



NGH



Landscaping Plan

Jindera Solar Farm

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Acronyms and abbreviations

AC	Alternating current
AHD	Australian Height Datum
APZ	Asset Protection Zone
BESS	Battery Energy Storage System
BMP	Biodiversity Management Plan
CEEC	Critically Endangered Ecological Community
CEMP	Construction Environmental Management Plan
CoC	Conditions of Consent
DC	Direct current
DPE	Department of Planning and Environment (NSW) (formerly Department of Planning, Industry and Environment (DPIE))
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPC Contractor	Engineering Procurement and Construction
ESCP	Erosion and Sediment Control Plan
EWMS	Environmental work method statement
GHSC	Greater Hume Shire Council
GSNSW	Geological Survey of NSW
HSEQ	Health Safety and Environment and Quality
km	Kilometres
kV	Kilovolts
LGA	Local Government Area
LP	Landscaping Plan (this document)
m	Metres
mm	Millimetres
MW	Megawatt
NSW	New South Wales
PCT	Plant community type
PV	Photovoltaic
sp/spp	Species/multiple species
SoCs	Statement of Commitments

SSD	State Significant Development
SWMP	Soil and Water Management Plan
The Proponent	Jindera Solar Farm Pty Ltd
The Project	Jindera Solar Farm

1. Introduction

1.1 Overview

Jindera Solar Farm Pty Ltd (the Proponent) received planning approval on 22 December 2020 for the construction and operation of a 120 Megawatt (MW) alternating current (AC) photovoltaic (PV) Solar Farm; equivalent to up to 150 MW direct current (DC).

The Project is located on agricultural land approximately 4 kilometres (km) north of Jindera, New South Wales (NSW). The Jindera Solar Farm (JSF, the Project) has a 521 hectare (ha) footprint and is State Significant Development (SSD, SSD-9549).

A modification (SSD-5649 -Mod-1) to the Project was determined on 25 October 2023 and consolidated Conditions of Consent (CoC) issued. The modification to the Project included change to an underground transmission line connection, increase in inverter stations and peak vehicles movements, refinements to the visual screening and security fencing and staging of the Battery Energy Storage System (BESS).

This Landscaping Plan (LP) has been prepared to address the requirements of the mitigation and management measures listed in the *Jindera Solar Farm Environmental Impact Statement* (EIS) (NGH Environmental 2019), Jindera Solar Farm Submissions Report (NGH, 2020), Modification 1 Report (NGH, 2023) and the updated Consolidated Conditions of Consent (CoC) from the New South Wales Minister for Planning, Department of Planning and Environment (DPE, October 2023). The Proponent received approval from DPE for this Plan on the 4 October 2022 (Appendix E). Additionally, this Plan considers legislation, policies and guidelines applicable to landscaping.

1.2 Staging

As per Condition 3 of Schedule 4 of the development consent, Jindera Solar Farm Pty Ltd received approval on 14 September 2022 for staging the development and submission of the relevant strategies, plans or programs required by the development consent on a progressive basis.

The construction of the Project will be undertaken in two approved stages:

- Stage 1 of the Project will include construction and operation of all components of the solar farm as approved, with the exception of the 'battery storage facility.' Stage 1 is expected to commence in 2024.
- Stage 2 of the Project will include construction and operation of the 'battery storage facility.' Stage 2 will commence after Stage 1; however, the timing is not yet known.

The plans, including this LP will be required to be updated to address Stage 2.

1.3 The Project

The approved Project includes all works necessary to design, construct, test, commission, energise, operate and decommission the solar farm.

The scope of works for Stage One includes but is not limited to:

- Approximately 390,500 single axis tracker photovoltaic (PV) solar panels (up to 3 metres (m) high) and 38 inverter stations (up to 3.5 m high).
- A 1,050 m 132 kilovolts (kV) underground transmission line along Ortlipp Road to TransGrid's 330/132kV Jindera substation.
- Connection configuration works at TransGrid's Jindera Substation.
- Electrical cables and conduits.

- Weather station.
- On-site high voltage substation.
- Control room and maintenance facilities (up to 3.5 m high).
- Site office, staff amenities, parking area and perimeter fencing, and CCTV.
- Internal access tracks.
- Access road entrances from public roads.
- Upgrade to existing roads.
- On-site vegetative screening, including earthen visual bunds.
- Other associated ancillary infrastructure.

During construction, three access points to the development site will be used. Access points are located along Urana Road and Walla Walla Jindera Road. These access points would be used during the construction and operation of the Project and would be suitable for all vehicles, including heavy and oversized vehicles.

Two additional emergency access points, located on Klinberg and Ortlipp Road, would be utilised. Klinberg Road for emergency purposes and Ortlipp Road for emergency access and limited maintenance purposes.

Stage 1 construction is proposed to commence Q2 2024 and will last approximately 12-18 months from the commencement of site establishment work. Construction hours will be limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1pm. Night works are not anticipated to occur. Any construction outside of these normal or agreed working hours, if required, will only occur with prior approval from relevant authorities, or in emergency circumstances.

The approved Project layout is provided in Figure 1-1. Note, the approved Project layout includes a Battery Energy Storage System (BESS). The BESS will be included as part of Stage 2 and therefore not considered in this management plan.

Operation activities for Stage 1 will include:

- Routine visual inspections, general maintenance and cleaning operations of the solar arrays as required.
- Routine visual inspections, general maintenance and cleaning operations of the substation.
- Vegetation management in accordance with the Bushfire Management Plan.
- Site security response (24 hr) if required.
- Site operational response (24 hr) if required.
- Replacement of equipment and infrastructure as required.
- Maintenance of landscaping and screening plantings as required.

Operation of the solar farm will commence post construction and commission and is proposed to be operational for 35 years.

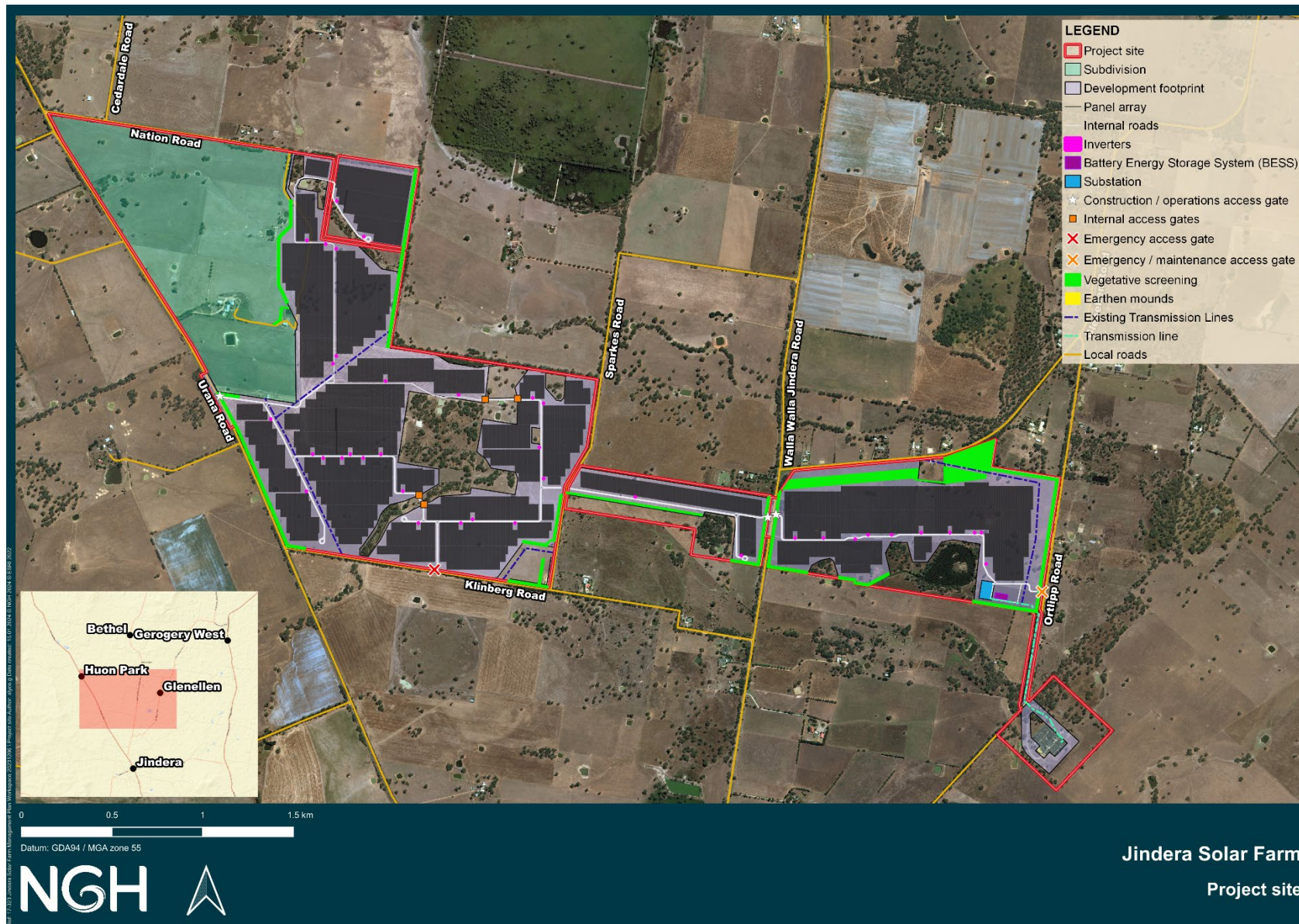


Figure 1-1 Approved Project Layout

1.4 Environmental Management Strategy

This LP is part of the Project 's overall Environmental Management Strategy (EMS). Mitigation and management measures identified in this LP will be incorporated into site or activity-specific Environmental Work Method Statements (EWMS).

When used in conjunction, the overarching EMS, LP and other subplans, procedures and EWMS form management guides that clearly identify the necessary environmental management actions for reference by the Proponent's personnel and contractors.

The review and document control processes for this plan are described in the EMS.

2. Purpose, objectives and targets

2.1 Purpose

The purpose of this report is to plan, establish and maintain landscaping to reduce visual impacts to sensitive receivers and road users during operation of the Project .

2.2 Objectives

The key objective of the LP is to ensure that all conditions, mitigation measures and licence/permit requirements relevant to landscaping are described, scheduled, and assigned responsibility as outlined in:

- DPE Consolidated Development Consent (determined 25 October 2023).
- *Jindera Solar Farm Environmental Impact Statement* (EIS) (NGH Environmental, 2019).
- Final amended Statements of Commitments (SoCs) listed in the *Jindera Solar Farm Submissions Report* (NGH Environmental, 2020).
- Modification 1 Report (NGH, 2023).
- All applicable legislation during the construction of the Project .

Specifically, the LP aims to:

- Ensure appropriate planning, controls and procedures are implemented during construction to facilitate the preparation and completion of landscape areas to be maintained during operation.
- Ensure appropriate measures are implemented to comply with all relevant legislation and other requirements.
- Ensure the Landscaping Plan addresses all details expected of the plan as indicated in the EIS, including:
 - Screening location.
 - Species type.
 - Planting density and spacing.
 - Method for planting.
 - Measures that would be implemented to ensure vegetative screening is successful (i.e. irrigation, fertilising, weed control and monitoring).
 - A program to manage, monitor and report on the effectiveness of implemented measures.

The Project will be carried out generally in accordance with the EIS and the CoC, if there is any inconsistency between the documents the conditions of the consent will prevail.

2.3 Targets

The following targets have been established for the management of the visual amenity impacts during construction and operation of the Project:

- Ensure full compliance with legislative requirements, including the CoC
- Landowners are satisfied with the planted screening provided to address amenity issues at this property. Landscape screening to be conducted within 12 months of commencing development and prior to commencing construction.
- Effective screening of solar farm infrastructure within 3 years of commencing operations.

3. Environmental requirements

3.1 Relevant legislation and guidelines

3.1.1 Legislation

Legislation relevant to landscaping management includes:

- *Environmental Planning and Assessment Act 1979 (NSW)* (EP&A Act)
- Environmental Planning and Assessment Regulation 2021
- *Rural Fires Act 1997*
- *Biosecurity Act 2016*
- *Pesticides Act 1999*
- Pesticides Regulation 2017
- *Biodiversity Conservation Act 2016*.

How this legislation is relevant to the Landscaping Plan and Project is outlined in Appendix C of the EMS.

3.1.2 Guidelines and standards

The main guidelines, specifications and policy documents relevant to this Plan include:

- AS 4419-2003 Soils for landscaping and garden use: outlines the requirements for general purpose soils, top dressing, topsoil and landscaping mixes for domestic and commercial use.
- AS 2303:2015 Tree stock for landscape use: outlines the tree specification process for ensuring quality tree stocks for landscaping uses.
- Planning for Bushfire Protection 2019: provides standards and guidance for development on bush fire prone land, which needs to be considered with landscaping placement.

3.1.3 Conditions of Consent

The Project's CoCs (DPE, 2023) and Statement of Commitments (SoCs) from the Submissions Report (NGH, 2020) relevant to the Landscaping Plan are listed in Table 3-1. A cross reference is also included to indicate where the requirement is addressed in this Plan.

