



environment, forestry & fisheries

Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA ·0001· Environment House ·473 Steve Biko Road, Arcadia· PRETORIA

DEA Reference: 14/12/16/3/3/1/2204

Enquiries: Ms Samkelisiwe Dlamini

Telephone: (012) 399 9379 E-mail: SDlamini@environment.gov.za

Mr David Peinke
Bushmanland PV (Pty) Ltd
101, Block A, West Quay Building
7 West Quay Road
Waterfront
CAPE TOWN
8000

Telephone Number: (021) 418 2596
Email Address: david@atlanticep.com

PER EMAIL / MAIL

Dear Mr Peinke

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: FOR THE PROPOSED DEVELOPMENT OF THE 100MW BUSHMANLAND PV FACILITY ON RE FARM GEEL KOP NO 456 NEAR UPINGTON AND KEIMOEWS WITHIN THE KAI IGARIB LOCAL MUNICIPALITY IN THE NORTHERN CAPE PROVINCE

With reference to the above application, please be advised that the Department has decided to grant authorisation. The Environmental Authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the decision as well as the provisions regarding the submission of appeals that are contained in the Regulations.

In terms of the Promotion of Administrative Justice Act, Act No. 3 of 2000, you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, Act No. 4 of 2013 which stipulate that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuse or compromise your personal information in any way.

Your attention is drawn to Chapter 2 of National Environmental Management Act, Act No. 107 of 1998 National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribes the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

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Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appeals@environment.gov.za

By hand: Environment House
473 Steve Biko
Arcadia
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

Please note that in terms of Section 43(7) of the National Environmental Management Act, Act No. 107 of 1998, as amended, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appeals@environment.gov.za.

Yours faithfully



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environment, Forestry and Fisheries
Date: 05/0/2020

cc:	Mr Dale Holder	Cape Environmental Assessment Practitioners (Cape EAPrac)	Email: dale@cape-eaprac.co.za
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environment, forestry & fisheries

Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014, as amended

Development of the 100MW Bushmanland PV Facility near Uplington and Keimoes

ZF Mgcawu District Municipality

Authorisation register number:	<i>14/12/16/3/3/1/2204</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>Bushmanland PV (Pty) Ltd</i>
Location of activity:	<i>RE Farm Geel Kop Farm No 456 Kai !Garib Local Municipality ZF Mgcawu District Municipality; Northern Cape Province.</i>

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this Environmental Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, Act No. 107 of 1998, as amended and the EIA Regulations, 2014, as amended.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Department hereby authorises –

BUSHMANLAND PV (PTY) LTD

(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Mr. David Peinke

Bushmanland PV (Pty) Ltd

101, Block A, West Quay Building

7 West Quay Road

Waterfront

CAPE TOWN

8000

Tel: (021) 418 2596

Cell: (084) 401 9015

E-mail: david@atlanticep.com

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, Listing Notice 2 and Listing Notice 3 of the EIA Regulations, 2014 as amended:

Activity number	Activity description
<p><u>Listing Notice 1, Item 11:</u></p> <p><i>"The development of facilities or infrastructure for the transmission and distribution of electricity-</i></p> <p><i>(i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts</i></p>	<p>Construction of the IPP portion of the on-site substation outside of an urban area. The facilities and Infrastructure associated with Bushmanland PV will have a maximum capacity of 132 kilovolts</p>
<p><u>Listing Notice 1, Item 12:</u></p> <p><i>"The development of—</i></p> <p><i>(ii) infrastructure or structures with a physical footprint of 100 square metres or more;</i></p> <p><i>where such development occurs—</i></p> <p><i>(a) within a watercourse;</i></p>	<p>Construction of internal and perimeter roads as well as PV mounting structures across the ephemeral washes identified on the Farm Geelkop 456. These roads and structures will have a physical footprint exceeding 100 square metres</p>
<p><u>Listing Notice 1, Item 19:</u></p> <p><i>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</i></p>	<p>Construction of internal and perimeter roads as well as PV mounting structures across the ephemeral washes identified on the property. The excavation and infilling associated with these roads and structures will exceed 10 cubic metres</p>
<p><u>Listing Notice 1, Item 24:</u></p> <p><i>The development of a road –</i></p> <p><i>(ii) with a reserve wider than 13.5 meters, or where no reserve exists where the road is wider than 8 metres</i></p>	<p>Construction of the main access road to the proposed Bushmanland PV facility. The access road will have a width of 8m but with the inclusion of side drains will exceed a total width of more than 8m.</p>
<p><u>Listing Notice 1, Item 28:</u></p> <p><i>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:</i></p>	<p>The Bushmanland PV facility is considered as commercial use, being proposed on an area used for agricultural purposes. Bushmanland PV will have a total footprint of approximately 220 ha</p>

