

# Glenellen Solar Farm

## Independent Planning Commission Briefing

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1 November 2023



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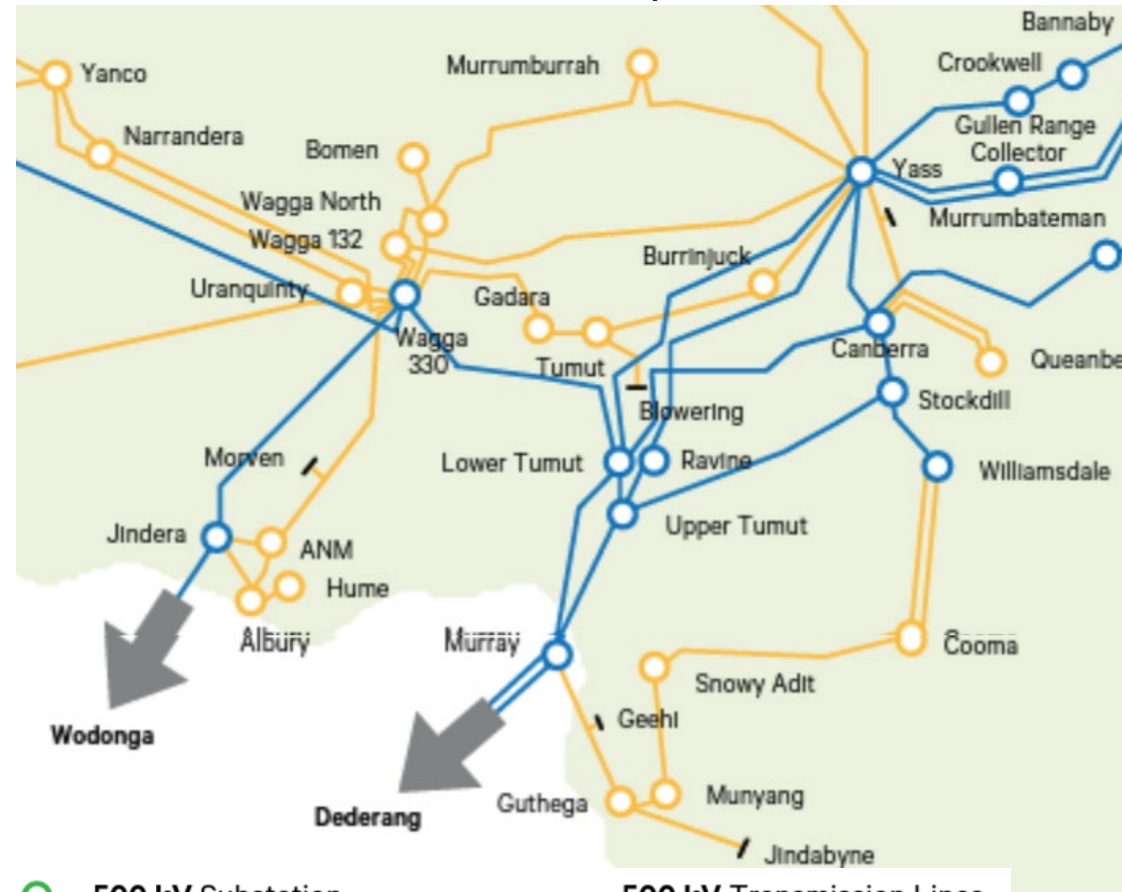




