Palaeontological Heritage: Site Sensitivity Verification Report

PROPOSED EZELSJACHT 110 MW SOLAR PV ENERGY ENERGY FACILITY (SEF), BATTERY ENERGY STORAGE SYSTEM (BESS) AND ASSOCIATED GRID INFRASTRUCTURE LOCATED NEAR DE DOORNS, BREEDE VALLEY LOCAL MUNICIPALITY, WESTERN CAPE PROVINCE

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EXECUTIVE SUMMARY

The development area for the proposed Ezelsjacht Solar Energy Facility (SEF) and associated infrastructure near De Doorns, Western Cape, is underlain by two formations of shallow marine sediments of Devonian age that are assigned to the Bokkeveld Group (Cape Supergroup).

Despite the provisional High to Very High Palaeosensitivity of the Ezelsjacht Solar Energy Facility project area mapped by the DFFE Screening Tool (***contested* in this report**), as well as the known occurrence of important Devonian marine fossil sites in the wider region between De Doorns and Touwsrivier, **in practice the site is rated as being of Low to Very Low Palaeosensitivity based on recent field data.** This is due largely to the high levels of tectonic deformation (faulting, folding, cleavage development) in this sector of the Cape Fold Belt as well as intense near-surface weathering of the sedimentary bedrocks. No fossil occurrences were recorded during the recent site visit within the Devonian bedrocks or Late Caenozoic superficial sediments. None of the recorded fossil sites recorded in the wider Ezelsjacht renewable energy project area is very well preserved and all represent common, widely-distributed forms of limited scientific or conservation value.

Impacts on local palaeontological heritage resources due to the proposed Solar Energy Facility and associated infrastructure are anticipated to be of VERY LOW (-ve) significance. A palaeontological heritage assessment is *not* recommended as part of the Environmental Authorisation process for the SEF and associated infrastructure developments and there are no objections on palaeontological grounds to their authorisation. None of the known fossil sites requires specialist monitoring or mitigation. A Chance Fossil Finds Protocol should be included within the EMPR for the developments (Appendix 1).

The qualified palaeontologist responsible for any mitigation work triggered by chance fossil finds during the Construction Phase will need to submit a Work Plan for approval by Heritage Western Cape. Minimum standards for PIA reports have been compiled by Heritage Western Cape (2021) and SAHRA (2013).

1. Project outline

South Africa Mainstream Renewable Power Developments (Pty) Ltd ('Mainstream') is proposing to develop own and operate one (1) Solar photovoltaic (PV) Energy Facility (SEF), Battery Energy Storage System (BESS) and associated infrastructure with a generation capacity of up to 110 megawatts (MW). In order to evacuate the energy generated by the SEF to supplement the national grid, Mainstream is also proposing an electrical grid infrastructure (EGI)/grid connection project which will be assessed in a separate Basic Assessment Processes.

The proposed WEF is situated some 13 km south-east of De Doorns and 20 km SW of Touwsrivier, straddling the R318 tar road between Montagu and the N1, north of the Koo region and the Rooihoogte Pass and south of the Moordhoogte Pass along the N1, Breede Valley Local Municipality, Western Cape Province (Figure 1).

Applicant	Project Name	Capacity (MW)	Affected Property
South Africa Mainstream Renewable Power Developments (Pty) Ltd	Ezelsjacht Solar PV Energy Facility (SEF)	110 MW_{ac}	Portion 6 of the Farm Ratelbosch No. 149

The overall objective of the proposed development is to generate electricity by means of renewable energy technologies capturing wind energy to feed into the national grid.

The proposed SEF will consist of PV Panels, internal and access roads (with a width of up to 12 m during construction), a construction laydown area/camp, Operation and Maintenance (O&M) Building and and the Independent Power Producer (IPP) 33/132kV portion of the onsite substation, amongst other associated infrastructure. The solar PV energy facility will have a generation capacity of up to 110 MW. In addition to the infrastructure mentioned above, the SEF will also potentially include energy storage infrastructure if it is deemed economically feasible to do so. This will consist of an area for a Battery Energy Storage System (BESS) covering an extent of up to approximately 5 hectares (ha). Currently, the battery technologies being considered are either Solid State Batteries or Redox Flow Batteries.

The findings of the respective specialist studies will be used to inform the location of the Solar PV arrays. All identified sensitive and/or no-go areas (including their respective buffers) will be avoided accordingly, as required. However, as part of the proposed application / Scoping & Environmental Impact Assessment (EIA) process for the SEF project, various site area / location alternatives may be assessed for the associated infrastructure such as the O&M Buildings, IPP Substations and BESS. This is however still to be confirmed and will be communicated to the specialists.

The site areas / location alternatives for the associated infrastructure such as the O&M Buildings, IPP Substations and BESS, will also need to be assessed against the 'no-go' alternative. The 'no-go' alternative is the option of not constructing the respective projects, where the status quo of the current status and/or activities on the site would prevail.