<i>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;</i>	
<p><u>Listing Notice 1, Item 56:</u></p> <p><i>The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre—</i></p> <p><i>(ii) where no reserve exists, where the existing road is wider than 8 metres;</i></p>	The existing access track will be widened by more than 6m in certain sections.
<p><u>Listing Notice 2, Item 1:</u></p> <p><i>The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more,</i></p>	The proposed Bushmanland PV comprises a renewable energy generation facility, which will utilise PV technology and will have a net generation capacity of up to 100MW.
<p><u>Listing Notice 2, Item 15:</u></p> <p><i>The clearance of an area of 20 hectares or more of indigenous vegetation</i></p>	Bushmanland PV will have a total footprint of approximately 220ha.
<p><u>Listing Notice 3, Item 4:</u></p> <p><i>The development of a road wider than 4 metres with a reserve less than 13 metres.</i></p> <p><i>g. Northern Cape</i></p> <p><i>iii. Outside urban areas:</i></p> <p><i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p>	The access road to the project crosses a CBA in the South of the Property. This road will be 8m in width.
<p><u>Listing Notice 3, Item 12:</u></p> <p><i>The clearance of an area of 300 square metres or more of indigenous vegetation.</i></p> <p><i>g. Northern Cape</i></p> <p><i>i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i></p> <p><i>ii. Within critical biodiversity areas identified in bioregional plans;</i></p>	The access road and portions of the project fall within a CBA in the South of the Property. The construction of this section of road and PV infrastructure will require the removal of more than 300 square metres of vegetation within this CBA.

<p>Listing Notice 3, Item 14:</p> <p><i>The development of—</i></p> <p><i>(ii) infrastructure or structures with a physical footprint of 10 square metres or more.</i></p> <p><i>g. Northern Cape</i></p> <p><i>ii. Outside urban areas:</i></p> <p><i>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p>	<p>The access road and portions of the PV development is proposed within CBA in the South of the Property. This section of road and PV infrastructure within the CBA will have a footprint exceeding 10 square metres.</p>
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as described in the Basic Assessment Report (BAR) dated August 2020 at:

SG 21 Code

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Layout Alternative	Latitude	Longitude
North-West corner	28°37'35.79"S	21°1'50.56"E
North-East corner	28°37'32.93"S	21°2'39.90"E
South-West corner	28°38'38.85"S	21°02'41.05"E
South-East corner	28°38'18.66"S	21°03'12.43"E

- for the development of the 100MW Bushmanland PV facility on RE Farm Geel Kop No 456 near Upington and Keimoes in the Northern Cape Province, hereafter referred to as "the property".

The facility will comprise the following:

- On-site switching-station / substation;
- Auxiliary buildings (gate-house and security, control centre, office, warehouse, canteen & visitors centre, staff lockers etc.);
- Battery Energy Storage System up to 400 MWh;
- Inverter-stations, transformers and internal electrical reticulation (underground cabling);
- Access and internal road network;
- Laydown area;

- The projects intend to connect from the onsite sub-stations to the Upington MTS (400/132 kV), via the 132kV Geel kop Collector Substation (this basic assessment process only includes the IPP portion of the onsite sub-station, while the remainder of the grid connection is being assessed in a separate BAR process);
- Rainwater tanks; and
- Electrified Perimeter fencing and security infrastructure.

Technical details of the PV Facility:

Component	Description/ Dimensions
Location of the site	Approximately 27km Southwest of Upington along the N14
SG Codes	C02800000000045600000
Site access	The site will be accessed directly from the N14 via Access Point 1 (an existing farm access)
Development footprint	Approximately 220ha
Export capacity	100 MW
Proposed technology	PV with fixed-tilt-, single-axis tracking- or dual-axis tracking- mounting structures.
Height of installed panels from ground level	Solar panels a maximum of ± 3.5 m from ground level
Width and length of internal roads	Roads - width: up to 8m, length: up to 15km

Conditions of this Environmental Authorisation

Scope of authorisation

1. The development of the 100MW Bushmanland PV facility on RE Farm Geel Kop No 456 near Upington and Keimoes in the Northern Cape Province is approved as per the geographic coordinates cited in the table above.
2. Authorisation of the activity is subject to the conditions contained in this Environmental Authorisation, which form part of the Environmental Authorisation and are binding on the holder of the authorisation.

