

DEVELOPMENT OF A CLUSTER OF RENEWABLE ENERGY FACILITIES BETWEEN SOMERSET EAST AND GRAHAMSTOWN, EASTERN CAPE PROVINCE

PRE-APPLICATION MEETING WITH DEFF: NOTES FOR THE RECORD

Meeting Date: 09 October 2020

Time: 10:00

Venue: via Microsoft Teams (online virtual meeting)

Reference: 2020-09-0038

Attendees (Savannah Environmental attendance register attached):

NAME	ORGANISATION
Masina Litsoane	Department of Environment, Forestry and Fisheries (DEFF)
Lunga Dlova	Department of Environment, Forestry and Fisheries (DEFF)
Lisa Opperman	Savannah Environmental (SE)
Jo-Anne Thomas	Savannah Environmental (SE)
Hylton Newcombe	Wind Relic (WR)
Carla Strydom	Wind Relic (WR)
Thomas Garner	Wind Relic (WR)

The applicant seeks to make Application for Environmental Authorisation for the development of six wind farms, two solar farms and a 400kV Main Transmission Substation. The pre-application meeting provided an opportunity for the Applicant to explain the details of their developments and the processes which has been followed to date for the identification of the proposed projects.

The purpose of the meeting was to obtain confirmation from DEFF on the process to be followed for the projects and to give DEFF the opportunity to raise any comments or concerns regarding the approach for assessment of the projects, including the specialist studies being undertaken and the public participation process proposed.

Notes:

Lisa Opperman (SE) opened the meeting, explained the purpose of the meeting, and provided information on the background of the projects and an introduction to the projects being proposed.

Hylton Newcombe (WR) presented an overview of the projects, which included the location of the projects, the project infrastructure associated with the projects and the associated infrastructure. Hylton explained that all the projects fall within the Cookhouse Renewable Energy Development Zone (REDZ) and within a Strategic Transmission Corridor. The process followed for the identification of the project sites and placement of infrastructure to date was explained and it was indicated that the process followed included consultation with independent specialists through workshops and consideration of confirmed sensitivities within the sites to inform the placement of the project development footprints for assessment as part of the projects and Applications for Environmental Authorisation. Refer to **Appendix A**.

Lisa Opperman (SE) explained that based on the locations of the projects within the Cookhouse REDZ the projects will follow Basic Assessment processes. The 400kV Main Transmission Substation is located within Strategic Transmission Corridor and will therefore also fall under the ambit of a Basic Assessment. An overview of the specialist work undertaken to date and that will inform the Basic Assessment Reports was also provided.

Lisa Opperman (SE) provided feedback on the Public Participation plan submitted to the Department for approval and provided a summary of the approach proposed.

The following was stated and noted for the record:

- » Lunga Dlova (DEFF) confirmed that he will be the case officer on the projects.
- » Lisa Opperman (SE) requested that WR advise on the off-takers for the generated electricity as the projects are not proposed to be bid as part of the Renewable Energy Independent Power Producer Procurement (REIPPP) programme. Hylton Newcombe (WR) advised that he has distributed a letter for submission to the Department for consideration (**Appendix B**). Thomas Garner (WR) advised that a company named Earth and Wire has been established as a power utility to fill a gap in the market to supply electricity to private off-takers. The proposed projects will form part of this power utility.
- » Masina Litsoane (DEFF) requested confirmation regarding whether the projects will be connected to the Eskom national grid for the evacuation of the generated electricity. Thomas Garner (WR) advised that the projects will be connected to the Eskom national grid through the development of the proposed 400kV Main Transmission Substation and confirmed that Eskom has been consulted in this regard. There will be a "use-of-system" agreement with Eskom whereby Eskom will be compensated by Wind Relic for the use of the grid infrastructure to evacuate the generated electricity (i.e. wheeling tariff).

- » Lunga Dlova (DEFF) requested the distance of the projects located in the western section to the eastern section. Hylton Newcombe (WR) advised that the distance between the western section and the eastern section is approximately 60km.
- » Lunga Dlova (DEFF) requested the distance of the projects in the eastern section to Grahamstown. Hylton Newcombe (WR) advised that Grahamstown is ~13km away from the projects which is further away than the Waainek Wind Energy Facility existing project.
- » Lunga Dlova (DEFF) confirmed that the Applications for Environmental Authorisation are to be addressed to him. It must also be indicated in the applications that a Pre-Application Meeting was held for the projects.
- » Hylton Newcombe (WR) advised that the need and desirability of the projects are integrated and that this information must be considered by the Department (**Appendix C**).
- » Lisa Opperman (SE) requested whether Lunga Dlova (DEFF) would be the case officer for all applications or whether the projects will be allocated to various case officers for consideration. Lunga advised that the allocation would most probably be split between case officers, however this will be confirmed once the Applications for Environmental Authorisation have been lodged with the Department.
- » Masina Litsoane (DEFF) advised that if the projects will be submitted to the Department as a cluster application then Lunga will be the case officer, however if separate Applications for Environmental Authorisation are submitted then the projects will be allocated to officials who fall under Masina and not scattered throughout the Department.

No further comments or queries were raised by the attendees. The meeting was closed at 10:37 AM.

Prepared by:

Lisa Opperman

lisa.o@savannahsa.com

Post-meeting note: Following the pre-application meeting the applicant has advised that separate Applications for Environmental Authorisation will be lodged with the DEFF and not a cluster application.

Appendix List:

Appendix A: Project Presentation

Appendix B: Additional information on potential electricity off-takers

Appendix C: Need and desirability

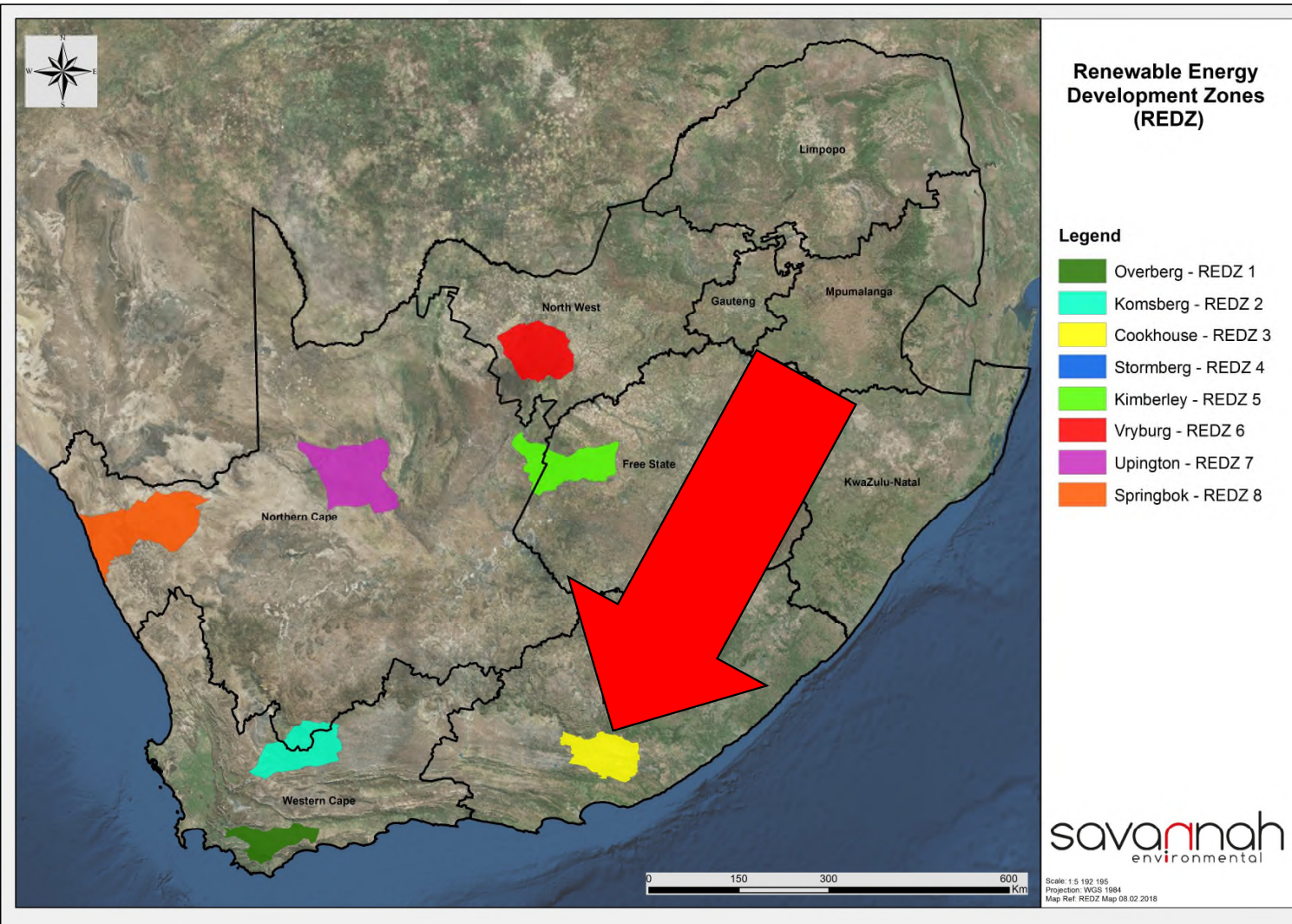
**APPENDIX A:
PROJECT PRESENTATION**



WIND RELIC

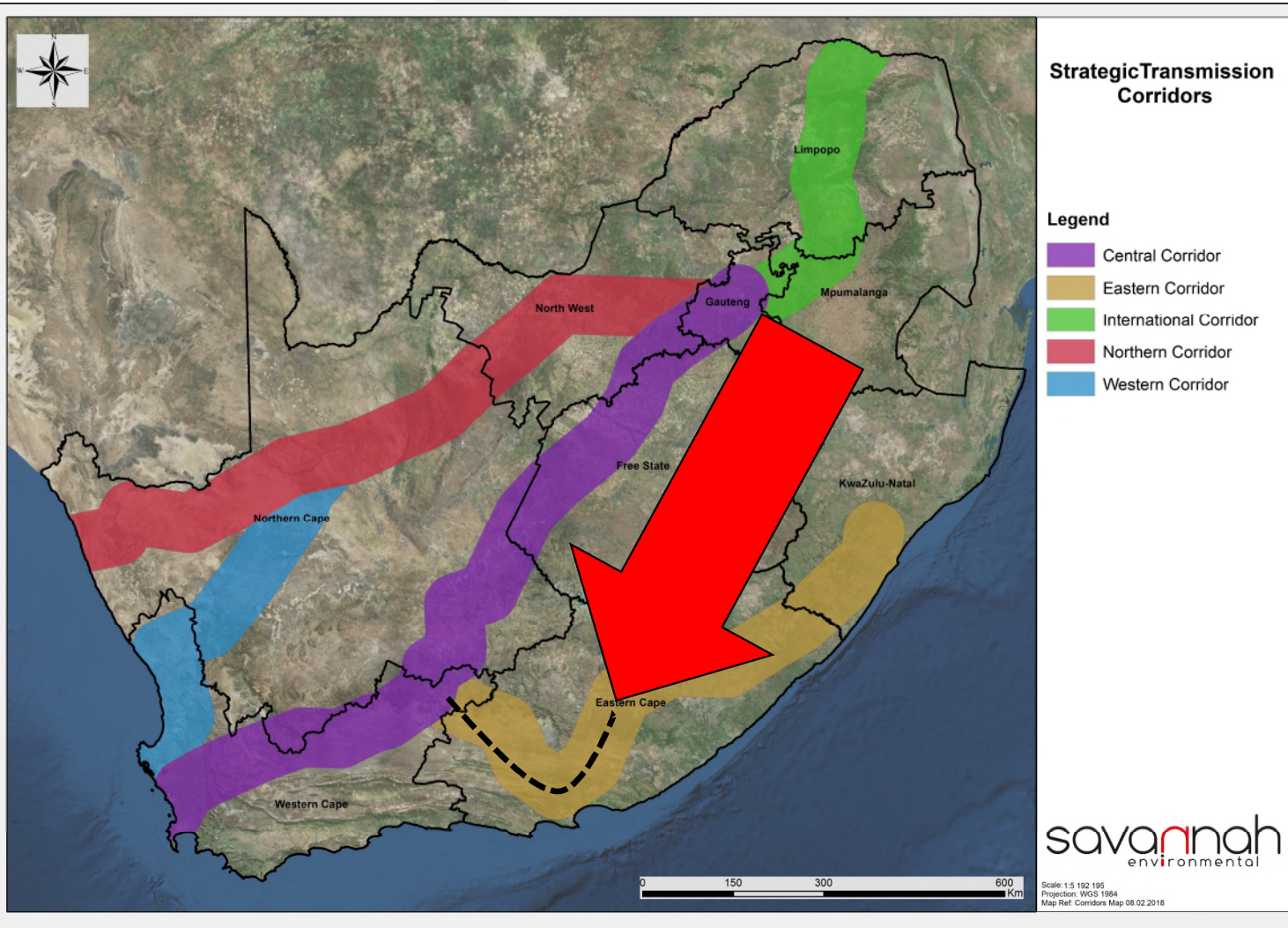
RENEWABLES

CHOJE SITE – REDZ#3



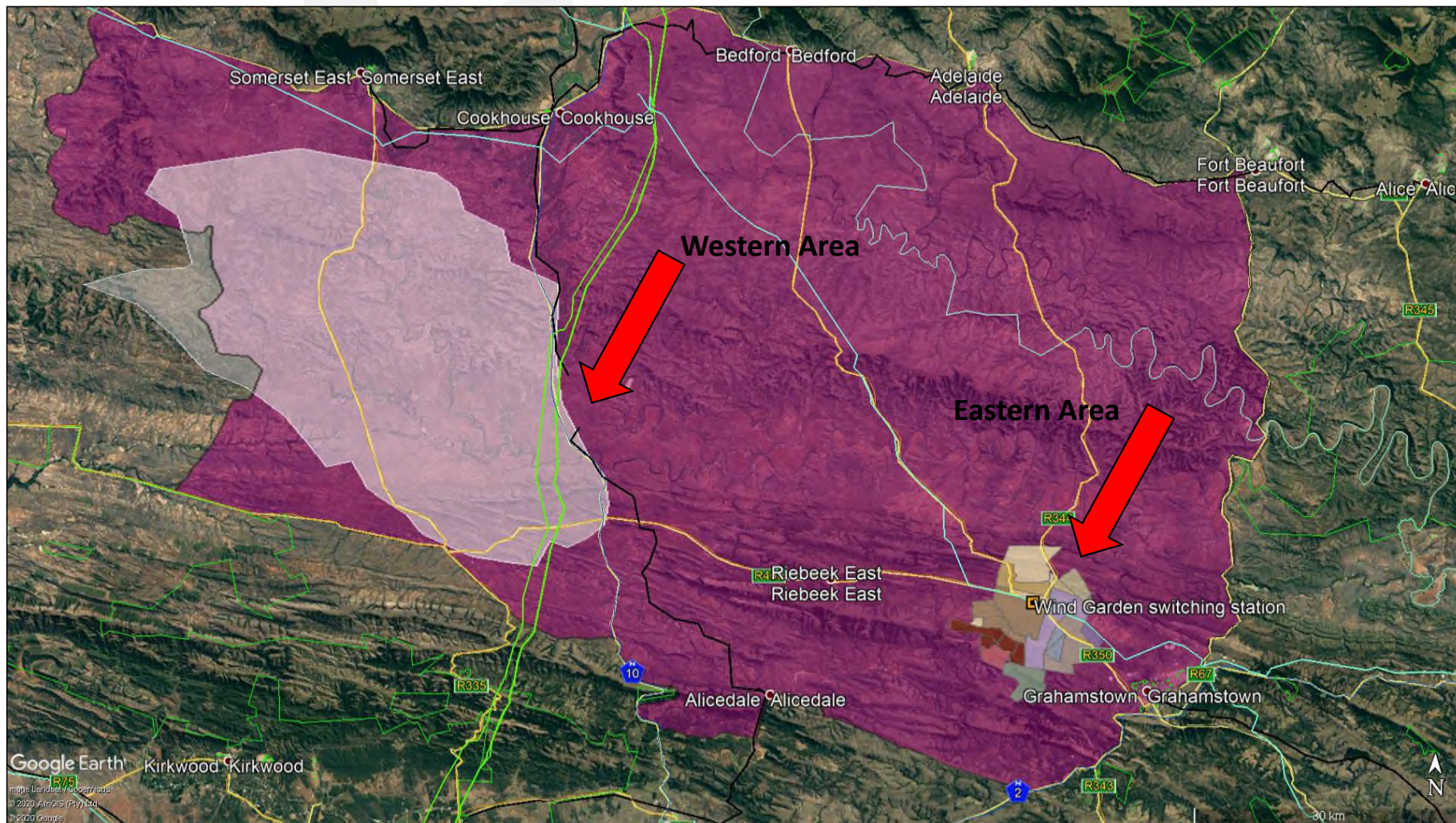
- Streamline:
 - Planning
 - Approval
 - Implementation processes
 - 147 day Environ Process
- REDZ adopted by PICC
 - Policy & Planning alignment
 - National
 - Provincial
 - Local authorities
 - Alignment supported by SPLUMA etc.
- Government priorities:
 - a) Reducing energy constraints - facilitating