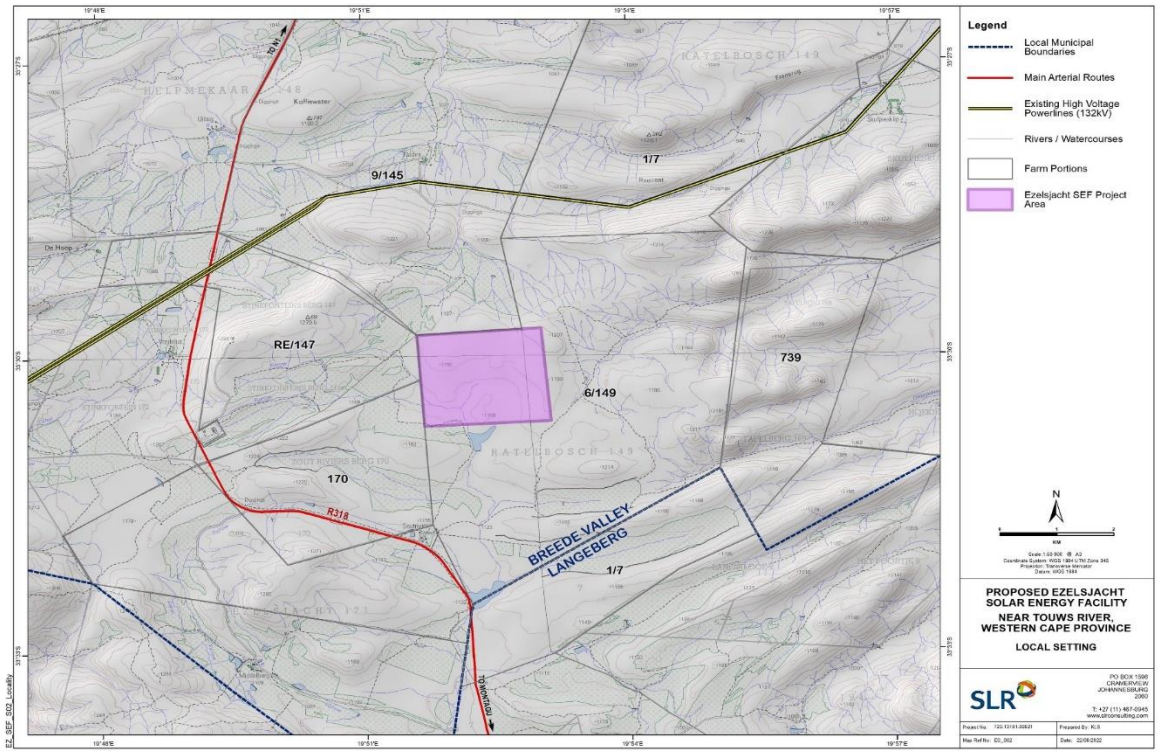

Figure 1: Map showing the location of the Ezelsjacht SEF near De Doorns, Western Cape (SLR).

2. Technical details for the proposed development

Ezelsjacht SEF infrastructure	
Location of the site (centre point)	33°30'21.04"S 19°53'33.22"E
Application site area	+/- 370 hectares
Affected Farm Portions	Portion 6 of the Farm Ratelbosch No. 149
SG Codes	C08500000000014900006
Export Capacity	110 MW
Height of PV panels	Up to 5m
Operations and Maintenance Complex (25 hectares): Shared infrastructure with associated grid	• Operations and Maintenance Building approximately 1 hectares • Temporary construction laydown area, approximately 3ha to be located on the site identified for the substation. It should be noted that no construction camps will be required in order to house workers overnight as all workers will be accommodated in the nearby town. • On-site Grid Connection and Substation: 33kV/132kV IPP portion of shared on site/step up substation.

	• A Battery Energy Storage System (BESS) will be located next to the IPP portion / yard of the shared onsite 33/132kV substation and will cover an area of 5 ha. The storage capacity and type of technology would be determined at a later stage during the development phase, the types of technologies to be considered will be either redox flow or solid state.
Access Roads	Existing access roads will be utilised as far as possible. The width of the access roads will be up to approximately 12m wide.
Fencing	Galvanized steel and 1.8 m in height.
Associated Infrastructure	• Cabling: Underground 33kV cables, buried along internal access roads where feasible; and outside of the road footprints and where there are topography and environmental concerns. Overhead 33kV power lines will be constructed, using monopole structures where burying is not possible due to technical, geological, environmental or topographical constraints.33kV overhead power lines supported by 132 kV pylons of approximately 22 m high will be required, as well as tracks for access to the pylons. • Electrical transformers adjacent to Panels (typical footprint of up to approximately 2m x 2m) to step up the voltage to between 11kV and 33kV; • Other Associated infrastructure (to be confirmed)

In terms of the National Environmental Management Act (Act 107 of 1998, as amended) (NEMA) Environmental Impact Assessment (EIA) Regulations [4 December 2014, Government Notice (GN) R982, R983, R984 and R985, as amended], various aspects of the proposed development may have an impact on the environment and are considered to be listed activities. These activities require environmental authorisation (EA) from the National Competent Authority (CA), namely the Department of Forestry, Fisheries and the Environment (DFFE), prior to the commencement thereof. One (1) application for EA for the proposed development will be submitted to the DFFE, in the form of a Scoping & EIA process in terms of the NEMA EIA Regulations of 2014 (as amended).

