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## **ANNEXURE F**

### **DEA REQUIREMENTS**

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F1: Site Maps

F2: Regional Maps

F3: DEA information requirements

## EIA FOR THE PROPOSED PV FACILITIES ON HOEKPLAAS FARM, NEAR COPPERTON

### ADDITIONAL INFORMATION REQUIRED BY THE DEA

The information required in column one corresponds with the items in the Letter from the Department of Environmental Affairs (DEA) accepting the Final Scoping Report (FSR) and the Plan of Study for Environmental Impact Assessment (EIA) (please see Annexure A of the Final Environmental Impact Assessment Report (EIAR) for the letter from DEA dated 2 September 2013).

Please note: **Annexures** refer to attachments to the EIA Report whereas **Appendixes** refer to attachments to this document which will only be submitted to the DEA.

Nr	Information required	Where to find it in the report
A.	All comments and recommendations made by all stakeholders and interested and Affected Parties (I&APs) in the Draft Scoping Report and submitted as part of the FSR must be taken into consideration when preparing an environmental impact assessment report in respect of the proposed development.	All comments received to date were included in the Comments and Responses Reports as included in Annexure B of the Draft and Final EIA Report. All comments received were taken into consideration throughout the preparation of the EIA report.
B.	Please ensure that all mitigation measures and recommendations in the specialist studies are addressed and included in the final EIR and Environmental Management Programme (EMPr).	Summaries of the specialist assessment as well as all the proposed mitigation measures are available in Chapter 5 of the Draft and Final EIA Reports. The specialists reports are included in Annexure C and all mitigation measures were included in the Life-cycle EMP as included in Annexure D.
C.	Please ensure that comments from all relevant stakeholders are submitted to the department with the Final Environmental Impact Report (EIR). This includes but is not limited to the Northern Cape Department of Environmental Affairs and Nature Conservation, The Department of Agriculture, Forestry & Fisheries (DAFF), the South African Civil Aviation Authority (SACAA), the Northern Cape. Department of Transport, the Emthanjeni Local Municipality, the district municipality, the Department of Water (DWA), the Department of Energy, the South African National Roads Agency Limited(SANRAL), Transnet, the South African Heritage Resources Agency (SAHRA) and the Square Kilometre Array (SKA).	<p>The following authorities and stakeholders are included as key stakeholders and have received copies of the Draft EIR, as indicated in the report transmittal note:</p> <ul style="list-style-type: none"> <li>• SiyaThemba Local Municipality, (Mr Gert Bessies);</li> <li>• Pixley ka Seme District Municipality, (Mr Sam Diokpala);</li> <li>• South African Heritage Resources Agency, (Dr Mariagrazia Galimberti);</li> <li>• Northern Cape Provincial Heritage, (Mr Andrew Timothy);</li> <li>• Northern Cape DEA&amp;NC, (Mr Chamuwari Ketano);</li> <li>• Department of Energy (Northern Cape): Regional Energy Director, (Mrs SP Mohapi);</li> <li>• Department of Agriculture (Northern Cape), (Ms Lucia Manong);</li> <li>• Department of Agriculture, Forestry and Fisheries, (Ms Jacqueline Mans);</li> <li>• Department of Water Affairs (DWA), (Mr Shaun Cloete);</li> <li>• Eskom, (Mr J Geeringh);</li> </ul>

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<b>Nr</b>	<b>Information required</b>	<b>Where to find it in the report</b>
		<ul style="list-style-type: none"> <li>• Square Kilometre Array (SKA) South Africa, (Mr Adrian Tiplady); and</li> <li>• SAHRA.</li> </ul> <p>Request for comment has been made and all comments received have been included in the Final EIA Report (please see Annexure B).</p>
<b>D.</b>	Please be advised that the contact person for renewable projects at the SKA office is Dr Adrian Tiplady and he can be contacted on Tel: 011 442 2434 or Email: atiplady@ska.ac.za.	Noted. Dr Tiplady has been included as a key stakeholder.
<b>E.</b>	You are also required to address all issues raised by organs of state and Interested and Affected Parties (I&APS) prior to the submission of the EIR to the Department.	All issues raised to date have been recorded in the Comments and Responses Reports as included in Annexure B of the Draft and Final EIA Reports.
<b>F.</b>	Proof of correspondence with the various stakeholders must be included in the Final EIR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.	Proof of correspondence with Authorities and I&APs have been included in Annexure B of the Draft and Final EIA Reports.
<b>G.</b>	The EAP must, in order to give effect to Regulation 56(2), give registered interested and affected parties access to, and an opportunity to comment on the report in writing within 21 days before submitting the final environmental impact assessment report to the Department.	Letters requesting comments have been sent to all registered I&APs. The Final EIAR has been lodged at the Prieska (Elizabeth Vermeulen) Public Library, letznietz Guest House in Copperton and on the Aurecon website for a period of 21 days (i.e. 22 November 2013 to 12 December 2013).
<b>H.</b>	<p>Please ensure that the Final EIR includes at least one legible A3 regional map of the area and the site layout map to illustrate the turbines positions and associated infrastructure. The maps must be of acceptable quality and as a minimum, have the following attributes:</p> <ul style="list-style-type: none"> <li>• Maps are relateable to one another</li> <li>• Cardinal points</li> <li>• Co-ordinates</li> </ul>	<p>Please refer Appendix A for the following:</p> <ul style="list-style-type: none"> <li>• Locality map;</li> <li>• Site layout map;</li> <li>• Sensitivity map; and</li> <li>• Land cover map.</li> </ul>

