and implemented of the proves is investigated. Make use of number and theretores on a security lights to the turbines on the perimeter according to CAA requirements, thereby reducing the the oveclopment of strobus lights that only activate when an aircraft is detected merby. This may ald in turbines, light light when there is no fing updet within the airspace of the WEF. The system relisson the active detectint of all proves there	MODERATE	MODERATE -
SINSTIVE VISUAL will have some significance. In addition, the remote CA requirements, thereby reducing the overall REGION sense of place and rural ambiance of the local areas increases its sensitivity to such lighting intrusions. - Another source of glare light is the aircraft warning lights mounted on top of the hub of the wind - install aircraft worning lights that only activate when the presence of on aircraft is detected, if personnel to be visible from a greater distance then general operational lighting, especially due to the strobing effect of the lights, a function specially due to the strobing effect of the lights, a function specially due to the strobing effect of the period. - Make use of non-nighters, or shielded figures. Warding lights and the specially due to the strobing effect of the lights, a function specially due to the strobing rescribes these warning lights to the turbines on the perimeter according to CA requirements, thereby reducing the overall lighting, especially due to the strobing rescribes these warning lights to the turbines on the perimeter according to CA requirements, thereby reducing the overall lighting, especially due to the end of lighting in the overall lighting, is recommended to be investigated. - Make use of non-nighting, especially due to the end of lighting, especially due to the end of lights, is anticing the end or lighting, especially due to the end of	NO IMI	PACT
RECEIVORS IN THE increases its sensitivity to such lighting intrusions. Another source of glare light is the aircraft warning lights mounted on top of the hub of the wind turbines. While these lights are less aggravating due to the tase adjust to be visible from a greater distance then general loge-attaonal gluting, especially due to the such adjust of the visual in general loge-attaonal gluting, especially due to the visual infinito (CAA) prescribes these warning lights to the turbines. The Civil visual infinito infigate their visual infigates. or alternative lights to infigate their visual infigates are compared to attract the visual infighting according to character the visual infighting. Separative due to the visual infighting according to CAA requirements, thereby reducing according to CAA requirements, thereby reducing the overall infigate. Make use of down-highters, or shielded fixtures, or other types of low inpact lighting. Bights of the potential to be visibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Siled the source of glare and mark is required for security or maintenance purposes. Make use of down-highting infighting. Siled the source of glare and mark is required for the visual infighting the there is no plant and should be better or other types of low inpact lighting. Make use of mount due to the visual infighting the visual infighting the visual infighting the visual infighting the vis		
REGION Increases its sensitivity to such lighting intrusions. - Instal aircoft worming lights that only activate where the presence of an aircoft is detected, if permitted by CAA. Another source of glare light is the aircaft warning lights and uses agrivating due to the toned-down red colour, they do have the potential to be visible from a greater distance then general operational lights, a function specially due to the strobing effect of the lights, a function specially due to the strobing effect of the lights, a function specially due to the strobing refer of the lights, a function specially due to the premised to a working prescribes these warning lights to the turbines on the perturbation, the fortune itself). - Limit mounting heights of lighting fixtures, or allottance itself, working lights, a function specially to book light of book and the prescribes these warning lights to the turbines on the perturbation, the fortune itself, warning lights to the turbines on the perturbation, the fortune itself, warning lights to the turbines on the perturbation arises and should be investigated. - Moke use of molinium lumen or wattage in fixtures. Some ground-breaking new technology in the developed an aircraft trade and permissible by the CAA. This new technology is referred to a should be the CAB. This new technology is referred to a should be the fixed should be the component, if available and permissible with the system relies on the present relies on the present relies on the present relies on the permission warning lights to the turbines on the permitter according to the turbine and permissible permitter according to the turbine of the solution the second presence of an aircraft the rade according to the turbines on the permitter according to the turbines on the permitter according to the turbines on the permitter according to the turbines on the permitte		
Another source of glare light is the aircraft warning lights mounted on top of the hub of the wind turbines. While these lights are less aggraving due to the toned-down red colour, they do have the potential to be visible from a greater distance then general coperational lighting, especially due to the strobing effect of the lights, a function specially designed to attract the viewers' attention. The Civil Aviation Authority (CAA) prescribes these warning lights and the potential to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated.While use of low-Pressure Sofium lighting or active the structure lights and the prostendial pormissible by the CAA. This were denoted and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically decivates wind turbines night lights when there is no flying object within the airspace of the VEF. The system relies on the activate and permissible by the CAA. This new technology is referred to as needs-based night lights when there is no flying object within the airspace of the VEF. The system relies on the activate approximation at night and should be investigated and implemented by the ECAA. This new technology is referred to as needs-based night lights when there is no flying object within the airspace of the VEF. The system relies on the activate decetion of aircraft are sensors,Were the analysis of the average sensors		
Another source of glare light is the aircraft warning lights mounted on top of the hub of the wind turbines. While these lights are less aggravating due to the tone-down red colour, they do have the potential to be visible from a greater distance then general operational lighting, sepscially due to the strobing effect of the lights, a function specially designed to attract the viewers' attention. The Civil Aviation Authonity (CAA) prescribes these warning lights and the potential to mitigate their visual impacts is low. The possibility of limiting aircraft warning lights to the tonic expressions of the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Some ground-breaking new technology in the development of strobing lights that only activates when an aircraft is detected nearby. This may aid in restricting lights, when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radies showed investigated.		