Table 3-1 Project CoCs and SoCs relevant to the Landscaping Plan

Reference number	Condition requirement	Document reference
Conditions of Consent		
Schedule 3 CoC10	Vegetation Buffer The Applicant must establish and maintain a vegetation buffer (landscape screening) at the locations outlined in the figure in Appendix 8 (Appendix A of this plan) to the satisfaction of the Planning Secretary. This Landscape screening must: (a) be planted within 12 months of commencing development under this consent and prior to commencing construction. (b) be comprised of species that are endemic to the area	Appendix D Section 6.1.3 Section 6.1.4

Reference number	Condition requirement	Document reference
	(including PCTs 9, 266, 277 and 360 where appropriate); (c) minimise views from residences R01, R09, R10, R11, R16, R17, R18, R19, R20 and R34 within 3 years of commencing operations. (d) be designed and maintained in accordance with RFS's <i>Planning for Bushfire Protection 2019</i> (or equivalent); (e) be properly maintained with a replanting programme being undertaken where the vegetation fails to establish; and (f) Undertake appropriate weed management unless the Planning Secretary agrees otherwise.	
Schedule 3 CoC11	Landscaping Plan Prior to commencing the development, the Applicant must prepare a detailed Landscaping Plan for the development in consultation with Council and residences R01, R09, R10, R11, R16, R17, R18, R19, R20 and R34 to the satisfaction of the Planning Secretary. This plan must include: (a) a description of measures that would be implemented to ensure that the vegetated buffers achieve the objectives of condition 10 (a)- (e) above; (b) a program to monitor and report on the effectiveness of these measures; and (c) details of who would be responsible for monitoring, reviewing and implementing the plan, and timeframes for the completion of actions. Following the Planning Secretary's approval, the Applicant must implement the Landscaping Plan.	Entire LP Appendix D
Schedule 3 CoC12	Land Management The Applicant must maintain the agricultural land capability of the site, including: (a) establishing the ground cover of the site within 3 months following completion of any construction or upgrading; (b) properly maintaining the ground cover with appropriate perennial species and weed management; and (c) maintaining grazing within the development footprint following construction, where practicable, unless the Planning Secretary agrees otherwise in writing.	Section 6.1.6
Schedule 3 CoC15	Biodiversity Management Plan Prior to commencing construction, the Applicant must prepare a Biodiversity Management Plan for the development in consultation with BCD, and to the satisfaction of the Planning Secretary. This plan must: a) include a description of the measures that would be implemented for: • the use of PCTs 9, 266, 277 and 360, where appropriate, to achieve the vegetation buffer objectives outlined in Condition 10 above;	Section 6.1.3
Schedule 3 CoC20	Visual The Applicant must: (a) minimise the off-site visual impacts of the development, including the potential for any glare or reflection.	Section 6.3 Section 6.4

Reference number	Condition requirement	Document reference
	(b) ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape; and (c) not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.	
Statement of Commitments		
BD14	Appropriate landscape plantings of local indigenous species to replace loss of planted vegetation.	Section 6 Appendix D
VA1	Screening would be required on-site, generally in accordance with the draft Landscape Plan provided in the VIA: - Plantings would be more than one row deep and where practical, planted on the outside of the perimeter fence, to break up views of infrastructure including the fencing. The majority of proposed visual screening is 15 m wide, with a 100 m buffer incorporating vegetative screening on the boundary of the proposal and Glenellen Road. - The plant species to be used in the screen are recommended to be native, derived from the naturally occurring vegetation community in the area. They should be fast growing with mixed canopy height. Species selection could be undertaken in consultation with affected near neighbours and a botanist, horticulturist or landscape architect. Suitable species are listed within the VIA. - The timing is recommended to be chosen to ensure the best chance of survival and can commence during the construction of the proposal if timing suits. - The screen would be maintained for the operational life of the solar farm. Dead plants would be replaced. Pruning and weeding would be undertaken as required to maintain the screen's visual amenity and effectiveness in breaking up views. - Proposed screening will be effective within three years of completion of construction. - All landscaping within the site shall comply with the principles of <i>Planning for Bush Fire Protection 2019</i>.	Section 6 Appendix D
VA2	Prior to the commencement of construction, a detailed landscape plan will be prepared including: - Screening location. - Species type. - Planting density and spacing. - Method for planting. - Descriptive measures that would be implemented to ensure vegetative screening is successful (i.e. irrigation or other watering method). A program to manage, monitor and report on the effectiveness of implemented measures.	Section 6 Appendix D
VA3	The materials and colour of onsite infrastructure will, where practical, be non-reflective and in keeping with the materials and colouring of existing infrastructure or of a colour that will blend with the landscape.	Section 6.3

Reference number	Condition requirement	Document reference
VA4	During construction, dust would be controlled in response to visual cues. Areas of soil disturbed by the Project would be rehabilitated progressively or immediately post-construction, reducing views of bare soil.	Section 6.2 Soil and Water Management Plan (SWMP)
VA5	Construction night lighting would be minimised to the maximum extent possible (i.e. manually operated safety lighting at main component locations). It would be directed away from roads and residents so as not to cause light spill that may be hazardous to drivers.	Section 6.4
VA6	If construction of the Glenellen Solar Farm occurs, a 15 m vegetative buffer for the full length of Ortlipp Road would be required. This would occur in consultation with the developers of Glenellen Solar Farm.	Section 6.5
VA7	Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network. In the event of glint or glare from the solar plant being evident from a public road, the Proponent shall immediately implement glare mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.	Section 6.3
LU5	The Proponent would consult with Geological Survey of NSW (GSNSW) in relation to biodiversity offset areas or any supplementary biodiversity measures to ensure there is no consequent reduction in access to prospective land for mineral exploration, or potential for sterilisation of mineral resources.	Section 4
SO2	A Groundcover Management Plan would be developed in consultation with a soil scientist and an agronomist and taking account of soil survey results to ensure perennial grass cover is established across the site as soon as practicable after construction and maintained throughout the operational phase. The plan would cover: • Soil restoration and preparation requirements. • Species selection. • Soil preparation (one season prior to commencement of construction). • Establishment techniques. • Maintenance requirements. • Perennial groundcover targets, indicators, condition monitoring, reporting and evaluation arrangements: ○ Live grass cover would be maintained at or above 70% at all times to protect soils, landscape function and water quality. ○ Any grazing stock would be removed from the site when cover falls below this level. ○ Grass cover would be monitored on a fortnightly basis using an accepted methodology. • Contingency measures to respond to declining soil or groundcover condition. Identification of baseline conditions for rehabilitation following decommissioning.	Section 6.1.1 Section 6.1.6

Reference number	Condition requirement	Document reference
S07	Sodic soil should be treated with gypsum where required.	Section 5.1.1 Section 6.1.1

4. Consultation

Further evidence of consultation is provided in Appendix E.

4.1 During assessment

Pre-approval, community consultation was undertaken as part of the impact assessment phase:

- On 31 June 2018, the Proponent and representatives from NGH visited all receivers within 1 km of the proposal and left a flyer with information about the proposal with all residences.
- On 11 October 2018, the Proponent further extended door knocking and face-to-face consultation with all residences within a 1 to 2 km radius of the proposal. For those that were home, discussions and initial concerns about the proposal were undertaken. For those that were not home, a flyer was left with details on how to make contact with the Proponent. Follow up meetings were organised with the Proponent on request.
- On 5 and 7, December 2018 two Open Day sessions were held at the Jindera Community Hub. One was conducted during the day, and one outside of business hours to allow the community ample opportunity to attend.
- Continued correspondence between the Proponent and landowners was undertaken via face-to-face meetings, phone calls, return emails and letters, and responding to the Jindera Solar Farm website.

4.2 Post Approval

Department of Planning and Environment

A copy of this plan was provided to DPE in March 2022. Comments were received 13 May 2022. DPE Approved the Plan in October 2022.

Greater Hume Shire Council

A copy of this LP was forwarded to Greater Hume Shire Council (GHSC) on the 15 September 2021 for comment and consultation. Council provided a response on the 27 October 2021. The GHSC response indicates that they are satisfied with the contents of the document and had no additional requirements.

Landowners

Post approval consultation for this LP occurred with the following landowners:

R01, R09, R10, R11, R16, R17, R18, R19, R20, R22, R25, R34 and R62.

Letter distribution

Consultation commenced in April 2021 with letters sent to the landowners above on the 30 April 2021. A follow up email was also sent, where email addresses were available, to the landowners above with the same information in the first week of June 2021. The correspondence introduced the post approval phase of the Project and described the methodology for landscaping. Landholders were asked to provide input into the initial stages of the LP preparation. Issues and ideas raised by the landowners above during the consultation and where it is addressed in this document has been tabulated (Table 4-1).

Subsequent discussions were held between Nectr (N. Morley) and R01. During the June 2022 consultation, residents at R01 requested an earthen mound adjacent to Sparkes Road, within the Project boundaries. The earthen mound would be to further restrict views of the solar farm. The earthen mound has been added to the solar farm design and this version of the LP.

Table 4-1 Landowner issues raised during consultation in May 2021

Issue #	Issue Raised	Response
1	R10 requested no further contact, no longer associated with Jindera. New landowner contacted. R25 “want no further correspondence”	Further consultation will only be provided if requested in future.
2	Ensure that the panels are not visible from our property, or any other neighbouring properties.	Landscaping is designed to minimise the view of the solar farm infrastructure (See Appendix A, Appendix D4.4).
3	What are the intended planting times for the screening.	Planting is intended to occur in the winter of 2022 as seasonal conditions permit (See Appendix D4.2).
4	Has any consideration been given to advanced plantings.	Long stem plantings and larger pots (~100mm) are proposed for the plantings where appropriate (Appendix D)
5	What landscaping will be done during construction.	Vegetation screening will be established prior to construction.
6	Location of the security fence should be on the inside of the vegetation screening areas.	Security fencing will be on the inside of the vegetation screening areas (Section 6.3) and Appendix D.2.
7	Maintenance and firebreak areas established on either side of vegetation screening areas.	Firebreak areas are adopted between the plantings and security fence where planting areas are less than 20 m wide and both sides when greater than 20 m wide (Appendix D.2)
8	Can plant selection be based off the local revegetation guide?	Plant selection is based off the PCT's identified within the proposal area. This would be more accurate to the site and nearby conditions than the revegetation guide (Appendix D). Consideration to the local revegetation guide has also been given to plant selections.
9	The construction of earthen mound within vegetation corridor.	Earthen mound adopted for three areas to a height of two metres, detailed in Section 6.1.2.
10	Notification of chemical use	Nearby receivers to chemical application areas will be notified as necessary (Appendix D4.1& D4.3).
11	Consider organic products and refrain from using products containing glyphosate.	Jindera Solar Farm and its subcontractors will use agricultural chemicals in accordance with the label as prescribed by NSW legislation. Chemicals approved for use in environmentally sensitive areas would be used.

Face to face Landowner meetings

Face to face consultation for the LP occurred with landowners between the 8th and 10th of September 2021. Face to face consultation was completed by two representatives from NGH. The Proponent was unable to attend face to face meetings due to COVID restrictions at the time. Individual meetings were held at receiver properties to discuss the landscaping plan. Meetings

were held with R01, R10, R16, R18, R19, R20, R22, R62 and the two involved landowners. Landowners R09, R11, R25, R34, R17, were invited to participate, however were either unresponsive or declined the offer of consultation.

Landowners were provided the opportunity to view the plans and maps, and to comment on the plan, and discuss any concerns during a face-to-face meeting over 1-2 hours. Meetings minutes were taken and provided to the Proponent for consideration.

Overall landowners were willing to provide input and comments on the Landscaping Plan. The most common concern raised was the ability of plantings to provide short-term effective screening of the solar farm during construction and initial operation. The inclusion of temporary hording with a printed natural vista was discussed. One landowner preferred the installation of earthen mounds (Section 6.1.2). High impact areas where landowners were closest to the farm were in favour of hording (Section 6.1.4). Further consultation on the printed natural vista will be completed with interested landowners.

A summary of concerns raised during the meetings and where they have been addressed in this report have been tabulated (Appendix E).

4.3 Modification 1

Key stakeholder consultation

Verbal discussion took place with Receiver 10 (R10) on Ortlipp Road (directly adjacent the on-site substation) on 19 July 2021, and it was agreed on 10 September 2021 to allow access over the development site for an electricity connection on SE corner of Project site. No objection or concerns have been raised by the Landowner.

Details on discussion with R01 on Klingberg Road and R22 on Sparkes Road where the earthen mound location was changed and will be made available as part of a communication log to the DPE. Consultation with R22 took place on 10 September 2022 as part of a series of neighbour consultation run by NGH for the LP. Feedback from this consultation resulted in the following issues being raised and solutions discussed:

- Northern mound in Area 2 is not in a suitable position to provide suitable screening. Relocated the north mound to the northern extent of Landscaping Area 2 and extend the mound length across the high impact area.
- Southern mound 2 may not be possible as this is under a powerline. Remove the mound located under the powerline and investigate an alternative solution for this area, for example the planting of shrubs.

In person consultation with R01 on Klingberg Road took place on 7 August 2022. During discussions R01 stated their preference to have an earthen mound along the Project boundary, extending up from the border of the existing dam until the transmission line easement.

Transgrid

The shared draft cable route was provided to TransGrid on 21 June 2021 via a formal request for information. Transgrid confirmed they had no comments via return email but have noted that the underground route within their Property boundary will need to be reassessed during detailed design. Transgrid have provided further design detail on the connection works, which was then included in the updated Project Description.

Electricity Transmission Ministerial Holding Corporation

A letter from the Electricity Transmission Ministerial Holding Corporation, as owners of the land the TransGrid substation is located, was received on 3 March 2023, giving consent for the Modification to be lodged.

5. Existing environment

5.1 General environment

5.1.1 Soils

Full details of the soil characteristics are contained in the Soil Survey Report (McMahon 2019). Details below are relevant to this LP.

The site is located at an elevation range of approximately 220 m – 265 m Australian Height Datum (AHD). The landform of the site consists of low, gently to moderately undulating hills to the west running to level to very gently inclined drainage plains to the east. The site includes the following topographic features:

- Two widely spaced, shallow ephemeral drainages traverse the site, Kilnacraft Creek and Dead Horse Creek, that lie in the upper catchment of the Murray River associated with the Oak Hill range to the west.
- The site geology is distributed over two units: Cainozoic alluvium and Granitoids.
 - The lithology groups on the site are Cainozoic colluvial surfaces and Silurian – Devonian granites.
 - The Cainozoic alluvium is associated with the drainage plains in the east of the site, while the granites lie in the west of the site on the low undulating hills.

Soil surveys assessed the soil conditions across the site. The findings indicated that the topsoil had weak structure, was moderately acidic with potential for hard-setting. The risk of erosion was described as low due to the low relief and generally low salinity and sodicity. However, soils that are continually worked/trafficked had potential to lose structure and become erosive. The subsoils were found to be clayey, acidic and of moderate permeability. The soils were generally of low to moderate fertility. No acid sulphate soils were identified on the site.

