

Avonlie Solar Farm

Environmental Management Strategy



Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

All Rights Reserved

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

Revision: H Prepared by: Richard Sharp, FEIANZ, CEnvP

Date: 18/03/2021 Reviewed by: Alexander Graham

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling
restrictions set forth on the title page

All Rights Reserved

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

Plan Review & History

Rev. #	ddmmyy	Description	Changed by	Authorised by
A	28/07/19	First draft for SGRE review	-	-
B	12/08/19	Updated in response to the release of the Development Consent	Richard Sharp	-
C	26/08/19	Updated in response to comments received from RES	Richard Sharp	-
D	29/08/19	Inclusion of a table in Section 1.3	Richard Sharp	-
E	06/09/2019	Updated to ensure consistency with other plans	Richard Sharp	-
F	04/10/2019	Updated in response to comments received from the Department	Richard Sharp	-
G	17/10/2019	Updated in response to input received from SGRE and RES	Richard Sharp	-
H	18/03/2021	Updated to reflect the reissued Conditions of Consent (November 2020)	Nicola Smith	-

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

Contents

Plan Review & History	3
Abbreviations & Definitions	5
1 INTRODUCTION	6
1.1 Project location	6
1.2 Project description	6
1.3 Requirement for this Environmental Management Strategy	6
1.4 Approval of this Environmental Management Strategy	7
1.5 Updates of this Environmental Management Strategy	7
1.6 Reviews and audit of this Environmental Management Strategy	7
1.7 Access to this Environmental Management Strategy	7
2 STRATEGIC FRAMEWORK FOR THE PROJECT	8
2.1 Basis for a strategic framework	8
2.2 Strategic objectives	8
2.3 Required strategies and plans for this project	8
2.4 Revision of strategies, plans and programs	11
2.5 Updating and staging of strategies, plans and programs	11
2.6 Reporting requirements	11
2.7 Environmental training	12
2.8 Site inductions	13
2.9 Toolbox talks	13
3 STATUTORY APPROVALS FOR THE PROJECT	14
3.1 Development Consent	14
3.2 Other Permits Required	15
4 ROLE, RESPONSIBILITY, AUTHORITY AND ACCOUNTABILITY OF KEY PERSONNEL	18
4.1 Construction	18
4.2 Operations	20
4.3 Decommissioning	20
5 INFORMATION, COMPLAINTS, DISPUTES AND EMERGENCIES	21
5.1 Information for the local community and relevant agencies	21

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

5.2	<i>Complaints</i>	21
5.3	<i>Disputes</i>	22
5.4	<i>Non-compliance</i>	23
5.5	<i>Incident Management</i>	23
6	MONITORING PLAN	26
6.1	<i>Level and extent of monitoring</i>	26
6.2	<i>Specific monitoring obligations</i>	26
	Attachment A: Avonlie Solar Farm Layout Map	27

Abbreviations & Definitions

CCTV	Closed Circuit Television
Department/DPIE	Department of Planning, Industry and Environment
EHS	Environment, Health and Safety
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPC	Engineering, Procurement and Construction
km	Kilometer
MW	Megawatt
NSW	New South Wales
O&M	Operations and Maintenance
Project Owner	Avonlie Solar Project Co Pty Ltd (ACN 636 108 597) as trustee for the Avonlie Solar Project Trust
Secretary	Secretary of the DPIE (refers to the DPIE approval authority)
SHEQ	Safety, Health, Environment and Quality

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

1 INTRODUCTION

1.1 Project location

Avonlie Solar Farm is located approximately 20km south of Narrandera in southern NSW. A map showing the layout of the site is provided at Attachment A.

1.2 Project description

Avonlie Solar Farm comprises a solar power generating facility consisting of the following components:

- Around 667,000 solar panels mounted on a single axis tracking system.
- Access tracks
- A total solar capacity up to around 200MW
- Operations and maintenance building with associated car parking
- An electrical substation
- Overhead and underground electrical cable reticulation
- Security fencing and CCTV

1.3 Requirement for this Environmental Management Strategy

Condition 1 of Schedule 4 of the Development Consent requires that an Environmental Management Strategy (EMS) be prepared for this project to the satisfaction of the Secretary. Accordingly, the EMS must contain information as listed in the table below:

Information required in the EMS	Where addressed in the EMS
Provide the strategic framework for environmental management of the project	Section 2
Identify the statutory approvals that apply to the project	Section 3
Describe the role, responsibilities, authorities and accountability of all key personnel involved in the environmental management of the project	Section 4
Describe the procedures that would be implemented to keep the local community and relevant agencies informed about the operation and environmental performance of the project	Section 5.1
Describe the procedures that would be implemented to receive, handle, respond to, and record complaints	Section 5.2
Describe the procedures that would be implemented to resolve any disputes that may arise	Section 5.3
Describe the procedures that would be implemented to respond to any non-compliance	Section 5.4
Describe the procedures that would be implemented to respond to emergencies	Section 5.5
References to any plans approved under the conditions of this consent	Section 2.3

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

A clear plan depicting all the monitoring to be carried out in relation to the project

Section 6

1.4 Approval of this Environmental Management Strategy

In accordance with Condition 1 of Schedule 4 of the Development Consent, this EMS required to be approved by the Secretary prior to the commencement of development

1.5 Updates of this Environmental Management Strategy

Prior to carrying out any upgrading or decommissioning of Avonlie Solar Farm, this EMS will be updated to the satisfaction of the Secretary, as required under Condition 2 of Schedule 4 of the Development Consent.

1.6 Reviews and audit of this Environmental Management Strategy

In accordance with Condition 2 of Schedule 4 of the Development Consent, this EMS will be reviewed each time any of the following actions occur:

- An incident report¹ is submitted to the Secretary
- An audit report² is submitted to the Secretary
- A modification to the Development Consent is issued

Each review will occur within 1 month of any of the above actions taking place. If this EMS is revised, it will then be forwarded to the Secretary for approval.