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### ADDITIONAL INFORMATION REQUIRED BY THE DEA

Nr	Information required	Where to find it in the report
	<ul style="list-style-type: none"> <li>• Legible legends</li> <li>• Indicate alternatives</li> <li>• Latest land cover</li> <li>• Vegetation types of the study area; and</li> <li>• A3 size locality map</li> </ul>	<p>The vegetation types of the study area are described in the Botanical Impact Assessment summarised in Section 5.2 of the Final EIA Report.</p>
I.	<p>In addition, the following additional information are required for the EIR:</p> <ol style="list-style-type: none"> <li>I. The Environmental Impact Assessment report must provide an assessment of the impact and the mitigation measures for each of the listed activities applied for.</li> <li>II. Written comment from the provincial Department of Environmental Affairs indicating that the activities applied for under GNR 546 applies.</li> <li>III. Details of the future plans for the site and infrastructure after decommissioning in 20-30 years and the possibility of upgrading the proposed infrastructure to more advanced technologies</li> <li>IV. The total footprint of the proposed development should be indicated. Exact locations of the infrastructure, power lines and associated should be mapped at an appropriate scale.</li> <li>V. Should a Water use license be required, proof of application for a license needs to be submitted.</li> <li>VI. Information on services required on the site, e.g. sewage, refuse removal, water and electricity. Who will supply these services and has an agreement and confirmation of capacity been obtained? Proof of these agreements must be provided</li> <li>VII. A copy of the final site layout map. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following: <ul style="list-style-type: none"> <li>• Panel positions and its associated infrastructure</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>I) Refer to Chapter 5 of the Final Environmental Impact Assessment Report (EIAR) for the assessment of potential impacts and proposed mitigation measures.</li> <li>II) The Northern Cape Department of Environment and Nature Conservation (DEANC) has been identified as a commenting authority and has received a copy of the draft and final EIARs. No comment has been received from DEANC to date.</li> <li>III) Please see Annexure G of the Final EIAR and Appendix B.</li> <li>IV) Total footprint areas are provided in Chapter 3 of the Final EIA Report and in Appendix A.</li> <li>V) DWA requested that Water Use Licence Applications only be submitted for renewable energy projects after the environmental process has been completed. Therefore the Water Use Licence will be applied for as a separate process to the EIA.</li> <li>VI) As indicated in Sections 3.1.4 and 3.15, water would be sourced via the Alkantpan pipeline from the local municipality. Mulilo has indicated that the water supply allocated to their approved PV facilities on Farms Hoekplaas, Klipgats Pan and Struisbult was originally over calculated. As such the over allocated water would be used during the construction and operational phases of the proposed PV facilities and only a limited volume of additional water would be requested from Alkantpan and the local municipality. The applicant is still in the process of confirming whether sufficient additional capacity is available from the municipality.</li> <li>VII) A site layout map and sensitivity map is provided in Chapter 3 of the Final EIA report as well as Appendix A.</li> </ol>



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	<ul style="list-style-type: none"> <li>• Foundation footprint</li> <li>• Permanent laydown area footprint</li> <li>• Construction period laydown footprint</li> <li>• Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)</li> <li>• Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used</li> <li>• The location of sensitive environment features on site e.g. CBAs, heritage sites, wetlands, drainage lines etc. that will be affected by the facility and its associated infrastructure</li> <li>• Sub-station(s) and/or transformer(s) sites including their entire footprint</li> <li>• Cable routes and trench dimensions (where they are not along internal roads)</li> <li>• Connection routes (including pylon positions) to the distribution/transmission network</li> <li>• Cut and fill areas at panel sites, along roads and at sub-station/transformer sites indicating the expected volume of each cut and fill</li> <li>• Borrow pits</li> <li>• Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)</li> <li>• All existing infrastructure on the site, especially roads</li> <li>• Buffer areas</li> <li>• Building, including accommodation; and</li> <li>• All “no-go” areas</li> </ul>	<ul style="list-style-type: none"> <li>• The panel positions and foundation footprints would only be determined during the detailed design phase.</li> <li>• Please see Appendix A for a map indicating the laydown areas and the internal roads. There will be no permanent laydown areas.</li> <li>• Please see Section 5.5 of the Final EIA Report for maps indicating wetland, drainage lines, rivers and streams.</li> <li>• The sensitive areas are indicated in the sensitivity map included in Appendix A. The proposed sites do not occur within a CBA.</li> <li>• The location of the substation and transformers, cable routes and connection routes would be determined during the detailed design. The cable routes will follow the internal roads and arrays as far as possible. Trenches will be up to 1.5m deep and 0.75m wide. Furthermore, all buildings would be restricted to the areas investigated by specialists as part of this EIA.</li> <li>• Cut and fills are expected to be approximately 2,000m<sup>3</sup> per substation, 600m<sup>3</sup> per 100m of roads and 20m<sup>3</sup> per 20m array.</li> <li>• There will be no borrow pits.</li> <li>• Information on spoil stockpiles and the management of these stockpiles will be defined in the method statements which the Environmental Control Officer (ECO) will approve prior to construction commencing.</li> <li>• Existing infrastructure is indicated in the land cover map included in Appendix A.</li> <li>• The buffer areas are indicated in the sensitivity map included in Appendix A.</li> <li>• The proposed buildings, such as Inverter Pad Blocks, AC DC Station, Interconnection Cabin, Substations and O&amp;M Building would be restricted to the areas assessed in the EIA process.</li> <li>• All no-go areas are indicated in the sensitivity map included in Appendix A.</li> </ul>
VIII.	An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.	
IX.	A map combining the final layout map superimposed (overlain) on the	

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	environmental sensitivity map.	VIII) An environmental sensitive map is included in Chapter 3 in the Final EIA Report. It is also included in Appendix A.
X.	A shapefile of the preferred development layout/footprint must be submitted to this Department. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, xml (Metadata file). If specific symbology was assigned to the file, then the avl and /or the lyf file must also be included. Data must be mapped at a scale of 1:10 000 (Please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title.	IX) The final layout is included in Appendix A as well as Chapter 3 of the EIA Report and Life-cycle Environmental Management Plan (LEMP). X) Please see the enclosed electronic copy of the Final EIA Report.
J.	The Environmental Management Programme (EMPr) to be submitted as part of the EIR must include the following: <ul style="list-style-type: none"> <li>I. All recommendations and mitigation measures recorded in the EIR and the specialist studies conducted.</li> <li>II. The final site layout map.</li> <li>III. Measures as dictated by the final site layout map and micro-siting.</li> <li>IV. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process</li> <li>V. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map.</li> <li>VI. An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.</li> <li>VII. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled after completion of construction activities to reduce the amount of habitat</li> </ul>	The LEMP, included in Annexure D of the Draft and Final EIA Reports, includes the following: <ul style="list-style-type: none"> <li>I) All recommendations and mitigation measures.</li> <li>II) Final site layout map (also included in Appendix A).</li> <li>III) Buffer areas are indicated on the site layout map (also included in Appendix A).</li> <li>IV) Final environmental sensitivity map included the LEMP and Appendix A.</li> <li>V) Final layout map superimposed on the environmental sensitivity map included in the LEMP and Appendix A.</li> <li>VI) Measures to manage alien invasive species are included in the LEMP.</li> <li>VII) A plant rescue and protection plan is included in the LEMP.</li> <li>VIII) A re-vegetation and habitat rehabilitation plan is included in the LEMP.</li> <li>IX) As indicated in the LEMP, the open space management plan will be undertaken during the planning phase.</li> <li>X) As indicated in the LEMP, the traffic management plan will be undertaken during the planning phase.</li> <li>XI) As indicated in the LEMP, the transportation plan will be undertaken during the planning phase.</li> </ul>

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VIII.	<p>converted at any one time and to speed up the recovery to natural habits.</p> <p>A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoring must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.</p>	<p>XII) The storm water management plan is included in Annexure C of both the LEMP and EIA Report.</p>
IX.	<p>An open space management plan to be implemented during the construction and operation of the facility.</p>	<p>XIII) The erosion management plan is included in Chapter 7 of the LEMP</p> <p>XIV) Recommendations for monitoring systems to detect any leakage or spillage of hazardous substances are included in the LEMP.</p>
X.	<p>A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.</p>	<p>XV) Measures to protect hydrological features are included in Annexure E of the EIA report.</p>
XI.	<p>A transportation plan for the transport of panel components, main assembly cranes and other large pieces of equipment.</p>	
XII.	<p>A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.</p>	
XIII.	<p>An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.</p>	
XIV.	<p>An effective monitoring system to detect any leakage or spillage of all hazardous</p>	