 Shield the sources of light by physical barries to train on the active detection of the wind turbines. While these lights are less agravating due to the concel down red colour, they do have the potential to be visible from a greater distance then general operational lighting, especially due to the structure itself). Limit mounting heights of lighting fixtures, or alternatively use foot-lights or bollard level lights. Make use of primium lumen or wattage in fixtures. Make use of down-indepting especially due to the viewer's attention. The Civil Aviation Authority (CAA) prescribes these warning lights to the turbines on the potential to mitigate their visual impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light polition at night and should be investigated and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine is not flying object. 		
iurbines. While these lights are less aggravating due to the toned-down red colour, they do have the potential to be visible from a greater distance the general operational lighting, especially due to the strobing effect of the lights, a function specially designed to attract the viewers' attention. The Civil Aviation Authority (CAA) prescribes these warning lights and the potential to mitigate their visual impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Moke use of own-fighters, or shielded fistures. Some ground-breaking new technology in the development of strobing lights to an only attivate investigated. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft's detected nearby. This may aid in restricting light, which bascially detactivates the wind turbine's night lights, when there is no fiying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
 due to the toned-down red colour, they do have the potential to be visible from a greater distance then general operational lighting, especially due to the strobing effect of the lights, a function specially due to the strobing effect of the lights, a function specially due to the visues' attention. The Civil Aviation Authority (CAA) prescribes these warning lights and the possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Some ground-breaking new technology in the development of strobing lights that on high at divide and perimissible by the CAA. This new technology is referred to a sneets-based night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors, 		
potential to be visible from a greater distance then general operational lighting, especially due to the strobing effect of the lights, a function specially due to the strobing effect of the lights, a function specially due to the strobing effect of the lights, a function specially due to the versiting the potential to mitigate their visual lights and the potential to mitigate their visual impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Make use of down-lighters, or shielded fixtures. Some ground-breaking new technology in the development of strobing light shard should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors, Some ground-breaking real to as needs-based night, lights, when there is no flying object		
strobing effect of the lights, a function specially Make use of minimum lumen or wattage in fixtures. Make use of down-lighters, or shielded fixtures. Make use of ontion detectors on security integration at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors, Within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors, Within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors, 		
designed to attract the viewers' attention. The Civil fixtures. Aviation Authority (CAA) prescribes these warning fixtures. lights and the potential to mitigate their visual make use of down-lighters, or shielded fixtures. impacts is low. The possibility of limiting aircraft Make use of Low-Pressure Sodium lighting or other types of low impact lighting. warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Make use of Low-Pressure Sodium lighting is required for security or maintenance purposes. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as need-sbased night lights, which basically deactivates the wind turbine's night lights, when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
Aviation Authority (CAA) prescribes these warning lights and the potential to mitigate their visual impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated.		
 lights and the potential to mitigate their visual impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights are spors, 		
 impacts is low. The possibility of limiting aircraft warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors, 		
 warning lights to the turbines on the perimeter according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors, 		
according to CAA requirements, thereby reducing the overall impact, is recommended to be investigated. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
the overall impact, is recommended to be investigated. relative darkness, until lighting is required for security or maintenance purposes. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
investigated. Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
Some ground-breaking new technology in the development of strobing lights that only activate when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
when an aircraft is detected nearby. This may aid in restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
restricting light pollution at night and should be investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
investigated and implemented by the project proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
proponent, if available and permissible by the CAA. This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
This new technology is referred to as needs-based night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
night lights, which basically deactivates the wind turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
turbine's night lights when there is no flying object within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
within the airspace of the WEF. The system relies on the active detection of aircraft by radar sensors,		
the active detection of aircraft by radar sensors,		
farm control to activate the obstacle lights.		
Last is the potential lighting impact is known as sky		
glow. Sky glow is the condition where the night sky		
is illuminated when light reflects off particles in the		
atmosphere such as moisture, dust or smog. The sky		
glow intensifies with the increase in the number of		
light sources. Each new light source, especially		
upwardly directed lighting, contributes to the		
increase in sky glow. The general lighting of the facility may contribute to the effect of sky glow in		

