



New
Energy
Development

Wallaroo Solar Farm



Project Overview

246-248 Southwell Rd Wallaroo NSW (adjacent to the ACT border)

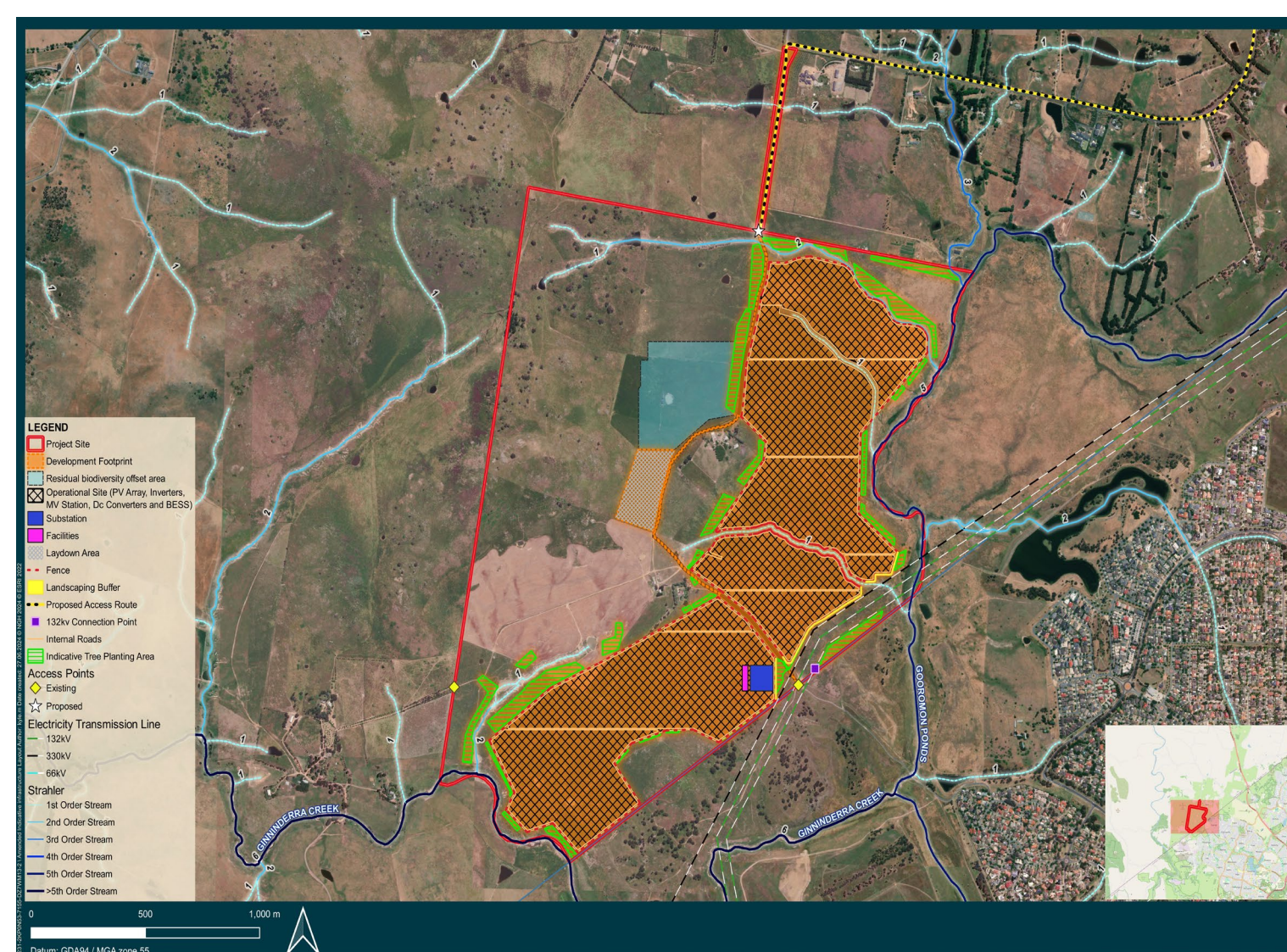
100MW

45MW/90MWH battery

Two landholders, 393 ha site

165 ha development footprint

Existing transmission line with capacity, onsite connection



Project Overview



- The project is located in Wallaroo NSW along the border with the ACT
- There is existing on-site electrical transmission infrastructure which will be the point of connection for the exported power
- Overall site footprint: 393Ha
- Disturbance footprint: 165Ha
- Land and Soil Capability (LSC) Class 4 (land with moderate to severe limitations)
- Vegetation screening along project boundaries to break up the view from potential receptors
- The site is an operational cattle/sheep farm. Sheep will continue to be run within the project boundaries post-construction





Alignment with policy

- The Commonwealth Renewable Energy Target
- NSW's Climate Change Policy Framework
- NSW Net Zero Plan Stage 1 : 2020-2030