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XV.	<p>substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.</p> <p>Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spelling of pollutants.</p>	
K.	<p>The EIR must include a cumulative assessment of the facility if there are other similar facilities in the region. The specialist studies e.g. biodiversity, visual, noise, etc. must also assess the facility in terms of potential cumulative impacts.</p>	<p>Please see Chapter 5 of the EIA Report describing the potential cumulative impacts.</p>
L.	<p>Please ensure that all the relevant listing notice activities are applied for, that the listing notice activities applied for are specific and that they can be linked to the development activity or infrastructure in the project description</p>	<p>Revised Application Forms have been included with this submission to the Department. Please refer to Section 1.3 of the EIA Report which list all activities for which environmental authorisation is applied for.</p>
M.	<p>The applicant is hereby reminded to comply with the requirements of Regulation 67 with regard to the time period allowed for complying with the requirements of the regulations, and regulations 56 and 57 with regard to the allowance of a comment period for interested and affected parties on all reports submitted to the competent authority for decision-making. The reports referred to are listed in Regulation 56(3a-3h)</p>	<p>Noted.</p>
N.	<p>Furthermore, it must be reiterated that, should an application for Environmental authorisation be subject to the provisions of Chapter 11, section 38 of the National Heritage Resources Act, Act 25 of 1999, then this Department will not be able to make nor issue a decision in terms of your application for Environmental Authorisation pending a letter from the pertinent heritage authority categorically stating that the application fulfils the requirements of the relevant heritage resources authority as described in Chapter 11, Section 38(8) of the National Heritage Resources Act, Act 25 of 1999.</p>	<p>Noted. Comment from the South African Heritage Resources Agency have been received and are available in Annexure B of the Final EIAR.</p>

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Nr	Information required	Where to find it in the report
O.	You are requested to submit two (2) electronic copies (CD/DVD and two(2) hard copies of the Environmental Impact Report (EIR) to the Department as per regulation 34(1)(b) of the EIA Regulation, 2010	Please find enclosed.
P.	Please also find attached information that must be used in the preparation of the environmental impact report. This will enable the department to speedily review the EIR and make a decision on the application.	Noted.
Q.	You are hereby reminded of Section 24F of the National environmental Management Act, Act no 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.	Noted.
R.	<b>EIA INFORMATION REQUIRED FOR SOLAR ENERGY FACILITIES</b>	
1.	<p><b>General site information</b></p> <p>The following general site information is required:</p> <ul style="list-style-type: none"> <li>• Descriptions of all affected farm portions</li> <li>• 21 digit surveyor general codes of all affected farm portions</li> <li>• Copies of deeds of all affected farm portions</li> <li>• Photos of areas that give a visual perspective of all parts of the site</li> <li>• Photographs from sensitive visual receptors (tourism routes, tourism facilities, etc.)</li> <li>• Solar plant design specifications including: <ul style="list-style-type: none"> <li>➤ Type of technology</li> <li>➤ Structure height</li> <li>➤ Surface area to be covered (including associated infrastructure such as roads)</li> <li>➤ Structure orientation</li> </ul> </li> </ul>	<p>The following information have been included:</p> <ul style="list-style-type: none"> <li>• For a description of the affected farm portions please see Chapter 3 of the Final EIA Report</li> <li>• 21 digit surveyor general codes were included in the Application Forms (Annexure A of the EIA Report).</li> <li>• Copies of deeds of all affected farm portions are provided in Annexure A of the Final EIA report.</li> <li>• Please see Section 3 and 4 of the Final EIA Report for photographs of the site.</li> <li>• The Visual Impact Assessment Report, including photographs from sensitive visual receptors, is summarised in Section 5.9 of the EIA Report and the full specialist Report is included in Annexure C.</li> <li>• Solar plant design specifications are included in Chapter 3 of the Final EIA report.</li> <li>• Generation capacity of the two layout alternatives are described in Chapter 3 of</li> </ul>

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Nr	Information required	Where to find it in the report
	<ul style="list-style-type: none"> <li>➤ Laydown area dimensions (construction period and thereafter)</li> <li>➤ Generation capacity</li> <li>• Generation capacity of the facility as a whole at deliver points</li> </ul> <p>This information must be indicated on the first page of any scoping or EIA document. It is also advised that it be double checked as there are too many mistakes in the applications that have been received that take too much time from authorities to correct.</p>	the Final EIA report.
<b>2.</b>	<p><b><i>Site Maps and GIS information</i></b></p> <p>Site maps and GIS information should include at least the following:</p> <ul style="list-style-type: none"> <li>• All maps/information layers must also be provided in ESRI Shapefile format</li> <li>• All affected farm portions must be indicated</li> <li>• The exact site of the application must be indicated (the areas that will be occupied by the application)</li> <li>• A status quo map/layer must be provided that includes the following: <ul style="list-style-type: none"> <li>➤ Current use of land on the site including: <ul style="list-style-type: none"> <li>▪ Buildings and other structures</li> <li>▪ Agricultural fields</li> <li>▪ Grazing areas</li> <li>▪ Natural vegetation areas (natural veld not cultivated for the preceding 10 years) with an indication of the vegetation quality as well as fine scale mapping in respect of critical biodiversity areas and ecological support areas</li> <li>▪ Critically endangered and endangered vegetation areas that occur on the site</li> <li>▪ Bare areas which may be susceptible to soil erosion</li> <li>▪ Cultural historical sites and elements</li> </ul> </li> </ul> </li> </ul>	<p>All of the shapefiles have been enclosed in the Final EIR. Please note that some of the information requested would only be available after detailed designs have been undertaken.</p> <p>The land use map is included in Appendix A.</p> <p>A final site layout map is included in Chapter 5 of the Final EIA report and Appendix A.</p> <ul style="list-style-type: none"> <li>• Water courses are indicated and discussed in Section 4.5 of the EIA Report.</li> <li>• Please see the enclosed shapefiles for information on ridgelines and boreholes.</li> <li>• For the Agricultural Assessment, please see Annexure E and Section 4.4 of the Final EIA Report.</li> <li>• The environmental sensitivity map includes the buffer zones, which have been recommended by specialists and authorities.</li> <li>• A slope analysis has been undertaken and the development area is relatively flat. The site does contain a number of small rocky outcrops and ridges however only the flat</li> </ul>