		NTH <u>ESIS OI</u>	F SP <u>ECIA</u>	LIST <u>IMPA</u>	CTS AS EXTR	RACTED FROM	THE <u>SPECIA</u>	LIST REPORTS		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION MEASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
POTENTIAL VISUAL IMPACT OF SHADOW FLICKER ON SENSITIVE VISUAL RECEPTORS IN CLOSE PROXIMITY TO THE PROPOSED DEVELOPMENT	 sun and the receptor (i.e. when the sun is low). De Gryse in Scenic Landscape Architecture (2006) found that "most shadow impact is associated with 3-4 times the height of the object". Based on this research, a 1.3km buffer along the edge of the outer most turbines is identified as the zone within which there is a risk of shadow flicker occurring. One unamed homestead is located within the 1.3km buffer. Of note is that this homestead is located on a property involved in this development, thereby reducing the probability of this impact occurring. It is expected that the shadow flicker experienced by motorist traveling along roads will be fleeting and not constitute a shadow flicker visual impact of concern. <i>Cumulative impact, on a localised scale, would be high should the Taaibos and Soutrivier WEF clusters operational timelines overlap, which is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the</i> 	DIRECT CUMULATIVE NO-GO	LOCALISED	LONG TERM LONG TERM	POSSIBLE POSSIBLE NO IMPA	MODERATE MODERATE CT	MODERATE - MODERATE - MODERATE -	 None possible. 	DIFFICULT DIFFICULT NO IMP	MODERATE - MODERATE - MODERATE - ACT
	same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact on sensitive visual recentors									
	sensitive visual receptors.				WAKE EFFECT					
WAKE EFFECTS	The operational Noblesfontein WEF does lie	DIRECT			NO IMPA			None suggested		
WARE EFFECTS										
	downwind of an important wind sector, but	CONIULATIVE			NO IMPA					