Effective and compatible use of land

- NSW Large Scale Solar Energy Guideline (2022)
 - Good solar resources and available capacity
 - Minimal impacts
 - Avoids LSC 1-3
 - Available connection capacity
- South East Tablelands Regional Plan 2036
 - Assists in positioning the region as a hub of renewable energy excellence
- Yass Settlement Strategy 2036
 - Maintain agricultural use and production over the short and long term
 - Maintain rural landscape character
 - Limiting the potential for residential development and conflicting land uses



Land use compatibility



Loss of Agricultural Land

- The Project is in the Yass region of NSW
- No BSAL present within the project footprint
- LSC 4 present across project footprint
- No net loss of Agriculture due to continued sheep grazing post-construction
- Existing farming infrastructure remains unchanged outside of the solar farm footprint

Concurrent Grazing

- The site currently grazes cattle and sheep
- Sheep will continue to graze post construction
- As part of the agreement with the landowners, the existing sheep yards are being removed, and new facilities installed.
- The landowners retain the right to continue grazing sheep on the land
- Further consultation during detailed project design with the landowners to ensure access to farming infrastructure
- Watering infrastructure to be installed as part of the project works



Visual



A Landscape and Visual Impact Assessment (LVIA) was completed during the EIS phase of the project. This showed;

- Low impacts on visual amenity and landscape
- Low and very low visual impacts on surrounding receivers (one Representative Viewpoint Moderate without mitigation)
- Site topography and siting, high-density urban dwellings, and existing and proposed vegetation minimise the visibility of the project to surrounding receivers
- Some visibility but no significant impact on broader landscape character

The Landscape and Visual Impact Assessment in conjunction with community consultation, resulted in WSF removing some arrays of panels and making other minor amendments to reduce potential impacts.



Hazards and risks



- **Bushfire**
 - Manageable through proposed design and prevention controls to reduce the likelihood of these fire events and mitigation controls to contain the fires and minimise the potential for escalated events (e.g., fire management plan, APZs, vegetation management etc.)
 - Better emergency services access to the site, Parkwood and through to the ACT due to upgraded and sealed roads
- **Contamination risk**
 - No cadmium in proposed solar panels
 - APZ's and bunding around infrastructure will reduce contamination risk
- **Extreme weather**
 - mechanical and hail impact testing according to the IEC61215 (International Electrotechnical Commission) standard.
 - Suppliers have stated that there is very little contamination risk from PV modules.
 - Flood events extremely unlikely to impact the project
 - Hail damage is considered more of an operational and energy generation risk rather than an environmental risk.
- **Avoidable risks have been avoided.**
 - The risks from a major hazard have been reduced by the separation and dispersion of the batteries.
 - Consequences of the more likely events are contained within the site boundaries.
 - There is no existing high-risk installation nearby.
- **The Project meets the qualitative risk criteria**





Summary of Project Amendments

Wallaroo Solar Farm has been responsive to community concerns regarding the potential impacts of the project. During the development process, the main concern raised by the community was the potential for visual impacts. These concerns were addressed by WSF at multiple stages throughout the development process. Amendments included:

Visual

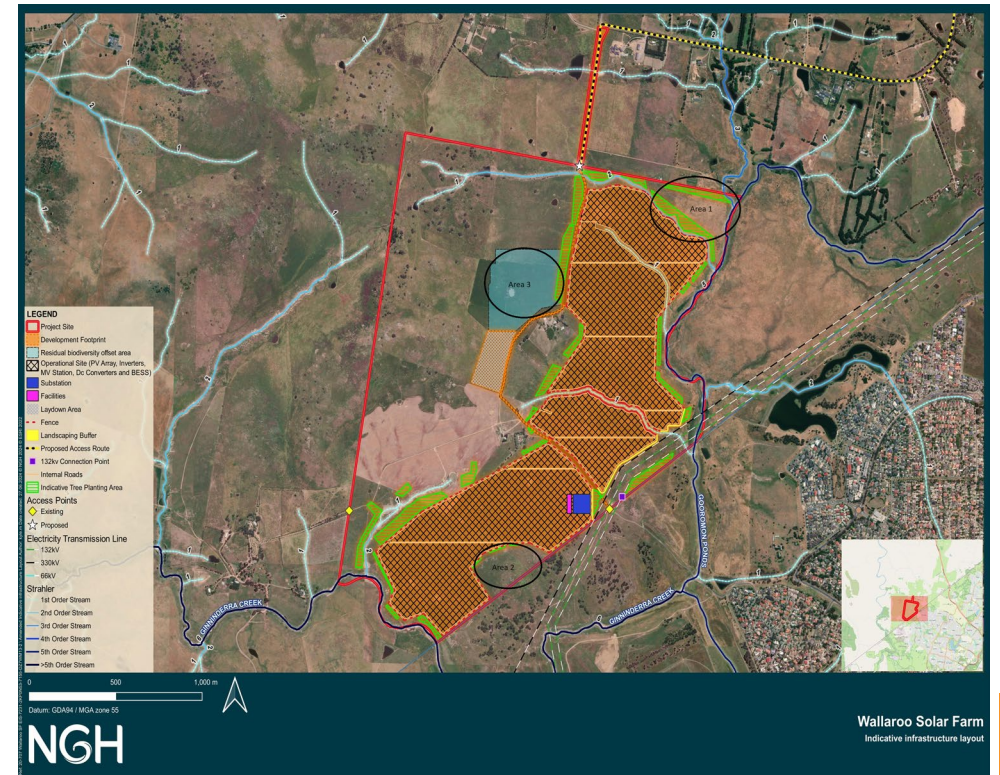
- The removal of panels from area 1 in the northeast corner of the project. This greatly reduced the potential for visual impact on the nearby neighbors on Gooroomon Ponds Road and Southwell Road.
- Removal of panels from area 2 on the hill in the southeast corner of the project. This was also done due to the potential habitat of the Striped Legless Lizard
- Removal of panels from area 3 in the northeast portion of the project. This was done to decrease the potential visual impact to ACT residents
- Operational amendments to avoid glint and glare impacts