In accordance with GN 320 and GN 1150 (20 March 2020)1 of the NEMA EIA Regulations of 2014 (as amended), prior to commencing with a specialist assessment, a site sensitivity verification must be undertaken to confirm the current land use and environmental sensitivity of the proposed project area as identified by the National Web-Based Environmental Screening Tool (*i.e*., Screening Tool). The palaeontologist has been commissioned to verify the sensitivity of the Ezelsjacht SEF site under these specialist protocols.

3. Geological context

The Ezelsjacht SEF project area is situated in semi-arid, rolling hilly terrain (*c*. 1000- 1270m amsl.) within the Cape Fold Mountains of the Western Cape Province. This topographically fairly subdued region features subdued, predominantly W-E trending ridges and valleys with low rocky ridges and alluvial *vlaktes* and is partially transformed for agriculture. It lies within a watershed region with small

[1] GN 320 (20 March 2020): Procedures for The Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(A) and (H) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation

streams draining towards the east (Touwsrivier drainge system), west (Hexrivier Valley) as well as towards the north and south.

The geology of the combined Ezelsjacht renewable energy facility project area is shown on the 1: 250 000 scale geology sheet 3319 Worcester (Council for Geoscience, Pretoria; Gresse & Theron 1992) (Figure 2). The area is underlain by several coastal to shallow marine formations of the Table Mountain and Bokkeveld Groups (Cape Supergroup) of Early to Middle Devonian age (*c*. 410 – 390 Ma) (Thamm & Johnson 2006). The stratigraphic position of these formations is shown in the table in Figure 3. Note that only the Hexrivier and Tra Tra Formations of the Lower Bokkeveld Group (Ceres Subgroup) are mapped within the SEF project area itself. The sandstone-dominated units (Hexrivier Formation) tend to build rocky ridges and scarps while the intervening mudrock-dominated subunits (Tra Tra Formation) underlie subdued, low-lying terrain and are generally poorly exposed at surface. The geology of these Devonian sedimentary bedrocks is outlined by Gresse and Theron (1992) and Penn-Clarke *et al.* (2018a) as well as several previous palaeontological impact assessments in the wider De Doorns – Touwsrivier – Montagu region (*e.g.* Almond 2011, 2015 and references therein). In this sector of the Cape Fold Belt – known as the Cape Syntaxis (De Beer 1992) – the Cape Supergroup bedrocks show a complex pattern of folding, often associated with a pervasive tectonic cleavage (especially within fine-grained facies), and are dissected by numerous faults, as is clear from the geological map.

As shown on satellite imagery, a high proportion of the outcrop areas of these Devonian age sedimentary bedrocks is covered by a range of Late Caenozoic superficial deposits (*e.g.* colluvium, alluvium, eluvial gravels, soils).