In accordance with Condition 7 of Schedule 4 of the Development Consent, an Independent Environmental Audit will be commissioned within 6 months of commencing construction, which assesses whether the project has complied with this EMS. This audit must appropriate measures or actions to improve this EMS.

1.7 Access to this Environmental Management Strategy

In accordance with Condition 8 of Schedule 4 of the Development Consent, the updated version of this EMS will be made available on the project website which is located at <http://www.avonlie-solarfarm.com/>

¹ Refer to Condition 4 of Schedule 4 of the Development Consent

² Refer to Condition 7 of Schedule 4 of the Development Consent

2 STRATEGIC FRAMEWORK FOR THE PROJECT

2.1 Basis for a strategic framework

The strategic framework for environmental management at the Avonlie Solar Farm is based on the overarching commitment that the Project Owner has which is to minimise the effects of its activities on the environment and integrating environment concerns and objectives into business decisions. As a result, the Project Owner manages its activities and its impacts to maximise the environmental benefits it can create through the project.

2.2 Strategic objectives

Details about environmental concerns and objectives together with the management arrangements are documented in a series of strategies and plans that apply to the construction, operations and the decommissioning phases of the project. The establishment of this strategic framework is deliberate and seeks:

- to prevent and/or minimise any adverse environmental impacts of the project;
- to set standards and performance measures for acceptable environmental performance; and
- to provide for the ongoing environmental management of the project.

2.3 Required strategies and plans for this project

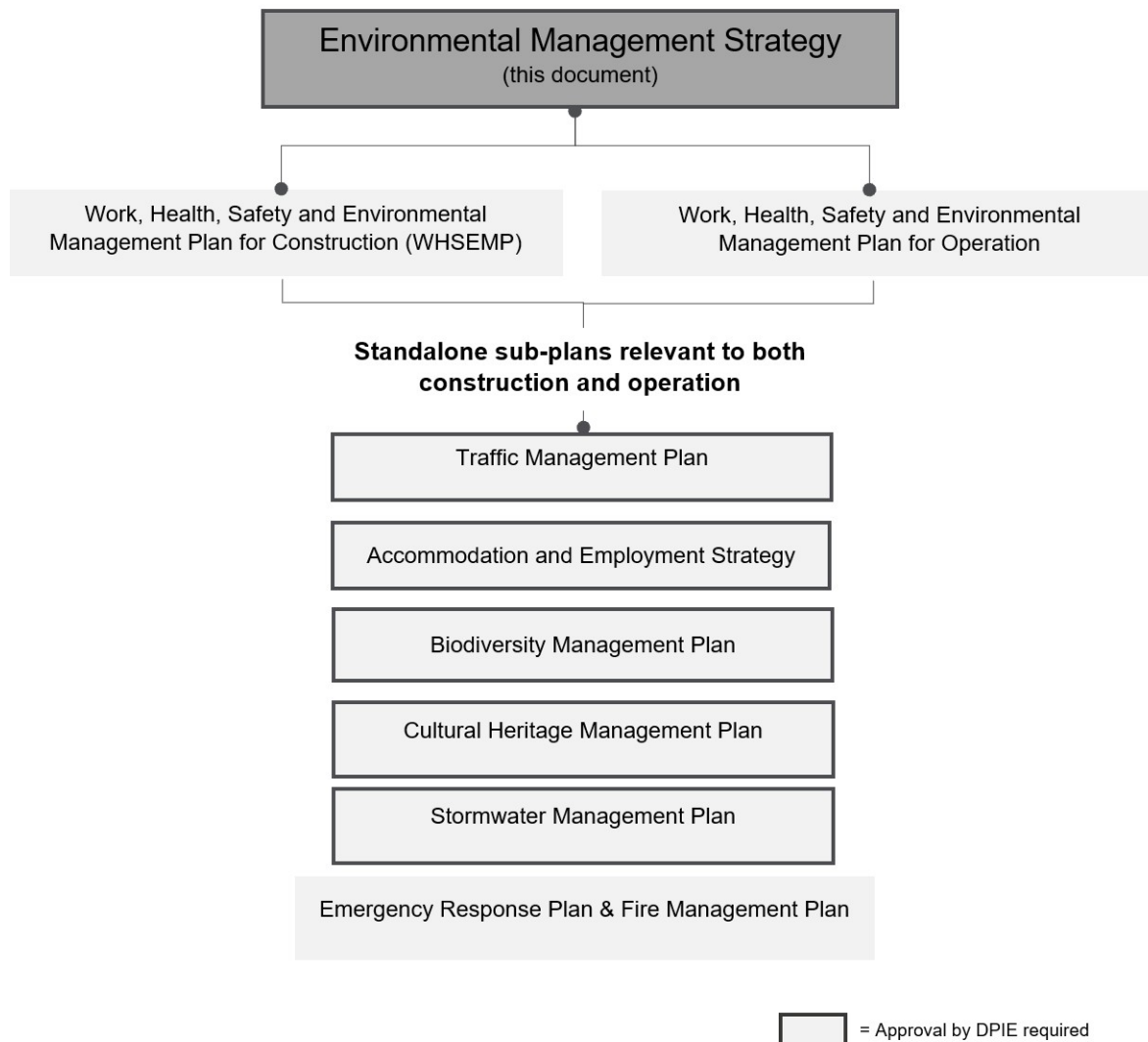
The Development Consent stipulates that the following strategies and plans are required:

- Environmental Management Strategy (this document)
- Accommodation and Employment Strategy
- Biodiversity Management Plan
- Emergency Plan⁴
- Final Layout Plans
- Heritage Management Plan⁵
- Stormwater Management Plan
- Traffic Management Plan
- Work as Executed Plans

Provided on the following page is a diagram which illustrates the management plans that are required under the Development Consent as the key documents to guide the construction, operations and the decommissioning phases for the Avonlie Solar Farm and collectively comprise the strategic framework for the project.