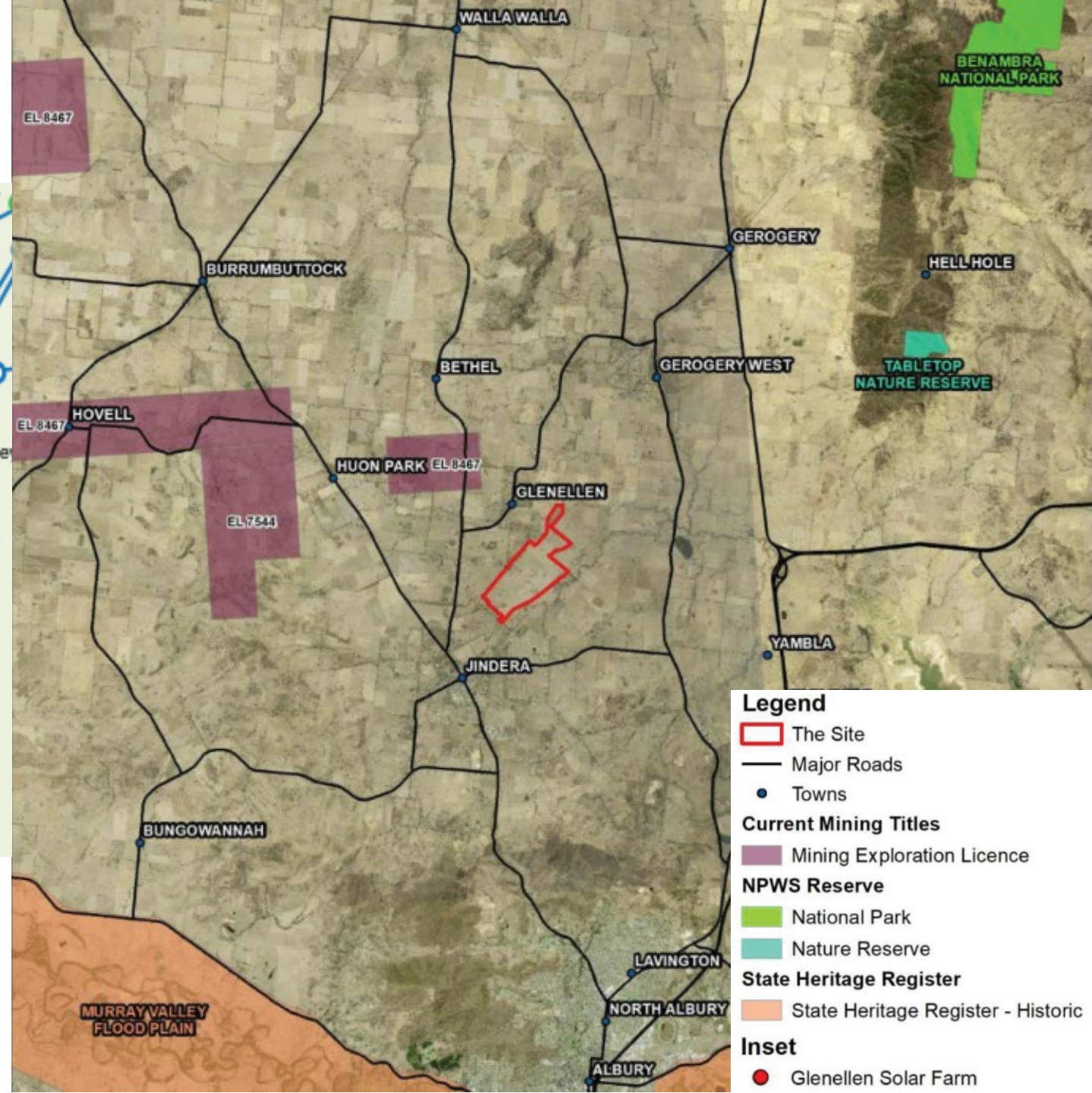


# Regional context

Transmission network map:



- 500 kV Substation
- 330 kV Substations
- 220 kV Substations
- 132 kV Substations
- Directlink
- Customer Exchange Point
- ➔ Interstate Exchange Point
- 500 kV Transmission Lines
- 330 kV Transmission Lines
- 220 kV Transmission Lines
- 132 kV Transmission Lines