CHOJE SITE – Transmission corridor

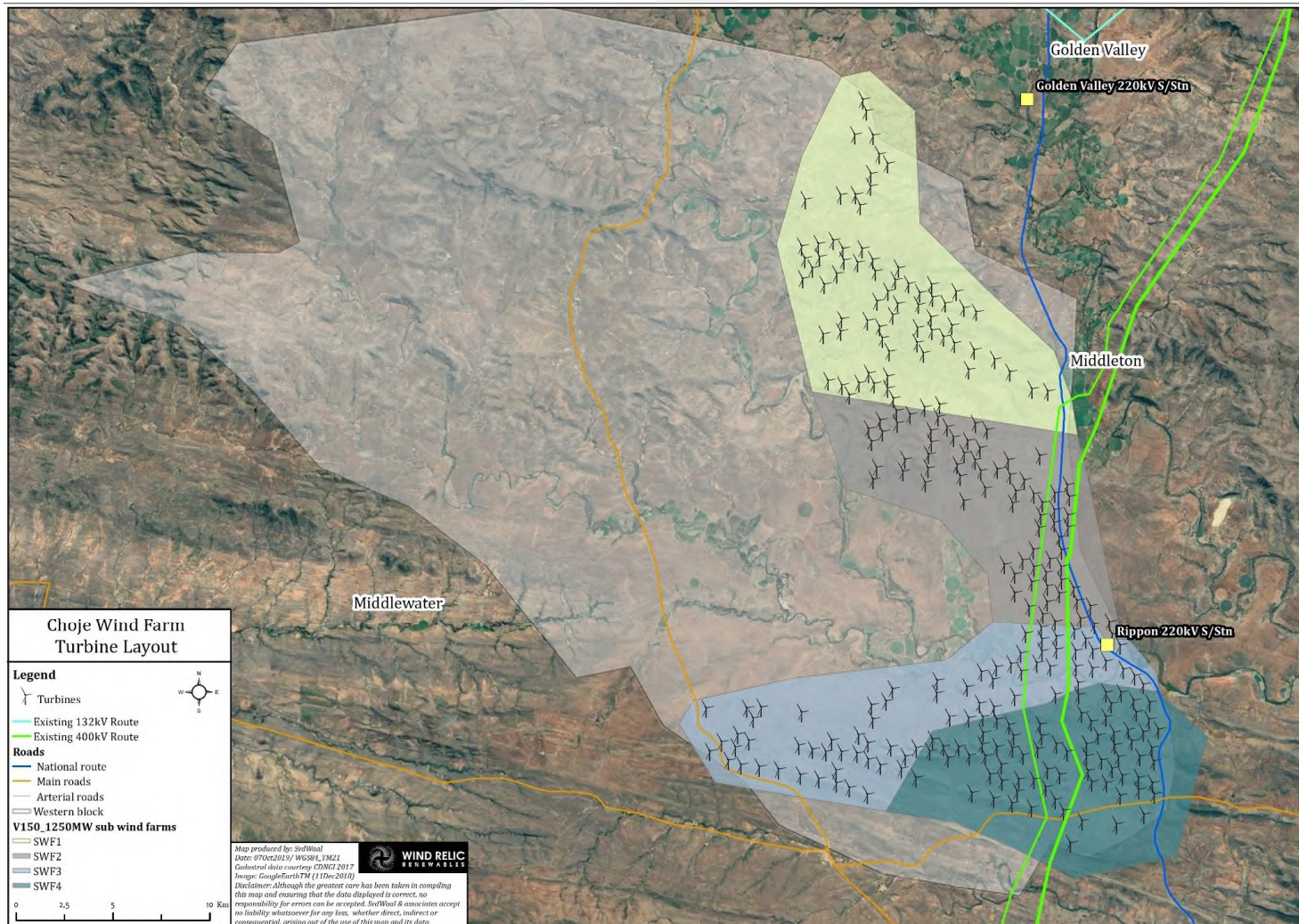


- Government priorities cont.:
 - b) Address NDP objectives
 - c) Achieve RE target in IRP
 - d) Promote green economy and sustainable development
 - e) Promote intergovernmental coordination and integrated authorizations
 - f) Eskom positive network gain (2.9%)

CHOJE SITE – Spatial Distribution

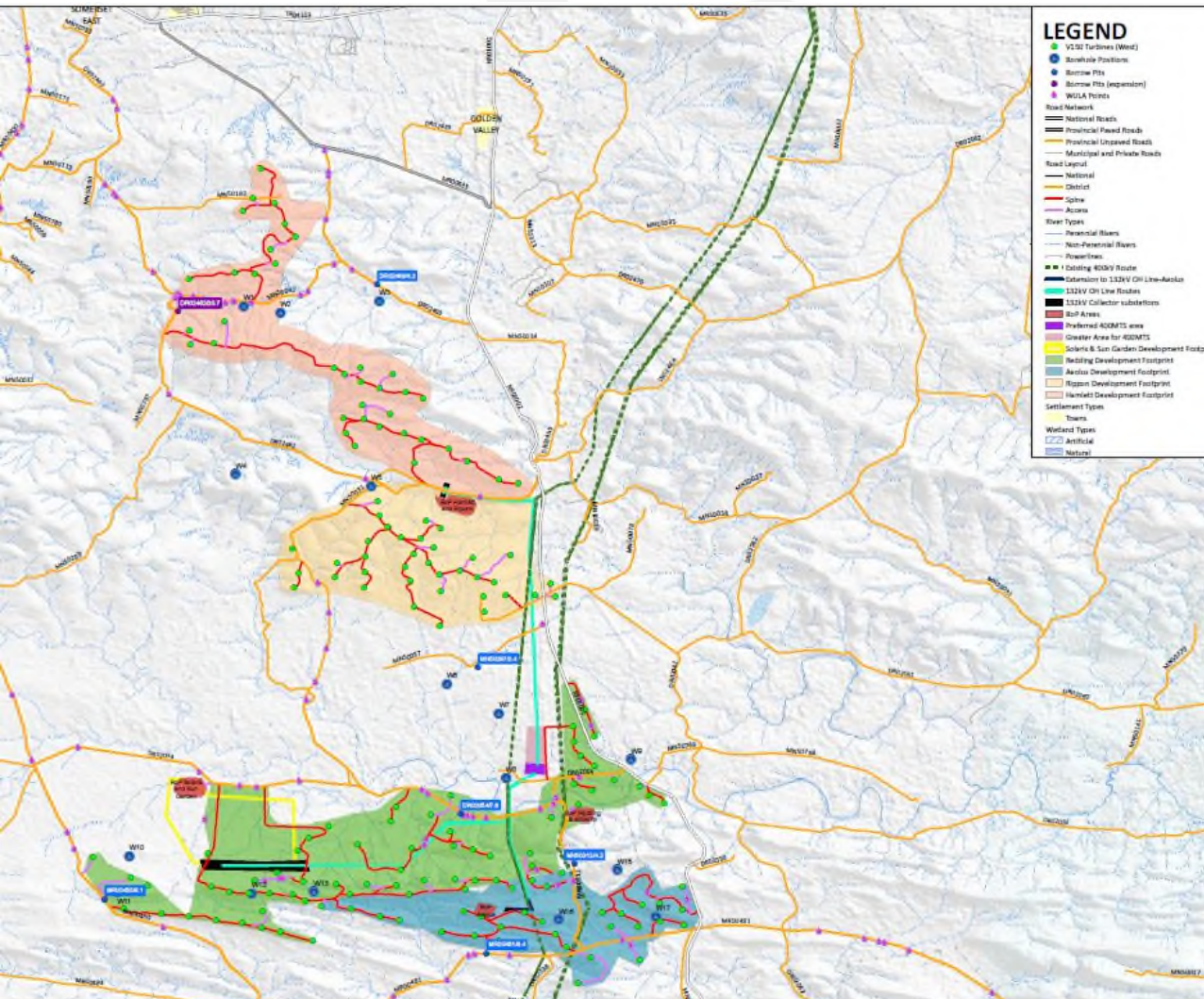


CHOJE SITE – Western Area (Priority)



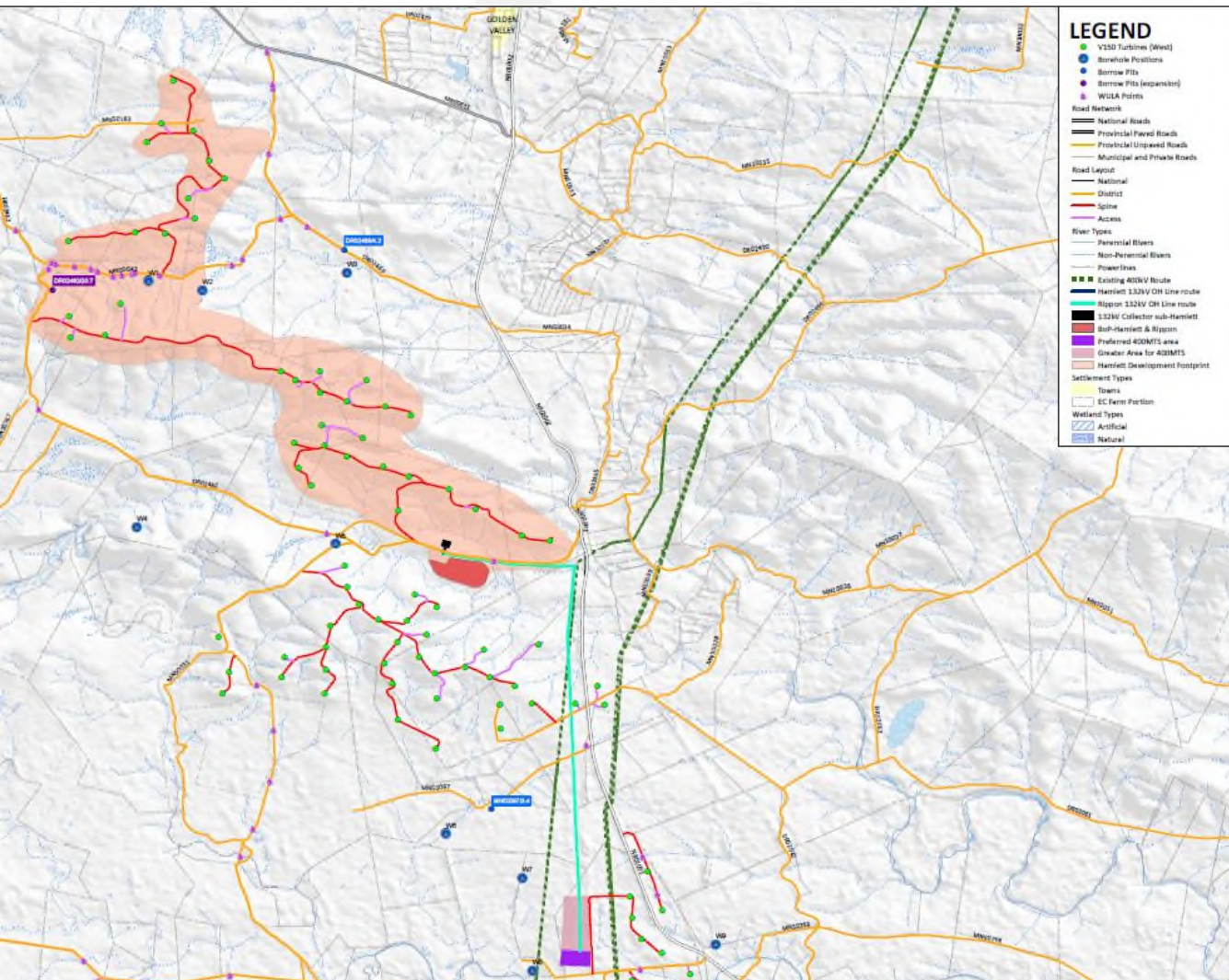
- 414 positioned WTGs outside priority area
- 297 potential WTGs: pre-mitigation
 - 5.6MW – 9MW nameplates
 - ~36% Net Capacity Factor
- 40km X 23km (extent)
- X4 sub-wind farms
 - Rationale for split
 - DEAT – Alistair McMaster
 - PPA roll-out readiness
- Poseidon-B 400kV MTS
 - 50km from Poseidon
 - 3X 400kV OH-Lines
 - Very stable