⁴ The Emergency Plan for this project is now known as the Project Emergency Response & Fire Management Plan

⁵ The Heritage Management Plan for this project is now known as the Cultural Heritage Management Plan



During the environmental planning and assessment process for this project which involved extensive community participation, the Environmental Impact Statement (EIS) proposed numerous strategies and plans. As a result of the conditions of the Development Consent, some of the proposed strategies and plans in the EIS have been now incorporated into other plans. A summary of the status of this change to the strategies and plans is provided in table below:

Strategies and plans proposed in the EIS	Relevant project plan
Biodiversity Management Plan	Biodiversity Management Plan
Bush Fire Management Plan	The Bush Fire Management Plan has been incorporated into the Emergency Response and Fire Management Plan
Construction Environmental Management Plan	Work Health Safety and Environmental Management Plan
Construction Traffic Management Plan	The Construction Traffic Management Plan is the Traffic Management Plan
Fire Management Plan	The Fire Management Plan has been incorporated into the Emergency Response and Fire Management Plan
Flood Management Strategy	The Flood Management Strategy has been incorporated into the Stormwater Management Plan
Noise Management Plan	The Noise Management Plan has been incorporated into the Work Health Safety and Environmental Management Plan for Construction during construction and the Work Health Safety and Environmental Management Plan for Operation during operation.
Operational Environmental Management Plan	The Operational Environmental Management Plan now becomes the Work Health Safety and Environmental Management Plan for Operation
Pest and Weed Management Plan	The Pest and Weed Management Plan has been incorporated into the Biodiversity Management Plan
Rehabilitation and Decommissioning Management Plan	The Rehabilitation and Decommissioning Management Plan is the Decommissioning Environmental Management Plan
Soil and Water Management Plan	The Soil and Water Management Plan has been incorporated into the Stormwater Management Plan
Traffic Management Plan	Traffic Management Plan
Waste Management Plan	The Waste Management Plan has been incorporated into the Work Health Safety and Environmental Management Plan for Construction
Work Health Safety Management Plan	The Work Health Safety Management Plan is the Work Health Safety and Environmental Management Plan for Construction during construction and the Work Health Safety and Environmental Management Plan for Operation during operation.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
 Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

2.4 Revision of strategies, plans and programs

In accordance with Condition 2 of Schedule 4 of the Development Consent, the Project Owner will:

- update the strategies, plans or programs required under the Development Consent to the satisfaction of the Secretary prior to carrying out any upgrading or decommissioning activities on site; and
- review and, if necessary, revise the strategies, plans or programs required under the Development Consent to the satisfaction of the Secretary within 1 month of the:
 - submission of an incident report under Condition 4 of Schedule 4 of the Development Consent;
 - submission of an audit report under Condition 7 of Schedule 4 of the Development Consent; or
 - any modification to the conditions of the Development Consent.

2.5 Updating and staging of strategies, plans and programs

In accordance with Condition 3 of Schedule 4 of the Development Consent, the Project Owner may submit any strategy, plan or program required by the Development Consent on a progressive basis, subject to the approval of the Secretary.⁶ In addition, the Project Owner may at any time submit revised strategies, plans or programs to the Secretary for approval. Subject to the agreement of the Secretary, the Project Owner may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of the Development Consent.

2.6 Reporting requirements

2.6.1 Heritage reporting

In accordance with the unexpected finds protocol appended to the Cultural Heritage Management Plan, there is a requirement for the Project Owner to report any unexpected heritage finds. Such finds may occur during any specific stage this project and may involve any of the following:

- Aboriginal stone artefacts, shell middens, modified trees, mounds, hearths, stone resources and rock art
- Human skeletal remains
- Remains of historic infrastructure and relics

For more details of the unexpected heritage finds reporting process, refer to the Cultural Heritage Management Plan.

2.6.2 Incident reporting

In accordance with Condition 4 of Schedule 4 of the Development Consent, the Project Owner will report in writing to the Major Projects website portal immediately after becoming aware of any environmental incident⁷ associated with this project. When reporting, the Project Owner will identify the application number [SSD 9031] and the name of the development [Avonlie Solar Farm] and set out the location and nature of the incident.

⁶ While any strategy, plan or program may be submitted on a progressive basis, the Project Owner must ensure that all development being carried out on site is covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly de-scribe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

⁷ An incident is a set of circumstances that causes or threatens to cause material harm to the environment which means that: it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

2.6.3 Non-compliance notification

In accordance with Condition 5 of Schedule 4 of the Development Consent, the Project Owner will report in writing to Major Projects website portal within 7 days after the becoming aware of any non-compliance⁸ with the conditions of the Development Consent. When reporting, the Project Owner will:

1. identify the development 'Avonlie Solar Farm' and the application number for it - SSD 9031
2. set out the condition of Development Consent that this project is non-compliant with
3. the way in which the project does not comply and the reasons for the non-compliance; and
4. what actions have been done, or will be, undertaken to address the non-compliance.

The Project Owner recognises that should there be any non-compliance with the conditions of the Development Consent, they would most likely be identified from the following:

- Site inspections
- Site audits
- Incident reports
- Relevant authorities responsible for the issuing of certificates, permits and licences
- Complaints from the local community

2.6.4 Independent Environmental Audit reporting

In accordance with Condition 7 of Schedule 4 of the Development Consent, the Project Owner will within 3 months of commencing construction and within 3 months of commencing operation, undertake an Independent Environmental Audit, or unless otherwise agreed by the Secretary. The proposed auditor must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.

The Independent Audit Reports and the Project Owner's response to audit findings will be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approval Requirements (2020) unless otherwise agreed by the Planning Secretary.

In accordance with the specific requirements of the Independent Audit Post Approval Requirements (2020), the Project Owner must review and respond to each Independent Audit Report and submit the response to the Planning Secretary. The Project Owner must make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary, unless otherwise agreed by the Planning Secretary.