A number of recommendations have been derived from the Soil Survey Report. Recommendations specific to revegetation and landscaping include:

- The addition of gypsum would minimise dispersion risk and sodic soils while improving fertility at the same time. Gypsum rates in the order of 1t/ha are commonly applied in the area.
- Increasing organic matter content with composted organics will improve soil microbial activity and fertility, assist nutrient retention and improve the moisture holding capacity of the soils, thus promoting the establishment of revegetation and landscaping.
- Landscaping will benefit from frequent, low volume watering due to the dense subsoils.
- The surface of the soils surrounding plantings should be mulched to avoid hard setting surfaces.
- The addition of lime in the order of 1t/ha prior to deep ripping will improve soil acidity levels and soil fertility.

These recommendations are addressed in Section 6.

5.1.2 Vegetation

The site is dominated by cleared areas primarily used for cropping and grazing (82% of the development site), with limited habitat for fauna. Fragmented areas of grassy woodland also occur within the Project boundary.

The Project has been designed to minimise clearing of native woodland and threatened species habitat. In this regard, the development footprint is 338 ha, with 255 ha of this existing as exotic vegetation.

The Proponent has ensured the retention of:

- The majority of grassy woodland vegetation of high importance.
- The majority of threatened communities listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and/or the *Biodiversity Conservation Act 2016* (BC Act).

Four vegetation types are mapped within the development site. These include:

- Plant Community Type (PCT) 277 - Blakely's Red Gum – Yellow Box Grassy Woodland of the NSW South Western Slopes Bioregion
- PCT 266 - White Box Grassy Woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- PCT 9 – River Red Gum – Wallaby grass tall woodland wetland on the outer River Red Gum zone mainly in the Riverina Bioregion; and
- PCT 360 – Gilgai wetland mosaic in the southern NSW South Western Slopes Bioregion.

PCT 277 is listed as a Critically Endangered Ecological Community (CEEC) and occurs in varying condition across the site.

5.1.3 Weeds

Forty-four weed species were recorded in the Project site during the assessment phase. Some of these species are listed on either the Biosecurity Act and/or are weeds of national significance. However, *Hypericum perforatum* (St John's Wort), *Xanthium spinosum* (Bathurst Burr), *Bromus diandrus* (Great Brome), *Paspalum dilatatum* (Paspalum) and *Pomulea rosea* (Onion Grass) are classified as priority weeds.

Xanthium spinosum (Bathurst Burr) and *Hypericum perforatum* (St John's Wort) are listed on NSW WeedWise as having a General Biosecurity Duty under the Biosecurity Act (2015)

5.2 Visual Impact Assessment

A VIA prepared for the Project EIS concluded that there were three high impact view locations for the Project which require mitigation.

High impacts are expected for views along Ortlip Road and the receivers 16 to 21 along Glenellen Road. The impact is due to proximity of the Project, aspect of the property and visual concern from landowners. Vegetation screening is approved to mitigate impacts. Medium impacts expected for two viewpoints will be mitigated also.

Mitigation measures to soften views of the solar farm site are recommended to include:

- Screen requirements - Planting would be more than one row deep and, where practical, planted on the outside of the perimeter fence. The majority of visual screening is 15 m wide.

- Plantings will be native, derived from naturally occurring vegetation in the area. They should be fast growing with a mixed canopy height.
- The timing of planting is recommended to be chosen to ensure the best chance of survival and can commence during the construction of the proposal if timing suits.
- The vegetative screening will be maintained for the operational life of the solar farm. Dead plants would be replaced as required. Pruning and weeding would be as required to maintain the screen's visual amenity and effectiveness in breaking up views.

The adverse cumulative visual impacts are anticipated to be manageable due to the ability to effectively screen infrastructure in this low to moderate relief landscape.

In all other locations surrounding the site, view durations would be less for passing motorists due to terrain, additional distance of infrastructure from the road, less linear edge of infrastructure along the boundary and existing vegetation between the site and receivers.

Outcomes from the approved updates in the Modification 1 report demonstrate the design change from an overhead to underground transmission line would result in less visual impact for adjacent receivers and passing motorists. There would be no above ground transmission lines and affected groundcover in the adjacent vegetation areas will be rehabilitated post trenching works. The design change for the vegetative screening to be located on an associated landowner's land would maintain the consent conditions for screening this area, it has been moved to allow for the construction of livestock movement laneways to provide for the safe handling of livestock onsite. The vegetation screening maintains the same orientation as the original consented design. The addition of an earthen mound to provide additional screening for affected receivers is not in the original consented design, however, it will reduce the visual impact on the nominated receiver. The change in the number and location of inverters differs from the consented design, however, centralising the design and moving the inverters as far as possible from the boundary of the development will reduce the visual impact on nearby and passing receivers. The proposed modifications would not result in additional visual impacts and would require no additional mitigation measures.

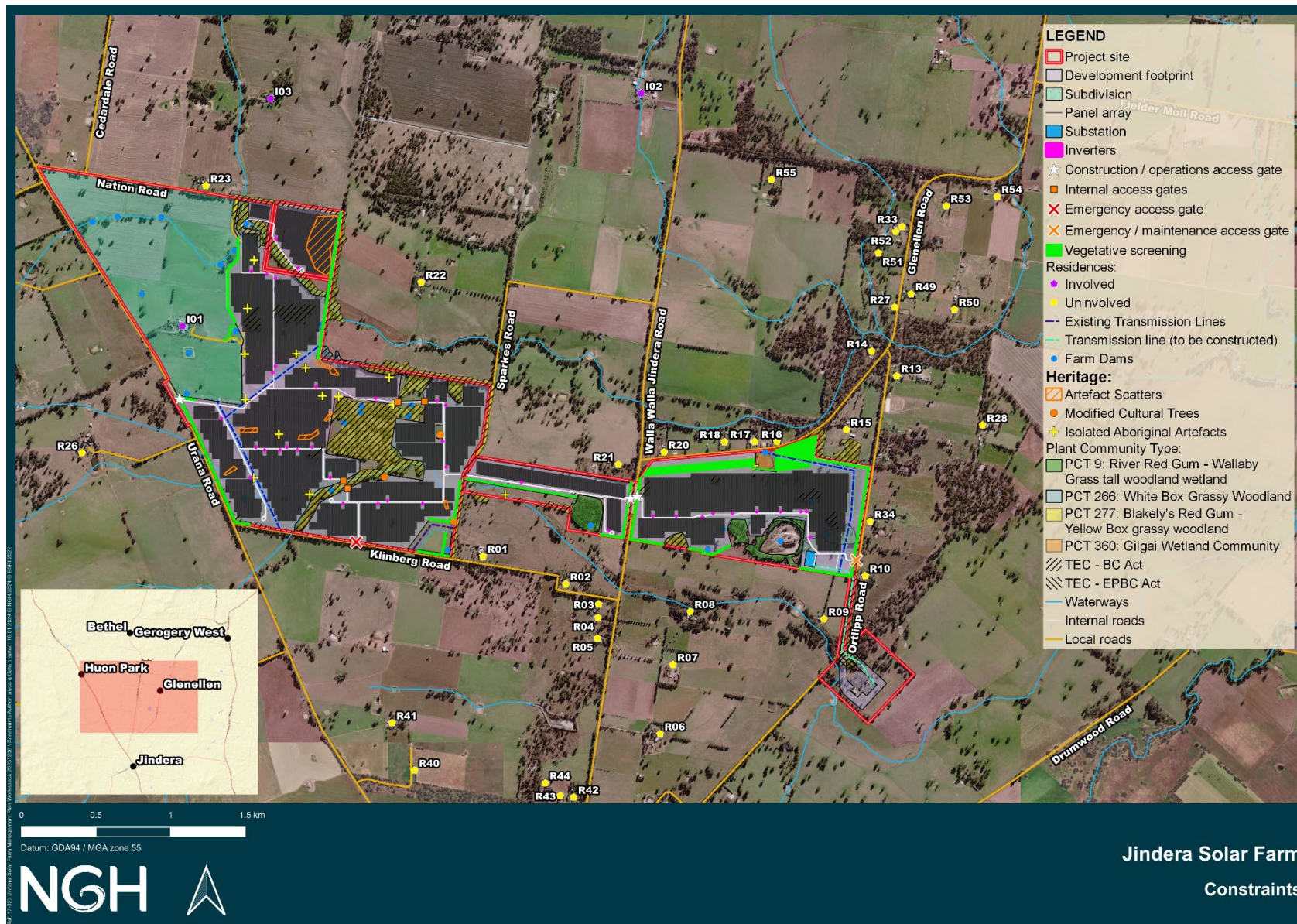


Figure 5-1 Site constraints and sensitive receivers

6. Landscape management protocols

6.1 Landscape treatments

6.1.1 Ground preparation

The following practices will precede development works:

- Addition of gypsum (1 t/ha) to alleviate dispersion risk and sodic soils where soils are likely to be disturbed e.g., roads, compounds, trenches and landscaping areas.

Add organic matter to soils through mulch or composted organics to improve fertility, assist nutrient retention and improve the moisture holding capacity of the soils, as required.

6.1.2 Screening - earthen mounds

Spiire Landscape Architecture developed a landscape concept for the proposed earthen bunds (Figure 6-1 and Appendix A) and offers the following design requirements:

- Construction of earthen mounds is subject to further detailed design.
- Mounds shall typically be constructed over existing site subgrade.
- Mounds shall be constructed using site soil obtained from site works (e.g., trenching). Add multiple layers of subbase soil, built up in 150 millimetres (mm) max incremental layers, as required to achieve mound height. Ensure top 150 mm layer is site composted topsoil.
- The construction of the earthen mounds will provide screening of solar panels from adjacent properties.

The earthen bunds are designed to allow for a 1.8 m high mound with planting of low tufted grasses and small shrubs, with a maximum 1:3 fall to decrease any potential for erosion or washout. A 1m wide top to the mound will also decrease potential for erosion and allow for additional plantings. The mounds are located entirely within the approved development footprint and have been designed to fit within the 15 m vegetative buffer zone around the development site.



Figure 6-1 Earthen mound locations

6.1.3 Screening - perimeter plantings

Sections of perimeter plantings will be established along the development site boundary as shown in . The plantings will minimise views of infrastructure for sensitive receivers (namely - R01, R09, R10, R11, R16, R17, R18, R19, R20 and R34) expected to experience a high and medium visual impact. Perimeter plantings will be completed within 12 months of the commencement of the development and prior to the commencement of construction. Native plantings will utilise key species of PCTs 9, 266, 277 and 360. The landscape screening will be achieved within a period of 3 years of commencing operations.

Vegetation buffers will be designed and maintained in accordance with RFS's Planning for Bushfire Protection 2019 (or equivalent). The vegetation buffer will be maintained so that fuel loads will be suppressed via mechanical means prior to the bushfire danger period. Vegetation buffers will be located outside the asset protection zone (APZ). Vegetation buffers will be fenced so as not to impede the ability of firefighters to conduct operations on the site or within the vegetation buffer.

Changes to visual screening as part of the approved Modification 1 have been made in response to land surveys, riparian zones, correction of cadastral boundaries and feedback from non-associated receivers. Part of the vegetation screening will be moved to outside of the development footprint to facilitate the safe movement of livestock. This will impact on the location of one section of vegetative screening. It will not change the overall visual screening function of the vegetation screening of the site from potential receivers. In addition, an earthen bund (mound) to act as a visual screen has been requested by the non - associated receiver on Klinberg Road (R01). Visual impact for receiver R01 will decrease due to these changes. Refinements to the vegetative screening from following the fence line on Klinberg road and Sparkes road to form a T to accommodate an existing dam, realign vegetative screening along Sparkes Road to protect buffer distances from a scar tree, and change the overall layout of the earthen bund adjacent Sparkes Road near non-associated receiver R22 as to not encroach an underground transmission line and minimise visual impacts.

The perimeter plantings will include at least two rows of plants encompassing an area of 15 m on average will form vegetation screening areas. A wider section will be planted along the northern boundary of the eastern segment of the Development site (Areas 9, 10 and 11 of Appendix A).

Plantings will include:

- Frequent (weekly when required), low volume watering will be used to irrigate landscaping due to topsoil limitations and dense subsoils.
- Landscaping will be mulched following planting to minimise hard setting surfaces surrounding plantings.

The planting specification provided in Appendix E details:

- Screening location.
- Species type.
- Planting density and spacing.
- Method for planting.
- Descriptive measures that would be implemented to ensure vegetative screening is successful (i.e. irrigation or other watering method, fencing and mulching).

6.1.4 Planting Strategy

In all cases, the aim of the landscape screening is to break up rather than eliminate views of solar farm infrastructure. Open plantings, rather than a formal 'hedge' effect, is considered more

appropriate to the existing environment. Open plantings will reflect endemic structure to the area's vegetation, akin to the existing vegetation remnants.

In order to achieve effective screening within 3 years, this Strategy relies on:

- Weed control, soil amelioration and soil preparation in the twelve months leading up to planting.
- Planting will be completed by an experienced landscaping contractor in consultation with local nurseries.
- Planting as soon as possible prior to the commencement of construction and before the completion of construction as seasonal conditions dictate.
- Fertilising and mulching the planting areas to improve soil fertility and moisture and maximise plant growth.
- Use of quality seasoned tube stock / long stem tube stock.
- Maintenance (watering and protection from stock and other herbivores) during establishment.
- Inclusion of 'pioneer' species. The species list includes pioneer species that grow rapidly and will be replaced by slower growing longer lived species.

In order to avoid adverse impacts on the adjacent road corridors, plantings will:

- Avoid species with large habits, where falling limbs or trunks may provide a hazard.
- Where large species are used, this will be located further back from the road reserve.
- Where planting is required near access points, the planting location and species selected will ensure sight lines are not impeded.
- Include firebreak areas for fire prevention and maintenance access on the inside of vegetation screening areas in line with RFS Planning for Bushfire Protection 2019 (or equivalent).