CHOJE SITE – Western Area (Priority)



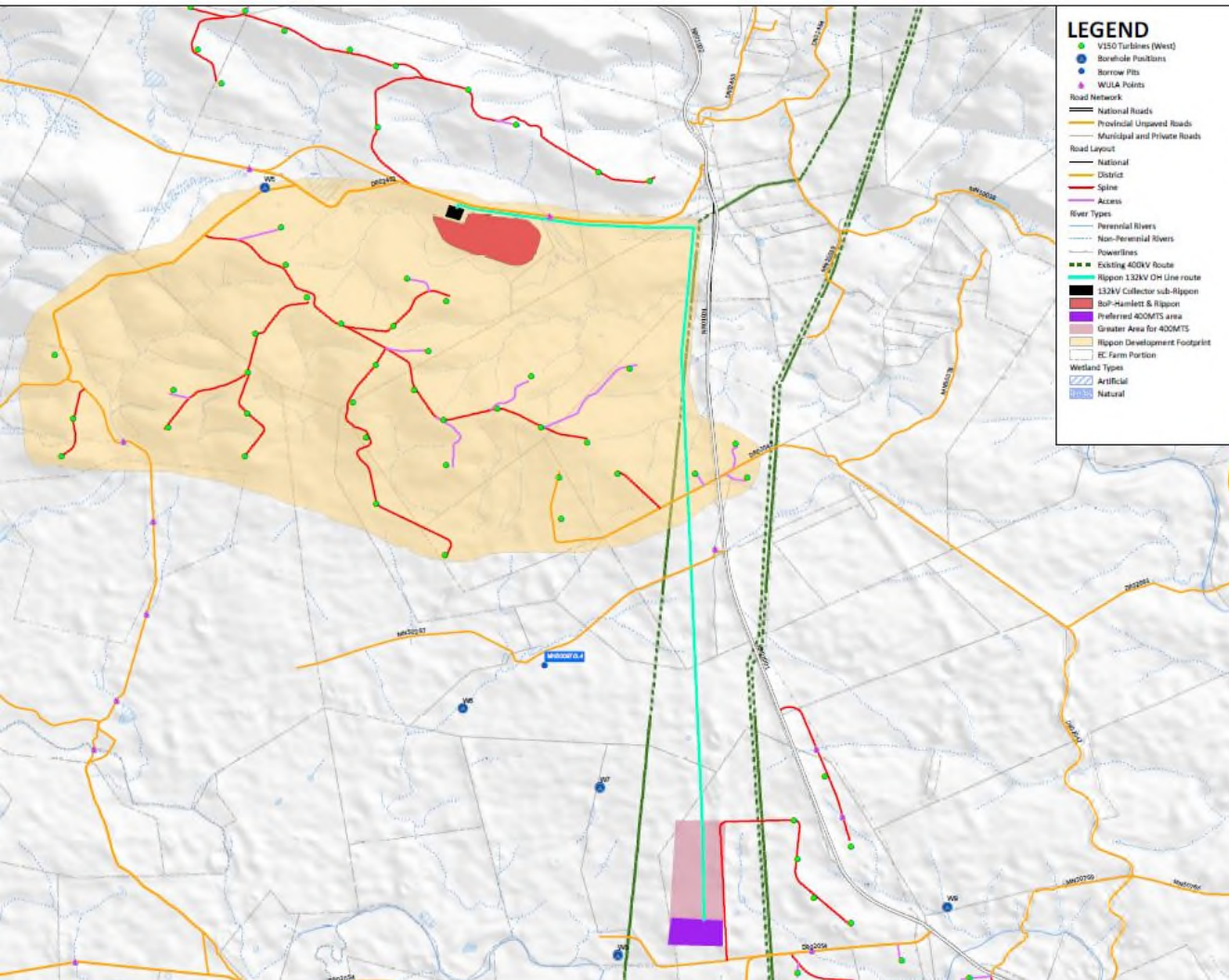
- 170 WTGs – post mitigation
- 2 Environmental screening workshops:
 - Pre and Post specialist site visits
- No-go areas: WTGs removed
- NOW WTGs are placed in:
 - >90% Low sensitivity areas
 - <10% Medium sensitivity areas
- X4 Wind farms
 - Hamlett
 - Ripponn
 - Redding
 - Aeolus
- ESKOM CEL – 1300MW
 - Applied for

CHOJE SITE – Hamlett WEF



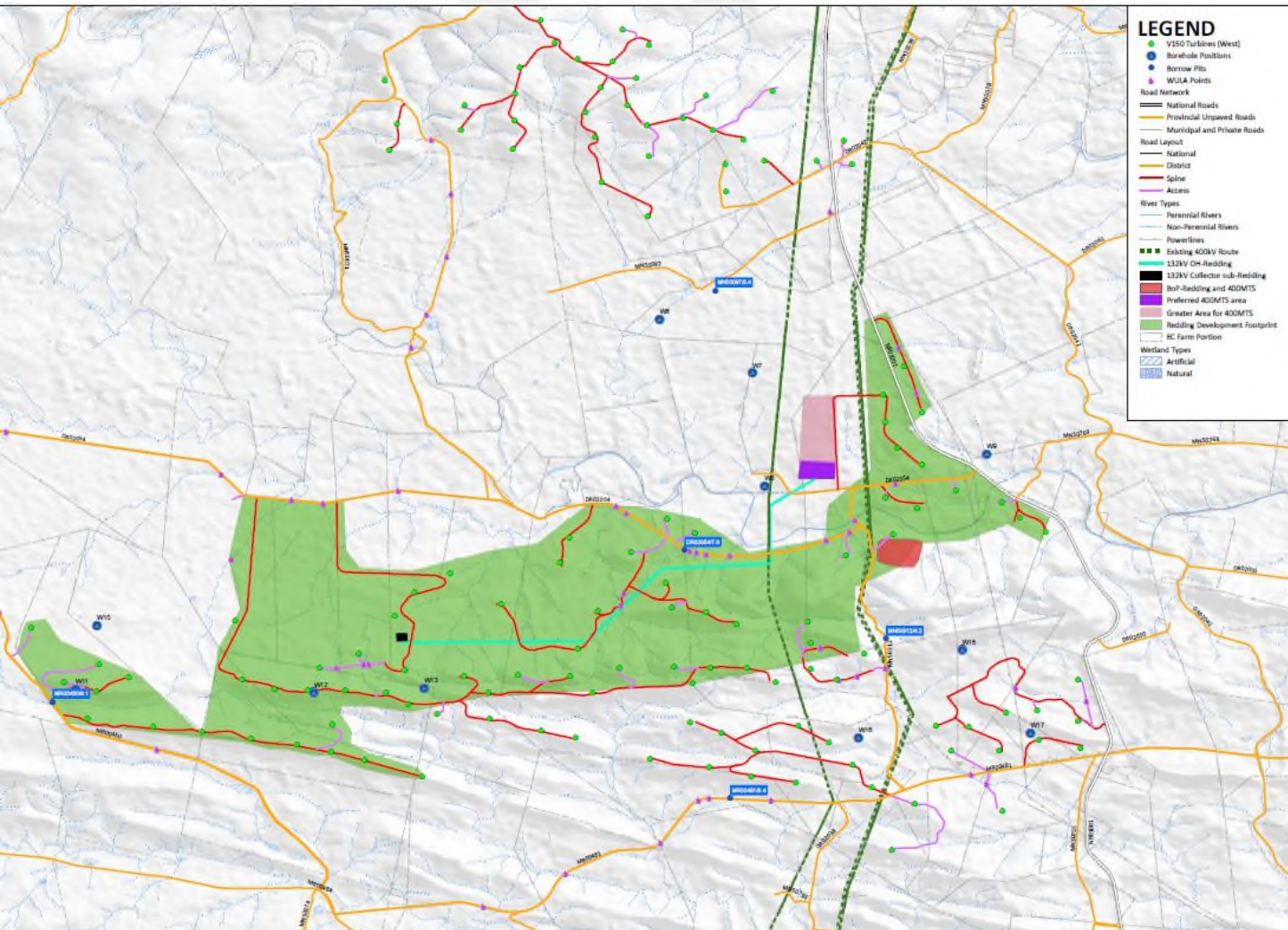
- Size of project: 14 329ha
- Development footprint:
 - 48.6ha
 - 0.34% of proposed area
- Capacity of WEF:
 - 207.2MW – 333MW
- Number & capacity of wind turbines:
 - 37
 - 5.6MW – 9MW
- Turbine dimensions
 - Hub Height: 120m – 166m
 - Rotor diameter: 150m – 160m
 - Blade length: 74.5m – 80m
- Tower type
 - Hybrid (concrete and steel) or concrete