Environmental

- Installing an on-site substation in place of transmission lines to the Canberra substation
- Avoidance of native vegetation and rocky habitats

Transport Routes

- Avoiding Southwell Road between Wallaroo Road and Brooklands Road to minimise cumulative impacts with ongoing gully remediation works





Ginninderry Estate

Consultation with Riverview Projects , the project manager for the Ginninderry JV, has been undertaken throughout the Project development, who have been largely supportive of the Project due to the community benefits being consistent with Ginninderry's commitment to sustainability and renewable energy. During the response to submissions stage, further consultation was undertaken regarding understanding potential future visual impacts, and noise levels. This consultation included additional wireframes to inform visual impacts and noise assessment at the closest potential future residence and no concerns were raised by Ginninderry in regard to the proposed Project.

WSF has initiated discussions with the Ginninderry SPARK program on the development of training, apprenticeship, and work experience programs to be run throughout the construction and operation of the solar farm



Community Benefits



Employment & business

- The solar farm will employ 150-200 employees at peak construction
- The ongoing operations will employ 4-5 full-time employees
- The wider business community will benefit from funds being injected to the local economy
- Partnership with the Ginninderry SPARK program to run training and apprenticeship programs for the community

Community benefit fund

- The Wallaroo Solar Farm has committed to funding community and environmental groups local to the project.
- The community benefit fund is proposed to be run by members of the local community, representatives from Yass Valley Council & the Wallaroo Solar Farm
- If the project is approved, the Wallaroo Solar Farm is committing \$150,000 in the first year and \$55,000 every operational year to help local community and environmental groups fund projects to enhance the local community

Wider Community benefits

- If the proposed project gets approval, it will displace approximately 215,000 tonnes of greenhouse gases per annum
- Help NSW achieve net zero emissions by 2050
- Produce approximately 260,000 MWH per annum of clean electricity

Local Volts

Discounted energy will be made available to residents and small businesses within a 7km radius on a first come first serve basis. The project is able to do this as only 70% of the energy output from the project is contracted under a power purchase agreement, leaving 30% to be sold on the open market or through LocalVolts.

It is estimated that residents will save 20-25% on their direct energy costs. This discount applies to the kWh rate and does not apply to existing transmission costs, metering costs or daily charges.





Voluntary Planning Agreement


WSF has been in consultation with the Yass Valley Council regarding the VPA for the project. YVC provided a draft copy of their preferred VPA of which we have agreed to.

Initially the project proposed a payment of \$50,000 per annum, this was increased to \$55,000 at the response to submissions stage to keep in line with Council expectations.

Decisions on where funds will be spent are to be made by a panel consisting of;

- 2 council representatives
- 2 community members who reside near the project
- 1 project representative

During community consultation the below groups were identified as the communities preferred recipients, though these will need to be confirmed by the VPA panel

- Wallaroo RFS
 - Ginninderra Catchment Group
 - Educational opportunities
- 

Glint and Glare



During the preparation of the EIS, Moirl Landscape Architects conducted a Glint and Glare assessment for the project.

This assessment showed the potential for moderate to high levels of yellow glare at receivers throughout the area. While atmospheric conditions and intervening vegetation would likely have lowered this to acceptable levels, consultation with the Department of Planning, Housing, and Infrastructure indicated that this was likely to be above the acceptable level.