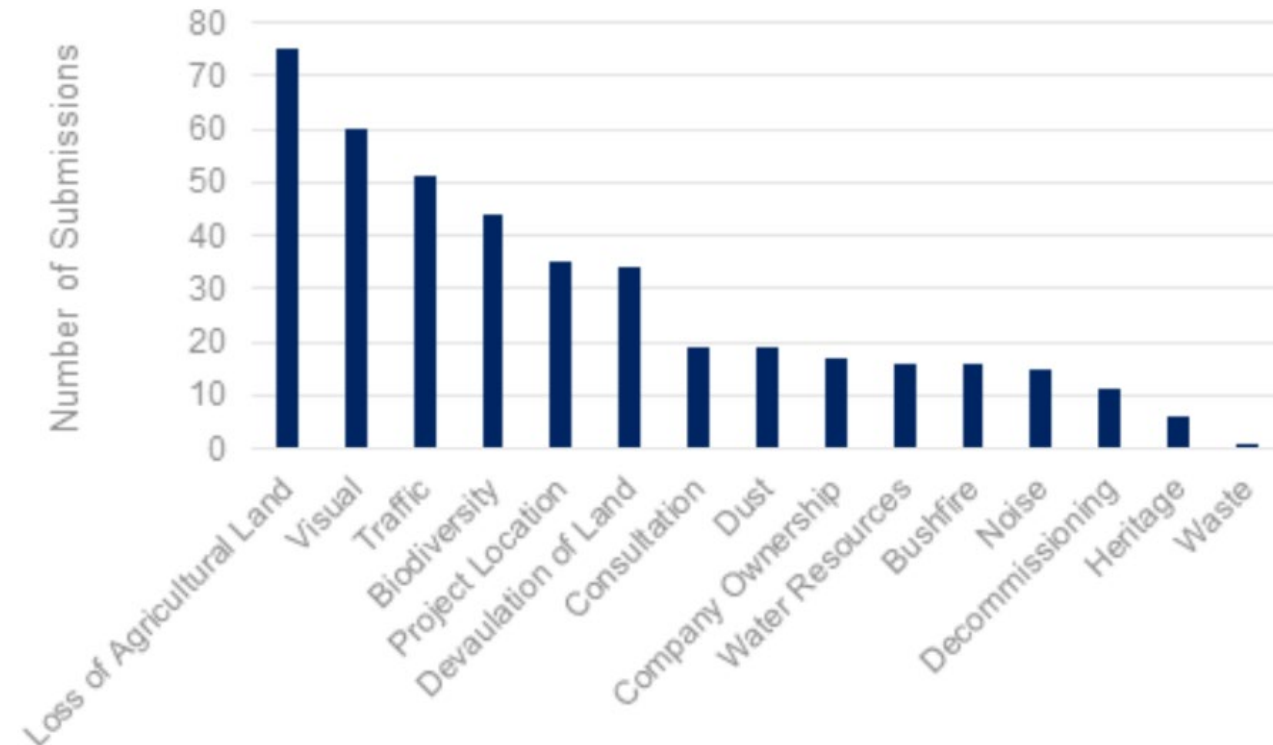
- Legend**
- The Site
  - Major Roads
  - Towns
  - Current Mining Titles**
  - Mining Exploration Licence
  - NPWS Reserve**
  - National Park
  - Nature Reserve
  - State Heritage Register**
  - State Heritage Register - Historic
  - Inset**
  - Glenellen Solar Farm

# Community engagement

- Public Exhibition – 31 October to 30 November 2020
  - 107 public submissions:
    - 79 objections from individuals (including one petition signed by 67 individuals)
    - 27 supporting submissions
    - 1 comment from an individual
  - Advice from 12 government agencies
  - Greater Hume Council – consultation
- Community information session in 2019.
- Site visit on 20 May 2022
- Consultation with Landowners