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	<ul style="list-style-type: none"> <li>➤ Rivers, streams and water courses</li> <li>➤ Ridgelines and 20m continuous contours with height references in the GIS database</li> <li>➤ Fountains, boreholes, dams (in-stream as well as off-stream) and reservoirs</li> <li>➤ High potential agricultural areas as defined by the department of agriculture, forestry and fisheries</li> <li>➤ Buffer zones (Also where it is dictated by elements outside the site) <ul style="list-style-type: none"> <li>▪ 500m from any irrigated agricultural land</li> <li>▪ 1km from residential areas</li> </ul> </li> <li>➤ Indicate isolated residential, tourism facilities on or withing 1km of the site</li> <li>• A slope analysis map/layer that include the following slope ranges: <ul style="list-style-type: none"> <li>➤ Less than 8% slope</li> <li>➤ Between 8% and 12% slope</li> <li>➤ Between 12% and 14% slope</li> <li>➤ Steeper than 18% slope</li> </ul> </li> <li>• A site development proposal map(s)/layer(s) that indicate: <ul style="list-style-type: none"> <li>➤ Positions of solar facilities</li> <li>➤ Foundation footprint</li> <li>➤ Permanent laydown area footprint</li> <li>➤ Construction period laydown footprint</li> <li>➤ Internal roads indication width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)</li> <li>➤ River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used</li> <li>➤ Substation (s) and/or transformer (s) sites including their entire footprint.</li> <li>➤ Cable routes and trench dimensions (where they are not along internal</li> </ul> </li> </ul>	

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	<p>roads)</p> <ul style="list-style-type: none"> <li>➤ Connection routes to the distribution/transmission network (the connection must form part of the EIA even if the construction and maintenance thereof will be done by another entity such as ESKOM)</li> <li>➤ Cut and fill areas along roads and at substation/transformation sites indicating the expected volume</li> <li>➤ Borrow pits</li> <li>➤ Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)</li> <li>➤ Buildings including accommodation</li> </ul> <p>With the above information authorities will be able to assess the strategic and site impacts of applications.</p>	
3.	<p><b><i>Regional map and GIS information</i></b></p> <p>The regional map and GIS information should include at least the following:</p> <ul style="list-style-type: none"> <li>• All maps/information layers must also be provided in ESRI shapefile format</li> <li>• The map/layer must cover an area of 20km around the site</li> <li>• Indicate the following: <ul style="list-style-type: none"> <li>➤ Roads including their types (tarred or gravel) and category (national, provincial, local or private)</li> <li>➤ Railway lines and stations</li> <li>➤ Industrial areas</li> <li>➤ Harbours and airports</li> <li>➤ Electricity transmission and distribution lines and substations</li> <li>➤ Pipelines</li> <li>➤ Waters sources to be utilised during the construction and operational</li> </ul> </li> </ul>	<p>GIS information is included on a CD submitted with this Final EIA Report. The regional map is included in Appendix C.</p>



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Nr	Information required	Where to find it in the report
	<p>phases</p> <ul style="list-style-type: none"> <li>➤ A visibility assessment of the areas from where the facility will be visible</li> <li>➤ Critical biodiversity areas and ecological support areas</li> <li>➤ Critically endangered and endangered vegetation areas</li> <li>➤ Agricultural fields</li> <li>➤ Irrigated areas</li> <li>➤ An indication of new road or changes and upgrades that must be done to existing roads in order to get equipment onto the site including cut and fill areas and crossings of rivers and streams</li> </ul>	
<b>4.</b>	<p><b><i>Important stakeholders</i></b></p> <p>Amongst other important stakeholders, comments from the National Department of Agriculture, forestry and fisheries must be obtained and submitted to the Department. Any application, documentation, notification etc. should be forwarded to the following officials:</p> <p>Ms Mahudu Marubini Delegate of the Minister (Act 70 of 1970) E-mail: <a href="mailto:MashuduMa@daff.gov.za">MashuduMa@daff.gov.za</a> Tel: 012 319 7619</p> <p>Ms Thoko Buthelezi Agriland Liaison office E-mail: <a href="mailto:ThokoB@daff.gov.za">ThokoB@daff.gov.za</a> Tel 012 319 7634</p> <p>All hardcopy applications/ documentation should be forwarded to the following address:</p>	<p>Noted. These departments have been included as key stakeholders. Requests for comment have been made.</p> <p>Mr John Geeringh has been included as a key stakeholder. Request for comment has been made</p>

**EIA FOR THE PROPOSED PV FACILITIES ON HOEKPLAAS FARM, NEAR COPPERTON  
ADDITIONAL INFORMATION REQUIRED BY THE DEA**

Nr	Information required	Where to find it in the report
	<p><u>Physical address:</u>  Delpen Building  Cnr Annie Botha and Union Street  Office 270  Attention: Delegate of the Minister Act 70 of 1970</p> <p><u>Postal Address:</u>  Department of Agriculture, Forestry and fisheries  Private Bag x120  Pretoria  0001  Attention: Delegate of the Minister Act 70 of 1970</p> <p>In addition, comments must be requested from Eskom regarding grid connectivity and capacity. Request for comment must be submitted to:</p> <p>Mr John Geeringh  Eskom Transmission  Megawatt Park D1Y38  PO Box 1091  Johannesburg  2000</p> <p>Tel: 011 516 7233  Fax: 086 661 4064  <a href="mailto:John.geeringh@eskom.co.za">John.geeringh@eskom.co.za</a></p>	
5.	<p><b><i>Agriculture Study Requirements</i></b></p> <ul style="list-style-type: none"> <li>Detailed soil assessment of the site in question, incorporation a radius of 50m</li> </ul>	<p>Please see Section 5.10 of the Final EIA Report, as well as Annexure C for the Agricultural Impact Assessment.</p>

## EIA FOR THE PROPOSED PV FACILITIES ON HOEKPLAAS FARM, NEAR COPPERTON

### ADDITIONAL INFORMATION REQUIRED BY THE DEA

Nr	Information required	Where to find it in the report
	<p>surrounding the site, on a scale of 1:10 000 or finer. The soil assessment should include the following:</p> <ul style="list-style-type: none"> <li>➤ Identification of the soil forms present on site</li> <li>➤ The size of the area where a particular soil form is found</li> <li>➤ GFA reading of soil survey points</li> <li>➤ The depth of the soil at each survey point</li> <li>➤ Soil colour</li> <li>➤ Limiting factors</li> <li>➤ Clay content</li> <li>➤ Slope of the site</li> <li>➤ A detailed map indicating the locality of the soil forms within the specific area;</li> <li>➤ Size of the site</li> </ul> <ul style="list-style-type: none"> <li>• Exact locality of the site</li> <li>• Current activities on the site, developments, buildings</li> <li>• Surrounding developments/ land uses and activities in a radius of 500m of the site</li> <li>• Access routes and the condition thereof</li> <li>• Current status of the land (including erosion, vegetation and a degradation assessment)</li> <li>• Possible land use options for the site</li> <li>• Water availability, source and quality (if available)</li> <li>• Detailed descriptions of why agriculture</li> <li>• Impact of the change of land use on the surrounding area</li> <li>• A shape file containing the soil forms and relevant attribute data as depicted on the map.</li> </ul>	