CHOJE SITE – Ripponn WEF



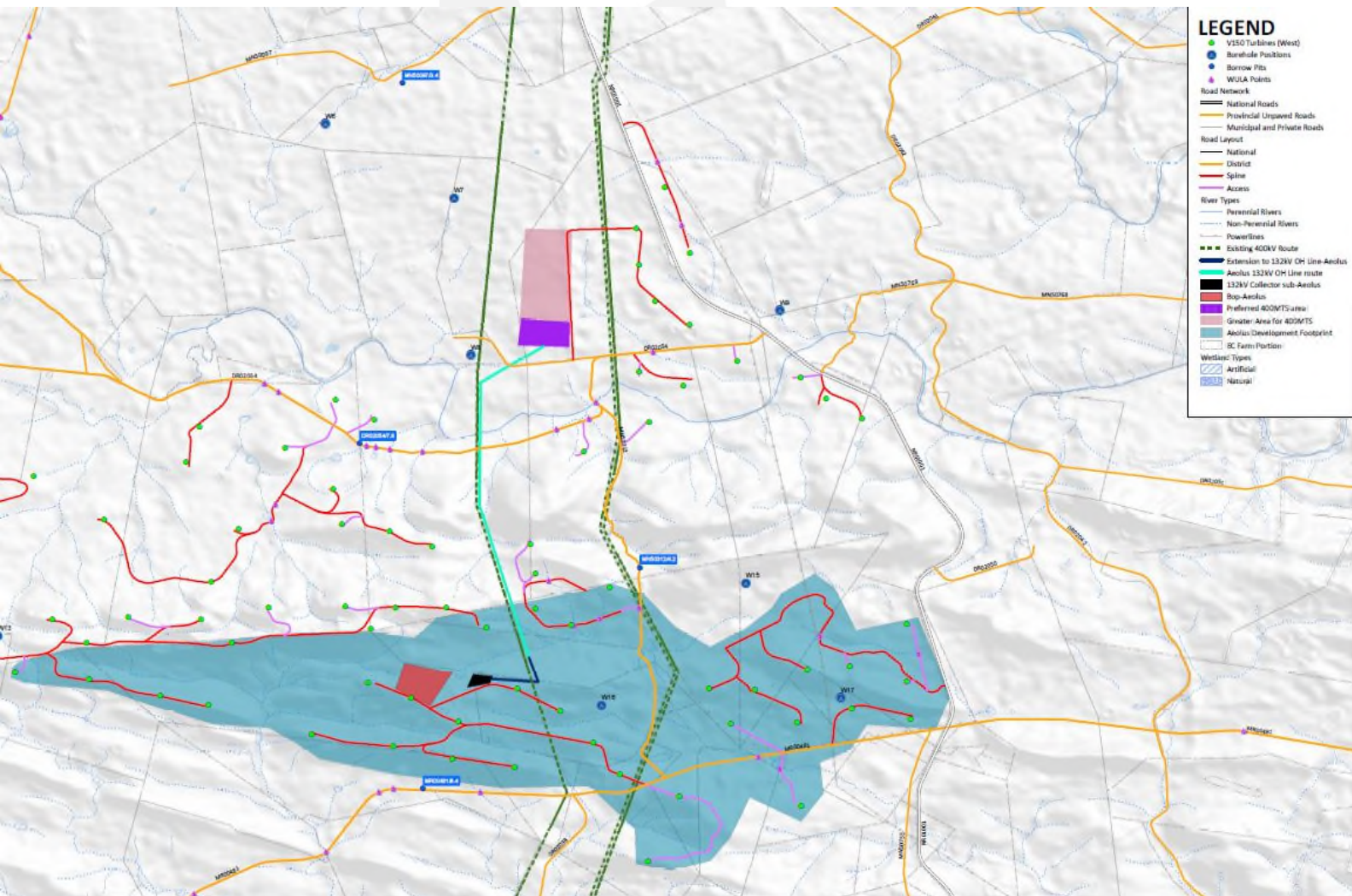
- Size of project: 12 838ha
- Development footprint:
 - 30.8ha
 - 0.24% of proposed area
- Capacity of WEF:
 - 201.6MW – 324MW
- Number & capacity of wind turbines:
 - 36
 - 5.6MW – 9MW
- Turbine dimensions
 - Hub Height: 120m – 166m
 - Rotor diameter: 150m – 160m
 - Blade length: 74.5m – 80m
- Tower type
 - Hybrid (concrete and steel) or concrete

CHOJE SITE – Redding WED



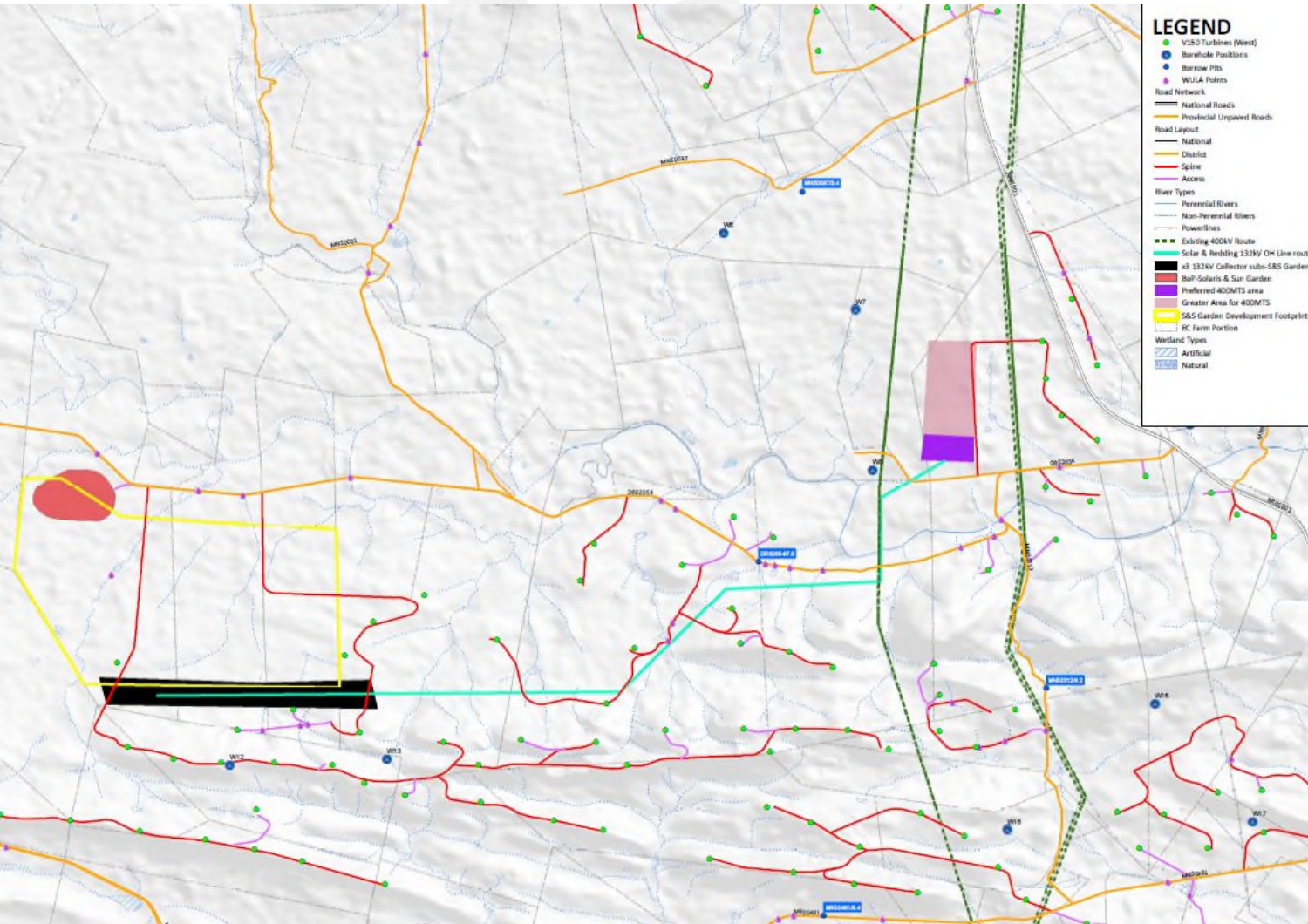
- Size of project: 13 115ha
- Development footprint:
 - 88.2ha
 - 0.67% of proposed area
 - Includes 400MTS footprint
- Capacity of WEF:
 - 358.4MW – 576MW
- Number & capacity of wind turbines:
 - 64
 - 5.6MW – 9MW
- Turbine dimensions
 - Hub Height: 120m – 166m
 - Rotor diameter: 150m – 160m
 - Blade length: 74.5m – 80m
- Tower type
 - Hybrid (concrete and steel) or concrete