# Public Submissions

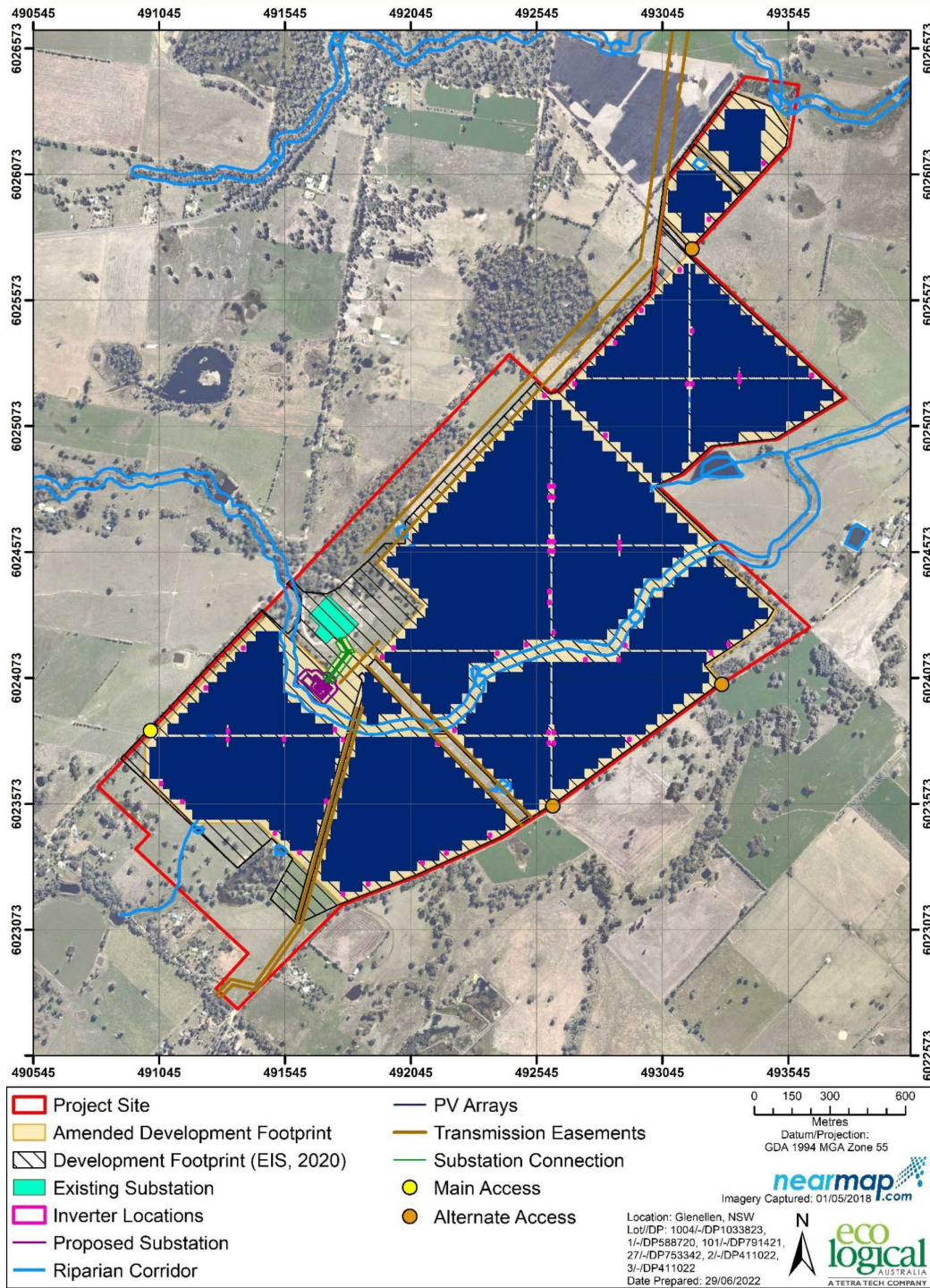
- Supporting submissions cited transition to renewable energy sources and increased employment and economic benefits.
- Public objections cited:
  - land use compatibility;
  - visual amenity;
  - traffic;
  - biodiversity;
  - project location; and
  - devaluation of land.





# Project amendments

- Key amendments to project design included:
  - a revised heavy vehicle haulage route;
  - 2.7 ha reduction in impact on native vegetation;
  - recontouring of an inundation area in the south-east of the site;
  - reduced visual impacts through:
    - relocation of the substation expansion;
    - removal of more than 22,000 solar panels;
    - increased spacing between panels from 6 m to 9 m;
    - reduction in height of fencing and meteorological station;
    - increased setbacks from Lindner, Ortlipp and Drumwood Roads; and
    - increased vegetation screening.



# Key Issues

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- Energy transition
- Land use compatibility (including impacts on agricultural land)
- Traffic
- Visual amenity



# Energy Transition

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- 200 MW generating capacity that would power about 76,400 homes
- Consistent with the NSW Climate Change Policy Framework of net zero emissions by 2050
- Project is within an area with direct access to the transmissions network and with available capacity and solar resources
- Project would play an important role in :
  - Increasing renewable energy generation and capacity; and
  - Contributing to the transition to a cleaner energy system as coal fired generators retire.