6.1.5 Printed vista for hording

Shade cloth hording with a printed natural vista will be erected along sections of the solar farm security fence. The hording with a printed vista will screen the solar farm infrastructure while the planting establishes and provides screening. The hoarding will be maintained for up to three years while the planting becomes established. The hoarding will be printed with a natural landscape as shown in Figure 6-2 or similar. The hording is proposed near Planting Areas 9 and 11 along Glenellen Road and Planting Areas 5 and 4 (Appendix D4.5). Further information on the printed vista will be provided to landowners prior to installation of the hording.



Figure 6-2 Example of natural vista for printed hording

6.1.6 Groundcover

Following construction disturbed areas will be revegetated and rehabilitated. Detailed measures and targets to rehabilitate groundcover are detailed in Appendix E of the Biodiversity Management Plan (BMP). Performance targets for ground cover rehabilitation are outlined below:

- Establish groundcover on disturbed areas as seasonal conditions permit but within 3 months following completion of any construction or upgrading.
- Maintain and establish ground cover with appropriate perennial species and control weeds through routine monitoring and management.
- Maintaining grazing within the development footprint following construction, where possible, unless the planning secretary agrees otherwise in writing.
- Groundcover cover will be maintained at or above 70% at all times to protect soils, landscape function and water quality.
- Any grazing stock will be removed from the site when cover falls below this level.
- Grazing stock will be excluded from rehabilitated areas until ground cover has established and has set seed.
- Areas not subject to rehabilitation may be grazed when ground cover is above 70% cover.
- Advice from an agronomist will be sought prior to commencing grazing in rehabilitated areas.
- Observations of groundcover condition will be recorded during routine site inspections.

Additional action is required if performance targets are not achieved. The triggers for additional action include:

- Groundcover falls below 70% cover of 90% of disturbed areas.
- Failed vegetation patches greater than 50 m².
- Groundcover seed set below 80% of area after 3 months.
- Scours greater than 50 mm deep and 80 m long.
- Grassland weeds cover greater than 10%.
- Presence of priority weeds.

Additional actions will include:

- Remove grazing stock.
- Bare patches greater than 50 m² will be recultivated and revegetated.
- Additional watering of seeded areas.
- Weeds controlled where required.
- Treat soil conditions such as acidity, compaction, frequency of traffic movements, low seedbank storage, lack of soil moisture and nutrient imbalance.
- Seek additional advice from an agronomist if seed set is not occurring.

6.2 Dust Control

Dust suppression measures are to be used during dry or windy conditions, or in response to visually sighting dust on site to reduce impacts upon surrounding residences. Dust suppression measures

will include the use of a water cart on unsealed roads, mulching of landscaped areas and progressive groundcover rehabilitation of disturbance soils.

6.3 Onsite Infrastructure

The materials and colour of onsite infrastructure will, as far as possible, be non-reflective and in keeping with the materials and colouring of existing infrastructure or of a colour that will blend with the landscape to reduce any potential for glare and reflection, where practical:

- Buildings will be non-reflective and in eucalypt green, beige or muted brown.
- Security fencing posts and wire will be non-reflective.
- Avoidance of unnecessary lighting, signage and logos (unless required for identification or safety purposes).
- Retain and protect existing and planted boundary landscaping.
- Vegetative screening will be placed on the outside of security fencing.
- Advertising signs or logos will not be mounted anywhere onsite, except where this is required for site identification and/or safety purposes, such as site access points.

Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network. In the event of glint or glare from the solar plant being evident from a public road and a complaint is received, the Proponent shall immediately investigate and if appropriate implement glare mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.

6.4 Other visual amenity mitigation works

Other actions which will be implemented to minimise views of infrastructure are included in Table 6-1.

Table 6-1 Landscape management protocols.

Stage of Project	Objective	Management protocol	Resources	Responsibility
Design	Allow room for vegetation screen in detailed design	- Areas will be designated for the landscape screening as set out in Appendix A. - This requires: - No planting within the road reserve 15 m minimum vegetation corridors for screening, between the property boundary and the perimeter fencing (Appendix A). 100m buffer incorporating screening on the Project boundary adjacent Glenellen Road (Appendix A).	Appendix A Detailed screening locations of this LP Appendix D	HEA and (EPC) Contractor
Pre-construction	Establish vegetation screening on the solar farm site, to minimise views to motorists and residential receivers	- Screening will be undertaken as set out in this LP and Appendix E of this LP, including: - A strategy to obtain an effective screen within 3 years. - Locations for planting and construction of earthen mounds - Species selection (in consultation with local landscape architects, Landcare and/or local nurseries). - Planting establishment and monitoring requirements including water crystals and fertiliser (specific to native plants) would be used unless long stem tube stock are used.	Appendix D Planting Specification of this LP	EPC Contractor
Construction and Operation	Protect plants	- The landscaping area will be protected during construction as set out in this LP and Appendix E of this LP, including: - Watering - Tree guards - Replacement of plants to maintain 90% success rate for plantings.	Appendix D Planting Specification of this LP.	EPC Contractor and Operator
Construction	Reducing lighting impacts during construction	Construction night lighting will be minimised to the maximum extent possible (i.e. manually operated safety lighting at main component locations). It will be directed away from roads and residents so as not to cause light spill that may be hazardous to drivers.		EPC Contractor

Stage of Project	Objective	Management protocol	Resources	Responsibility
Operation	Monitor the planting	Plantings will be monitored and maintained for the life of the Project . Monitoring requirements for the Project are included in Section 7.3 and Appendix E	Section 7.3 Planting Specification of this LP.	Operator

6.5 Potential Future Works

The Proposed Glenellen Solar Farm Project is currently being assessed from the NSW DPE Major Projects portal. The proposed Glenellen Solar Farm site lies adjacent to and south-east of Jindera Solar farm, across Ortlipp Road. Cumulative impacts on surrounding receivers and the environment from the two Solar Farms operating concurrently will have to be assessed as part of the development process and Environmental assessment for the Glenellen Solar Farm. A 15 m wide buffer along for the full length of Ortlipp Road (As detailed in Appendix A) is a commitment of the Project.

7. Compliance management

7.1 Roles and responsibilities

The Proponent's Project Team's organisational structure and overall roles and responsibilities are outlined in Section 4 of the Project EMS. Specific responsibilities for the implementation of environmental controls will be detailed in the Project Construction Environmental Management Plan (CEMP).

Below is a table (Table 7-1) outlining the teams responsible for the construction of the Project including the implementation of this LP.

Table 7-1 Construction team roles and responsibilities.

Role	Responsibility	Authority
EPC Contractor Project Manager	- Ensure resources are made available to enable works to comply with EMS and other environmental management requirements. - Ensure that all procedures are followed adequately. - Ensure appropriate approvals and licences are held. - Ensure all staff and contractors are aware of environmental compliance requirements and environmental controls. - Responsible for reporting incidents and non-compliance with the conditions of consent - Ensure monitoring is completed as required - Ensure this plan is reviewed and implemented - Ensure required timeframes are met for monitoring, reporting, and management of incidents	- Order 'stop work' for an activity that may cause material or environmental harm. - Release of environmental hold points, if required.
EPC Contractor Health Safety and Environment Quality (HSEQ) Manager	- Maintain all environmental management documents. - Identify where environmental measures are not meeting the targets and where improvements can be achieved. - Monitor and report environmental compliance. - Review Project environmental documents. - Report pollution incidents.	- Recommend 'stop work' for an activity that may cause material or environmental harm. - Release of environmental hold points, if required.
EPC Contractor Site Manager	- Responsible for the implementation of environmental management plans. - Responsible for the induction of staff and contractors. - Responsible for all aspects of the worksite including the coordination and management of all staff and subcontractors. - Undertake routine environmental site inspection. - Maintain environmental records. - Receiving plant, materials and chemicals	- Order 'stop work' if any items in the EMS are in danger of breach. - Approve and accept waste disposal methods requested by staff or subcontractors. - Approve minor changes to environmental sub-plans, including the Erosion and Sediment Control Plan (ESCP).

Role	Responsibility	Authority
	and ensuring all items are appropriately stored. Responsible for addressing corrective actions arising from environmental inspections.	
All Proponent staff: - Project Manager/Site Superintendent - Steering Committee - Technical Team	- Ensure contractors are working in accordance with the requirements of the EMS, Landscaping Plan and EIS. - Undertake site visits during construction to monitor compliance with EMS requirements. - Report and raise any issues that arise that may have an environmental impact. - Report and raise the discovery of any artefacts, Aboriginal relics or places and cease work until the matter has been addressed.	- Report any issues that may have the potential to cause material or environmental harm. - Report any incidents or near-misses that may impact on the environment or breach conditions set out in this Landscaping plan.
Subcontractors	Operate as instructed by the EPC Site Manager in compliance with all environmental requirements.	EPC Site Manager

7.2 Training

All employees, contractors and utility staff working on site will undergo site induction training. Targeted training in the form of toolbox talks and specific individual training will also be provided to personnel with a key role in landscape management. Targeted training would address the requirements of the environmental control measures. Further details regarding staff induction and training are outlined in Section 6 of the EMS.

7.3 Monitoring

Monitoring requirements for perimeter plantings are detailed in Appendix E of this document.

7.4 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this sub plan, infrastructure approval and other relevant approvals, licences, and guidelines. Audit requirements are detailed in Section 11.1 of the EMS.

7.5 Reporting

Reporting requirements and responsibilities are detailed in Sections 4 and 11 of the EMS.

7.5.1 Incident reporting

In accordance with Condition 7 of Schedule 4 of the Development Consent, the Planning Secretary must be notified in writing via the Major Project's website immediately after the Proponent becomes aware of an incident. Within seven days of the date of the incident, the Proponent will provide the Planning Secretary and any relevant agencies with a copy of the incident report, and such further reports as may be requested.

Written notification of an incident must:

- a) Identify the development and application number.

- b) Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident).
- c) Identify how the incident was detected.
- d) Identify when the applicant became aware of the incident.
- e) Identify any actual or potential non-compliance with conditions of consent.
- f) Describe what immediate steps were taken in relation to the incident.
- g) Identify further action(s) that will be taken in relation to the incident.
- h) Identify a Project contact for further communication regarding the incident.

As per Appendix 7 of the CoA (Incident Notification and Reporting Requirements), within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.

The Incident Report must also include:

- a) A summary of the incident.
- b) Outcomes of an incident investigation, including identification of the cause of the incident.
- c) Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence.
- d) Details of any communication with other stakeholders regarding the incident.

All written requirements of the Planning Secretary or relevant public authority, which may be given at any point in time, to address the cause or impact of an incident must be complied with, within any timeframe specified by the Planning Secretary or relevant public authority.

Non-compliances

Non-compliances will be reported in accordance with Section 11.3 of the EMS, and the Planning Secretary (DPE) must be notified in writing via the Major Project's website within seven days after the Proponent becomes aware of any non-compliance.

A non-compliance notification must identify:

- The development and the application number for it.
- Set out the condition of consent that the development is non-compliant with.
- The way in which it does not comply.
- The reasons for the non-compliance (if known).
- What actions have been, or will be, undertaken to address the non-compliance.

8. Review and improvement

8.1 Continuous improvement

Continuous improvement of this LP will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets to identify opportunities for improvement.

8.2 LP Updates and Amendments

This LP will need to be revised whenever the construction program, scope of work, or work methods change, whenever the work methods and control structures are found to be ineffective, or if directed by the Proponent. This will involve the HSEQ Manager (or equivalent) and relevant Project team members and stakeholders.

Additional management reviews would be undertaken per the requirements of Schedule 4 Condition 2 of the CoC:

The Applicant must:

- a) update the strategies and plans required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and*
- b) review and, if necessary, revise the strategies and plans required under this consent to the satisfaction of the Planning Secretary within 1 month of the:*
 - submission of an incident report under Condition 7 of Schedule 4;*
 - submission of an audit report under Condition 9 of Schedule 4; or*
 - any modification to the Conditions of consent.*

In accordance with Condition 3 of Schedule 4 all updated strategies and plans required under the Conditions of consent may be submitted at any time to the Planning Secretary for approval. Additionally in agreement of the Planning Secretary, revised strategies, plan or programs may be prepared without undertaking consultation with all parties nominated under the applicable Condition in this approval.

Amendments to the Project's management documents, risk assessment review, re-evaluation of the Project objectives and targets as well as changes to other Project documents would be conducted in accordance with the Documentation and Document Control procedures outlined in Section 13 of the EMS.

Refer to Appendix E for consultation records and records of amendments made to this plan.

8.3 Document Controls

Document control procedures are outlined in Section 9 of the EMS.

9. References

Essential Energy Vegetation Management Plan (EE) (2021).

NGH Environmental (2018). *Submissions Report Jindera Solar Farm*.