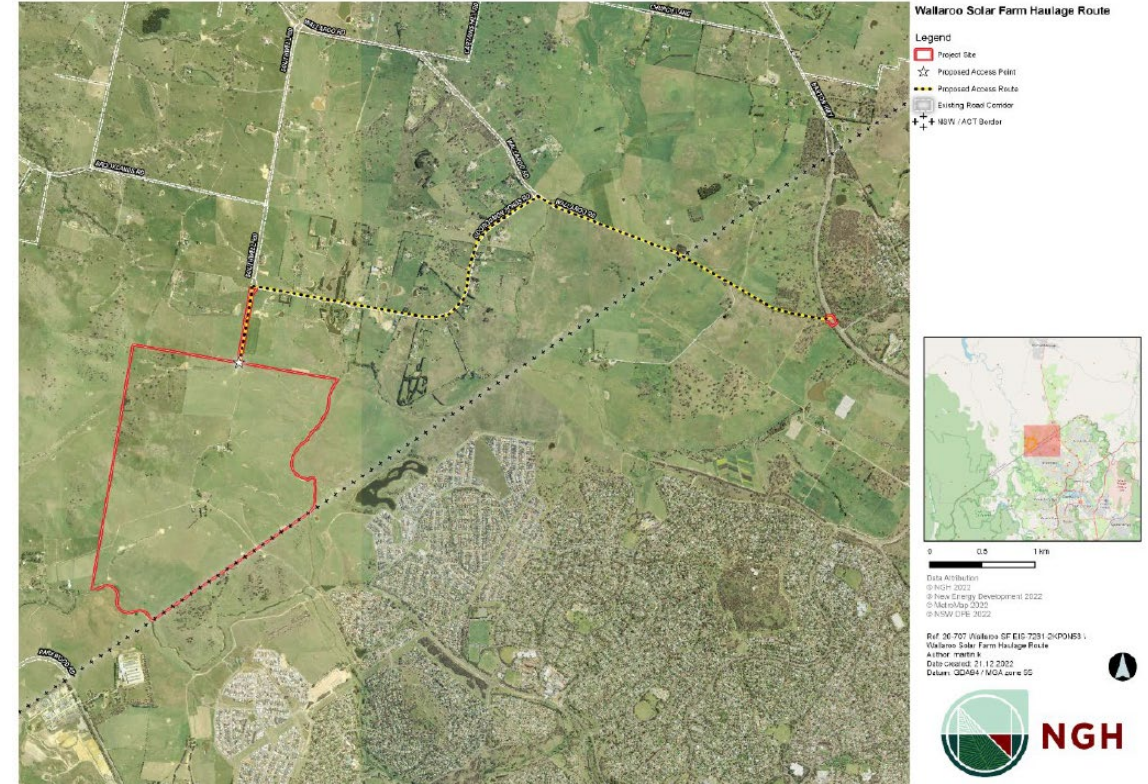
For that reason, a new Glint and Glare assessment was completed using newly available software. This new report shows that operational controls of limiting the solar panels to $\pm 5^\circ$ between the hours of 5:00 am and 8.30 am will reduce the glint and glare impact to zero at all non-associated receivers