2.7 Environmental training

All site personnel and other people who may be exposed to environmental risks or contribute to the environmental impacts of this project during the construction, operations or decommissioning will be provided with information and training related to the workplace and work to be performed. This training may include site induction training, toolbox talks, supervisor and management training, work-specific training and ongoing or refresher training. Such training may include, but not be limited, to the following matters:

- Aboriginal cultural heritage awareness
- Code of practice for the construction and operation of solar farms
- Driver's code of conduct
- Emergency spill kit use
- Minimisation and management of accidental spills
- Soil and water management

Records of training will be kept at the site office.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

⁸ Non-compliance is an occurrence or set of circumstances that is a breach of the Development Consent but is not an incident.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling
restrictions set forth on the title page

All Rights Reserved

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

2.8 Site inductions

All site personnel and visitors will undertake a site induction prior to commencing work or touring the site and will sign relevant documentation to acknowledge they have understood the contents of the induction. Site inductions will be tailored to suit the specific stage of this project. Site inductions may include, but not be limited to the following environmental management matters:

- Biodiversity
- Heritage
- Emergencies
- Security gate process
- Soil and water management
- Speed limits
- Traffic activities

After completing the induction, site personnel and visitors will sign a statement of attendance and records of this will be kept in the site office.

2.9 Toolbox talks

Toolbox talks are expected to be undertaken on a regular basis and cover of a wide range of aspects including administrative, environmental, management and reporting requirements. Records of each toolbox talk will be kept at the site office. The subject for each toolbox talk will be chosen based on the specific stage of this project

3 STATUTORY APPROVALS FOR THE PROJECT

3.1 Development Consent

The Project received Development Consent from the Minister of Planning on 8 August 2019. The statutory context of the consent is outlined below.

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and its associated regulations provide the framework for assessing environmental impacts and determining planning approvals for developments and activities in NSW. Part 4 of the EP&A Act provides for the control of development that requires Development Consent. Depending on the circumstances of the proposal, the consent authority may be the local Council or the Minister for Planning.

Part 4, Division 4.1 of the EP&A Act establishes an approval regime for development that is declared to be State Significant Development by either a SEPP or Ministerial Order. The Project is considered to be 'State Significant Development' as it is of a type listed in Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011*:

Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:

(a) has a capital investment value of more than \$30 million, or

(b) has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.

As the Project is for an electricity generating facility and has a capital investment of over \$30 million, it is State Significant Development.

The Minister for Planning is the consent authority for State Significant Development, and the approval process is managed by the DPIE.

Pursuant to Clause 8A of Section 78A of the EP&A Act, an Environmental Impact Statement (EIS) is required to support a development application for State Significant Development.

An EIS was prepared for the Project by NGH Environmental (NGH) (June 2018). The EIS was publicly exhibited from 2 August 2018 to 31 August 2018. During the exhibition period, the public and agencies were invited to make submissions.

Following the EIS exhibition period, NGH prepared a Response to Submissions Report (dated 11 June 2019) to address issues raised by the public and agencies. Following the DPIE's review of the Response to Submissions Report, the Project received Development Consent from the Minister of Planning on 8 August 2019.

3.1.1 Conditions of Consent and Revised Mitigation Measures

The Development Consent includes a number of Conditions of Consent (CoC) which must be complied with. The current consolidated CoC was issued in November 2020. CoC 2, Schedule 2 states:

The Applicant must carry out the development:

- *generally in accordance with the EIS; and*
- *in accordance with the conditions of this consent.*

The EIS comprises the following documents:

- Avonlie Solar Farm Environmental Impact Statement (NGH, June 2018)
- Amended development application letter (RES, 21 February 2019)
- Response to Submissions Report (NGH, June 2019)
- Subdivision Plan (as shown in Appendix 3 of the Development Consent)

The Response to Submissions Report included an updated summary of mitigation measures (referred to as the Revised Mitigation Measures (RMM)), which supersede the mitigation measures proposed in the EIS document. These revised mitigation measures should generally be complied with.

Following approval, a modification report was prepared to assess the transport and traffic, and biodiversity impacts to the detailed road design upgrade to Sandigo and Muntz Road alongside internal road amendments and the exclusion of the Old Man Salt Bush. Modification Report 1 (NGH, October 2020) was submitted and approved by the Department.

3.2 Other Permits Required

This section outlines any permits or approvals required for the Project that are addition to the Development Consent.

3.2.1 Consent under the Roads Act 1993

Under Section 138 of the *Roads Act 1993*, a person must not impact or carry out work on or over a public road without the consent of the appropriate roads authority.

The Project involves the following works within a public road:

- Upgrade of the intersection of the Sturt Highway and Sandigo Road, including BAR/AUL(s) treatments
- Upgrade of the intersection of Sandigo Road and Muntz Road, including BAR treatments
- Upgrade of Sandigo Road from Sturt Highway to 100m past Muntz Road
- Upgrade Muntz Road between Sandigo Road and the site access point
- Establish the site access point off Muntz Road with a Rural Property Access type treatment.

Each of the above activities requires consent from the relevant road authority under Section 138 of the *Roads Act 1993*. The relevant road authority for the affected roads is as follows:

- Sturt Highway (State, Classified road) – Transport for NSW (TfNSW)
- Sandigo Road (local, unclassified road) – Council
- Muntz Road (local, unclassified road) - Council

3.2.2 Activity Approval under Section 68 of the Local Government Act 1993

Section 68 of the Local Government Act 1993 specifies a range of activities where approvals are required to be obtained from Council. These are often in addition, or ancillary to, Development Consent requirements and are known as ‘Section 68 Activity Approvals’.

A person may carry out an activity specified in Section 68 only with the prior approval of Council.

The Project involves the following works which require a Section 68 Activity Approval.

- Operate a system of sewage management

An Activity Approval is required from Council for the above works under Section 68 of the *Local Government Act 1993*. The operation of a system of sewage management on the Project relates to the operation of septic systems.

3.2.3 Construction and Occupation Certificates under the EP&A Act

Part 6 of the *Environmental Planning and Assessment Act 1979* specifies when additional certification is required to be approved by Council for building and subdivision works.

Where a Development Consent has been issued for proposals involving building works, a Construction Certificate must be obtained prior to commencement of any building works. The Construction Certificate certifies that building work is being completed in accordance with specified plans and specifications or standards which comply with the requirements of relevant regulations.