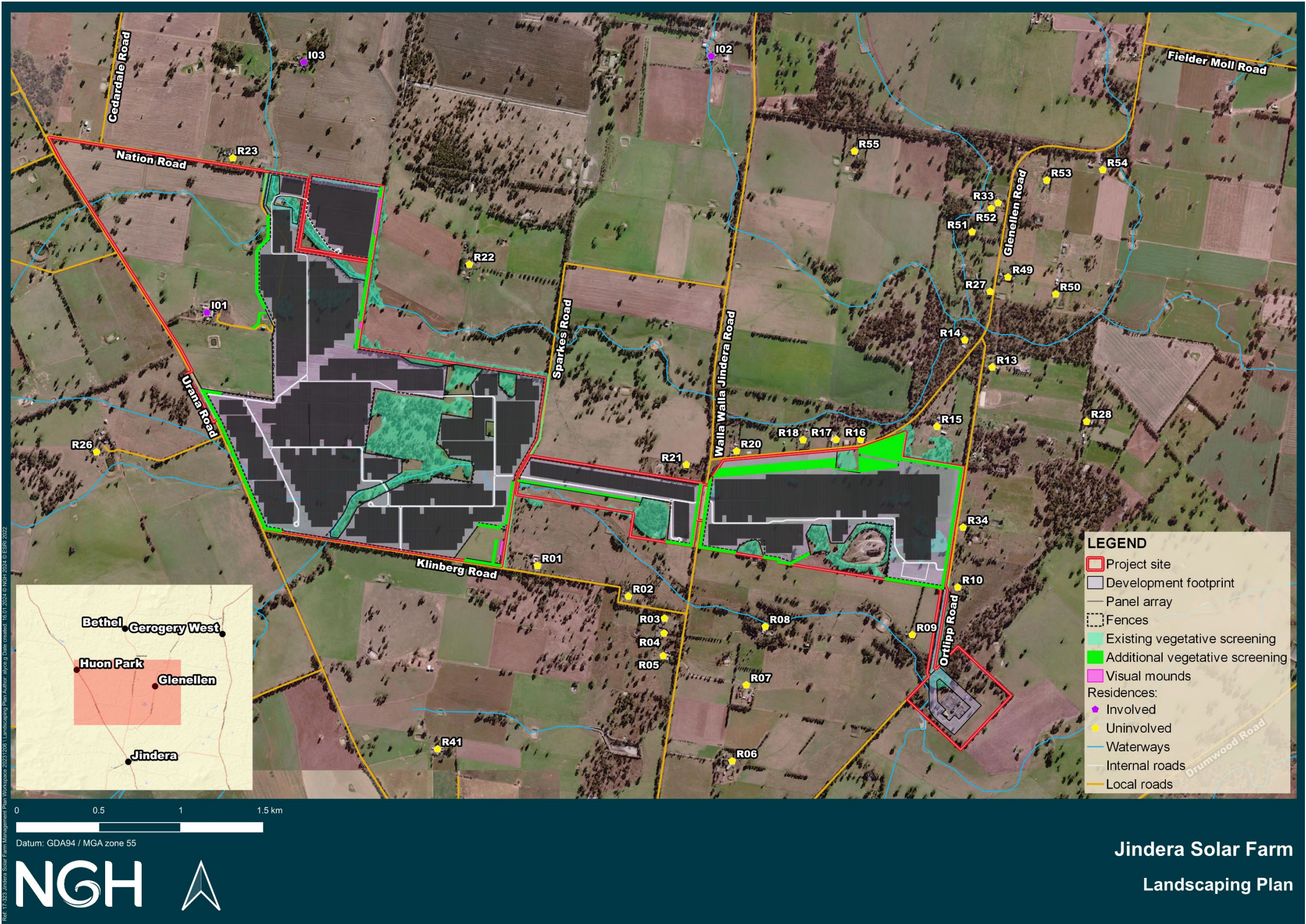
NGH Environmental (2019) *Environmental Impact Statement Jindera Solar Farm*.

NGH Environmental (2019) *Visual Impact Assessment Jindera Solar Farm*

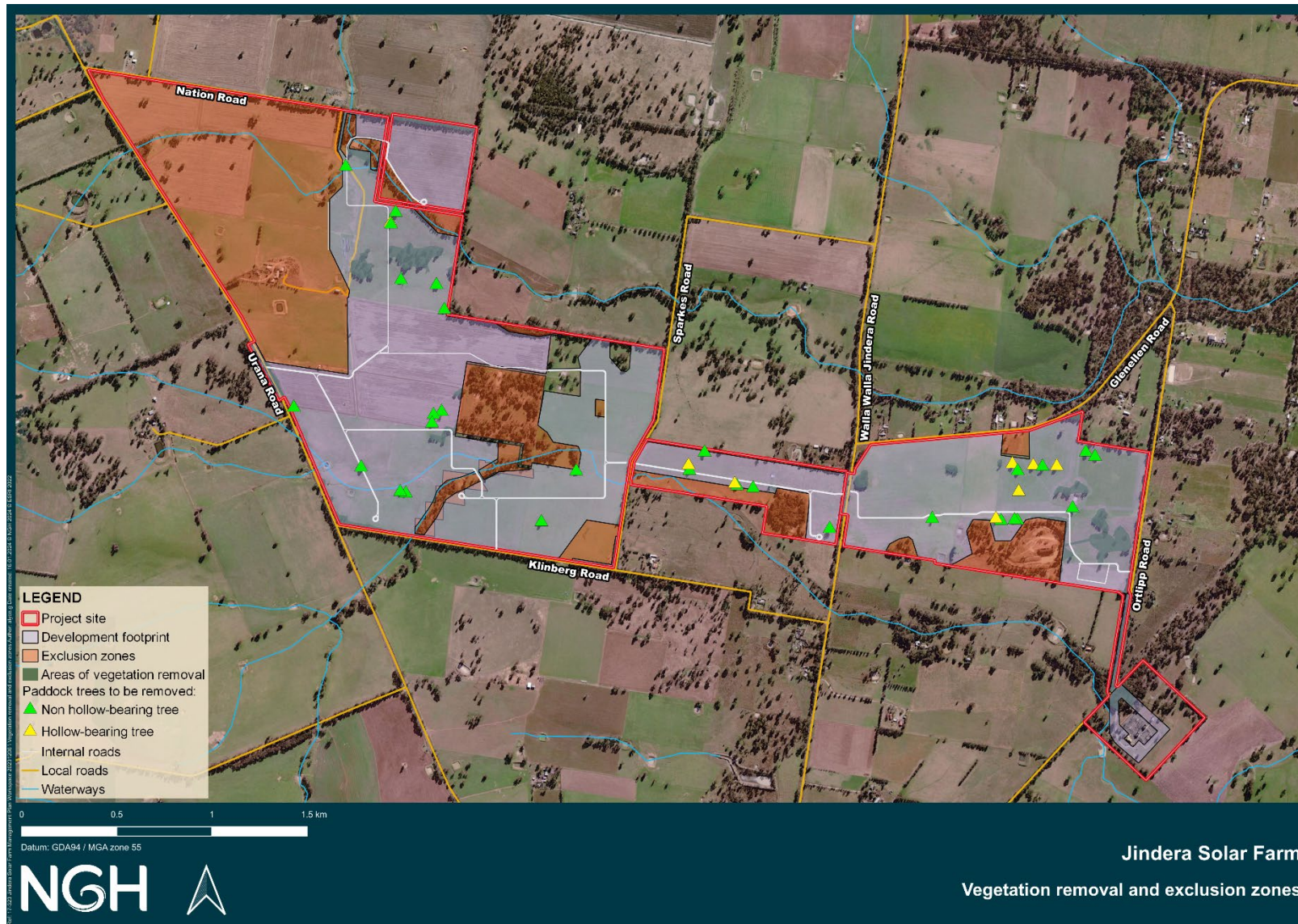
NGH Environmental (2020) *Biodiversity Development Assessment Report Jindera Solar Farm*

McMahon (2019) *Soil Survey Report Jindera Solar Farm*

Appendix A Landscaping Plan



Appendix B Vegetation Removal and Exclusion Zones



Appendix C Paddock Trees To Be Retained



Appendix D Perimeter Screening Specification

D.1 Screening Strategy

In all cases, the aim of the landscape screening is to break up rather than eliminate views of solar farm infrastructure. Open plantings, rather than a formal 'hedge' effect, is considered more appropriate to the existing environment. Open plantings will reflect endemic structure to the area's vegetation, akin to the existing vegetation remnants. In addition to plantings, earthen mounds will also be constructed to provide additional screening.

In order to achieve effective screening within 3 years, this Strategy relies on:

- Weed control, soil amelioration and soil preparation in the twelve months leading up to planting.
- Planting will be completed by an experienced landscape contractor in consultation with local nurseries.
- Planting as soon as possible prior to the commencement of construction and before the completion of construction as seasonal conditions dictate.
- Fertilising and mulching the planting areas to improve soil fertility and moisture and maximise plant growth.
- Use of quality seasoned tube stock / long stem tube stock.
- Maintenance (watering and protection from stock and other herbivores) during establishment.
- Inclusion of 'pioneer' species. The species list includes pioneer species that grow rapidly and will be replaced by slower growing longer lived species.

In order to avoid adverse impacts on the adjacent road corridors, plantings will:

- Avoid species with large habits, where falling limbs or trunks may provide a hazard.
- Where large species are used, this will be located further back from the road reserve.
- Where planting is required near access points, the planting location and species selected will ensure sight lines are not impeded.
- Include firebreak areas for fire prevention and maintenance access on the inside of vegetation screening areas in line with RFS Planning for Bushfire Protection 2019 (or equivalent).

D.2 Screening Areas

Screen plantings and earthen mounds will be located as shown in Appendix A.

Planting design and execution will ensure:

- Planting areas are fenced to exclude livestock during establishment and solar farm operation.
- Rows are spaced 5 m apart within planting areas.
- Be planted approximately 10m apart for large trees/Eucalypts, and 5 m apart for shrubs (alternating planting of shrubs and trees), within gridded rows.
- Be located on the solar farm site, not within the road reserve.
- Be located adjacent to perimeter fencing, allowing sufficient space for plants to mature.
- Be located with sufficient space to maintain fencing.

The proposed planting design provided below depicts the planting when mature (Figure 9-1). This image is an artistic impression of the likely planting outcome. Given the native species

planned for the planting areas the planting may take up to 30 + years to reach that depicted in the figure below.

Design requirements for the earthen mounds include:

- Mounds shall typically be constructed over existing site subgrade.
- Mounds shall be constructed using site soil obtained from site works (e.g., trenching). Add multiple layers of subbase soil, built up in 150mm max incremental layers, as required to achieve mound height. Ensure top 150mm layer is site composted topsoil.
- The construction of the earthen mounds will provide screening of solar panels from adjacent properties.

The earthen bunds are designed to allow for a 1.8m high mound with planting of low tufted grasses and small shrubs, with a maximum 1:3 fall to decrease any potential for erosion or washout. A 1m wide top to the mound will also decrease potential for erosion and allow for additional plantings.

The mounds are located entirely within the approved development footprint and have been designed to fit within the 15m vegetative buffer zone around the development site.



SECTION F - F' (1:200 @ A3)



DRG NO. 230701 LAMP 04 REV. C DATE 15/04/2019 DRAWING: 0000000000 AUTH: 0000000000 COMMENTS: FOR DEVELOPMENT APPLICATION

JINDERA SOLAR FARM LANDSCAPE BUFFER
CROSS SECTIONS SHEET 3 | JINDERA

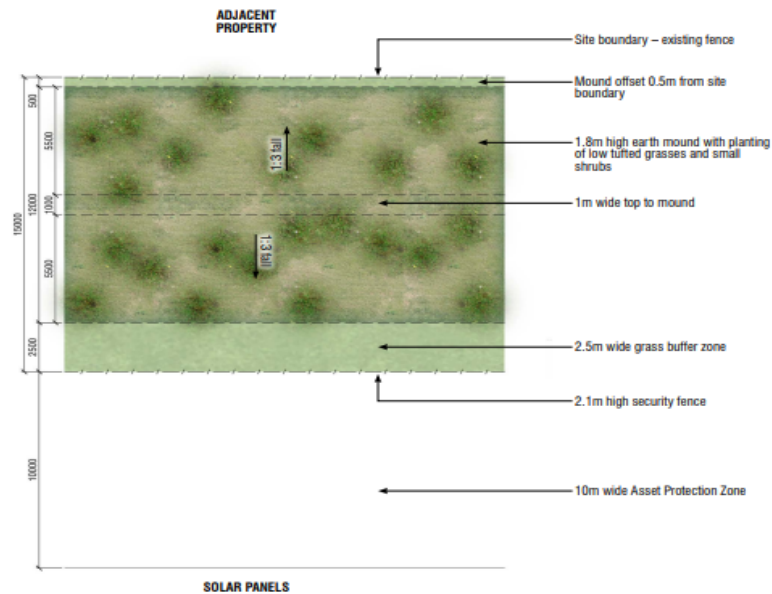


Figure 9-1 Cross sectional example of planting layout with infrastructure.

01.

LANDSCAPE CONCEPT

EARTH MOUNDS – JINDERA SOLAR FARM, JINDERA NSW



PLAN

MOUND CONSTRUCTION

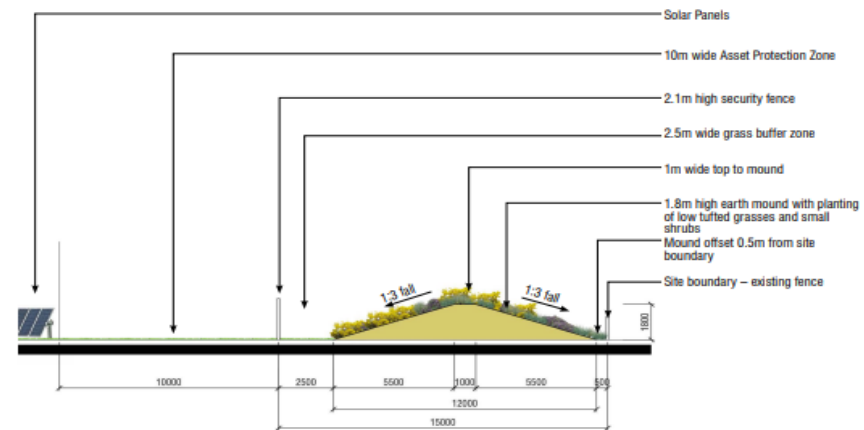
Construction of earthen mounds is subject to further detailed design.

Mounds shall typically be constructed over existing site subgrade.

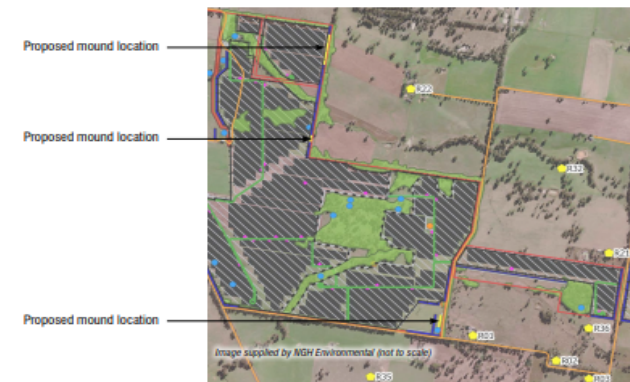
Mounds shall be constructed using site soil obtained from site works (e.g. trenching). Add multiple layers of subbase soil, built up in 150mm max incremental layers, as required to achieve mound height. Ensure top 150mm layer is site composted topsoil.