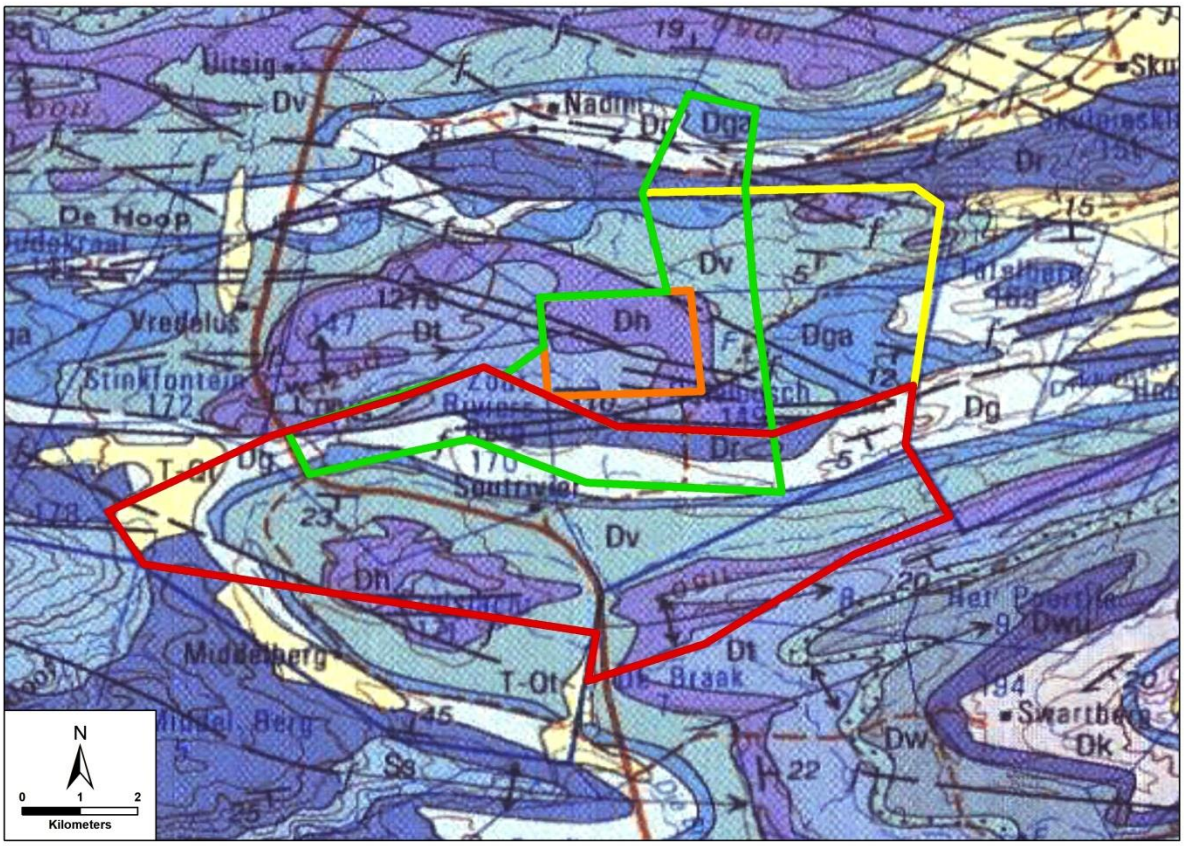

Figure 2: Extract from 1: 250 000 geology sheet 3319 Worcester (Council for Geoscience, Pretoria) showing the location (orange polygon) of the SEF project area between De Doorns and Touwsrivier, Western Cape Province. The SEF project area is underlain by two shallow

marine formations of the Lower Bokkeveld Group (Cape Supergroup) of Early to Middle Devonian age (*c*. 410 – 390 Ma), *viz*. the Hexrivier and Tra Tra Formations (Map supplied by SLR). Key to main geological units:

TABLE MOUNTAIN GROUP
Dr (dark blue) = Rietvlei Formation

CERES SUBGROUP (= LOWER BOKKEVELD GROUP)
Dg (pale blue) = Gydo Formation
Dga (blue) = Gamka Formation (mainly sandstones / wackes)
Dv (blue-green) = Voorstehoek Formation (mudrock-dominated)
Dh (purple) = Hexrivier Formation (mainly sandstones / wackes)
Dt (blue) = Tra Tra Formation (mainly mudrocks with minor sandstones)
T-Qt (pale yellow) = Tertiary / Quaternary colluvium (scree gravels, sands).
***N.B.* Extensive cover of the Palaeozoic bedrocks by thin colluvial (slope) deposits and rocky soils is not depicted on the map.**