Transport and traffic route

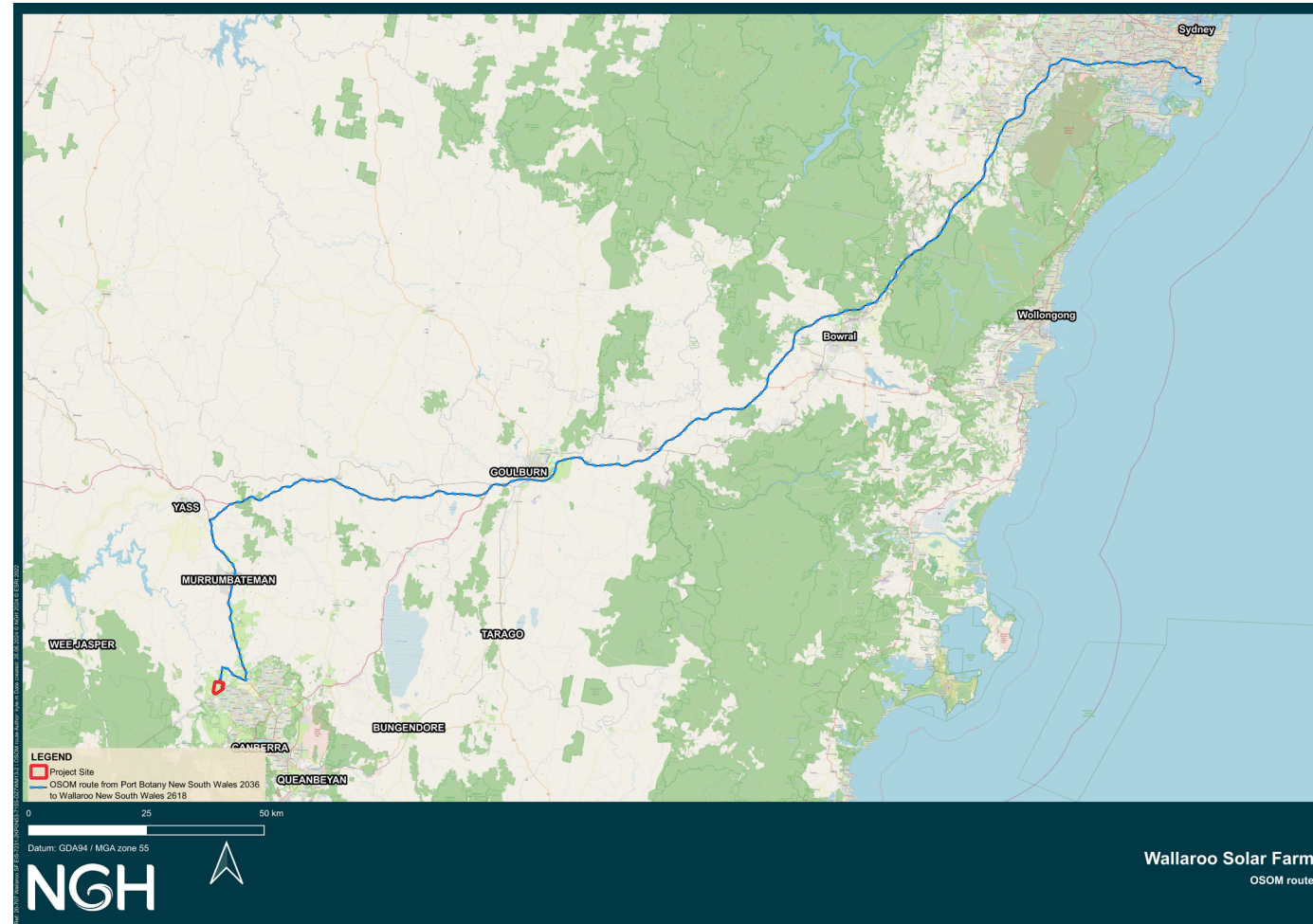


- Access to the site is proposed via Southwell Road, Gooroomon Ponds Road and Wallaroo Road which are located in NSW, and subsequently link to the state road network via Barton Highway, which is located approximately 7.5km northeast of the site
- The Traffic Impact Assessment found the following:
 - The road network is able to accommodate the traffic generated by the development during the construction and operational period
 - The cumulative impact of the site traffic with nearby developments is expected to be minimal
 - In order to mitigate the impacts of the development during construction, a CTMP will be prepared
- Road upgrades required as part of the project include:
 - Southwell Road between Gooroomon Ponds Road and the site access to a minimum sealed width of 7 meters
 - Minor upgrade of east and southbound turning lanes at Barton Highway / Wallaroo Road intersection



OSOM Route

Sydney has been identified as the location where the solar farm plant will be imported. The proposed construction traffic access route from Sydney to the site is proposed to be via Hume Highway, Federal Highway and Barton Highway. Some larger OSOM vehicles may choose to access Barton Highway via Hume Highway in order to avoid travelling through Canberra



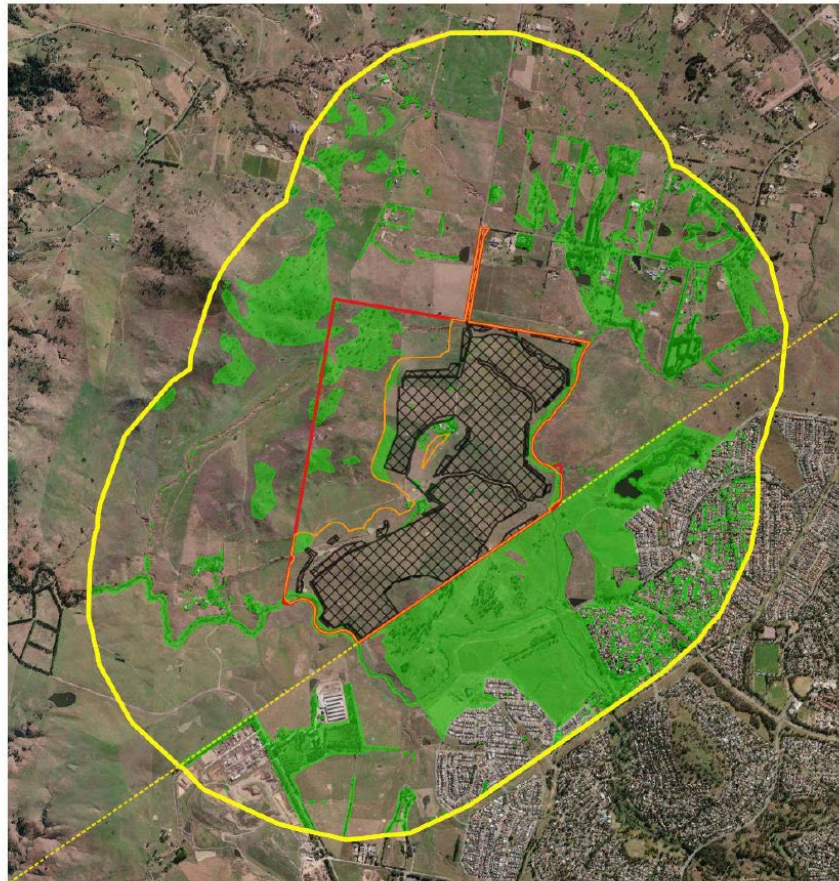
Additional information



Additional information outside of the meeting agenda is provided in the following slides.