The construction of the earthen mounds will provide screening of solar panels from adjacent properties.

TYPICAL MOUND CONCEPT



SECTION



DRG NO: 310914 LC300 B REV: 16/11/2022 DES/DOC: SME CHK: PB AUTH: CME AMENDMENT: FOR APPROVAL

0 1 2 3 4 5m
SCALE 1:1000@A1

spiire

Figure 9-2 Earthen mound landscape concept

D.3 Plant Selection and Plant Numbers

Plantings will:

- Be native species known to be commercially available and associated with PCT 9, 266, 277, 360 (which occur on the adjacent solar farm site).
- Be either tall shrubs or small trees and effective at screening views for motorists and residences.
- Be mixed and offset to produce a heterogeneous mix of plantings.
- Minimise the use of large spreading trees near roads and power lines, so that they may not impact road user safety, impede sight lines or lead to fires.
- Provide a successional planting strategy whereby:
 - Fast growing pioneer species are planted as soon as possible.
 - Slower growing species are given secondary priority.
 - Pioneer species are overtaken by the slower growing species as they senesce or as the slower growing species become effective as screening infrastructure.
 - Plantings will not be more than 10m apart.
 - Acacia shrubs would be planted between larger trees to create a natural look to the screen.
 - Long stem tube stock from locally collected endemic seed where feasible would be sourced from local nurseries.
- 10% of the species planted will be from larger pots, where available.
- Plants suitable for long stem planting will be given preference, where available.

Table 9-1 Species list and appropriate abundance guideline

Species and mature height	Known from PCT	Approximate abundance	Minimum separation distance
Tree species			
<i>Eucalyptus camaldulensis</i> (to 30m high)	9	<i>Eucalyptus mixes to combine for approximately one third of individual plantings. At least three species must be chosen</i>	10 m
<i>Eucalyptus albens</i> (to 25m high)	266, 277		10 m
<i>Eucalyptus blakelyi</i> (to 20m high)	266, 277, 360		10 m
<i>Eucalyptus bridgesiana</i> (to 20 m high)	266, 277		10 m
<i>Eucalyptus D-lacrocarpa</i> (to 25m high)	277, 360		10 m
<i>Eucalyptus melliodora</i> (to 30 m high)	266, 277, 360		10 m
<i>Eucalyptus goniocalyx</i> (to 15 m high)	277		10 m
<i>Eucalyptus polyanthemos</i> (to 20 m high)	277		10 m
Shrub species			
<i>Acacia dealbata</i> (3–30m, colonising)	277	<i>Acacia mixes to combine for approximately two thirds of individual plantings. At least three species must be chosen</i>	5 m
<i>Acacia decora</i> (1-4m)	266		5 m
<i>Acacia implexa</i> (5-12m)	266		5 m
<i>Acacia deanei</i> (1.5-7m)	266		5 m
<i>Acacia paradoxa</i> (1-4m)	277, 360		5 m
<i>Acacia buxifolia</i> (1-4m, colonising)	266		5 m

Plant numbers

The plantings will be a heterogenous mix of species that are locally available at the time of planting. Based on the locations of perimeter plantings (**Section E.4.5**), the following plant numbers will be required.

Location	Approximate number of individuals
Site 1	293 (74 trees, 219 shrubs)
Site 2	397 (100 trees, 297 shrubs)
Site 3	458 (116 trees, 342 shrubs)
Site 4	184 (47 trees, 137 shrubs)
Site 5	150 (38 trees, 112 shrubs)
Site 6	302 (76 trees, 226 shrubs)
Site 7	218 (54 trees, 164 shrubs)
Site 8	256 (64 trees, 192 shrubs)
Site 9	1335 (371 trees, 964 shrubs)
Site 10	1097 (268 trees, 829 shrubs)
Site 11	488 (132 trees, 356 shrubs)
Site 12	146 (33 trees, 113 shrubs)
Site 13	440 (111 trees, 329 shrubs)
Total	5764 (1484 trees, 4280 shrubs)

D.4 Planting Methods

D4.1 Establishment

- Planting must be by an experienced landscape contractor.
- Planting would be undertaken as soon as practical or prior to construction. A timeframe of within 12 months following commencement of the development has been established within this LP and the conditions of consent.
- Tube stock and advanced plants should be sourced as early as possible.
- Ripping and soil amelioration is proposed as appropriate to the soil conditions set out in Section 6.1.1.
- Weed control will include as required:
 - Seek the advice of an ecologist / agronomist on the distribution and control of weed infestations.
 - Suppress vegetation in the landscaping area in preparation for planting.
 - If mechanical control is adopted, manually clear an area with a 1m buffer from the planting to minimise weed encroachment during establishment.
 - Use of selective herbicides for invasive or priority weed control. Nearby receivers to be notified of chemical application times and rates. Herbicides approved for use in environmentally sensitive areas would be used.
 - Suppress non-native groundcover >10%, any new weed species on site or the presence of priority weeds will trigger corrective action.
 - Monitoring of weed infestations will occur twice annually during October and February as part of the routine environmental inspections to determine

effectiveness of management controls. The presence of weeds and management actions required will be noted on the Environmental Inspection Checklist.

- Pesticide application will only be administered by authorised personnel with ChemCert accreditation – AQF 3 in accordance with SafeWork requirements.
 - Pesticides will only be applied in accordance with the labelling instructions for that product.
 - A Pesticide Application Record will be completed, and public notifications made in accordance with relevant legislation, where pesticides are to be used in areas that could be accessed by members of the public.
 - Pesticide use will be notified to nearby receivers, as necessary.
 - Only pesticides registered for use near waterways may be used on site due to the numerous drainage lines and water bodies present in the area.
- Planting beds will be created by using summer soil ripping methods. This will allow planting to occur in the cooler winter months.
 - Water crystals and fertiliser (specific to native plants) would be used unless long stem tube stock are used.
 - Tree guards will be used to protect plants (creating a microclimate to reduce water loss and making follow up maintenance easier).

D4.2 Planting timing and need for irrigation

Planting would preferably occur in winter when soil moisture conditions are suitable (June and July). While planting in winter is generally the best time, if sufficient rainfall has not occurred irrigation will be installed, or weekly watering will need to be undertaken to ensure the consent condition of 'effective screening in 3 years'.

There would be safety benefits for ongoing maintenance if irrigation is installed, limiting worker access from the road corridor to the plantings. Irrigation will also improve the success of the plantings, reducing replacement of mortalities.

Where irrigation is used, temporary poly-pipe, water tanks and pumps would be used to irrigate the plantings during establishment and during ongoing periods of below average rainfall. This will allow more frequent lower intensity watering and have safety benefits for access when compared to hand watering. No additional water sources or quantities are required.

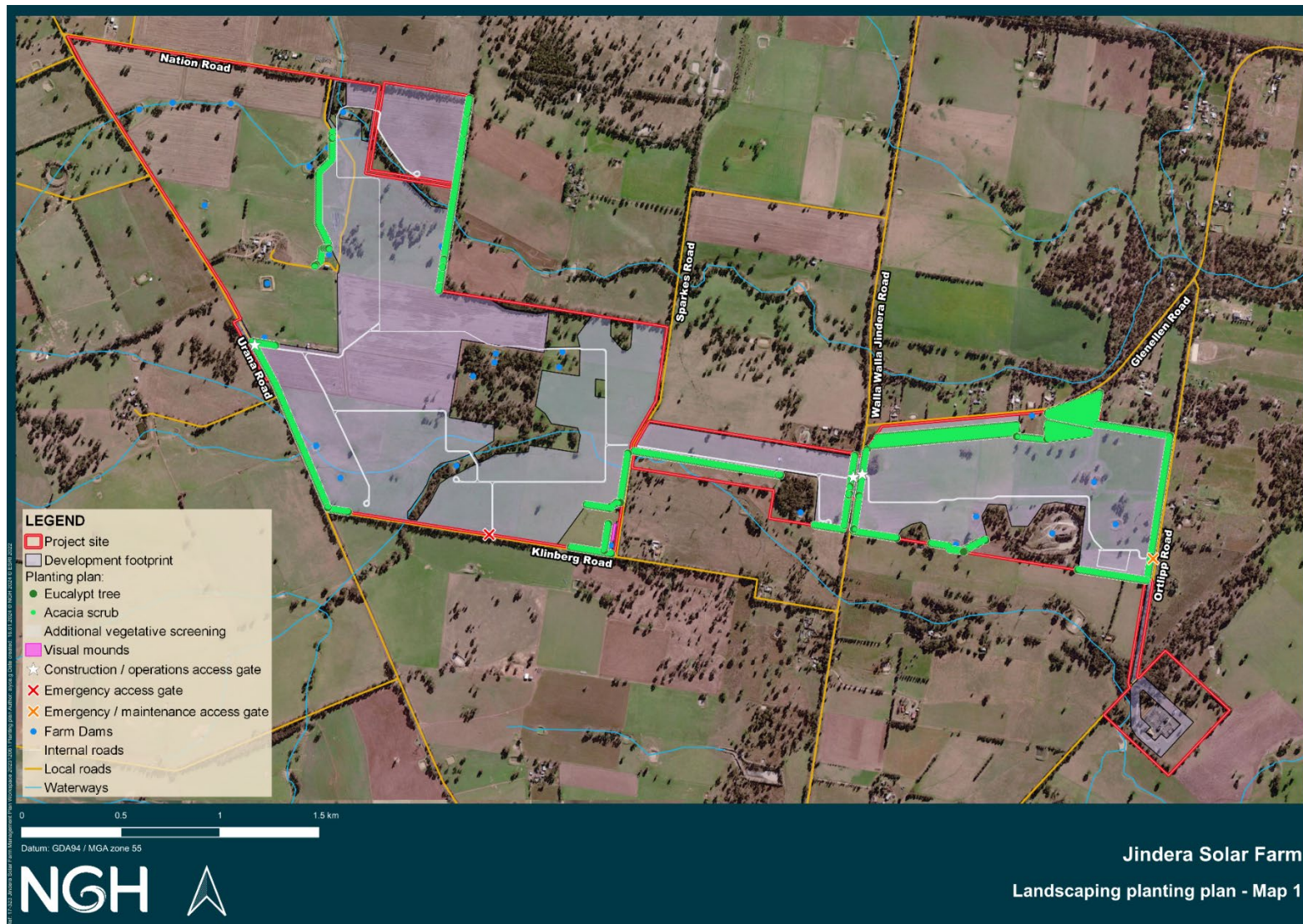
D4.3 Planting monitoring and maintenance

- Weed control will occur around plantings as required to suppress competition from surrounding vegetation, as detailed in Section D4.7
- Replace tree guards as required and remove once plants are taller than 1m.
- Replace dead plants to achieve an overall 90% success rate for the life of the Project .