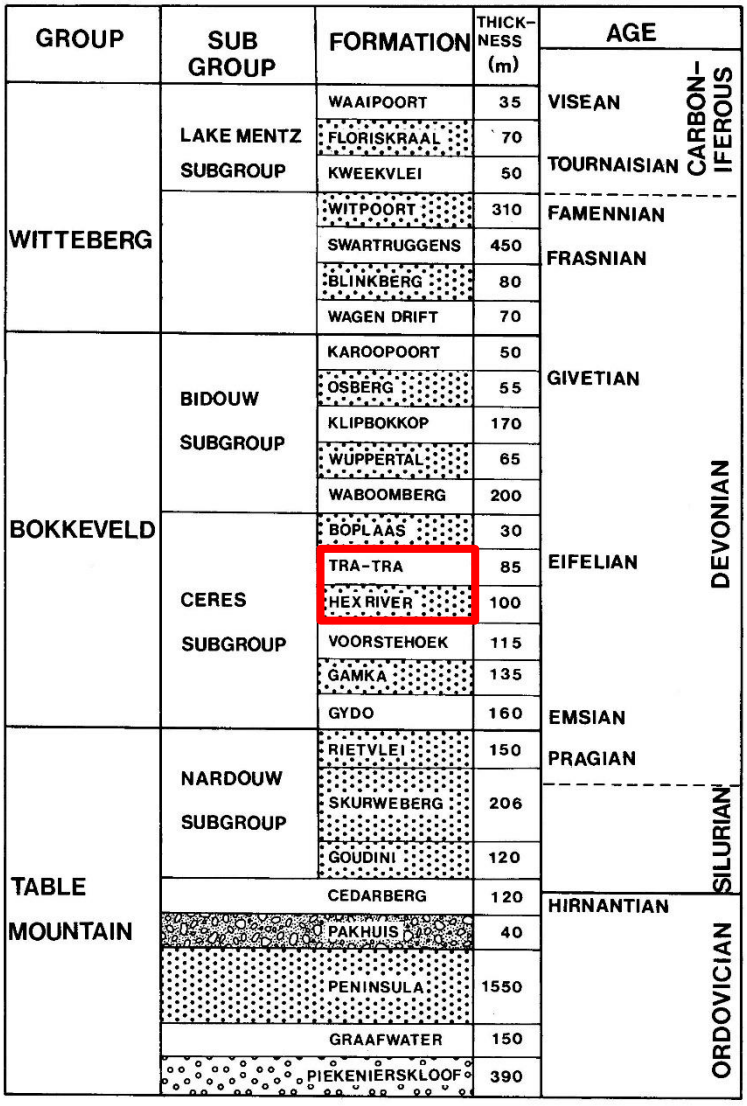

Figure 3: Stratigraphic column of the Cape Supergroup in the western Cape Fold Belt showing the two Devonian sedimentary formations of the Table Mountain and Bokkeveld Groups (red rectangle) that are represented within the Ezelsjacht Solar Energy Facility and project area near De Doorns (From Theron & Thamm 1990). Sandstone-dominated units are stippled.

4. Palaeontological heritage

The **Lower Bokkeveld Group** (Ceres Subgroup) *plus* overlying lowermost Bidouw Subgroup (Waboomberg Formation) in the Western Cape contains rich assemblages of shallow marine invertebrates, trace fossils and rarer fish remains of the Malvinokaffric Faunal Province of Gondwana (Cooper 1982, Oosthuizen 1984, Hiller & Theron 1988, Theron & Johnson 1991, MacRae 1999, Almond *in* De Beer *et. al*. 2002, Thamm & Johnson 2006, Almond 2008, 2010, Penn-Clarke *et al.* 2018b, Penn-Clarke 2019). The shelly fossil assemblages – generally preserved as impressions or moulds, but occasionally in the Gydo Formation also embedded within phosphatic or siliceous nodules – are especially abundant within the mudrock-dominated units such as the Gydo, Voorstehoek and Waboomberg Formations. However, rich fossil shell beds (coquinas) are also known locally from some of the marine sandstone units such as the Gamka Formation in the De Doorns – Touwsrivier area (*e.g.* N of Moordhoogte Pass), as reflected in local place names such as *Skulpiesklip*. Scientifically important occurrences of echinoderm and other invertebrate fossils are also recorded from the Voorstehoek Formation in this region (*e.g.* Breimer & Macurda 1972, Jell & Theron 1999, Reid *et al.* 2015, Matthews 2019).

The various **Late Caenozoic superficial sediments** overlying the Devonian bedrocks within the project are generally unfossiliferous to sparsely fossiliferous, at most. In coarser sediments (*e.g.* breccio-conglomerates) these fossils may include robust, highly disarticulated and abraded (*e.g.* rolled bones, teeth of vertebrates), especially within calcretised older alluvium. Well-preserved skeletal remains of plants (*e.g.* wood, roots), vertebrates (*e.g.* small mammals, reptiles) and invertebrate animals (*e.g.* freshwater molluscs and crustaceans) as well various trace fossils (*e.g.* termitaria and other insect burrows) may occasionally be found within fine-grained alluvium. Human artefacts such as stone tools that can be assigned to a specific interval of the archaeological time scale (*e.g.* Middle Stone Age) can be of value for constraining the age of Pleistocene to Recent surface deposits like alluvial terraces.