100115					T	RACTED FROM		
ISSUE	DESCRIPTION OF IMPACT	NATURE OF IMPACT	SPATIAL SCALE (EXTENT)	TEMPORAL SCALE (DURATION)	CERTAINTY SCALE (PROBABILITY/ LIKELIHOOD)	SEVERITY / BENEFICIAL SCALE	SIGNIFICANCE PRE- MITIGATION	MITIGATION N
	distance and terrain effects are likely to mean no significant impact is experienced at that site. Cumulative impact, on a localised scale, would be low should the Taaibos and Soutrivier WEF clusters operational timelines overlap, this is likely. However, it is important to note that the 5 WEFs and their associated infrastructure are proposed by the same developer and the EMPrs will be prepared to the same standard. No-go alternative would result in no impact related to wake effect as no WEFs would be present on these land parcels.	NO-GO			NO IMPA	ст		
	these land parcels.			Г	DECOMMISSION			
	ENVIRONIVIENTALIV	ANAGEMEN	r Program				CIALISTS, WHEN	THIS PHASE BECOMES RI
ltural impo				AG	RICULTURAL IMPA	CT ASSESSMENT	· · · · ·	
ltural impo	acts associated with the decommissioning phase will be sin			AG struction phase	RICULTURAL IMPA	CT ASSESSMENT mitigations measures i	· · · · ·	THIS PHASE BECOMES RE
		nilar to those list	ted in the con	AG struction phase	RICULTURAL IMPA and the associated AQUATIC IMPACT	CT ASSESSMENT mitigations measures I ASSESSMENT	must be updated ar	nd implemented to reduce pot
impacts	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar	nilar to those list to those listed i	ted in the cons	AG struction phase ction phase and A	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT	CT ASSESSMENT mitigations measures ASSESSMENT igations measures must ASSESSMENT	must be updated ar t be updated and in	nd implemented to reduce pot aplemented to reduce potenti
c impacts	acts associated with the decommissioning phase will be sin	nilar to those list to those listed i	ted in the cons	AG struction phase ction phase and A	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m	CT ASSESSMENT mitigations measures f ASSESSMENT igations measures must ASSESSMENT itigations measures must	must be updated ar t be updated and in	nd implemented to reduce pot aplemented to reduce potenti
ic impacts	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil	nilar to those list to those listed in ar to those listed	ted in the cons n the construc I in the constr	AG struction phase of ction phase and A suction phase an	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT AS	CT ASSESSMENT mitigations measures f ASSESSMENT igations measures must ASSESSMENT itigations measures mu SESSMENT	must be updated ar t be updated and in ust be updated and	nd implemented to reduce pot aplemented to reduce potenti implemented to reduce poten
impacts al impact	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar	nilar to those list to those listed in ar to those listed	ted in the cons n the construc I in the constr	AG struction phase and ction phase and A suction phase and phase and the o	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT AS associated mitigati	CT ASSESSMENT mitigations measures f ASSESSMENT gations measures must ASSESSMENT itigations measures mu SESSMENT ions measures must be	must be updated ar t be updated and in ust be updated and	nd implemented to reduce pot aplemented to reduce potenti implemented to reduce poten
c impacts nal impact	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil	nilar to those list to those listed in ar to those listed	ted in the cons n the construct in the constr e construction	AG struction phase and ction phase and A uction phase an phase and the o	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT ASS associated mitigati HERITAGE IMPACT	CT ASSESSMENT mitigations measures f ASSESSMENT igations measures must ASSESSMENT itigations measures must SESSMENT ions measures must be ASSESSMENT	must be updated an t be updated and in ust be updated and updated and implen	nd implemented to reduce pot aplemented to reduce potenti implemented to reduce poten mented to reduce potential ac
utic impacts unal impact mpacts asso age impacts	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil ociated with the decommissioning phase will be similar to t s associated with the decommissioning phase will be simila	nilar to those list to those listed in ar to those listed hose listed in the r to those listed	ted in the construct In the construct In the construction in the construction	AG struction phase and ction phase and a cuction phase and phase and the o nuction phase and	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT AS associated mitigati HERITAGE IMPACT I the associated mit NOISE IMPACT AS	CT ASSESSMENT mitigations measures f ASSESSMENT igations measures must r ASSESSMENT itigations measures must sessMENT ions measures must be ASSESSMENT tigations measures must SSESSMENT	must be updated an t be updated and in ust be updated and updated and implei st be updated and i	nd implemented to reduce pot aplemented to reduce potenti implemented to reduce poten mented to reduce potential ad mplemented to reduce potent