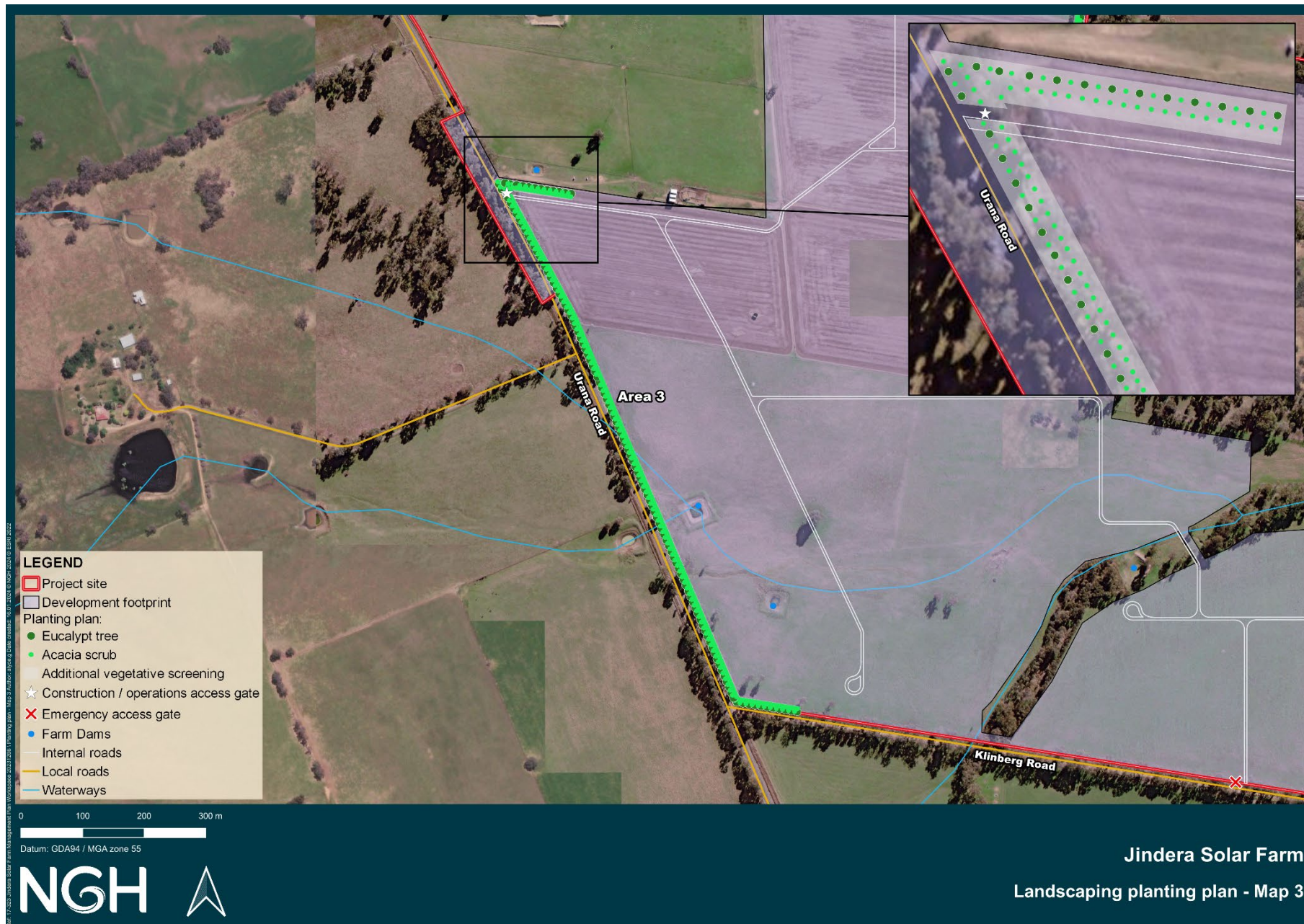
D4.4 Planting Schedule

Common Name	Scientific Name	Quantity	Spacing (m)	Pot size (mm)	Expected mature height (m)
River red gum	<i>Eucalyptus camaldulensis</i>	A total of 1484 individual Eucalyptus plants are required across the 13 areas. 5% = 74 10% = 148 15% = 223 20% = 296 25% = 371 33% = 490 40% = 592 50% = 742	10	50	10-25
White Box	<i>Eucalyptus albens</i>		10	50	15 – 25
Blakely's red gum	<i>Eucalyptus blakelyi</i>		10	50	10 -20
Apple Box	<i>Eucalyptus bridgesiana</i>		10	50	10-20
Grey Box	<i>Eucalyptus microcarpa</i>		10	50	15 – 25
Yellow Box	<i>Eucalyptus melliodora</i>		10	50	20 – 30
Long-leaved box	<i>Eucalyptus gonicalyx</i>		10	50	5 – 15
Red Box	<i>Eucalyptus polyanthemus</i>		10	50	10-20
Silver Wattle	<i>Acacia dealbata</i>	A total of 4280 individual Acacia plants are required across the 13 areas. 5% = 214 10% = 428 15% = 642 20% = 856 25% = 1070 33% = 1412 40% = 1712 50% = 2140	5	20	2-30
Western silver Wattle	<i>Acacia decora</i>		5	20	1-4
Hickory Wattle	<i>Acacia implexa</i>		5	20	5-12
Green Wattle	<i>Acacia deanei</i>		5	20	1.5-7
Mountain hickory Wattle	<i>Acacia penninervis</i>		5	20	2-8
Kangaroo thorn	<i>Acacia paradoxa</i>		5	20	1-4
Box-leaf wattle	<i>Acacia buxifolia</i>		5	20	1-4
All species	-	Total of 5764 plants required across the 13 areas	-	-	-

D4.5 Planting Seed and Spread



















D4.6 Works' schedule

This schedule of work guides the timing and outcomes of landscaping work. This table will be modified based on alterations to Project phases and climatic conditions.

Project Phase	Landscaping Work	Preferred Season	Performance Target	Measure and Monitor	Variation
Preconstruction	Source / order tube stock of required species	As soon as possible, noting the planting timing predicted	Sufficient numbers ordered. Correct species ordered.	Check in to ensure order is on track	-
Preconstruction	Weed control (herbicide) and mulch (weed free mulch)	Winter 12 months ahead of planting End of summer 4 months ahead of planting	Footprint of and 1m buffer around planting sites targeted	Groundcover dead by autumn	Second control session if required
Preconstruction	Apply lime and gypsum Rip planting beds	End of summer during dry conditions (Feb -March)	1t/ha of gypsum and lime applied across planting areas. Planting areas ripped to a depth of 350-450mm.	Subcontractor application records for lime and gypsum. Surveillance and measurement of ripping.	-
Preconstruction	Pre-water rip lines if less than 50mm rain in April or May	June prior to planting.	50mm of water depth applied to planting areas prior to planting.	Water cart records and standpipe records.	-
Preconstruction	Plant tube stock Water and Mulch planted tube stock	Autumn-Winter (June and July preferable)	Sufficient numbers planted Correct species planted	Climatic conditions, area covered, watering, ensure the plant location and spacing are aligned with the planting schedule above. Species delivered are as ordered.	Install irrigation and water if rainfall is insufficient.
Construction	Maintain plantings (watering, follow up weed control)	Monthly for the first 24 months, then reduced as required.	Plants alive	Mortality and soil moisture	Reduce watering if heavy rain falls or irrigated
Construction and life of Project	Replace dead plants	As required (note as substantial lead time is required, order surplus quantities)	90% success	Mortality and soil moisture	-

D4.7 Planting monitoring program

Monitor	Establishment (first 12 months after planting)			Two years post planting			Three years' post construction			Six years post construction to decommissioning		
Watering	Weekly	Regular watering where <30mm of rain has occurred in that month, unless irrigated	EPC Contractor – landscape / maintenance contractor	Weekly	Water when rainfall less than 10mm/month unless irrigated	Operator – landscape / maintenance contractor	Monthly	Water when rainfall less than 10mm/month	Operator – landscape / maintenance contractor	Monthly	Water when rainfall less than 10mm/month	Operator – landscape / maintenance contractor
	Weekly	For sections with temporary irrigation, check all drippers operational and water once per week	EPC Contractor – landscape / maintenance contractor	Monthly	For sections with temporary irrigation, check all drippers operational and water once per month	Operator – landscape / maintenance contractor	Monthly	For sections with temporary irrigation, check all drippers operational and water once per month	Operator – landscape / maintenance contractor	Remove drippers once established.		
Weeds	Monthly	Spot spray or manually remove weeds within 1.5 m of planting	EPC Contractor – landscape / maintenance contractor	Monthly	Spot spray or manually remove weeds within 1.5 m of planting	Operator – landscape / maintenance contractor	Quarterly	Spot spray or manually remove weeds within 1.5 m of planting	Operator – landscape / maintenance contractor	Every six months	Spot spray or manually remove weeds within 1.5 m of planting	Operator – landscape / maintenance contractor
Mortality	Monthly	Supplementary planting to occur in areas where plantings have died (not to occur during summer) to achieve a 90% success rate.	EPC Contractor – landscape / maintenance contractor	Quarterly	Supplementary planting to occur in areas where plantings have failed to effectively screen views (not in summer)	Operator – landscape / maintenance contractor	Annually in winter	Supplementary planting to occur in areas where plantings have failed to effectively screen views (not to occur during summer)	Operator – landscape / maintenance contractor	Annually in winter	Supplementary planting to occur in areas where plantings have failed to effectively screen views (not to occur during summer)	Operator – landscape / maintenance contractor

Monitor	Establishment (first 12 months after planting)			Two years post planting			Three years' post construction			Six years post construction to decommissioning		
Reporting	Monthly	Report on success of watering, weeding, mortalities, supplementary. Suggest changes as required	EPC Contractor – landscape / maintenance contractor	Quarterly	Report on success of watering, weeding, mortalities, supplementary. Suggest changes as required	Operator – landscape / maintenance contractor	Annually	Report on success of watering, weeding, mortalities, supplementary. Suggest changes as required	Operator – landscape / maintenance contractor	Annually	Report on success of watering, weeding, mortalities, supplementary. Suggest changes as required	Operator – landscape / maintenance contractor

Appendix E Consultation Records

E.1 Community Consultation Results

Issue raised	Response
Chemicals	
Concerns raised for chemical use onsite including spray drift	Jindera Solar Farm and its subcontractors will use agricultural chemicals in accordance with the label as prescribed by NSW legislation. Chemicals approved for use in environmentally sensitive areas would be used.
Requesting use of organic products	
Refrain from using products containing glyphosate	
Concerns raised that chemical used could impact on pastures or crops sown for cattle feed.	
Appearance of planting and choice of species list	
Concerns raised about the appearance of the planting. It should look natural.	The design of the planting includes a diversity of trees and shrubs local to the area which would look similar to rural plantings in the region. (Refer to Appendix D)
Suggested that consultation with local land care group and Lou Bull from Squirrel glider LAMP Project should be complete. They are interested and can provide advice on plant species selections-	Consultation with the Squirrel Glider Advisory Group has been complete as part of the BMP for the Project . Feedback from this consultation will be considered for this plan.
Remove <i>Acacia paradoxia</i> from list due to the risk of thorns getting in the sheep wool.	<i>Acacia paradoxia</i> has been removed from the species list and an alternative native shrub species included (Refer top Appendix D4.4)
Consider a variety of species in shrub layer so when wattles die back there will still be screening. Although not endemic consider using • <i>Melaleuca linareafolia</i> • <i>Melaleuca armillaris</i> • <i>Grevillea sp.</i>	(Refer top Appendix D4.4)
Ensure planting locations are suitable to the species selected. i.e <i>Eucalyptus camaldulensis</i> is planted in appropriate wet areas.	An experienced planting contractor would be used as provided in the E.1 of the LSP.
Time span for establishment of boundary buffer planting	
Requesting advanced planting	Long stem plantings and larger pots (~100mm) are proposed for the plantings where appropriate (Appendix E)
Planting should be in front of chain mesh boundary fence to increase buffer and	Planting is located in front of security fence as per Figure 9-1.

Issue raised	Response
obscure views of infrastructure	
Wanting a solution while construction is occurring, and planting is establishing -	Natural vista hording has been provided as an option for consideration while vegetative screening is establishing. Areas of high visual impact receivers in favour of hording have been provided in areas identified in Appendix D4.5.
Earthen Mounds	
Mound is not in suitable position for planting area 2 and does not provide suitable screening.	As part of Modification 1: • Earthen mound locations were revised, and a small section of screening has been relocated from the approved fence line to accommodate the construction of an earthen visual bund. This has resulted from a request from non-associated receiver R01, who has requested an earthen bund to restrict views of the Project. • An earthen mound originally approved to be directly west of the non-associated receiver R22 will now be relocated north of dead horse creek and northwest of R22 to minimise visual impact of the solar arrays. (Refer Appendix D4.5)
Include installation earthen mound in gaps of existing vegetation	(Refer Appendix D4.5)
Planting success and screening effectiveness	
Concern about responsibility of the planting success	Appendix E of the landscaping plan refers to monitoring and management of the landscaping areas
Concerns about the short term effectiveness of the screening. Screening wont be effective for at least 5 years.	Printed vista hoarding on perimeter fence proposed to mitigate short term visual impacts. Addressed in Section 6.1.4.
Grazing and damage of planting from Kangaroos which wont let screen establish	Appendix E of the landscaping plan refers to monitoring and management of the landscaping areas
View won't be screened through the transmission line.	Vista shade cloth would be considered for planting area 5 and 6. As part of Modification 1 the electrical connection will be constructed as an underground transmission line. The underground transmission line will connect the TransGrid Jindera substation to the designated on-site connection point in the southeast of the Project's Development Footprint. The underground transmission line will span approximately 1,050 m, be within the approved development footprint and will be a permanent installation outside the boundary of the solar farm.
Ensure planting area is completely fenced to exclude from stock	The planting areas are fenced to allow livestock exclusion during planning establishment or management during operation.
Concerns about use of suitable contractors	Suitable local contractors are being considered. Appendix E of the landscaping plan refers to monitoring and management of the landscaping areas.

Issue raised	Response
Density of shrub planting should be quite high to make sure the panels are screened (3-4 m height and full screen)	Shrubs have been selected as a dominant structure of the planting for screening effectiveness.
Practicality of planting locations	
Identified that site access is blocked by the planting in area 7 and 8.	Installation of access gates and livestock movement lanes through the planting areas will be included in the detailed design in consultation with land managers. Updated mapping in Appendix E As part of Modification 1: The design change for the vegetative screening to be located on an associated landowner's land would maintain the consent conditions for screening this area, it has been moved to allow for the construction of livestock movement laneways to provide for the safe handling of livestock onsite. The vegetation screening maintains the same orientation as the original consented design.
Groundcover plan needs to allow flexibility in selection of groundcover species and select species suitable for grazing under panels.	Pasture species selected would be suitable for grazing under panels and managed as best practice. Refer to Section 6.1.6 and Appendix E of BMP (Groundcover management plan in BMP).
General environmental impacts from solar farm	Addressed in EMS
Concern for heat island effect.	Landscaping is likely to reduce impacts associated with the heat island effect.
Noise impacts during operation and construction.	Addressed in Noise Management Plan
Tree removal – concern about number of trees removed from site	Impacts to biodiversity have been minimised where practicable and offsets created for any residual impacts. Addressed in the BMP
Keep existing Dams – increased disturbance - loss water source for wildlife	Detailed design will account for sufficient water sources for livestock to maintain grazing access and productivity.
Minimal impact – site disturbance- to enable site to be returned to previous use -farming land when Project is completed.	Addressed in EMS
Concern for longevity of the Project . What happens for decommissioning and returning the land back to agricultural productivity when there has been loss of paddock trees?	Will be addressed in Decommissioning and Rehabilitation Plan.
Concern for site rehabilitation post operation and whose responsibility it is.	Will be addressed in Decommissioning and Rehabilitation Plan.
Concerned about risks for RFS volunteers fighting fires associated with solar farm site.	Training for local RFS in dealing with electrical fires will be provided. Local RFS having a copy of the emergency response plan for the solar farm. This will be addressed in Emergency Management Plan

Issue raised	Response
The vegetation near planting area 8 is an important outlook for R 20 which is currently being removed.	Impacts to biodiversity have been minimised where practicable and offsets created for any residual impacts. Addressed in the BMP.
Ensure plant species and fencing are selected for threatened fauna i.e.. Squirrel glider	Species selected for landscaping are locally endemic and suitable as corridor and foraging resources for Squirrel Gliders. Refer to D.3 of this plan and Squirrel Glider Management Plan.
Managing fuel loads for fire control	Groundcover would be managed in accordance with Appendix E of the BMP.
Connectivity of recent Landcare planting to solar farm site – requires squirrel glider passage	BMP to address use of non-barb fencing in Squirrel glider passages.
Planting area 8 and 9 need to allow for stock access.	Installation of access gates and livestock movement lanes through the planting areas will be included in the detailed design in consultation with land managers. As part of Modification 1: The design change for the vegetative screening to be located on an associated landowner's land would maintain the consent conditions for screening this area, it has been moved to allow for the construction of livestock movement laneways to provide for the safe handling of livestock onsite. The vegetation screening maintains the same orientation as the original consented design.

E.2 Greater Hume Shire Council Consultation Record

The landscaping plan was provided to Greater Hume Shire Council on 15 September 2021.