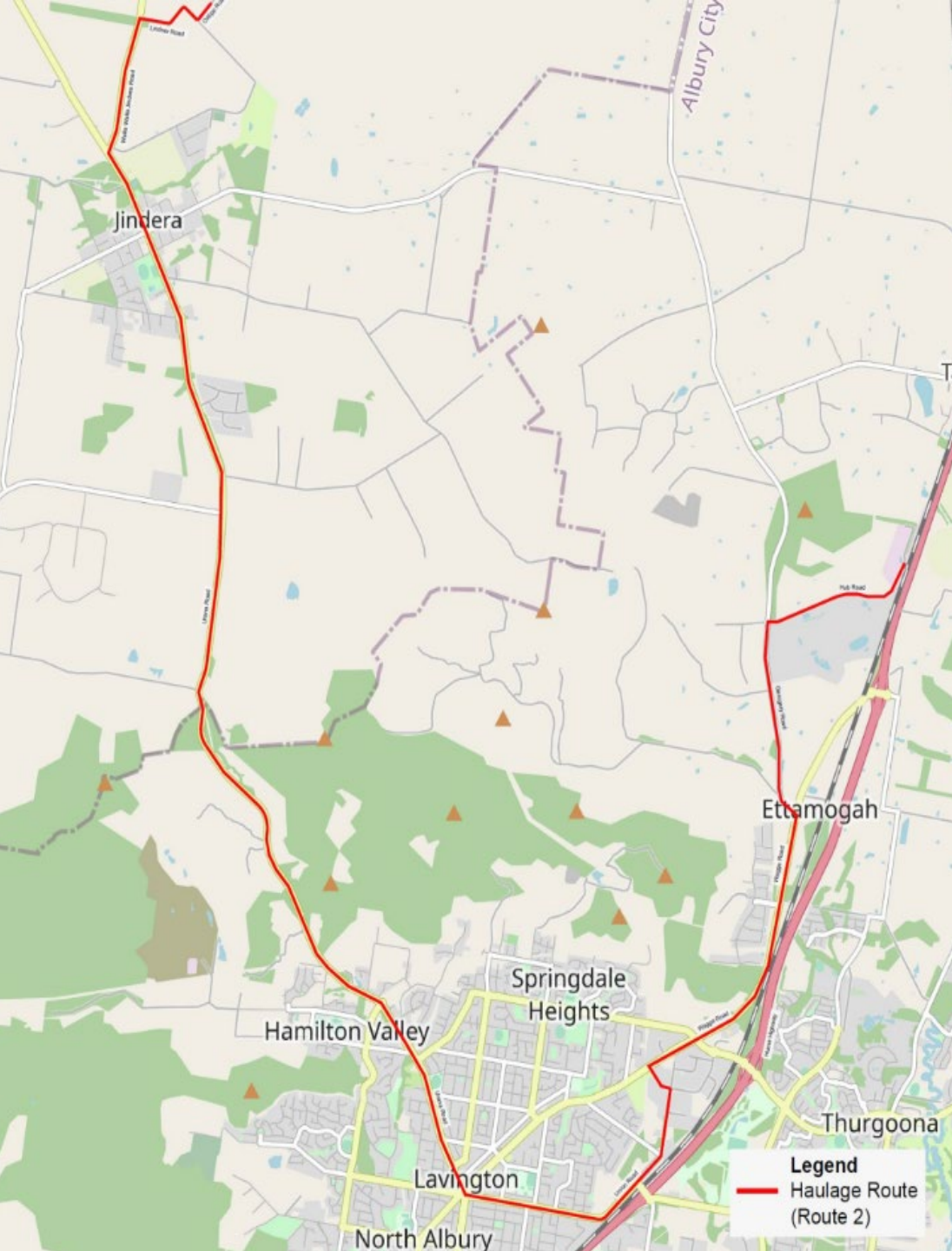
# Land Use Compatibility

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- A key concern raised in submissions.
- Project is permissible on the site under the *State Environmental Planning Policy (Infrastructure) 2007*.
- Project is consistent with the *Greater Hume Local Strategic Planning Statement 2018*.
- Project is consistent with the Department's *Riverina Murray Regional Plan 2041*.
- Site is not identified as a future growth area by Council.
- Development footprint is entirely Class 4 land with moderate to severe limitations.
- The combined area of projects within the Riverina Murray region represents 0.09% of the 9.1 million ha of land currently used for agriculture.
- Agricultural capability of the land would be returned following decommissioning.

# Traffic and transport

- Council originally objected given the proposed use of Glenellen Road.
- Road haulage route was amended to avoid the use of Glenellen Road and Council withdrew its objection
- Two road haulage routes were assessed:
  1. From Port of Newcastle – Hume Highway, Thurgoona Drive, Union Road, Urana Road, Walla Walla Jindera Road, Lindner Road, and Ortlipp Road.
  2. From a port in Melbourne – railed to the Ettamogah Rail Hub then transported to site via Hub Road, Gerogery Road, Wagga Road, Catherine Crescent, Union Road, Urana Road, Walla Walla Jindera Road, Lindner Road, and Ortlipp Road.