Following the completion of construction, an Occupation Certificate is required which authorises that the use of the new building is in accordance with the Development Consent.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

3.2.4 Rural Fires Act 1997

If proposed, prior to conducting any Hot Works in a Total Fire Ban an exemption under Section 99 of the Rural Fires Act 1997 must be obtained from the Commissioner of the NSW Rural Fire Service (RFS).

3.2.5 Over-dimensional Vehicle Permits under Heavy Vehicle National Law

An over-dimensional vehicle is an over-mass and/or over-size/length vehicle (OSOM). OSOM vehicles are defined as Class 1 vehicles under the *Heavy Vehicle National Law Act 2012*. A vehicle or vehicle combination is considered to be OSOM if it, together with its load, exceeds prescribed mass or dimension limits.

If an OSOM vehicle exceeds the mass or dimension limits it may be eligible to operate under an existing Class 1 Notice or Ministerial Order. These legal instruments allow categories of eligible vehicles access to the road network subject to route restrictions, maximum dimension/mass limits and operating conditions.

All other OSOM vehicles must obtain a permit to travel on the road network. For travel only within NSW, permits can be obtained from RMS. For interstate travel, permits must be obtained from the National Heavy Vehicle Regulator (NHVR).

3.2.6 Subdivision

In accordance with Condition 13, Schedule 2 of the Development Consent, the project land may be subdivided to create three new allotments, as identified in Appendix 3 of the Development Consent, and in accordance with the requirements of the EP&A Act and the EP&A Regulation.

Under Part 6 of the EP&A Act, a subdivision certificate is required for a plan of subdivision.

3.2.7 Biodiversity Offsets

As per Condition 10, Schedule 3 of the Development Consent, within two years of commencing the development the biodiversity credits listed in the below tables must be retired to the satisfaction of OEH, unless the Secretary agrees otherwise.

The retirement of these credits must be carried out in accordance with the *NSW Biodiversity Offsets Scheme* and can be achieved by:

- (a) acquiring or retiring 'biodiversity credits' within the meaning of the *Biodiversity Conservation Act 2016*;
- (b) making payments into an offset fund that has been developed by the NSW Government; or
- (c) funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the biodiversity offset scheme.

Vegetation Community	PCT ID	Credits required
Western Grey Box – White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion	80	76

Species Credit Species	Credits Required
Sand - hill Spider Orchid (<i>Caladenia Arenaria</i>)	40
Oaklands Diuris (<i>Diuris</i> sp.)	40
Pine Donkey Orchid (<i>Diuris tricolor</i>)	21

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

Species Credit Species	Credits Required
A Spear Grass (<i>Austrostipa wakoolica</i>)	27
Superb Parrot (<i>Polytelis swainsonii</i>)	6
Major Mitchell Cockatoo (<i>Lophochroa leadbeateri</i>)	6

3.2.8 Water licences

If groundwater extraction is proposed during construction or operation, a Water Access Licence will be required under the Water Act 1912 and/or the Water Management Act 2000.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

4 ROLE, RESPONSIBILITY, AUTHORITY AND ACCOUNTABILITY OF KEY PERSONNEL

4.1 Construction

The role and responsibility of all key personnel involved in the environmental management at the Avonlie Solar Farm during construction along with their respective authority and accountability is described in the table below:

Role	Responsibility	Authority	Accountability
EPC Project Director	Ensure appropriate resources are available to comply with all relevant regulatory and project requirements.	Direct that works be stopped immediately where there is an actual or potential risk of environmental harm	Reports to the Project Owner
EPC Project Manager	- Overall responsibility to execute the engineering, procurement and construction works - Ensure works comply with all relevant regulatory and project requirements. - Liaise with Project Owner and regulatory authorities - Exercise a duty of care to the environment - Ensure that all personnel understand, accept and fully carry out their obligations for environmental protection and that they are adequately trained, instructed and resourced to fulfil their obligations - Seek relevant approvals for any required works or changes to site conditions outside the limits of the applicable project approvals/permits/plans - Assist with environmental compliance audits and incident investigations as required	Direct that works be stopped immediately where there is an actual or potential risk of environmental harm	Reports to the EPC Project Director
EPC Site Manager	- Plan and organise works to reduce the risk of adverse environmental impacts. - Ensure works comply with all relevant regulatory and project requirements. - Exercise a duty of care to the environment - Notify the Project Manager of any required works or changes to site conditions outside the limits of the applicable project approvals/permits/plans to seek the necessary approvals. - Assist with the independent environmental audits and any environmental incident investigations as required.	Can direct construction teams and personnel to take reasonable measures to prevent or minimise any material harm to the environment	Reports to the EPC Project Manager
EPC Site EHS Advisor	- Overall person responsible for managing the environmental aspects of the project. - Coordinate environmental monitoring, reviews and audits as required. - Ensure works comply with all relevant regulatory and project requirements. - Implement EPC's SHEQ programs. - Ensure all personnel have completed a site	Can direct construction teams and personnel to take reasonable measures to prevent or minimise any material harm to the environment	Reports to the EPC Site Manager

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

Role	Responsibility	Authority	Accountability
	induction prior to starting work. • Exercise a duty of care to the environment • Ensure the EMS, CEMP and associated documents are available to all personnel. • Carry out environmental inspections and initiate actions to ensure compliance with stated requirements. • Participate in the independent environmental audit. • Report on environmental performance at the site. • Undertake environmental incident investigations and implement improvement measures		
EPC Workers and Subcontractors	• Participate in environmental reviews and audits as required and directed by the EPC Site EHS Advisor, for relevant work areas • Ensure relevant works comply with all relevant regulatory and project requirements. • Provide environmental documentation and records for their relevant work areas to EPC Site EHS Advisor. • Implement and comply with the applicable environmental management measures. • Report on environmental performance at the site for relevant work areas. • Report any environmental incidents (potential and/or actual) in a timely manner.	Identify and treat environment risks before commencing works each day and prevent any material harm to the environment	Reports to the EPC Site Manager