CHOJE SITE – Aeolus WEF



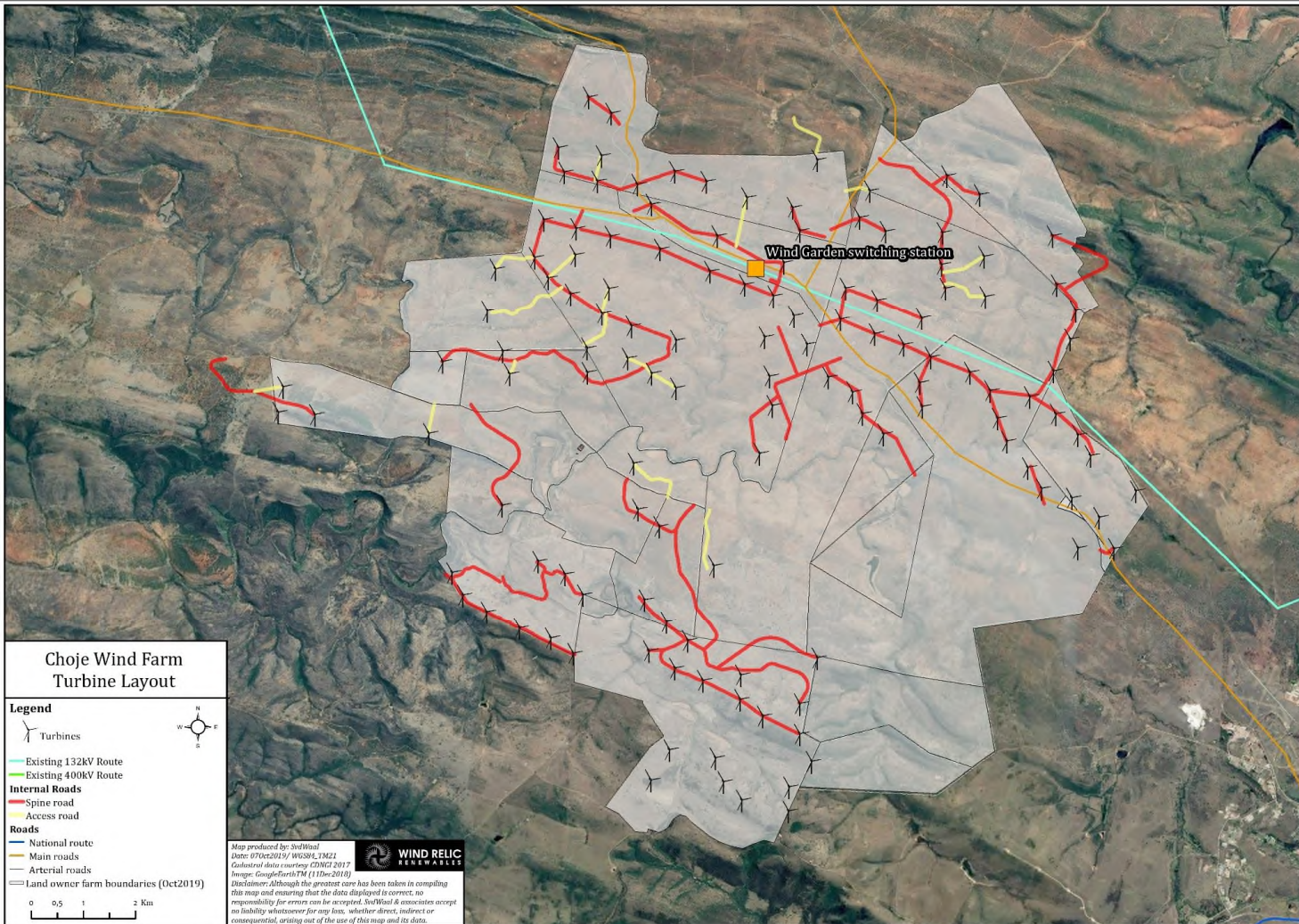
- Size of project: 5 330ha
- Development footprint:
 - 45.4ha
 - 0.85% of proposed area
- Capacity of WEF:
 - 184.8MW – 297MW
- Number & capacity of wind turbines:
 - 33
 - 5.6MW – 9MW
- Turbine dimensions
 - Hub Height: 120m – 166m
 - Rotor diameter: 150m – 160m
 - Blade length: 74.5m – 80m
- Tower type
 - Hybrid (concrete and steel) or concrete

CHOJE SITE – Solar



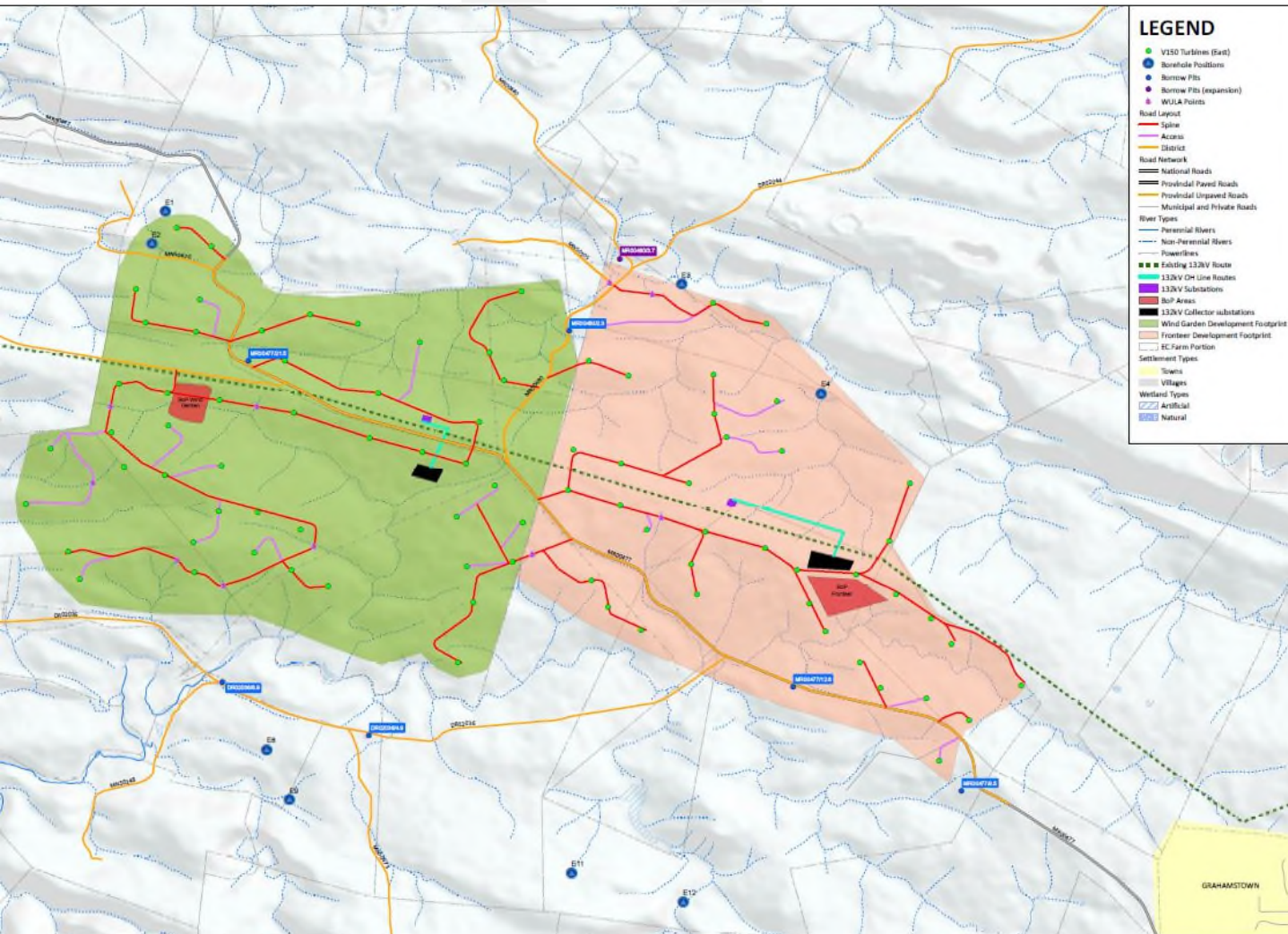
- X2 Bifacial Tracking Solar PV plants:
 - Solaris: 300MW
 - Sun Garden: 300MW
- Development footprint:
 - Each 500ha
- Site selection:
 - Low sensitivity area
- Rationale
 - Alternative energy source
 - Baseload optimisation combined with WEFs
 - Reduces impact by substituting omitted WTGs