c impacts nal impact pacts asso ge impacts	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil ociated with the decommissioning phase will be similar to t	nilar to those list to those listed in ar to those listed hose listed in the r to those listed	ted in the construct In the construct In the construction in the construction	AG struction phase and ction phase and A suction phase and phase and the o nction phase and phase and the	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT AS associated mitigati HERITAGE IMPACT the associated mitiga NOISE IMPACT AS e associated mitiga	CT ASSESSMENT mitigations measures f ASSESSMENT igations measures must "ASSESSMENT itigations measures must SESSMENT tigations measures must SSESSMENT ations measures must b	must be updated an t be updated and in ust be updated and updated and implei st be updated and i	nd implemented to reduce pot aplemented to reduce potenti implemented to reduce poten mented to reduce potential ad mplemented to reduce potent
c impacts nal impact pacts asso ge impacts mpacts as	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil pciated with the decommissioning phase will be similar to t as associated with the decommissioning phase will be similar to t	nilar to those list to those listed in ar to those listed hose listed in the r to those listed	ted in the construct In the construct In the construction in the construction	AG struction phase and ction phase and A suction phase and phase and the o nction phase and phase and the	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT AS associated mitigati HERITAGE IMPACT the associated mitiga NOISE IMPACT AS e associated mitiga	CT ASSESSMENT mitigations measures f ASSESSMENT igations measures must r ASSESSMENT itigations measures must sessMENT ions measures must be ASSESSMENT tigations measures must SSESSMENT	must be updated an t be updated and in ust be updated and updated and implei st be updated and i	nd implemented to reduce pot aplemented to reduce potenti implemented to reduce poten mented to reduce potential ad mplemented to reduce potent
c impacts nal impact pacts asso ne impacts mpacts as	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil pciated with the decommissioning phase will be similar to t as associated with the decommissioning phase will be similar to t	nilar to those list to those listed in ar to those listed hose listed in the r to those listed	ted in the construct In the construct In the construction in the construction	AG struction phase and ction phase and a phase and the o notion phase and phase and the phase and the phase and the	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT AS associated mitigati HERITAGE IMPACT I the associated miti NOISE IMPACT AS e associated mitigati	CT ASSESSMENT mitigations measures f ASSESSMENT igations measures must assessment itigations measures must be ASSESSMENT tigations measures must assessment tigations measures must be ASSESSMENT ations measures must b PACT ASSESSMENT	must be updated an t be updated and in ust be updated and updated and implei st be updated and i	nd implemented to reduce pot aplemented to reduce potenti implemented to reduce poten mented to reduce potential ad mplemented to reduce potent
ic impacts nal impact pacts asso ge impacts impacts as tified by sp	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil ociated with the decommissioning phase will be similar to t as associated with the decommissioning phase will be similar sociated with the decommissioning phase will be similar to pecialist	nilar to those list to those listed in ar to those listed those listed in the tr to those listed o those listed in t	ted in the construct In the construction In the construction in the construction	AG struction phase and ction phase and a cuction phase and phase and the cuction phase and phase and the PALAE RIVE	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT AS associated mitigati HERITAGE IMPACT I the associated mitigati NOISE IMPACT AS e associated mitigati ECONTOLOGICAL IMI	CT ASSESSMENT mitigations measures in ASSESSMENT igations measures music ASSESSMENT itigations measures music SESSMENT tigations measures music SESSMENT ations measures music MACT ASSESSMENT	must be updated and t be updated and in ust be updated and updated and implei st be updated and ii be updated and impl	nd implemented to reduce pot implemented to reduce potenti implemented to reduce poten mented to reduce potential ad mplemented to reduce potential