Biodiversity



Wallaroo Solar Farm
Native Vegetation Extent

Legend

- Subject Land
- Development Footprint
- Development Site
- 1500m Buffer Development Site
- NSWACT Border
- Native Vegetation Extent

0 1 2 km

Data Attribution
© NGH 2022
© Wallaroo Solar Farm Pty Ltd, 2020
© ESRI, accessed 2022

Ref: 20-707_Wallaroo BDAR GIS 20210828 1
Native Vegetation Extent 1500m
Author: D. Bembick
Date created: 02.09.2022
Datum: GDA94 / MGA zone 55

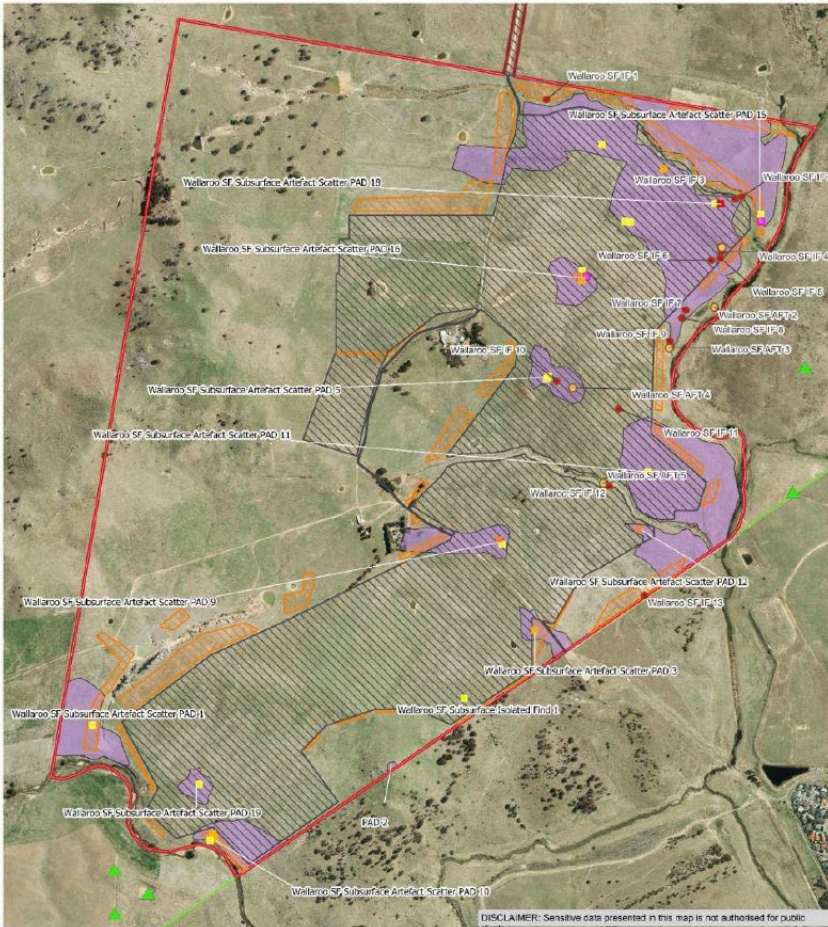


- Three Plant Community Types are found in the overall project footprint. Though none of these are directly impacted by the development
- Initially, the project was to connect directly to the Canberra substation via a new transmission line. This was amended to an onsite substation to remove the potential impact to the Golden Sun Moth colonies thought to be present along the initial route and to reduce visual impacts to the residents of McGregor.
- An existing 10m Buffer is present between the project footprint and Jaramlee Nature Reserve (ACT)
- Minimal impacts to threatened species habitats such as the Striped Legless Lizard, Pink-tailed Legless Lizard, Superb Parrot, Koala, and aquatic habitat.
- Avoidance of most rocky areas (west portion and south east outcrop) and waterways within the Project site.