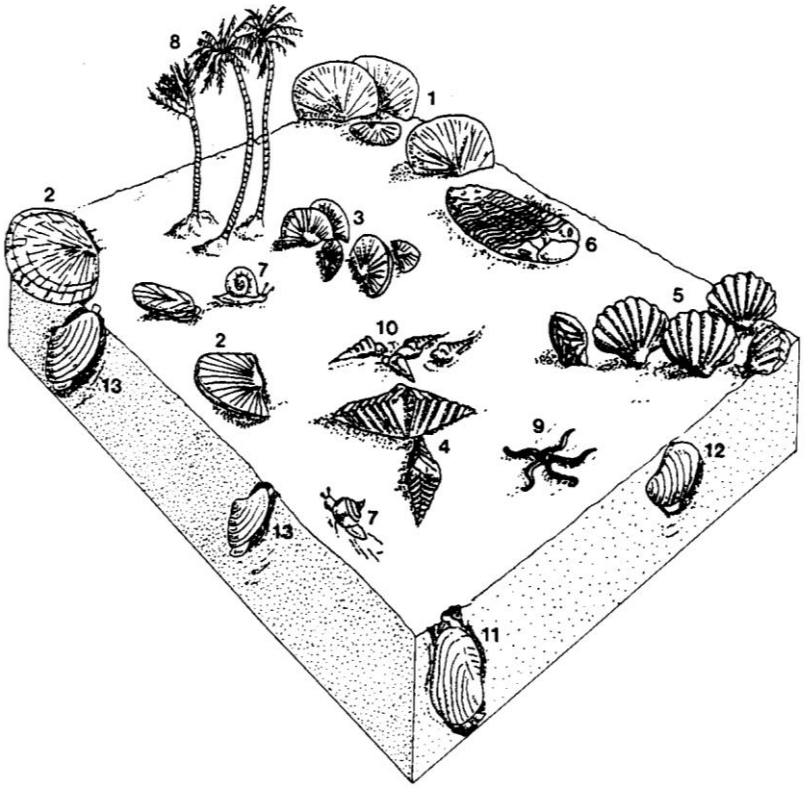

Figure 4: Reconstruction of a typical shelly invertebrate community from the Lower Bokkeveld Group (Early - Mid Devonian). Taxa include the articulate brachiopods *Australostrophia* (1), *Schuchertella* (2), *Pleurochonetes* (3), *Australospirifer* (4), *Australocoelia* (5), the trilobite *Metacryphaeus* (6), the gastropod *Pleurotomaria* (7), crinoids (8), ophiuroids or brittle stars (9), hyoliths (10), and the bivalves *Sanguinolites* (11), *Palaeoneilo* (12) and *Nuculites* (13). From Hiller & Theron (1988).

5. Palaeosensitivity mapping

Provisional palaeosensitivity mapping of the Ezelsjacht SEF using the DFFE Screening Tool and the SAHRIS Website suggest that most of the area is of Very High Sensitivity (corresponding to the Lower Bokkeveld Group outcrop area) (Figure 5). **This sensitivity mapping is *contested*, however, in the present Site Sensitivity Verification Report.**

Based on desktop analysis and a one and a half day site visit to the combined Ezelsjacht renewable energy facility project area (7-8 November 2022), **the overall palaeosensitivity of the SEF site is rated as LOW TO VERY LOW.** This is large part due to the high levels of tectonic deformation (folding, faulting, jointing and cleavage development) as well as to near-surface weathering of both mudrock and sandstone facies throughout the project area, as very clearly seen in road cuttings along the R318 tar road just to the west of the area. During the site visit no fossil remains observed within the bedrocks and superficial sediments occurring within SEF project area.

Due to locally high levels of tectonic deformation within the Cape Syntaxis, including cleavage development which often associated with high levels of chemical weathering, it is likely that fossil assemblages originally present within the Lower Bokkeveld Group bedrocks have been destroyed within at least some - and possibly most - portions of the present study area. In addition, the outcrop areas of the potentially most fossiliferous formations (*e.g.* Gydo Formation) are probably extensively

mantled by Late Caenozoic superficial deposits as well as disturbed by agriculture, as suggested by satellite imagery, further reducing their palaeosensitivity.