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

4.2 Operations

The role and responsibility of all key personnel involved in the environmental management at the Avonlie Solar Farm during operations along with their respective authority and accountability is described in the table below:

Role	Responsibility	Authority	Accountability
O&M Service Operations Manager (Off-Site)	Ensure appropriate resources are available to comply with all relevant regulatory and project requirements.	Direct that works be stopped immediately where there is an actual or potential risk of environmental harm	Reports to the Project Owner
O&M Site Service Manager (On-Site)	- Plan and organise operations to reduce the risk of adverse environmental impacts. - Ensure operations comply with all relevant regulatory and project requirements. - Exercise a duty of care to the environment. - Notify the Service Operations Manager of any required operations or changes to site conditions outside the limits of the applicable project approvals/permits/plans to seek the necessary approvals. - Assist with environmental audits and environmental incident investigations as required.	Can direct construction teams and personnel to take reasonable measures to prevent or minimise any material harm to the environment	Reports to the O&M Service Operations Manager
O&M Service EHS Advisor (Off-Site)	- Provides environmental advice and support to the EPC Site Manager. - Assist with environmental monitoring, reviews and audits as required. - Monitors environmental performance at the site. - Assist with environmental incident investigations.	Can direct construction teams and personnel to take reasonable measures to prevent or minimise any material harm to the environment	Reports to the O&M Service Operations Manager
O&M Site Service Team	- Participate in environmental reviews and audits as required for relevant service areas - Ensure servicing comply with all relevant regulatory and project requirements. - Provide environmental documentation and records for relevant service areas. - Implement and comply with the applicable environmental management measures. - Report on environmental performance at the site for relevant service areas. - Report any environmental incidents (potential and/or actual) in a timely manner.	Identify and treat environmental risks before commencing works each day and prevent any material harm to the environment	Reports to the O&M Site Service Manager

4.3 Decommissioning

The role and responsibility of all key personnel involved in the environmental management at the Avonlie Solar Farm during the decommissioning will be described in a later version of this EMS.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

5 INFORMATION, COMPLAINTS, DISPUTES AND EMERGENCIES

5.1 Information for the local community and relevant agencies

To keep the local Narrandera community and relevant agencies informed about the environmental performance of the Avonlie Solar Farm, the Project Owner will proceed to regularly publish news about the Avonlie Solar Farm at <http://www.avonlie-solarfarm.com/news/>

In addition to the above, the Project Owner will proceed to make the following information publicly available on the Avonlie Solar Farm website as relevant to the stage of the project and keep this information up to date:

- the EIS;
- the final layout plans for the development;
- current statutory approvals for the development;
- approved strategies, plans or programs required under the conditions of this consent;
- the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
- how complaints about the development can be made;
- the complaints register;
- compliance reports;
- any independent environmental audit, and the Applicant's response to the recommendations in
- any audit; and
- any other matter required by the Secretary.

5.2 Complaints

5.2.1 Meaning of the term complaint

The term complaint means an expression of dissatisfaction about this project, the Project Owner, or the project contractors where a response or resolution is explicitly or implicitly expected or legally required.

5.2.2 Project Owner approach to any complaint

The Project Owner is committed to dealing with complaints in a reasonable timeframe and commits to ensuring that people who make complaints will be:

- provided with information about the complaint handling process;
- provided with acceptable ways to make complaints
- listened to, treated with respect and actively involved in the complaint process: and
- provided with reasons for and decisions and any options for redress or review.

The Project Owner will take all reasonable steps to ensure people making complaints are not adversely affected because a complaint has been made by them or on their behalf. The Project Owner will accept anonymous complaints and will carry out an investigation of the issues raised where there is enough information provided.

The Project Owner will ensure that information about how and where complaints may be made is well publicised. If a person prefers or needs another person/organisation to assist or represent them in making their complaint, the Project Owner will communicate with them through their representative.

The Project Owner will acknowledge the receipt of any complaint within 1 day from receiving the complaint and will ensure that the person handling the complaint is different from any project person whose conduct or service is being complained about. A more detailed response to the complaint will be provided within 2 days.

The Project Owner will resolve complaints promptly. The Project Owner will protect the identity of people making complaints where this is practical and appropriate. Personal information that identifies individuals will only be disclosed or used by the Project Owner as permitted under the relevant, secrecy provisions and privacy laws, secrecy provisions and any relevant confidentiality obligations.

5.2.3 Making a complaint to the Project Owner

This project has a website⁹ which provides the following contact details to be used by a person seeking to make a complaint to the Project Owner.

Email: info@avonlie-solarfarm.com

Phone: 1800 118 737

When making a complaint, the following information will be recorded if provided:

- Name of the complainant
- Email address or telephone number of the complainant
- Distance the complainant lives from the Avonlie Solar Farm
- A statement outlining the complaint
- Documentary evidence to support of the complaint
- A statement of the outcome being sought to resolve the complaint.

5.2.4 Making a complaint to the Department

The Department has a website¹⁰ for the online lodgement of complaints for solar farm projects. It is accepted that some people may choose to lodge a complaint about this project with the Department rather than the Project Owner. Once the Department receives a complaint about this project, it commences an investigation which can take up to 12 months to conclude, depending on the nature and complexity of the complaint.

5.2.5 Making a complaint to the National Wind Farm Commissioner

The National Wind Farm Commissioner can handle complaints from people who live in close proximity to a large-scale solar farm. The contact details for the National Wind Farm Commissioner are as follows:

Email: nwfc@environment.gov.au

Phone: 1800 656 395

It is accepted that some people may choose to lodge a complaint with the National Wind Farm Commissioner who is recognised as being impartial.

5.3 Disputes

5.3.1 Best practice approach

The Project Owner is committed to being accessible and responsive in addressing the local community's feedback and concerns throughout the lifetime of the development and this includes resolving any disputes in a timely manner.