**EIA FOR THE PROPOSED PV FACILITIES ON HOEKPLAAS FARM, NEAR COPPERTON  
ADDITIONAL INFORMATION REQUIRED BY THE DEA**

Nr	Information required	Where to find it in the report
6.	<p data-bbox="165 344 913 368"><b><i>Astronomy Geographic Advantage Act, 2007 (Act No. 21 of 2007)</i></b></p> <p data-bbox="165 400 1146 671">The purpose of the Act is to preserve the geographic advantage areas that attract investment in astronomy. The entire Northern Cape Province excluding the Sol Plaatjie Municipality had been declared an astronomy advantage area. The Northern Cape optical and radio telescope sites were declared core astronomy advantage areas. The Act allowed for the declaration of the Southern Africa Large Telescope (SALT), MeerKAT and Square Kilometre array (SKA) as astronomy and related scientific endeavours that had to be protected.</p> <p data-bbox="165 703 1146 852">You are requested to indicate the applicability of the Astronomy Geographic Advantage Act, Act No. 21 of 2007 on the application in the BAR/EIR. You must obtain comments from the Southern African Large Telescope (SALT) if the proposed development is situated within a declared astronomy advantage area.</p>	<p data-bbox="1167 344 2145 456">Dr Adrian Tiplady from the SKA Office has been identified as a key stakeholder on this project. Comment was received from Dr Tiplady during the Scoping Phase and are available in Appendix D.</p>

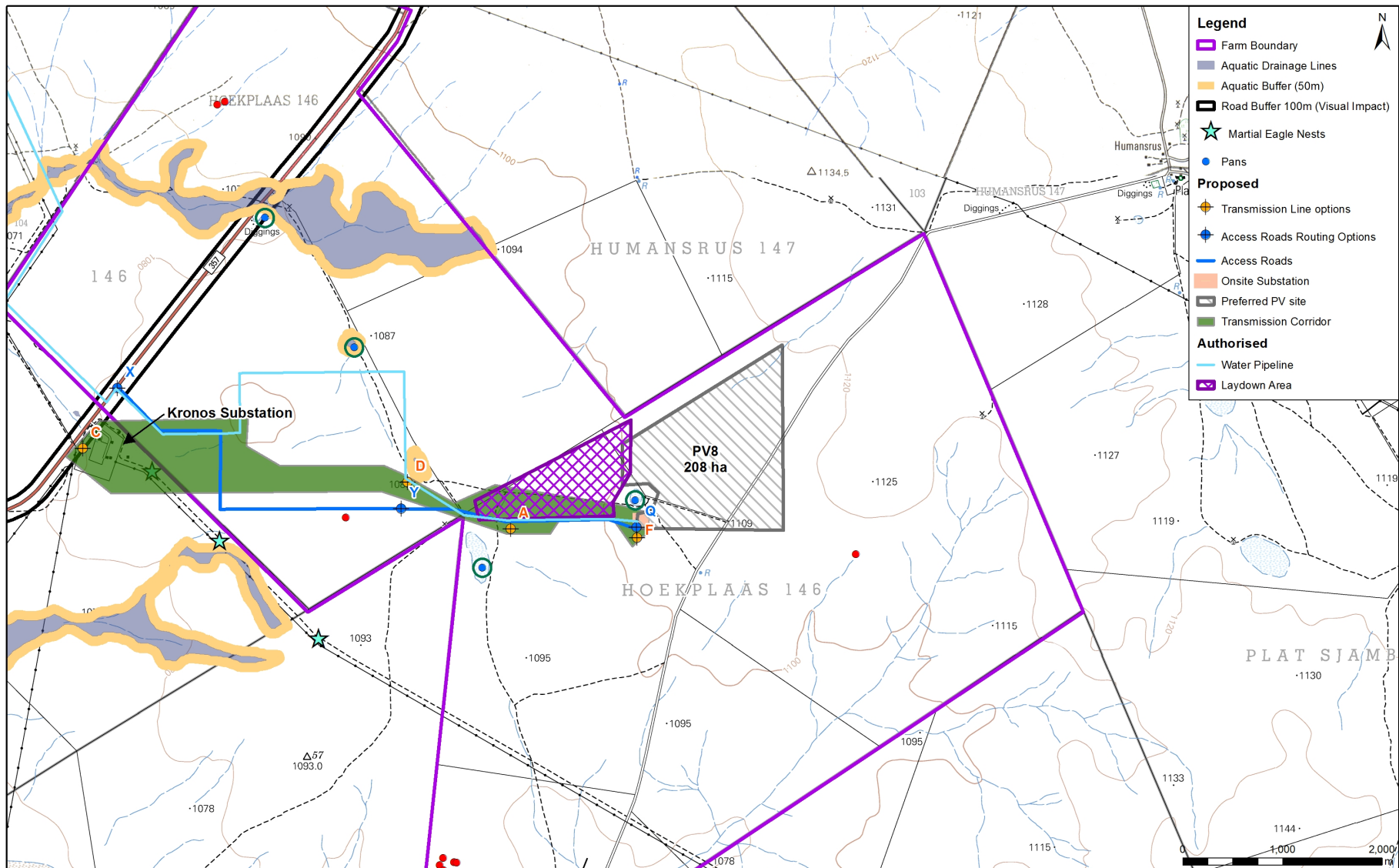
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# **ANNEXURE F**

## **DEA REQUIREMENTS**

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- Site Maps



**Legend**

- Farm Boundary
- Aquatic Drainage Lines
- Aquatic Buffer (50m)
- Road Buffer 100m (Visual Impact)
- ★ Martial Eagle Nests
- Pans

**Proposed**

- Transmission Line options
- Access Roads Routing Options
- Access Roads
- Onsite Substation
- Preferred PV site
- Transmission Corridor

**Authorised**

- Water Pipeline
- Laydown Area



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DRAWING TITLE  
**Environmental Sensitive areas with the preferred PV site overlaid**

PROJECT TITLE  
**PROPOSED PV8 PHOTOVOLTAIC ENERGY FACILITY ON FARM HOEKPLAAS NEAR COPPERTON, NORTHERN CAPE**


SCALE: 1:50,000	DESIGNED: DRAWN: D Ogier
PAPER:	CHECKED:
APPROVAL:	