ic impacts inal impact inpacts asso ge impacts impacts as tified by sp	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil pciated with the decommissioning phase will be similar to t as associated with the decommissioning phase will be similar to t	nilar to those list to those listed in ar to those listed those listed in the tr to those listed o those listed in t	ted in the construct In the construction In the construction in the construction	AG struction phase of ction phase and A suction phase and phase and the ction phase and phase and the PALAE RIVE construction phase	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated m BAT IMPACT AS associated mitigati HERITAGE IMPACT I the associated mitigati NOISE IMPACT AS e associated mitigati ECONTOLOGICAL IMI	CT ASSESSMENT mitigations measures in ASSESSMENT igations measures music ASSESSMENT itigations measures music SESSMENT tigations measures music SESSMENT tigations measures music SESSMENT ations measures music MACT ASSESSMENT ited mitigations measures	must be updated and t be updated and in ust be updated and updated and implei st be updated and ii be updated and impl	nd implemented to reduce pot implemented to reduce potenti implemented to reduce poten mented to reduce potential ad mplemented to reduce potential
ic impacts inal impact inpacts asso ge impacts impacts as tified by sp economic i	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil ociated with the decommissioning phase will be similar to t as associated with the decommissioning phase will be similar sociated with the decommissioning phase will be similar to pecialist	nilar to those list to those listed in ar to those listed those listed in the to those listed in t o those listed in t e similar to those	ted in the construct n the construct d in the constru- e construction in the construction the construction the construction the construction	AG struction phase and ction phase and A uction phase and the phase and the ction phase and the PALAE RIVE construction pha SOC	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated mi BAT IMPACT AS associated mitigati HERITAGE IMPACT AS the associated mitigat NOISE IMPACT AS e associated mitiga ERINE RABBIT IMPA asse and the associa	CT ASSESSMENT mitigations measures in ASSESSMENT igations measures music ASSESSMENT itigations measures music SESSMENT fons measures musical be ASSESSMENT ations measures musical SESSMENT ations measures musical ACT ASSESSMENT ited mitigations measures ACT ASSESSMENT	must be updated and t be updated and in ust be updated and updated and implei st be updated and i e updated and impl res must be updated	nd implemented to reduce pot aplemented to reduce potenti implemented to reduce potent mented to reduce potential ac mplemented to reduce potential lemented to reduce potential
tic impacts unal impact mpacts asso age impacts e impacts as ntified by sp -economic i -economic i	acts associated with the decommissioning phase will be sim associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil ociated with the decommissioning phase will be similar to t as associated with the decommissioning phase will be similar sociated with the decommissioning phase will be similar pecialist impacts associated with the decommissioning phase will be impacts associated with the decommissioning phase will be	nilar to those list to those listed in ar to those listed those listed in the tr to those listed o those listed in t e similar to those	ted in the construct in the construction in the construction in the construction the construction the construction the construction the construction the construction	AG struction phase and ction phase and a phase and the of phase and the of action phase and phase and the phase and the PALAE RIVE construction pho SOCI construction pho	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated mi BAT IMPACT AS associated mitigati HERITAGE IMPACT AS the associated mitigati NOISE IMPACT AS e associated mitigati ENINE RABBIT IMPA ase and the associa IO-ECONOMIC IMP ase and the associa RIAL BIODIVERSITY	CT ASSESSMENT mitigations measures in ASSESSMENT igations measures music ASSESSMENT itigations measures music SESSMENT itigations measures music ASSESSMENT itigations measures music SESSMENT itions measures music PACT ASSESSMENT ited mitigations measures ACT ASSESSMENT ited mitigations measures ited mitigations measures ited mitigations measures ited mitigations measures ited mitigations measures	must be updated and t be updated and in ust be updated and updated and implei st be updated and ii be updated and implei res must be updated res must be updated	nd implemented to reduce pot implemented to reduce potenti implemented to reduce potent mented to reduce potential ad implemented to reduce potential lemented to reduce potential d and implemented to reduce d and implemented to reduce