⁹ <http://www.avonlie-solarfarm.com/contact-us/>

¹⁰ <https://www.planning.nsw.gov.au/Assess-and-Regulate/About-compliance/Lodge-a-compliance-complaint>

5.3.2 Referral to the Department

During the construction, operation and decommissioning of this project, should a dispute arise with the local community that is unable to be resolved by the Project Owner, then the Project Owner will refer the matter to the Department for resolution or advice.

5.4 Non-compliance

A non-compliance is an occurrence or set of circumstances that is a breach of the Development Consent but is not an incident. During the construction, operation and decommissioning of this project, should the Project Owner become aware of any non-compliance with the conditions of the Development Consent, action will be immediately initiated to investigate and address the non-compliance. The approach taken by the Project Owner to deal with any non-compliance will depend upon the following considerations:

- What is the level of seriousness of the non-compliance?
- Does the non-compliance involve harm towards the environment or community?
- Based on the evidence of the non-compliance, what is a reasonable response?
- Can a response be applied in a timely manner to obtain the best outcomes?

As part of any investigation by the Project Owner about a non-compliance matter involving the conditions of the Development Consent, site inspections and interviews of the site personnel will be conducted, and information including site records will be identified and secured. The Project Owner may engage in independent third party to undertake a specific inspection or conduct an audit in order to inform the investigation and any response.

For all other matters non-compliance matters, it is envisaged that the relevant internal investigation processes used by the Project Owner and the various contractors as part of their respective management systems, will be adequate to determine actions are appropriate and what improvements can be made to reducing further non-compliance in the future.

5.5 Incident Management

An incident is defined in the Development Consent as a set of circumstances that causes or threatens to cause material harm to the environment.

Material harm is defined in the Development Consent as harm that:

- involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial;
or
- results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

5.5.1 Incident Management Procedure

This procedure details the protocols to be followed in the event of an incident. Refer also to the Emergency Response & Fire Management Plan which includes additional measures to be taken in the event of an emergency.

Immediate Response

Following an incident, the personnel present at the incident site shall determine whether the area requires isolation. If isolation is required, the following steps should then be taken:

- Stop works around the area
- Implement containment measures to prevent the impact of the incident spreading
- Undertake internal notifications, and any external notifications as appropriate.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

Internal Notifications

Any incident must be reported immediately to the construction manager or delegate, and EHS Advisor. Site inductions will emphasise this obligation to all contractors and personnel working on-site.

The notified construction manager or delegate and EHS Advisor will determine the next steps to be taken and undertake external notifications as appropriate.

The project manager, senior project manager and project owner is to be notified as soon as possible after the incident has been dealt with.

External Notifications

All incidents, as defined under the Development Consent, must be notified in writing to the DPIE immediately via the Major Projects website portal within 7 days after the Project Owner becomes aware of the incident. This is in accordance with Condition 4 of Schedule 4. The notification must identify the development (Avonlie Solar Farm) and the application number (SSD 9031) and set out the location and nature of the incident.

Depending on whether the incident resulted in material harm, further agency notification may be required, as outlined below.

Incident with material harm

If it is determined that material harm has been caused, relevant external agencies will be immediately notified and provided the following relevant information:

- the time, date, nature, duration and location of the incident;
- if the incident involves pollution, the nature, the estimated quantity or volume and the concentration of pollutants;
- the circumstances in which the incident occurred (including the cause of the incident, if known); and
- the action taken or proposed to be taken to deal with the incident.

The agencies that may need to be notified include:

- Police, Fire or Ambulance 000 or for Mobiles Only 112
- SES 13 25 00
- NSW EPA 131 555
- Safe Work NSW 13 10 50 (for notifiable incidents)
- Narrandera Shire Council (02) 6959 5510
- Transport for NSW 13 22 13
- Narrandera Police Station (02) 6959 5999

For major traffic-related incidents, or incidents involving a member of the public, vehicles will not be moved and/or removed from the scene until the incident has been investigated. Drivers of any vehicle involved in a traffic-related incident will undertake a standard drug and alcohol testing.

5.5.2 Incident Investigation

As soon as the incident has been contained and external notifications undertaken the EHS Advisor will then undertake an incident investigation.

One purpose of the investigation will be to identify and understand the cause of the incident with a view to modifying procedures to avoid the potential for a recurrence. The types of preventative actions taken could include revision of work methods, management plans, or other procedures.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

The other purpose of the incident investigation will be to define the appropriate remediation work required in order to address any bio-physical impact of the incident. The appropriate remediation work (if required) will be determined by the specific circumstances of the incident.

Work may only resume at the incident site once the construction manager and EHS Advisor are satisfied that it is safe to do so, and there is no risk of further impacts to the environment.

5.5.3 Incident Reporting

Any incident will be recorded in an Incident Report. Each Incident Report will include details on:

- the time, date, nature, duration and location of the incident
- climatic conditions
- pollutants involved, if any
- circumstances in which the incident occurred
- the actions taken to deal with the incident
- external notifications undertaken.
- remediation activities undertaken to address any bio-physical impacts
- preventative actions undertaken to avoid the potential for a recurrence.

Incident reports will be distributed to senior personnel and filed. Incident reports will be made available to external agencies on request. External agencies may request additional information on a case-by-case basis.

5.5.4 Emergency Response & Fire Management Plan

The project's Emergency Response & Fire Management Plan (ERFMP) provides details about the emergency procedures which meet the requirements of Fire and Rescue NSW and the NSW Rural Fire Service. A copy of the Emergency Response & Fire Management Plan will be made available, adjacent to the site entry point, following its approval prior to commissioning. The ERFMP will cover foreseeable emergency situations and will include as a minimum:

- Site plans
- The roles and responsibilities associated with emergency response
- Internal and external emergency notification procedures
- Training requirements
- Information that emergency services may require if attending site such as location of emergency equipment, first aid kits and others
- The procedures for responding to different types of emergencies such as bushfire, electricity, flood and others
- Safe evacuation paths
- A log of emergency events, response adequacy, communication procedures and improvements
- Actions for when the emergency is over to allow safe operation of the site to recommence
- Control of any remaining hazards.