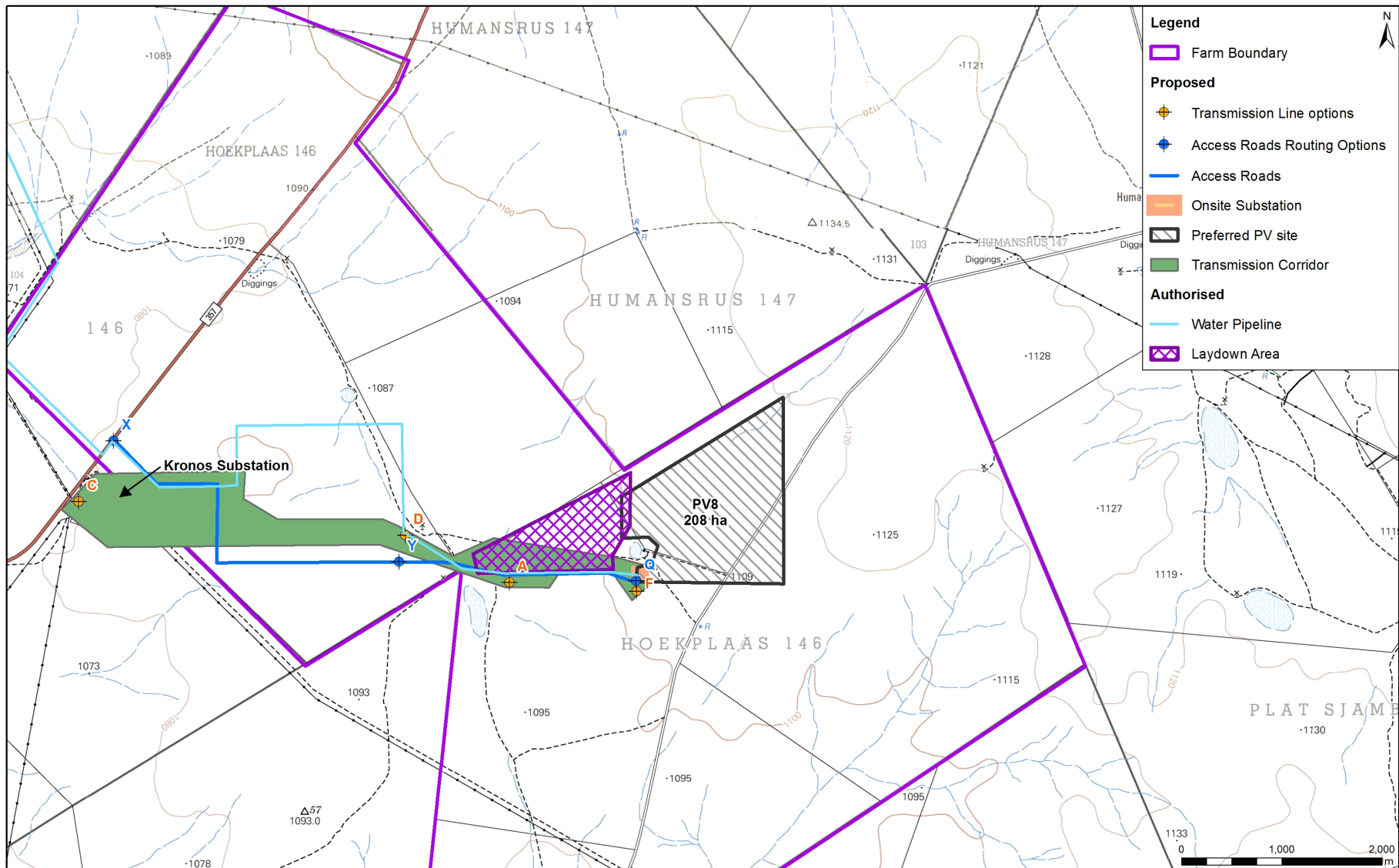
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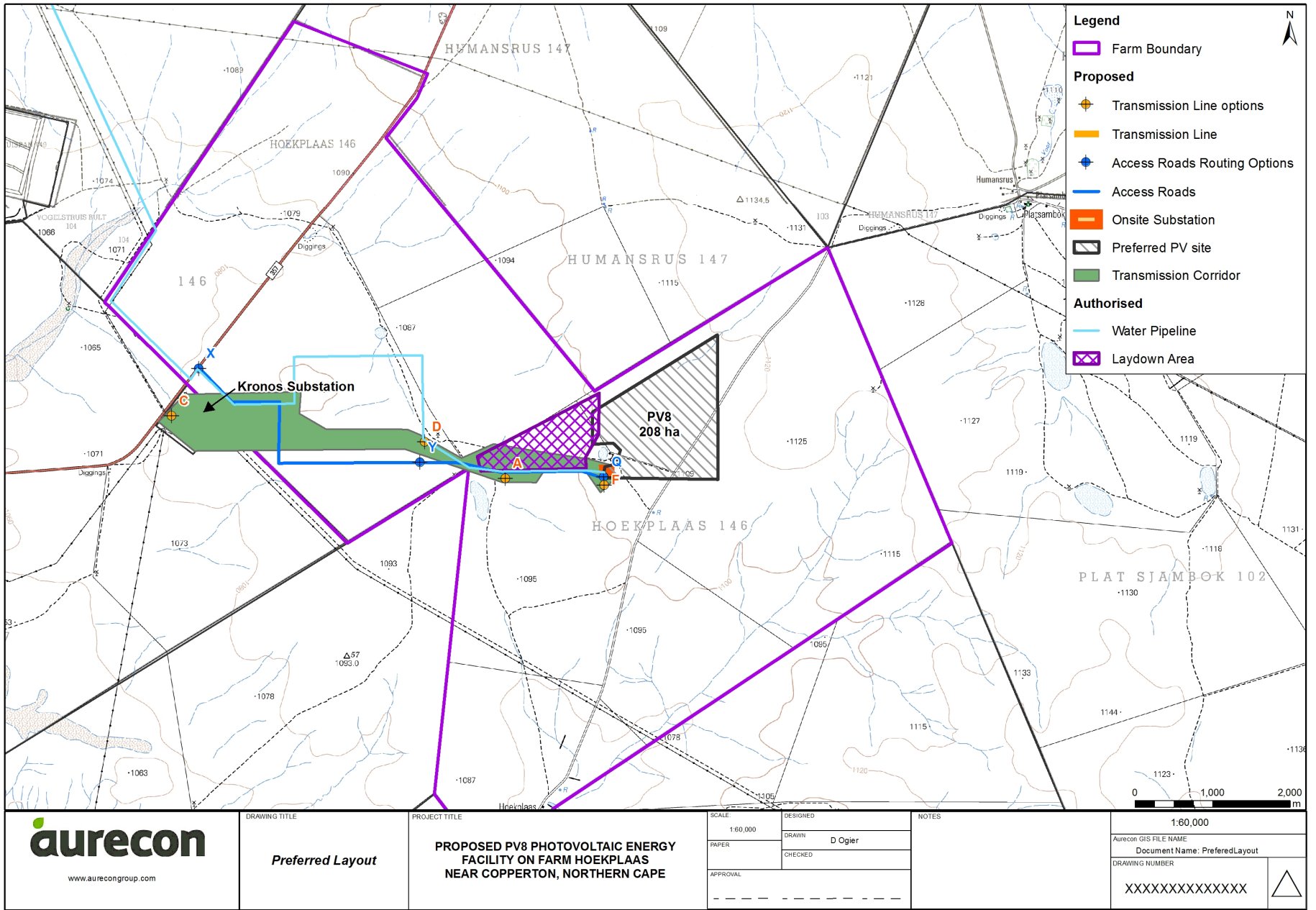