CHOJE SITE – Eastern Area



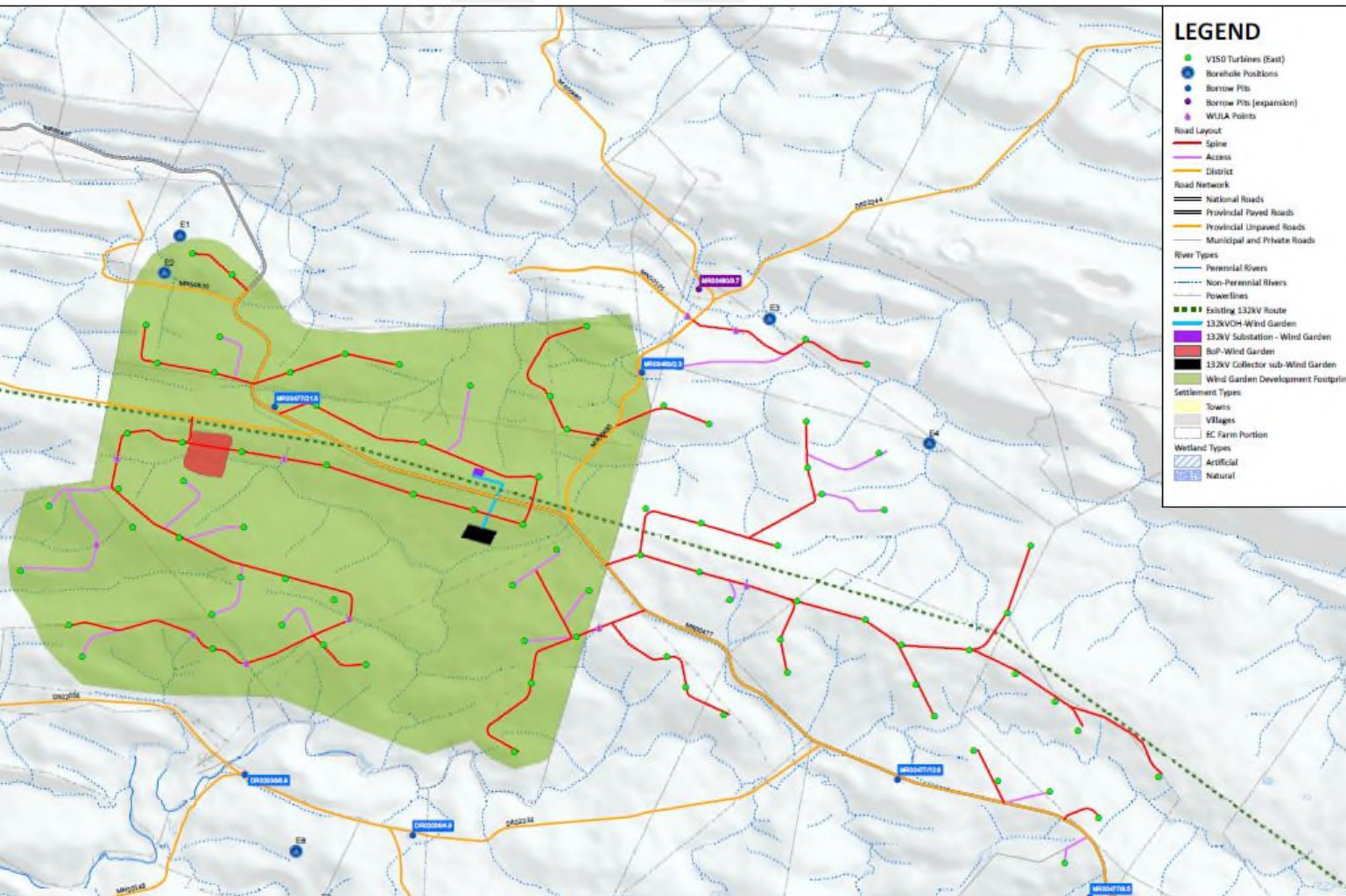
- 128 potential WTGs: pre-mitigation
 - 4.2MW – 5.6MW nameplates
 - +40% Net Capacity Factor
- Previously well researched WEF study area.
- X2 sub-wind farms
 - Rationale for split
 - DEAT – Alistair McMaster
 - PPA roll-out readiness
- Poseidon – Albany 132kV line capacity
 - Only available capacity within entire REDZ 3 area without 400MTS new build
 - Eskom CEL
 - Eskom Budget Quote accepted

CHOJE SITE – Eastern Area (Mitigated)



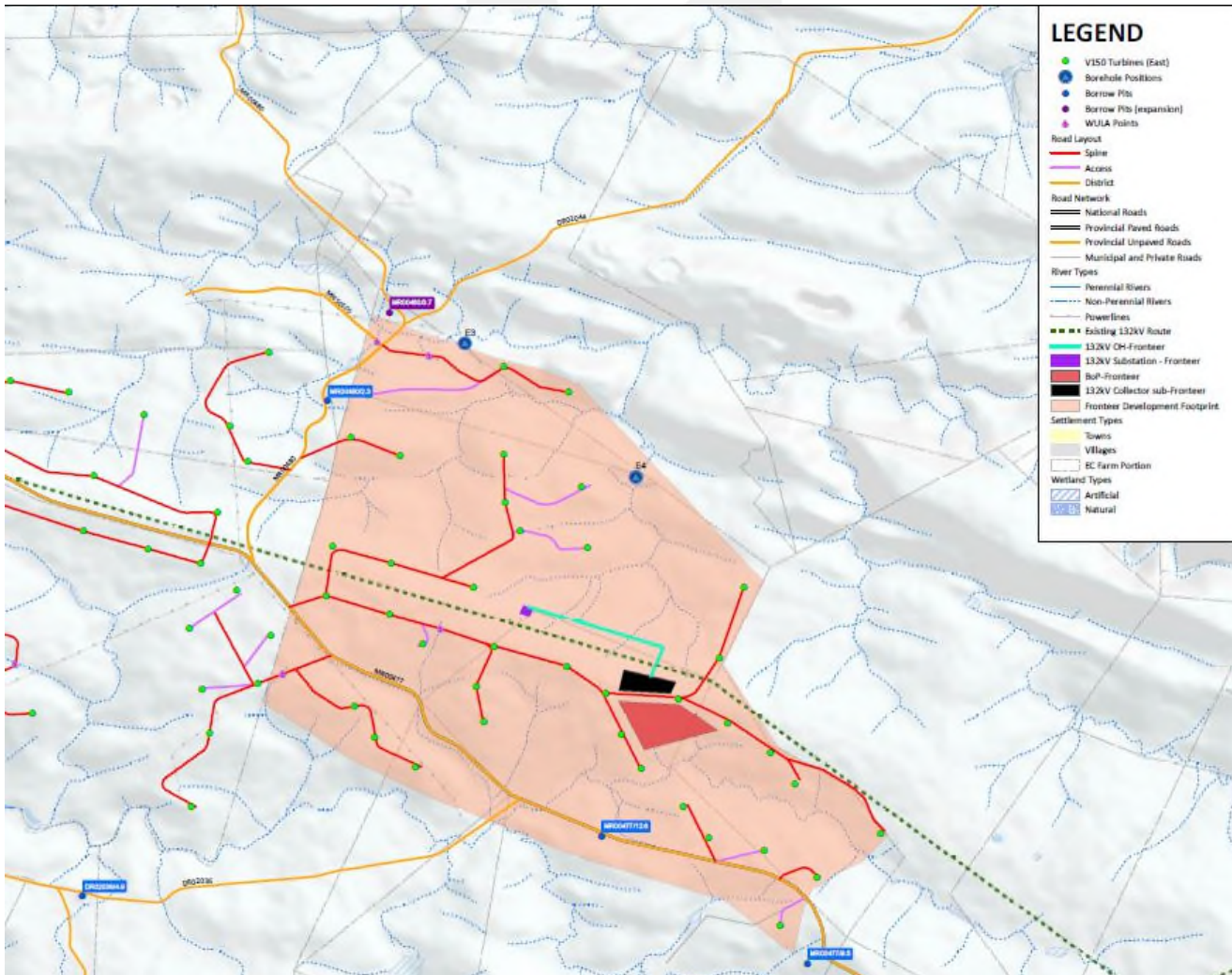
- 85 WTGs – post mitigation
- 2 Environmental screening workshops:
 - Pre and Post site visits
- No-go areas: WTGs removed
 - >95% Low sensitivity areas
 - <5% Medium sensitivity areas
- X2 Wind farms
 - Wind Garden
 - Fronteer
- ESKOM Budget Quote accepted

CHOJE SITE – Wind Garden (Mitigated)



- Size of project: 4 336ha
- Development footprint:
 - 66.6ha
 - 1.54% of proposed area
- Capacity of WEF:
 - 197.4MW – 263.2MW
- Number & capacity of wind turbines:
 - 47
 - 4.2MW – 5.6MW
- Turbine dimensions
 - Hub Height: 120m
 - Rotor diameter: 150m – 160m
 - Blade length: 74.5m – 80m
- Tower type
 - Steel

CHOJE SITE – Frontier (Mitigated)



- Size of project: 5 091ha
- Development footprint:
 - 49.4ha
 - 0.84% of proposed area
- Capacity of WEF:
 - 159.6MW – 212.8MW
- Number & capacity of wind turbines:
 - 38
 - 4.2MW – 5.6MW
- Turbine dimensions
 - Hub Height: 120m
 - Rotor diameter: 150m – 160m
 - Blade length: 74.5m – 80m
- Tower type
 - Steel



WIND RELIC

R E N E W A B L E S

**APPENDIX B:
ADDITIONAL INFORMATION ON POTENTIAL ELECTRICITY OFF-
TAKERS**

OCTOBER
2020

Energy Exchange of Southern Africa

Potential Customer Profiles



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The Energy Exchange of Southern Africa

Energy Exchange acts as a marketplace where independent generators of electricity can sell their energy to the industrial and commercial entities who need it. By bringing supply and demand together in one place, Energy Exchange can create transparency in pricing that benefits both buyers and sellers. The competitive advantage of Energy Exchange is the aggregation function, whereby it balances demand and supply across customers and groups of customers – this advantage is enhanced by the ‘banking’ arrangement it has with Eskom which allows surplus power to be spilled to the grid and then utilised at a later stage via a credit system.

By transacting via an aggregator like Energy Exchange, the customer is able to derive a number of benefits namely, including continuity of supply (due to a diversified supply), profile engineering, an ability to manage load outages (relative to the underlying contract to buy energy), and the administration of the transactions.