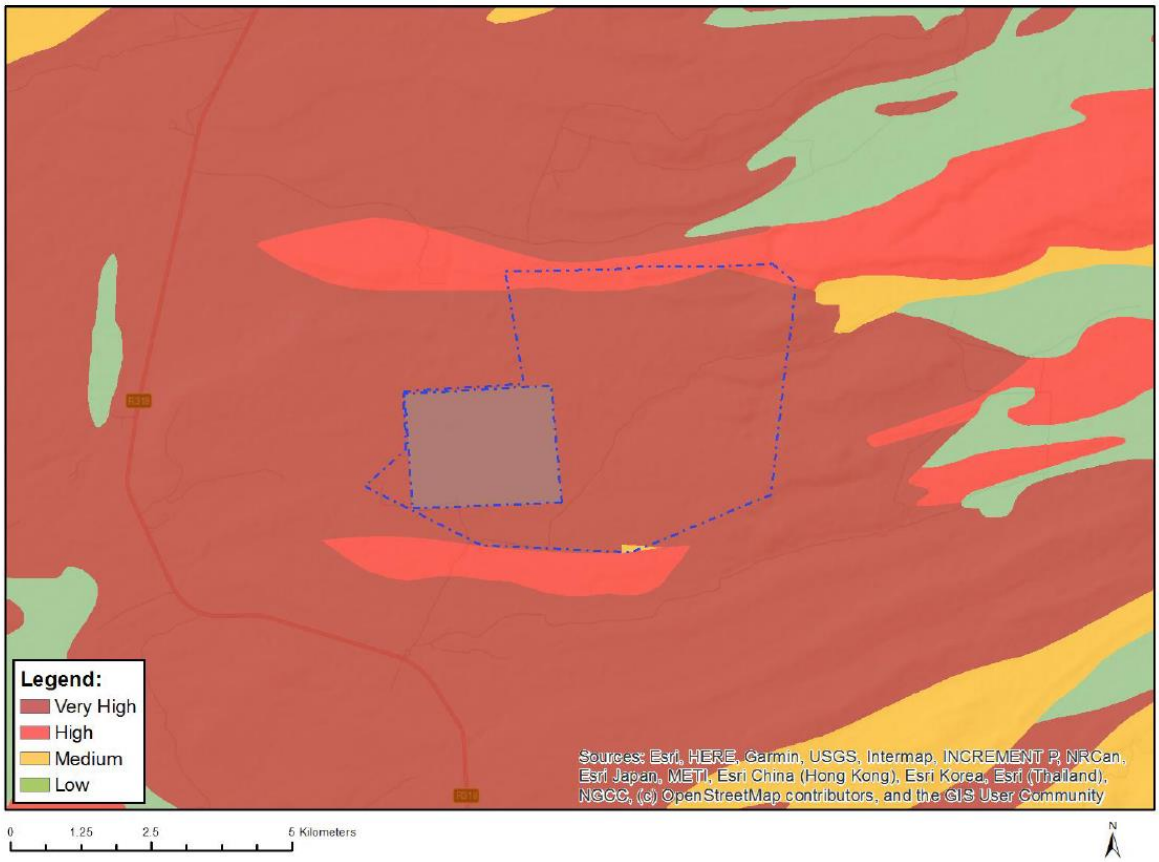

Figure 5: Provisional palaeosensitivity mapping of the Ezelsjacht SEF project area (blue dotted polygon, infilled) by the DFFE Screening Tool.

6. Legislative context

All palaeontological heritage resources in the Republic of South Africa are protected by the National Heritage Resources Act (Act 25 of 1999). Heritage resource management in the Western Cape is the responsibility of Heritage Western Cape (HWC) (Contact details: 3rd Floor Protea Assurance Building, 142 Longmarket Street, Green Market Square, Cape Town 8000. Private Bag X9067, Cape Town 8001. Tel: 021 483 5959 Email: ceoheritage@westerncape.gov.za).

The various categories of heritage resources recognised as part of the National Estate in Section 3 of the National Heritage Resources Act (Act 25 of 1999) include, among others:

- geological sites of scientific or cultural importance;
- palaeontological sites; and
- palaeontological objects and material, meteorites and rare geological specimens.

According to Section 35 of the National Heritage Resources Act, dealing with archaeology, palaeontology and meteorites:

(1) The protection of archaeological and palaeontological sites and material and meteorites is the responsibility of a provincial heritage resources Agency.

(2) All archaeological objects, palaeontological material and meteorites are the property of the State.
(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources agency, or to the nearest local agency offices or museum, which must immediately notify such heritage resources Agency.
(4) No person may, without a permit issued by the responsible heritage resources agency—
(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
(c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
(d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
(5) (5) When the responsible heritage resources agency has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may—
(a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
(b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
(c) if mitigation is deemed by the heritage resources agency to be necessary, assist the person on whom the order has been served under paragraph *(a)* to apply for a permit as required in subsection (4); and
(d) recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.

Minimum standards for the palaeontological component of heritage impact assessment reports (PIAs) have recently been published by SAHRA (2013) and Heritage Western Cape (2021).

7. Potential impacts palaeontological heritage and conclusions

The proposed Ezdelsjacht SEF will involve substantial surface clearance and bedrock excavations - for example for access road networks, underground cables, construction laydown areas/camps, operation & maintenance buildings, solar panel footings, on-site substations, BESS and electrical pylon footings - may disturb, damage or destroy legally projected palaeontological heritage resources of scientific and conservation value.

Despite the provisional High to Very High Palaeosensitivity of the Ezelsjacht Solar Energy Facility project area mapped by the DFFE Screening Tool (*contested* in this report), as well as the known occurrence of important Devonian marine fossil sites in the wider region between De Doorns and Touwsrivier, in practice the site is rated as being of Low to Very Low Palaeosensitivity based on recent field data. This is due largely to the high levels of tectonic deformation (faulting, folding,

cleavage development) in this sector of the Cape Fold Belt as well as intense near-surface weathering of the sedimentary bedrocks.

Impacts on local palaeontological heritage resources due to the proposed Solar Energy Facility and associated infrastructure are anticipated to be of VERY LOW (-ve) significance. A palaeontological heritage assessment is *not* recommended as part of the Environmental Authorisation process for the SEF development and there are no objections on palaeontological grounds to its authorisation. A Chance Fossil Finds Protocol should be included within the EMPR for the development (Appendix 1).

The qualified palaeontologist responsible for any mitigation work triggered by chance fossil finds during the Construction Phase will need to submit a Work Plan for approval by Heritage Western Cape. Minimum standards for PIA reports have been compiled by Heritage Western Cape (2021) and SAHRA (2013).

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8. John Almond short *curriculum vitae*

Dr John Almond has an Honours Degree in Natural Sciences (Zoology) as well as a PhD in Palaeontology from the University of Cambridge, UK. He has been awarded post-doctoral research fellowships at Cambridge University and the University of Tübingen in Germany, and has carried out palaeontological research in Europe, North America, the Middle East as well as North and South Africa and Madagascar. For eight years he was a scientific officer (palaeontologist) for the Geological Survey / Council for Geoscience in the RSA. His current palaeontological research focuses on fossil record of the Precambrian - Cambrian boundary and the Cape Supergroup of South Africa. He has recently written palaeontological reviews for several 1: 250 000 geological maps published by the Council for Geoscience and has contributed educational material on fossils and evolution for new school textbooks in the RSA.