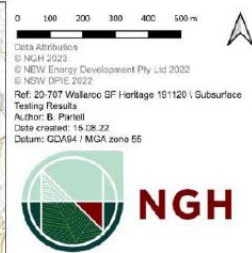




Heritage



Aboriginal sites within the Wallaroo SF Proposal Area




- 13 isolated finds and five low density artefact scatters were identified across the Project site during the survey. This informed the need for test pit surveys to be conducted.
- A total of 78 artefacts were recovered during the test pit survey all were found to be of low to moderate overall value
- The assessment of harm overall as a consequence of the development and operation of the Wallaroo Solar Farm is therefore assessed as low.
- No items of potential historical heritage significance were identified during the site inspection of Wallaroo Solar Farm.
- These artefacts will be salvaged and relocated in consultation with Registered Aboriginal Parties (RAPs) and prior to the commencement of construction



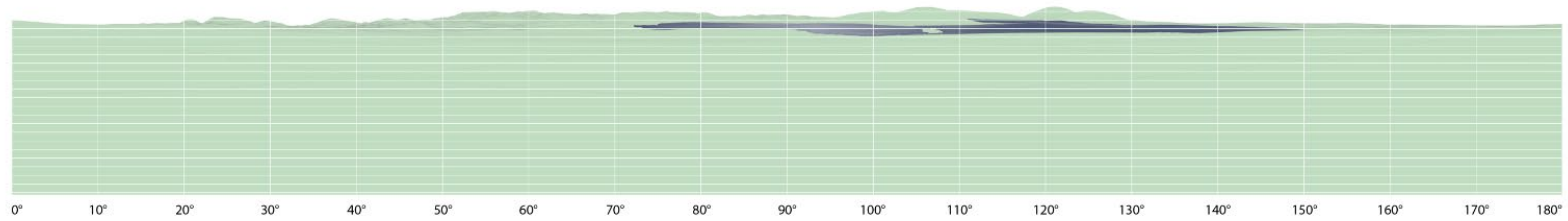


Neighbour Agreements

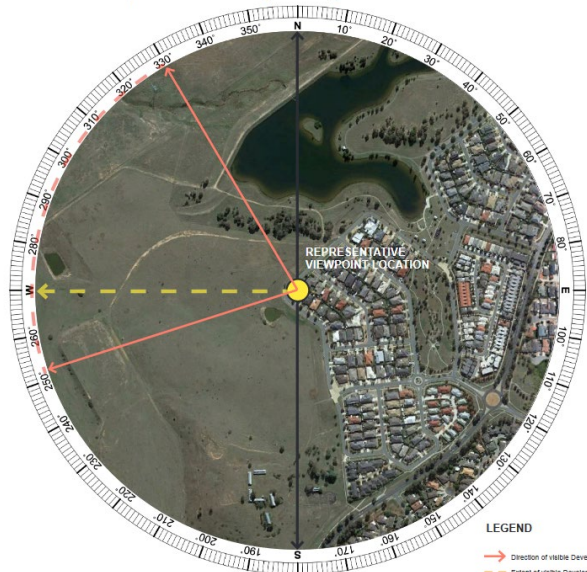
During the project development, offers of neighbour agreements were made to all contactable residents on Gooromon Ponds Road as well as those at Parkwood to the southwest of the project. The agreements were offered as a goodwill gesture and there was no expectation on behalf of the project that these residences would be removed from assessment. The neighbour agreements offered:

- Cash payments or the installation of solar systems at their properties
 - An agreement to install vegetation screening at their properties if requested
 - An agreement to keep the details of those who took up the offer confidential
-
- In total 4 neighbours have exercised agreements, with a further 3 still in discussions
 - For residents who have not exercised the neighbour agreement, WSF is still offering the onsite vegetation planting at their residences if requested
- 