We facilitate and conclude on various legal agreements, in particular power purchase agreements, for both customers and independent generators, including Wind Relic (Pty) Ltd and its associated project pipeline including but not limited to Aeolus (Pty) Ltd, Hamlett (Pty) Ltd, Redding Wind (Pty) Ltd, Ripponn (Pty) Ltd, Wind Garden (Pty) Ltd, Fronteer (Pty) Ltd, Sun Garden (Pty) Ltd and Solaris Fields (Pty) Ltd. We also perform the reconciliation of the accounts of the various participants: generator(s), Eskom, municipalities and customer(s).

Potential Customer Profiles

Target Market

Southern Africa faces a combination of rapidly increasing energy costs, combined with rising concerns around the security of supply, and a failing national utility. Many of our customers are looking to shift towards cleaner and more sustainable sources of energy, with renewable energy becoming a key focus area for many South African corporates.

Our key customer focus areas are primarily within the industrial, mining and commercial sectors. The type of customers within these sectors generally have significant load requirements, due to operation of electricity intensive equipment and machinery.

Number of Potential Customers and Total Demand

Our customers’ total load requirement is in excess of 1,000 GWh. The graph below shows the profile of our total diversified load requirement.

Potential Customer(s)	Consumption (kWh)
Customer 1	75 709
Customer 2	3 805 012
Customer 3	13 160 934
Customer 4	6 118 566
Customer 5	4 820 355
Customer 6	2 803 364
Customer 7	15 403 155
Customer 8	43 642 008
Customer 9	4 642 560
Customer 10	68 090 679
Customer 11	70 760 029
Customer 12	27 206 975
Customer 13	538 137 716

Customer 14	24 428 314
Customer 15	297 840 000
Total Demand	1 120 935 376

We are actively looking for new customers in the market, in addition to our existing customer base. The current customer base includes, Remgro and Phembani group companies, as well as third party customers.

**APPENDIX C:
NEED AND DESIRABILITY**



54 Thomas Road, Walmer, Port Elizabeth, Eastern Cape, 6070, South Africa

Date: 08th October 2020

Wind Relic – Project Need and Desirability

The Wind Relic portfolio of wind and solar projects, as well as a 400 kV Main Transmission Substation (MTS) are planned for the area between Grahamstown (Makhanda) and Somerset East. The development area falls within a gazetted RED Zone and Transmission Power Corridor due to its good wind resources and access to the 3 x 400kV Eskom transmission lines which connect the Eastern Cape with Mpumalanga. The area has thus been earmarked for fast track development of renewable energy. Furthermore, wind resource measurement in the area has been in progress since the launch of the DMRE Wind Atlas programme from 2011. Various wind masts have been deployed by private developers in the area since 2011.

Due to the scale of the development (circa 5000MW of renewable energy) and the mix of technologies including wind, solar and potentially battery storage, it is certain to have a meaningful impact on the development of the region. The mix of wind, solar and storage will ensure the optimisation of a supply of steady state baseload type power, as well as play a significant role in the Just Energy Transition (“JET”) by supplying low cost energy to the national grid. At the same time, it will contribute to a JET fund to assist in transitioning jobs from the fossil fuel sector in Mpumalanga to renewable energy.

The siting of the 400 kV MTS forms part of Eskoms planning for the area for new proposed substations Poseidon B and C. Based on the support received from Eskom to date for the construction of this new 400 kV MTS suggests that Eskom is not in the position to fund any new infrastructure projects and rely on IPPs to fully fund the new sub stations and transmission lines. For an IPP to make this investment viable it is an imperative that a project of significant magnitude is required to derive economy of scale and thereby utilize the full capacity of the new infrastructure required to strengthen/expand the grid as what Wind Relic are proposing and intend to do in this instance.

Directors: Christopher Rohrich | Hylton Newcombe | Jonathan Connellan | Neil Barton

Contact Details: Phone: +27 (0)79 822 9756 e-mail: lisa@windrelic.net | Company Reg: 2018/205007/07 VAT No: 4200283481



54 Thomas Road, Walmer, Port Elizabeth, Eastern Cape, 6070, South Africa

The high-quality wind resource, proximity to the transmission infrastructure and scale of the portfolio may also play a possible role in contributing to the hydrogen economy in South Africa, with Europe as a possible export market.

These wind and solar projects can be registered as Strategic Infrastructure Projects – namely SIP 8: Green energy in support of the South African economy, SIP 9: Electricity generation to support socio-economic development and SIP 10: Electricity transmission and distribution to all.

Furthermore, Government has prioritised post COVID-19 turnaround plans in terms of renewable energies within the Just Energy Transition, coupled with key development objectives of the various sphere's of government from a National level down to District and Local Municipal level. These include:

- the National Development Plan 2030,
- New Growth Path Framework 2011,
- Renewable Energy Vision 2030 South Africa,
- Integrated Resource Plan 2019,
- The Constitution of South Africa 1996,
- White Paper on the Renewable Energy Policy of RSA 2003,
- The Eastern Cape industrial Development Strategy 2011,
- The Eastern Cape Sustainable Energy Strategy 2012,
- Eastern Cape Provincial Economic Strategy (PEDS) 2016,
- Sarah Baartman District SDF 2013,
- Sarah Baartman District IDP 2017,
- Makana Municipality IDP 2017,
- Makana LED Strategy 2009.
- Blue Crane Route Municipality IDP

The policies also share the same ideal, such as:

- The utilisation, application and investment in renewable energy resources in South Africa is considered to be an essential means in reducing the carbon footprint of the country,

Directors: Christopher Rohrich | Hylton Newcombe | Jonathan Connellan | Neil Barton

Contact Details: Phone: +27 (0)79 822 9756 e-mail: lisa@windrelic.net | Company Reg: 2018/205007/07 VAT No: 4200283481



54 Thomas Road, Walmer, Port Elizabeth, Eastern Cape, 6070, South Africa

- Diversifying the national economy,
- Reducing poverty, and
- Providing critical additional energy to that of Eskom

Most important is, however, the massive impact such a large-scale facility could have on meaningful job creation (direct and indirect) in South Africa, considering the tragic 2.2 million jobs lost within South Africa during the COVID-19 pandemic. Specifically, with emphasis on the region it will have a major positive impact on the development of the local towns like Makhanda, Bedford, Cookhouse, Alicedale, Somerset East and Adelaide.

Wind Relic

A handwritten signature in black ink, appearing to read "Hylton Newcombe", written in a cursive style.

Hylton Newcombe

Directors: Christopher Rohrich | Hylton Newcombe | Jonathan Connellan | Neil Barton

Contact Details: Phone: +27 (0)79 822 9756 e-mail: lisa@windrelic.net | Company Reg: 2018/205007/07 VAT No: 4200283481

Lisa Opperman

From: Lunga Dlova <LDlova@environment.gov.za>
Sent: Monday, 02 November 2020 13:12
To: Lisa Opperman; Masina Litsoane
Cc: Hylton; carla@earthandwire.com; thomas@earthandwire.com; Jo-Anne Thomas
Subject: RE: 2020-09-0038 Wind Relic Pre-Application Meeting Notes and Public Participation Plan

Dear Lisa

Yes, it is approved.

Regards
Lunga

From: Lisa Opperman [mailto:lisa.o@savannahsa.com]
Sent: 02 November 2020 01:11 PM
To: Lunga Dlova; Masina Litsoane
Cc: Hylton; carla@earthandwire.com; thomas@earthandwire.com; Jo-Anne Thomas
Subject: RE: 2020-09-0038 Wind Relic Pre-Application Meeting Notes and Public Participation Plan

Dear Lunga,

Thanks for the feedback.

Please can you advise whether the Public Participation Plan is formally approved for the project.

Thanks

Kind regards
Lisa

From: Lunga Dlova <LDlova@environment.gov.za>
Sent: Thursday, 29 October 2020 09:22
To: Lisa Opperman <lisa.o@savannahsa.com>; Masina Litsoane <MLitsoane@environment.gov.za>
Cc: Hylton <hylton@windrelic.net>; carla@earthandwire.com; thomas@earthandwire.com; Jo-Anne Thomas <joanne@savannahsa.com>
Subject: RE: 2020-09-0038 Wind Relic Pre-Application Meeting Notes and Public Participation Plan

Dear Lisa

Everything looks fine.

Regards
Lunga

From: Lisa Opperman [<mailto:lisa.o@savannahsa.com>]
Sent: 28 October 2020 04:05 PM

To: Masina Litsoane; Lunga Dlova
Cc: Hylton; carla@earthandwire.com; thomas@earthandwire.com; Jo-Anne Thomas
Subject: 2020-09-0038 Wind Relic Pre-Application Meeting Notes and Public Participation Plan

Dear Masina and Lunga,

I trust you are doing well.

Thank you again for the Pre-Application Meeting for the Wind Relic projects.

As agreed, please find attached the meeting notes of the meeting for your consideration.

Further to the above, please see attached the Public Participation Plan for approval (which was also submitted with the Pre-Application Meeting Request). Please advise should there be any queries on the plan and whether this plan is approved.

I look forward to hearing from you.

Kind regards
Lisa



t: +27 (0) 11 656 3237
f: +27 (0) 86 684 0547

Lisa Opperman
Environmental Consultant

e: lisa.o@savannahsa.com
c: +27 (0) 84 920 3111

[SAWEA Award for Leading Environmental Consultant on Wind Projects in 2013 & 2015](#)

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