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

6 MONITORING PLAN

6.1 Level and extent of monitoring

Much of the monitoring that is to be undertaken for this project is variable and is dependent on the scope of the strategy or plan to which it relates. For this project, the types of monitoring that will be undertaken includes, but is not limited to, the following:

- Continued periodic monitoring
- Compliance monitoring
- Daily monitoring
- Delivery schedule monitoring
- Equipment monitoring
- In-situ monitoring
- Meteorological monitoring
- Monitor for performance
- Monitoring during construction
- Monitoring during decommissioning
- Monitoring of sites
- Ongoing monitoring
- Review monitoring
- Road condition monitoring
- Traffic monitoring
- Vehicle monitoring
- Weekly monitoring

For explicit details of the various monitoring requirements, refer to the monitoring section in each of the strategies and plans identified in Section 2.3.

6.2 Specific monitoring obligations

In terms of the specific monitoring obligations this project has that are detailed in the Development Consent, these obligations are outlined in table below:

Development Consent	Monitoring Obligations	Strategy / Plan
Condition 11(b) of Schedule 3	include details of who would be responsible for monitoring ... the plan, and timeframes for completion of actions.	Biodiversity Management Plan
Condition 18(d) of Schedule 3	include a program to monitor ... the effectiveness of these measures and any heritage impacts of the project.	Heritage Management Plan
Condition 28(d) of Schedule 3	include a program to monitor ... the effectiveness of the strategy over the life of the development, including regular monitoring and review during construction.	Accommodation and Employment Strategy

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

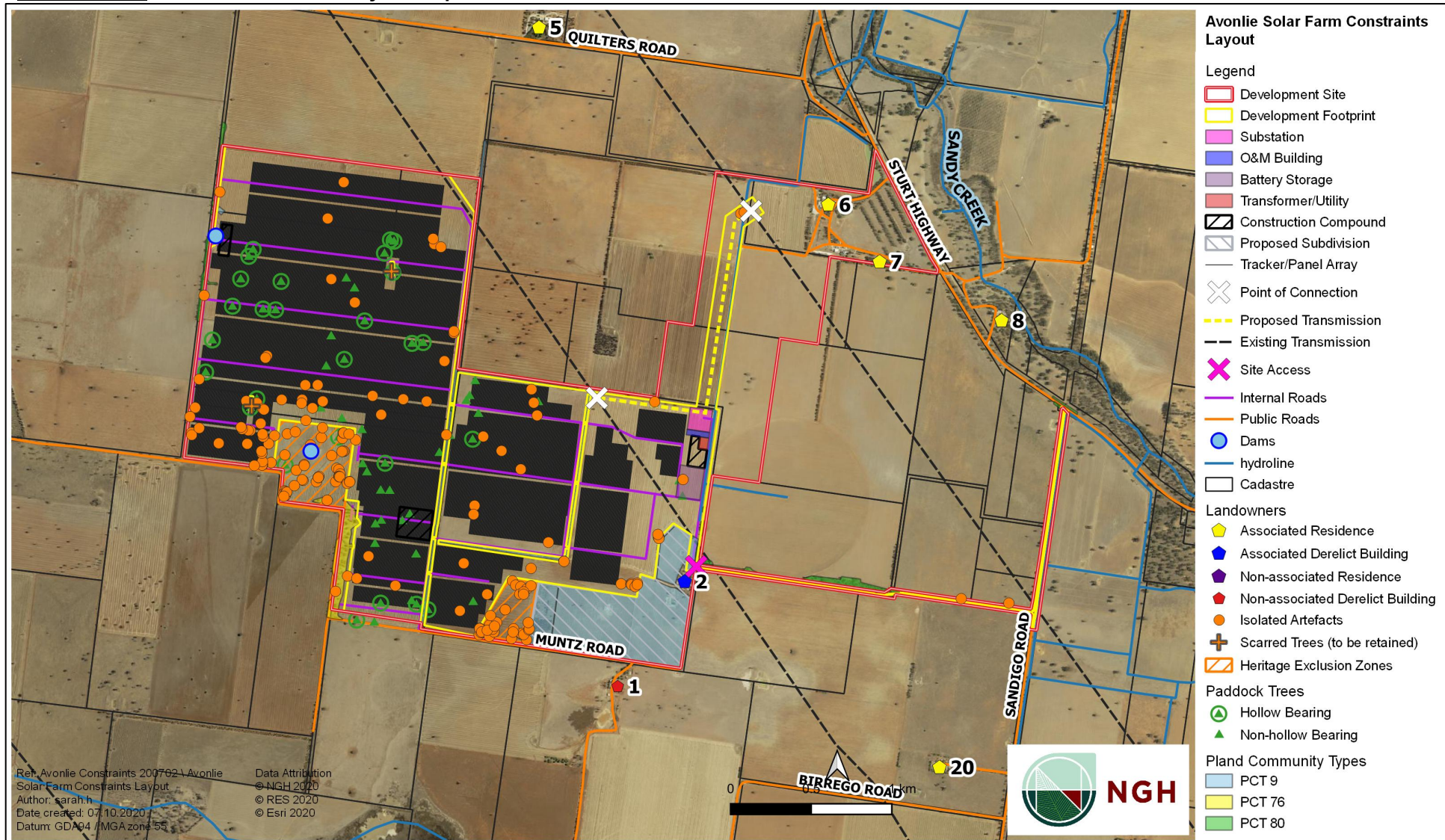
© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33

All Rights Reserved

Attachment A: Avonlie Solar Farm Layout Map



electronic document database.

© Siemens AG, 2016

This document is subject to the handling restrictions set forth on the title page

Unrestricted / INS 19676 Appendix 1
Ver. 4 / 2017-01-02 / Ref: DOC 14.33

All Rights Reserved

Printed version is uncontrolled. Controlled version only exists in the electronic document database.

© Siemens AG, 2016

This document is subject to the handling
restrictions set forth on the title page

All Rights Reserved

Unrestricted / INS 19676 Appendix 1
Ver. 5 / 2021-03-18 / Ref: DOC 14.33