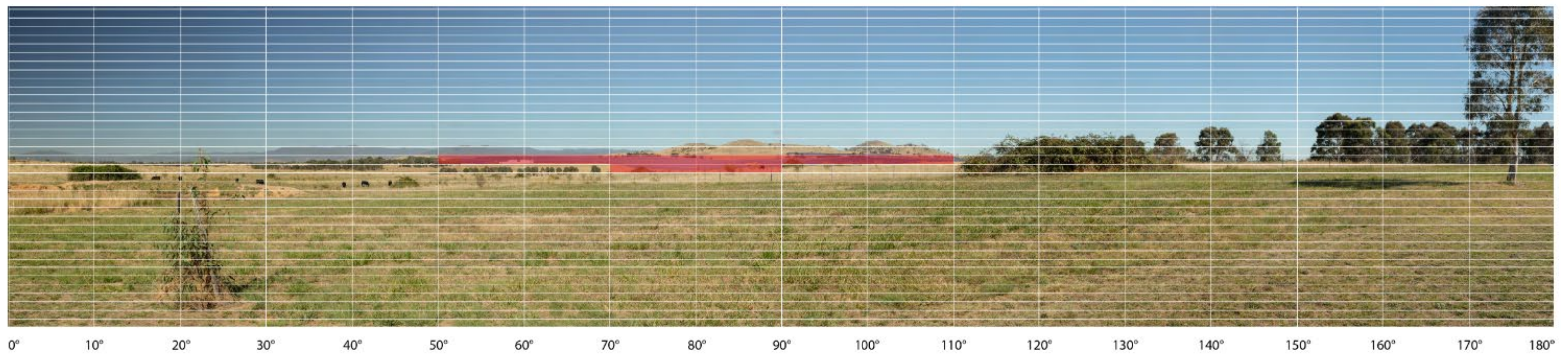
Representative receiver R8



Residential Receptor 08 - Sensitivity and Magnitude

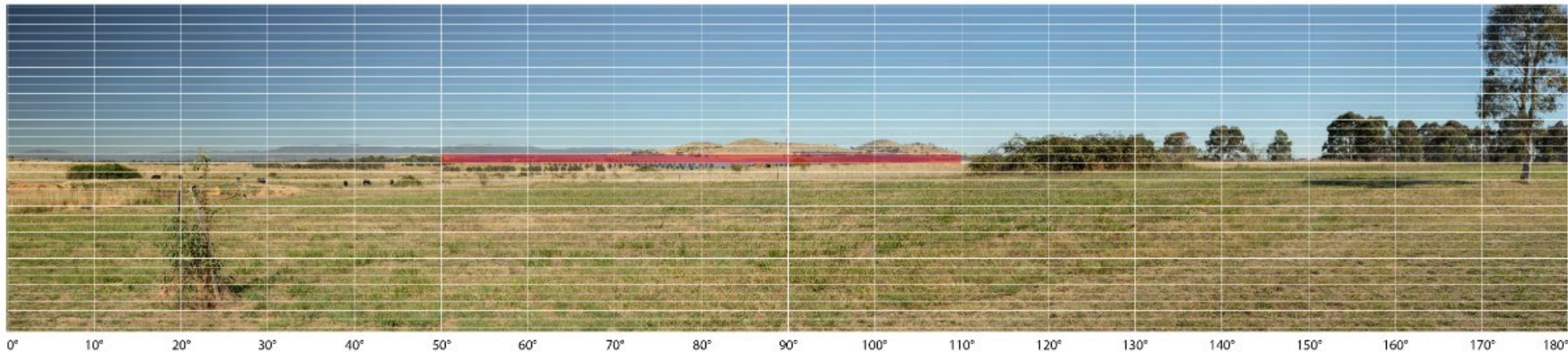
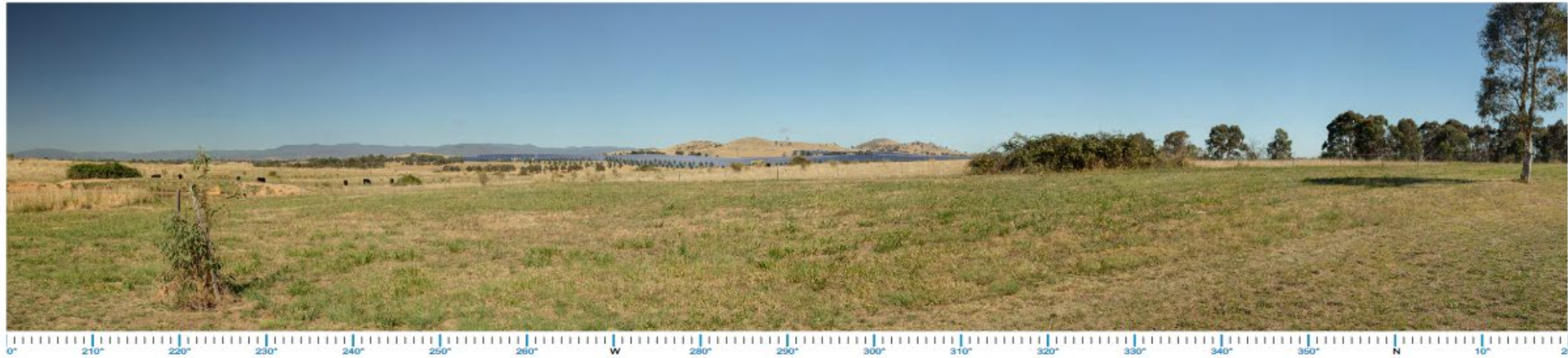


Aerial Image - Wireframe Location (Aerial Image Source: Google Earth 2019)



Photomontage 02- Mitigation - Visual Impact Rating: Low

Indicative Vegetation Screening at 5 years



Mitigation and Residual Impact Discussion

An assessment based on visual magnitude grid tool over the mitigated photomontage indicates a **Very Low** magnitude rating and a **Low** visual impact rating from this location.

Coordinates	Distance to development:	Viewpoint Type:	Viewpoint Sensitivity:	Scenic Quality:	Overall Sensitivity:	Occupied Cells:	Magnitude Rating:	Visual Impact Rating:
35°11'32.57" S 149° 0'49.16" E	660m	Representative Viewpoint	High	Moderate	High	6	Very Low	Low





Thank You

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