tic impacts unal impact mpacts asso age impacts e impacts as ntified by sp -economic i -economic i	acts associated with the decommissioning phase will be sin associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil ociated with the decommissioning phase will be similar to t as associated with the decommissioning phase will be similar sociated with the decommissioning phase will be similar beciated with the decommissioning phase will be similar to associated with the decommissioning phase will be similar to becialist	nilar to those list to those listed in ar to those listed those listed in the tr to those listed o those listed in t e similar to those	ted in the construct in the construction in the construction in the construction the construction the construction the construction the construction the construction	AG struction phase and ction phase and a phase and the of phase and the of action phase and phase and the phase and the PALAE RIVE construction pho SOCI construction pho	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated mi BAT IMPACT AS associated mitigati HERITAGE IMPACT AS the associated mitigati NOISE IMPACT AS e associated mitigati ENTOLOGICAL IMP ERINE RABBIT IMPA ase and the associa IO-ECONOMIC IMP ase and the associa RIAL BIODIVERSITY ion phase and the associa	CT ASSESSMENT mitigations measures in ASSESSMENT igations measures musi ASSESSMENT itigations measures musi SESSMENT fons measures must be ASSESSMENT ations measures must be PACT ASSESSMENT ations measures must b PACT ASSESSMENT ations measures must b PACT ASSESSMENT ations measures must b PACT ASSESSMENT ations measures must b PACT ASSESSMENT ations measures must b MACT ASSESSMENT ations measures must b MACT ASSESSMENT ations measures must b MACT ASSESSMENT ations measures measures ations measures measures ations measures must b MACT ASSESSMENT ations measures must b MACT ASSESSMENT	must be updated and t be updated and in ust be updated and updated and implei st be updated and ii be updated and implei res must be updated res must be updated	nd implemented to reduce pot implemented to reduce potenti implemented to reduce potent mented to reduce potential ad implemented to reduce potential lemented to reduce potential d and implemented to reduce d and implemented to reduce
atic impacts aunal impact impacts asso age impacts e impacts as entified by sp p-economic i p-economic i	acts associated with the decommissioning phase will be sim associated with the decommissioning phase will be similar ts associated with the decommissioning phase will be simil ociated with the decommissioning phase will be similar to t as associated with the decommissioning phase will be similar sociated with the decommissioning phase will be similar pecialist impacts associated with the decommissioning phase will be impacts associated with the decommissioning phase will be	nilar to those list to those listed in ar to those listed those listed in the tr to those listed o those listed in t e similar to those e similar to those e will be similar t	ted in the construct in the construction in the construction in the construction in the construction the construction is the c	AG struction phase and ction phase and auction phase and phase and the phase and the ction phase and the PALAE RIVE construction pha SOCI construction pha TERRESTI	RICULTURAL IMPA and the associated AQUATIC IMPACT the associated miti VIFAUNAL IMPACT d the associated mi BAT IMPACT ASS associated mitigati HERITAGE IMPACT the associated mitigati NOISE IMPACT AS e associated mitigati ENTOLOGICAL IMPACT asse and the associa IO-ECONOMIC IMPA asse and the associa RIAL BIODIVERSITY ion phase and the a	CT ASSESSMENT mitigations measures in ASSESSMENT igations measures music ASSESSMENT itigations measures music SESSMENT itigations measures music ASSESSMENT itigations measures music SESSMENT ations measures music PACT ASSESSMENT ited mitigations measures ACT ASSESSMENT ited mitigations measures ited mitigations measures ited mitigations measures associated mitigations SESSMENT	must be updated and t be updated and in ust be updated and updated and impler st be updated and in the updated and impler res must be updated res must be updated measures must be updated	nd implemented to reduce pot implemented to reduce potenti implemented to reduce potent mented to reduce potential ad mplemented to reduce potential lemented to reduce potential d and implemented to reduce d and implemented to reduce

None identified by specialist

EASURES	REVERSABILITY/ MITIGATION	SIGNIFICANCE POST- MITIGATION
	NO IMP.	ACT

ESSMENT IN THE FORM OF A DECOMISSIONING ELEVANT.

otential adverse impacts.

tial adverse impacts.

ential adverse impacts.

adverse impacts.

ntial adverse impacts.

al adverse impacts.

ce potential adverse impacts.

ce potential adverse impacts.

o reduce potential adverse impacts.

al adverse impacts.