**Legend**

- Farm Boundary
- Proposed**
- ✦ Transmission Line options
- ✦ Access Roads Routing Options
- Access Roads
- Onsite Substation
- Preferred PV site
- Transmission Corridor
- Authorised**
- Water Pipeline
- Laydown Area

 www.aurecongroup.com	DRAWING TITLE	PROJECT TITLE	SCALE: 1:49,651	DESIGNED: D Ogier	NOTES	1:49,651
	Location of Proposed Infrastructure	PROPOSED PV8 PHOTOVOLTAIC ENERGY FACILITY ON FARM HOEKPLAAS NEAR COPPERTON, NORTHERN CAPE	DRAWN: D Ogier	CHECKED:		Aurecon GIS FILE NAME: Document Name: Infras
			PAPER:	APPROVAL:		



**Legend**

- Farm Boundary
- Proposed**
- ◆ Transmission Line options
- Transmission Line
- ◆ Access Roads Routing Options
- Access Roads
- Onsite Substation
- Preferred PV site
- Transmission Corridor
- Authorised**
- Water Pipeline
- Laydown Area

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DRAWING TITLE  
**Preferred Layout**

PROJECT TITLE  
**PROPOSED PV8 PHOTOVOLTAIC ENERGY FACILITY ON FARM HOEKPLAAS NEAR COPPERTON, NORTHERN CAPE**

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PAPER:	CHECKED:
APPROVAL:	

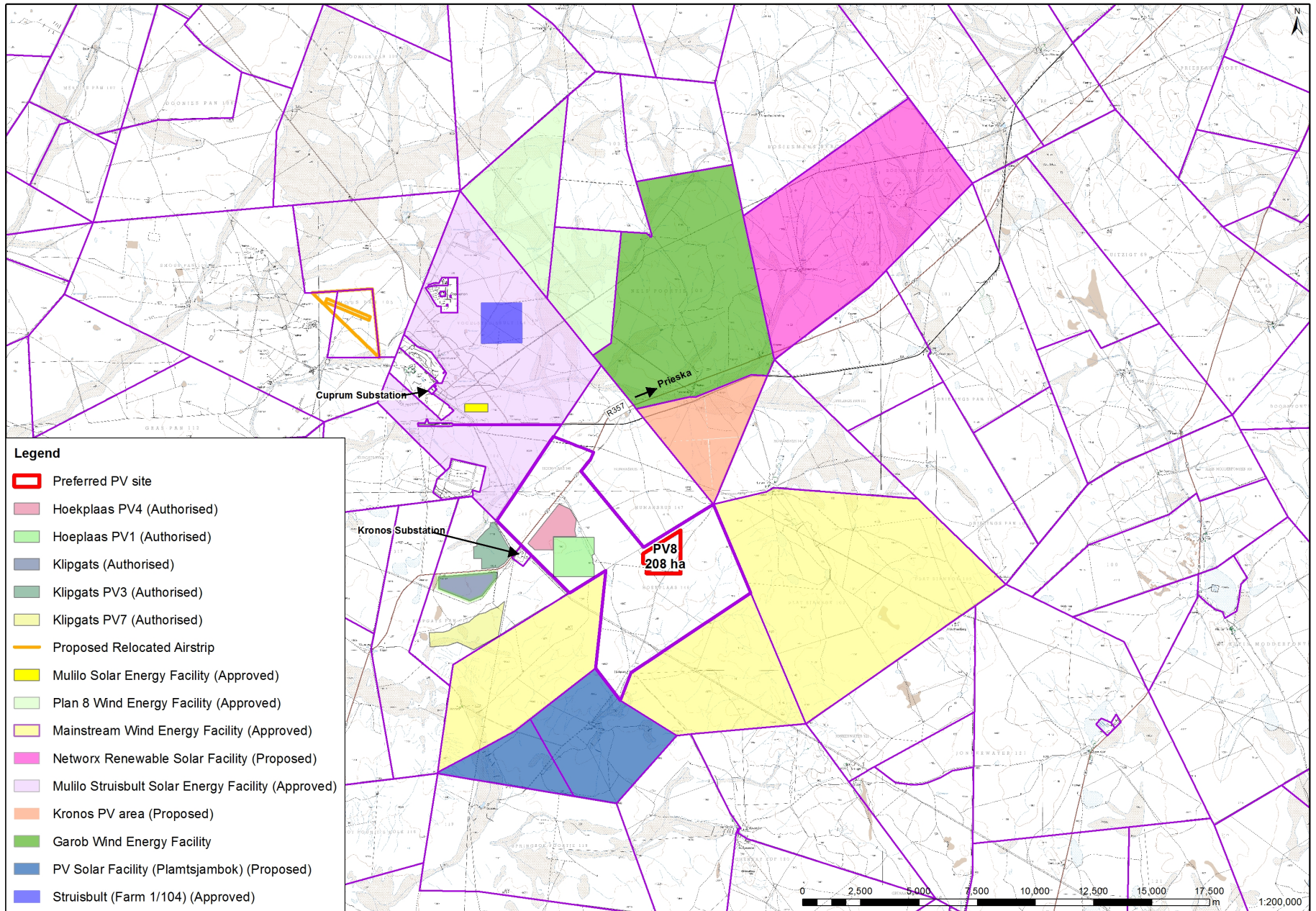
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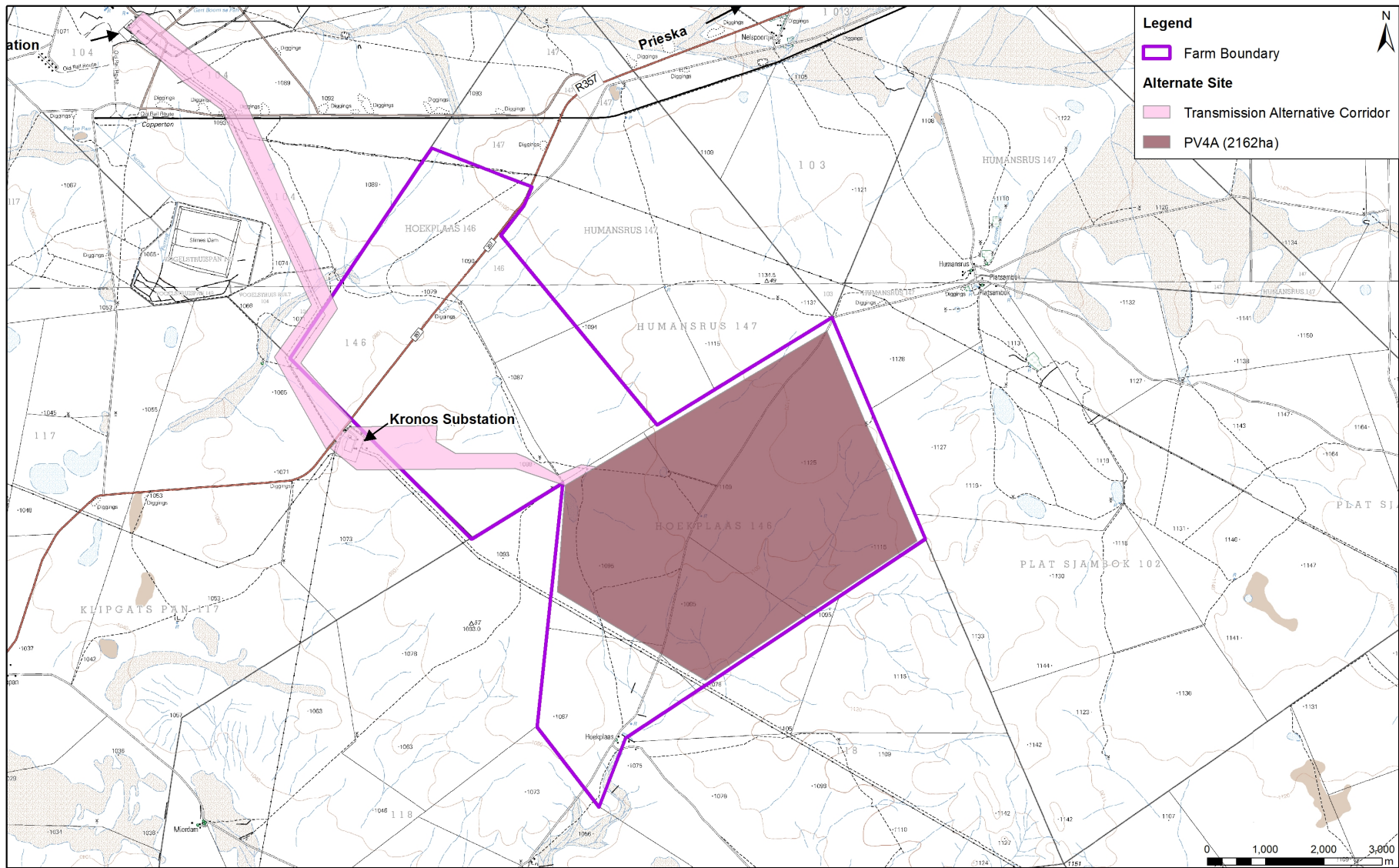
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**aurecon**