3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this Environmental Authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this Environmental Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further Environmental Authorisation in terms of the regulations.
6. The holder of an Environmental Authorisation must apply for an amendment of the Environmental Authorisation with the Competent Authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of ten (10) years from the date of issue of this Environmental Authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for Environmental Authorisation must be made in order for the activity to be undertaken.
8. Construction must be completed within five (05) years of the commencement of the activity on site.
9. Commencement with one activity listed in terms of this Environmental Authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

10. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this Environmental Authorisation, of the decision to authorise the activity.
11. The notification referred to must –
 - 11.1. specify the date on which the authorisation was issued;
 - 11.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 11.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 11.4. give the reasons of the Competent Authority for the decision.

Commencement of the activity

12. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014, and no appeal has been lodged against the decision. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, Act No. 107 of 1998, as amended will suspend the Environmental Authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

13. The Environmental Management Programme (EMPr) submitted as part of the BAR dated August 2020 is approved and must be implemented and adhered to.
14. The EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
15. Changes to the approved EMPr must be submitted in accordance to the EIA Regulations applicable at the time.
16. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the BAR be discovered.

Frequency and process of updating the EMPr

17. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 25 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
18. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
19. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of the EIA Regulations, 2014 as amended. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
20. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of the EIA Regulations, 2014 as

amended. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.

21. The holder of the authorisation must apply for an amendment of an EMPr, if such amendment is required before an audit is required. The amendment process is prescribed in Regulation 37 of the EIA Regulations, 2014, as amended. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.

Monitoring

22. The holder of the authorisation must appoint an experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
 - 22.1. The ECO must be appointed before commencement of any authorised activities.
 - 22.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 22.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
 - 22.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

23. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.
24. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.

25. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of the EIA Regulations, 2014 as amended.
26. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
27. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 as amended and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
28. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Notification to authorities

29. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

30. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

31. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and Competent Authority at that time.

Specific conditions

Conditions for Non-operational aspects

32. A botanist must be appointed to perform a final walkthrough for the PV facility to identify sensitive plant species, and assist in identifying the areas that require protection.
33. A permit must be obtained from the relevant nature conservation agency for the removal or destruction of indigenous, protected or endangered plant or animal species and a copy of such permit/s must be contained within the approved EMPr.
34. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste must be disposed of at a landfill licensed in terms of Section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).

General

35. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
 - 35.1. at the site of the authorised activity;
 - 35.2. to anyone on request; and
 - 35.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
36. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of Environmental Authorisation: 05/10/2000



Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environment, Forestry and Fisheries

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The listed activities as applied for in the application form received on 21 July 2020.
- b) The information contained in the BAR dated August 2020.
- c) The comments received from SAHRA, South African Radio Astronomy Observatory, Northern Cape Department of Environment & Nature Conservation, Eskom, and interested and affected parties as included in the BAR dated August 2020.
- d) Mitigation measures as proposed in the BAR and the EMPr.
- e) The information contained in the specialist studies contained within the appendices of the BAR dated August 2020 and as appears below:

Title	Prepared by	Date
Ecological Impact Assessment	David Hoare Consulting (Pty) Ltd	May 2020
Aquatic Impact Assessment	EnviroSci (Pty) Ltd	May 2020
Bird Impact Assessment	Chris van Rooyen Consulting	March 2020
Agricultural Impact Assessment	C R LUBBE	June 2020
Social impact assessment	Tony Barbour	April 2020
Palaeontological Impact Assessment	Prof Marion Bamford	March 2020
Heritage Impact Assessment	HCAC - Heritage Consultants	April 2020
Visual Impact Assessment	Environmental Planning and Design	March 2020
Traffic Impact Assessment	JG AFRIKA (PTY) LTD	March 2020
Geological Assessment	Geotechnical Consult Services	April 2020
EMPr	Cape EAPrac	May 2020

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the proposed project stems from the provision of electricity to the national grid.
- c) The BAR dated August 2020 identified all legislation and guidelines that have been considered in the preparation of the BAR.
- d) The location of the proposed PV facility.
- e) The methodology used in assessing the potential impacts identified in the BAR dated August 2020 and the specialist studies have been adequately indicated.
- f) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the BAR Regulations, 2014 as amended for public involvement.

3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the BAR dated August 2020 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The information contained in the BAR dated August 2020 is deemed to be accurate and credible.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

Annexure 2: Locality Plan