Since 2002 Dr Almond has also carried out numerous palaeontological impact assessments for developments and conservation areas in the Western, Eastern and Northern Cape, Limpopo, Northwest Province, Mpumalanga, Gauteng, KwaZulu-Natal and the Free State under the aegis of his Cape Town-based company *Natura Viva* cc. He has served as a member of the Archaeology, Palaeontology and Meteorites Committee for Heritage Western Cape (HWC) and an advisor on palaeontological conservation and management issues for the Palaeontological Society of South Africa (PSSA), HWC and SAHRA. He is currently compiling technical reports on the provincial palaeontological heritage of Western, Northern and Eastern Cape for SAHRA and HWC. Dr Almond is an accredited member of PSSA and APHP (Association of Professional Heritage Practitioners – Western Cape).

Declaration of Independence

I, John E. Almond, declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed development, application or appeal in respect of which I was appointed other than fair remuneration for work performed in connection with the activity, application or appeal. There are no circumstances that compromise the objectivity of my performing such work.

Dr John E. Almond
Palaeontologist
***Natura Viva* cc**

<table>
<tr><th colspan="3">APPENDIX 1 - CHANCE FOSSIL FINDS PROCEDURE: Ezelsjacht Renewable Energy Projects and associated infrastructure near De Doorns, Western Cape</th></tr>
<tr><td>Province & region:</td><td colspan="2">BREEDE VALLEY & LANGEBERG LOCAL MUNICIPALITIES, WESTERN CAPE PROVINCE</td></tr>
<tr><td>Responsible Heritage Management Agencies</td><td colspan="2">HERITAGE WESTERN CAPE for W. Cape. Protea Assurance Building, Green Market Square, Cape Town 8000. Private Bag X9067, Cape Town 8001. Tel: 021 483 9598. E-mail: ceoheritage@westerncape.gov.za</td></tr>
<tr><td>Rock unit(s)</td><td colspan="2">Table Mountain Group, Bokkeveld Group (Cape Supergroup), Late Caenozoic alluvium.</td></tr>
<tr><td>Potential fossils</td><td colspan="2">Marine shelly fossil and trace fossil assemblages, reworked vascular plants, rare fish in Cape Supergroup bedrocks.
Mammalian bones, teeth & horn cores, freshwater molluscs, calcretised trace fossils & rhizoliths and plant material in alluvium.</td></tr>
<tr><td rowspan="5">ECO / ESO protocol</td><td colspan="2">1. Once alerted to fossil occurrence(s): alert site foreman, stop work in area immediately (N.B. safety first!), safeguard site with security tape / fence / sand bags if necessary.</td></tr>
<tr><td colspan="2">2. Record key data while fossil remains are still in situ:
Accurate geographic location – describe and mark on site map / 1: 50 000 map / satellite image / aerial photo
Context – describe position of fossils within stratigraphy (rock layering), depth below surface
Photograph fossil(s) in situ with scale, from different angles, including images showing context (e.g. rock layering)</td></tr>
<tr><td>3. If feasible to leave fossils in situ:
Alert Heritage Resources Agency and project palaeontologist (if any) who will advise on any necessary mitigation
Ensure fossil site remains safeguarded until clearance is given by the Heritage Resources Agency for work to resume</td><td>3. If not feasible to leave fossils in situ (emergency procedure only):
Carefully remove fossils, as far as possible still enclosed within the original sedimentary matrix (e.g. entire block of fossiliferous rock)
Photograph fossils against a plain, level background, with scale
Carefully wrap fossils in several layers of newspaper / tissue paper / plastic bags
Safeguard fossils together with locality and collection data (including collector and date) in a box in a safe place for examination by a palaeontologist
Alert Heritage Resources Agency and project palaeontologist (if any) who will advise on any necessary mitigation</td></tr>
<tr><td colspan="2">4. If required by Heritage Resources Agency, ensure that a suitably-qualified specialist palaeontologist is appointed as soon as possible by the developer.</td></tr>
<tr><td colspan="2">5. Implement any further mitigation measures proposed by the palaeontologist and Heritage Resources Agency</td></tr>
<tr><td>Specialist palaeontologist</td><td colspan="2">Apply for Fossil Collection Permit Record / submit Work Plan to relevant Heritage Resources Agency. Describe and judiciously sample fossil remains together with relevant contextual data (stratigraphy / sedimentology / taphonomy). Ensure that fossils are curated in an approved repository (e.g. museum / university / Council for Geoscience collection) together with full collection data. Submit Palaeontological Mitigation report to Heritage Resources Agency. Adhere to best international practice for palaeontological fieldwork and Heritage Resources Agency minimum standards.</td></tr>
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