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DRAWING TITLE

**Alternative Layouts**

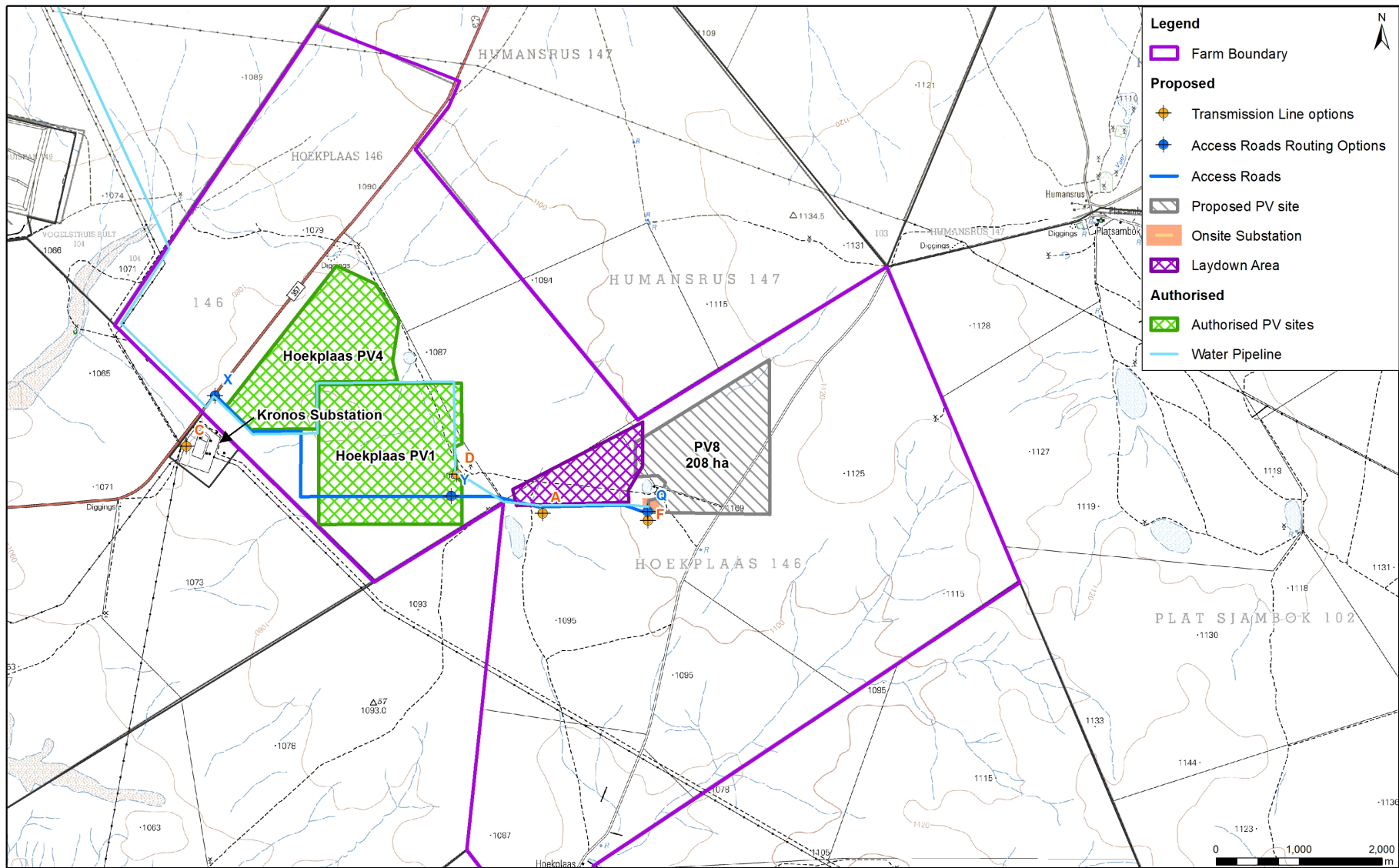
PROJECT TITLE

**PROPOSED PV8 PHOTOVOLTAIC ENERGY FACILITY ON FARM HOEKPLAAS NEAR COPPERTON, NORTHERN CAPE**

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PAPER:	DRAWN:
	D Ogier
	CHECKED:
APPROVAL:	

NOTES

1:85,469
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Document Name: Alternatives
DRAWING NUMBER
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DRAWING TITLE  
**Authorized and proposed PV facility**

PROJECT TITLE  
**PROPOSED PV8 PHOTOVOLTAIC ENERGY FACILITY ON FARM HOEKPLAAS NEAR COPPERTON, NORTHERN CAPE**

SCALE 1:60,000	DESIGNED D Ogier
PAPER	CHECKED
APPROVAL	

NOTES

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Aurecon GIS FILE NAME Document Name: AuthorizedLayout
DRAWING NUMBER XXXXXXXXXXXXXXXX

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# **ANNEXURE F**

## **DEA REQUIREMENTS**

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- Regional Maps