Council responded on 27 October 2021 noting that they had no additional requirements and were satisfied with the contents of the plan.

Council received a shared draft Aurecon report and updated design details on 13 December 2021, and a shared final Aurecon report on 19 January 2022. In a letter received on 8 December 2022, Council confirm they had no objection to the Applicant lodging the proposed Modifications. Council also confirmed that the section of Ortlipp Road required for the transmission route marked as Crown Land is part of the Ortlipp Road reserve and under the effective control of Council.

E.3 Department of Planning and Environment

This plan was provided to DPE in March 2022. Comments were received 13 May 2022. DPE Approved the Plan in October 2022.

Comments and responses are detailed below.

Comment	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
LP, Condition 1, Schedule 2: Obligation to Minimise Harm to the Environment				
In meeting the specific environmental performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, upgrading or decommissioning of the development.	No	Condition not included within the plan.	Include detail consistent with the condition.	Amended. Refer Table 3-1.
LP, Condition 2, Schedule 2: Terms of Consent				
The Applicant must carry out the development: a) generally in accordance with the EIS; and b) in accordance with the conditions of this consent. <i>Note: The general layout of the development is shown in Appendix 1.</i>	No	Condition not included within the plan. Some relevant conditions referenced herein have not been included within Table 3-1.	Include detail consistent with the condition. Reference all relevant conditions within Table 3-1.	Amended. Refer Table 3-1.
LP, Condition 10, Schedule 3: Vegetation Buffer				
The Applicant must establish and maintain a vegetation buffer (landscape screening) at the locations outlined in the figure in Appendix 8 to the satisfaction of the Planning Secretary. This landscape screening must:	Partial	Acknowledged within Table 3-1, which references Appendix D. Section 6.1.3 describes: <i>"Sections of perimeter plantings will be established along the development site boundary as shown in Appendix B."</i> illustrates the layout of the vegetation buffer locations, which corresponds to Appendix 8 of the development consent.	Update Table 3-1 to reference relevant section of the plan.	Amended. Refer Table 3-1.
a) minimise views from residences R01, R09, R10, R11, R16, R17, R18, R19, R20 and R34 within 3 years of commencing operations;	Partial	Section 6.1.3 describes: <i>"The plantings will minimise views of infrastructure for</i>	Update Table 3-1 to reference relevant	Amended. Refer Table 3-1 and

Comment	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
		<i>sensitive receivers expected to experience a high and medium visual impact."</i>	section of the plan. Update Section 6.1.3 to include residences specified in Condition 10 (e) Schedule 3.	Section 6.1.3.
b) be designed and maintained in accordance with RFS's Planning for Bushfire Protection 2019 (or equivalent);	No	Acknowledged within Table 3-1, which references Appendix D. It is noted that the condition is not included within the plan.	Update Table 3-1 to reference relevant section of the plan. Update the LP to include detail consistent with the condition.	Amended. Refer Table 3-1 and Section 6.1.3 with reference to RFS planning
c) be properly maintained with a replanting programme being undertaken where the vegetation fails to establish; and	No	Acknowledged within Table 3-1, which references Appendix D. It is noted that the condition is not included within the plan.	Update Table 3-1 to reference relevant section of the plan. Update the LP to include detail consistent with the condition.	Amended. Refer Table 3-1. Planting strategy from Appendix D has been included in Section 6.1.4
d) undertake appropriate weed management unless the Planning Secretary agrees otherwise.	Partial	Acknowledged within Table 3-1, which references Appendix D. It is noted that weed management is outlined in Appendix E.	Update Table 3-1 to reference relevant section of the plan. Update the LP to include detail consistent with the condition.	
LP, Condition 11, Schedule 3: Landscaping Plan				
Prior to commencing the development, the Applicant must	No	Acknowledged within Table 3-1, which references the plan	Update Table 3-1 to	Appendix A

Comment	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
prepare a detailed Landscaping Plan for the development in consultation with Council and residences R01, R09, R10, R11, R16, R17, R18, R19, R20 and R34 to the satisfaction of the Planning Secretary. This plan must include:		and Appendix D. It is noted that Appendix D contains a figure and does not include detail consistent with the condition.	reference relevant section of the plan.	provides a detailed landscaping plan. Evidence of community consultation is provided in Appendix E.1. Evidence of consultation with Council is provided in Appendix E.2.
a) a description of measures that would be implemented to ensure that the vegetated buffers achieve the objectives of condition 10 (a) – (e) above;	Partial	Landscape management measures have been described in Section 6.1. Detail is missing to fulfil the requirements of Condition 10 (a) – (e) above.	Update Table 3-1 to reference relevant section of the plan. Include details consistent with Condition 10 (a) – (e).	Amended. Refer Table 3-1 and Section 6.1.3.
b) a program to monitor and report on the effectiveness of these measures; and	No	Section 6 outlines performance targets, details are not included regarding how the effectiveness of management measures will be monitored and reported. Section 7.3 describes that monitoring requirements for perimeter plantings are detailed in Appendix E. Appendix E is missing details consistent with all monitoring and reporting requirements relating to Condition 10 (a) – (e).	Within the LP, Include detail consistent with the condition.	Amended. Refer Appendix D4.6 and Section 7.1. Planting monitoring program is described in Appendix D4.7. Reporting is detailed in Section 7.5.
c) details of who would be responsible for monitoring, reviewing and implementing the plan, and timeframes for the completion of actions. Following the Planning Secretary's approval, the	Partial	Section 7.1 describes the roles and responsibilities for the construction and implementation of the LP. Condition requirements are not addressed in the plan.	Provide details of who would be responsible for	Amended. Refer Section 7.1.

Comment	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
Applicant must implement the Landscaping Plan.			monitoring, reviewing and implementing the plan, and timeframes for the completion of actions.	
LP, Condition 12, Schedule 3: Land Management				
The Applicant must maintain the agricultural land capability of the site, including: a) establishing the ground cover of the site within 3 months following completion of any construction or upgrading;	No	Acknowledged within Table 3-1, which references Section 6.1.2 and Appendix D. It is noted that Section 6.1.2 describes the formation of earthen mounds, and Appendix D is a figure of paddock trees to be retained. Specific condition requirements are not met within the LP.	Include details consistent with the condition.	Included in Section 6.1.6, first dot point. Groundcover management is addressed in the BMP.
b) properly maintaining the ground cover with appropriate perennial species and weed management; and	No	As above.	As above.	Included in Section 6.1.6, second dot point. Groundcover management is addressed in the BMP.
c) maintaining grazing within the development footprint following construction, where possible, unless the Planning Secretary agrees otherwise in writing.	No	As above.	As above.	Included in Section 6.1.6, third dot point.
LP, Condition 20, Schedule 3: Visual				
The Applicant must: a) minimise the off-site visual impacts of the development, including the potential for any glare or reflection;	Partial	Acknowledged within Table 3-1, which references Sections 6.2, 6.3 and 6.4. It is noted that Section 6.2 describes dust control measures.	Update Table 3-1 to reference relevant sections of the plan.	Amended. Refer Table 3-1.
b) ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as	Partial	Section 6.3 describes: “The materials and colour of onsite infrastructure will, where	Replace language such as “where	Amended. Refer Section 6.3.

Comment	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
far as possible with the surrounding landscape; and		<i>practical, be non-reflective and in keeping with the materials and colouring of existing infrastructure or of a colour that will blend with the landscape to reduce any potential for glare and reflection, where practical...</i> Note that the condition requires that the visual appearance of ancillary infrastructure blends in <u>as far as possible</u> .	practical" with a commitment such as "as much/far as possible"	
c) not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.	No	Condition not included within the plan.	Include detail consistent with the condition.	Amended. Refer Section 6.3.
LP, Condition 1, Schedule 4: Environmental Management Strategy				
Prior to commencing construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	Partial	Acknowledged within Table 3-1, which indicates that the EMS is included within Section 7. It is unclear whether the EMS is a separate plan, or whether it has been incorporated into the LP. It is noted that the LP only addresses some requirements of Condition 1 Schedule 4.	Update Table 3-1 to reference conditions relevant to the LP. Confirm whether the EMS is separate to the LP.	Amended. Refer Table 3-1. Note that the EMS is a separate overarching plan.
a) Provide the strategic framework for environmental management of the development;	Partial	As above.	As above.	The LP is a subplan, as are other relevant management plans (including biodiversity management plan, heritage management plan, emergency management plan, and traffic management plan).
b) identify the statutory approvals that apply to the development;	Partial	As above.	As above.	
c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Partial	As above.	As above.	
d) describe the procedures that would be implemented to: - keep the local community and relevant agencies informed about the operation and environmental performance of the development; - receive, handle, respond to, and record complaints; - resolve any disputes that may arise; - respond to any non-compliance; - respond to emergencies; and	Partial	As above.	As above.	
e) include:	Partial	As above.	As above.	

Comment	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
- references to any plans approved under the conditions of this consent; and - a clear plan depicting all the monitoring to be carried out in relation to the development. Following the Planning Secretary's approval, the Applicant must implement the Environmental Management Strategy.				
LP, Condition 2, Schedule 4: Revision of Strategies, Plans and Programs				
The Applicant must: (a) update the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and	No	Condition not included within the plan.	Include detail consistent with the condition.	Amended. Refer Section 8.2. Further detail is provided in the EMS.
(b) review and if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary within 1 month of the: - submission of an incident report under condition 7 of Schedule 4; - submission of an audit report under condition 9 of Schedule 4; or - any modification to the conditions of this consent.				As above.
LP, Condition 5, Schedule 4: Final Layout Plans				
Prior to commencing construction, the Applicant must submit detailed plans of the final layout of the development to the Department via the Major Project's website, including details on the siting of solar panels and ancillary infrastructure.	No	Acknowledged within Table 3-1, which references the EMS. Condition not included within the plan.	Include detail consistent with the condition in the LP or reference the specific section of the EMS pertaining to the condition.	Amended. Refer Section 8.2.
LP, Condition 7, Schedule 4: Incident Notification				
The Planning Secretary must be notified via the Major Project's website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number	No	Condition not included within the plan.	Include detail consistent with the condition.	Amended. Refer Section 7.4. Further specifications on

<i>Comment</i>	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
and the name of the development if it has one), and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 7.				incident management are provided in the EMS.
LP, Condition 8, Schedule 4: Non-Compliance Notification				
The Department must be notified in writing via the Major Project s website within 7 days after the Applicant becomes aware of any non-compliance with the conditions of this consent. The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been done, or will be, undertaken to address the non-compliance.	No	Condition not included within the plan.	Include detail consistent with the condition.	Amended. Refer Section 7.4. Further specifications on incident management are provided in the EMS.
LP, Condition 15, Schedule 4: Access to Information				
The Applicant must: (a) make the following information publicly available on its website as relevant to the stage of the development: - 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; - provide a 24hr telephone line and instruction as to how complaints or enquiries about the development can be made; - a complaints register; - any independent environmental audit, and the Applicants response to the recommendations in any audit; and - any other matter required by the Planning	No	Condition not included within the plan.	Include detail consistent with the condition.	This condition is addressed in the EMS, which is the overarching document in relation to the EMS and sub-plans. The LP falls under the EMS, and will comply with EMS requirements in relation to this condition.

Comment	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
Secretary; and				
b) keep this information up to date.	No	Condition not included within the plan.	Include detail consistent with the condition.	As above
LP, Appendix 7: Written Incident Notification Requirements				
1. A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Project's website within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition 7 of Schedule 4 or, having given such notification, subsequently forms the view that an incident has not occurred.	No	Condition not included within the plan.	Include detail consistent with the condition.	Amended. Refer Section 7.4 for details regarding incidents, material harm and non-compliances.
2. Written notification of an incident must: (a) identify the development and application number; (b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); (c) identify how the incident was detected; (d) identify when the applicant became aware of the incident; (e) identify any actual or potential non-compliance with conditions of consent; (f) describe what immediate steps were taken in relation to the incident; (g) identify further action(s) that will be taken in relation to the incident; and (h) identify a Project contact for further communication regarding the incident.	No	Condition not included within the plan.	Include detail consistent with the condition.	As above.
3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.	No	Condition not included within the plan.	Include detail consistent with the condition.	As above.

<i>Comment</i>	Sufficient (Yes/No/Partial)	Document reference and comment	Action Required	Response
4. The Incident Report must include: (a) A summary of the incident; (b) Outcomes of an incident investigation, including identification of the cause of the incident; (c) Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and (d) Details of any communication with other stakeholders regarding the incident	No	Condition not included within the plan.	Include detail consistent with the condition.	As above.
General Comments			Action Required	Company Response
Section 3.1.3 does not provide a commitment that the Project will comply with the conditions of consent included within Table 3.1.		Within Section 3.1.3, provide a commitment that the Project will adhere to conditions of consent.		Amended. Refer Section 3.1.3
Document control: the LP is missing details such as a version/revision number and date.		Include details such as a version/revision number on the title page and/or footer		Version number is included in the footer. Document control table is included on the first page. This is in accordance with our QA9001 certification.
Section 7.6 describes that reporting requirements and responsibilities are outlined in the EMS. No specific section of the EMS has been referenced.		Summarise reporting requirements within the LP.		Reporting Requirements are detailed in Section 11 of the EMS.

Department of Planning and Environment



Our ref: SSD-9549 PA-5

Emma Hollo
Project Manager
Jindera Solar Farm Pty Ltd
15 Pacific Street
Bronte, NSW, 2024

04/10/2022

Subject: Landscaping Plan for Jindera Solar Farm (SSD-9549)

Dear Ms Hollo

I refer to the Landscaping Plan submitted to the Department as required under condition 11 of Schedule 3 of the Development Consent for the Jindera Solar Farm.

The Department has carefully reviewed the document and is satisfied that it generally meets the requirements of the condition.

Accordingly, the Planning Secretary has approved the Landscaping Plan (Revision 3.1, dated 18 August 2022). Please ensure that the approved plan is placed on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Andy Nixey on (02) 9274 6379.

Yours sincerely

Iwan Davies
A/Director
Energy Assessments