# Traffic and transport - road upgrades



PROJECT  
**GLENELLEN SOLAR FARM**  
 DEVELOPER  
**TRINA SOLAR**

NOTES  
 UPGRADE THE INTERSECTION OF URANAROAD / WALLA WALLA JINDERA ROAD; WALLA WALLA JINDERA ROAD / LINDNER ROAD; LINDNERROAD / ORTLIPP ROAD  
 WIDEN LINDNER ROAD & ORLIPP ROAD

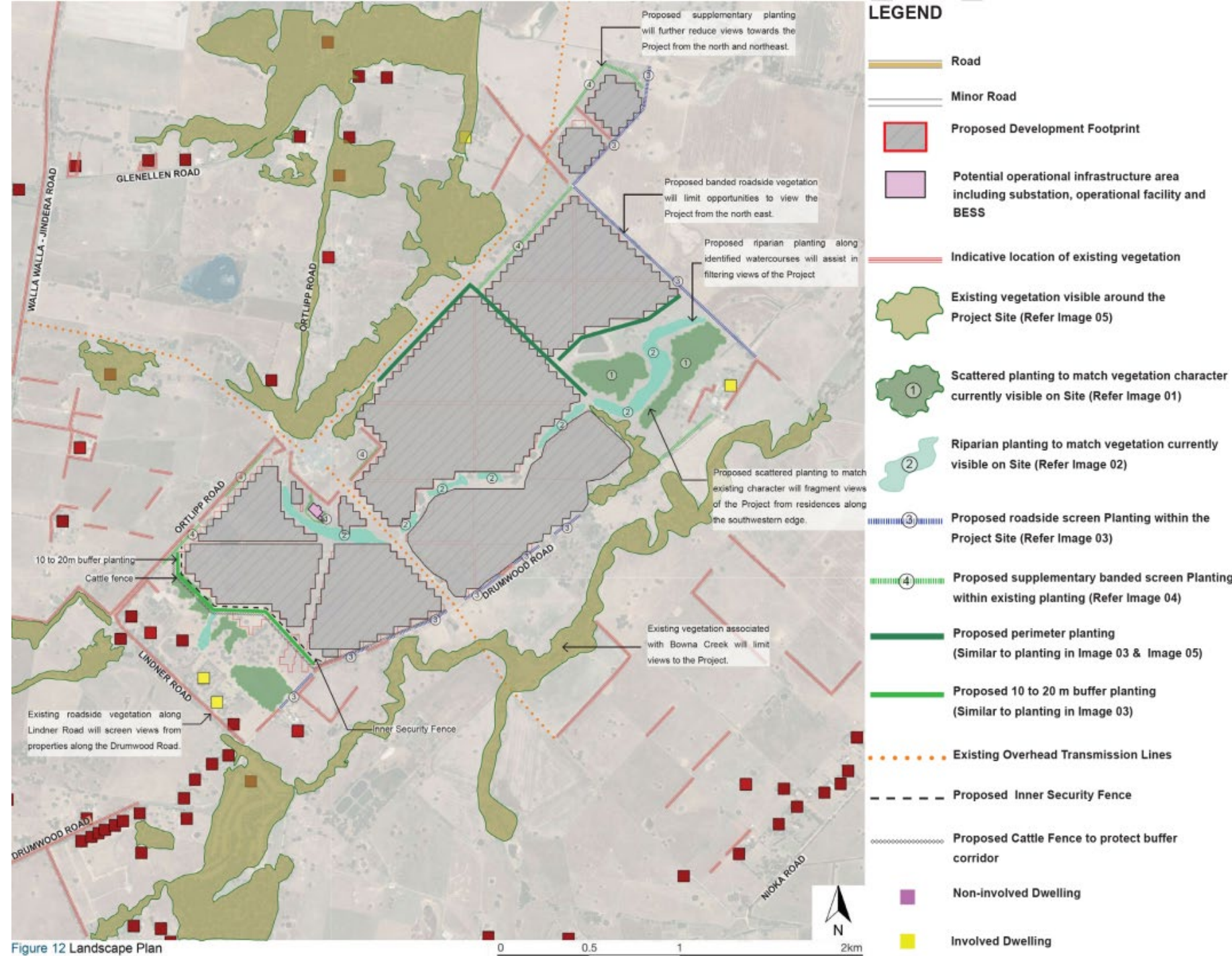
CHECK  
 DESIGNER JOSE FLORES  
 DRAFTER JOSE FLORES  
 PROJECT MANAGER JOSE FLORES

TITLE  
**ROAD UPGRADES**  
 DRAWING NUMBER: GL-SF-GN-RU-002  
 REVISION: 1.1  
 PAGE: 1/1



# Visual impacts

- All residences would experience nil to low impacts.
- This would be further reduced by on-site vegetation screening.
- Additional vegetation screening at individual properties would also be considered.
- The Applicant would continue to offer neighbour agreements following determination.



# Biodiversity and Heritage

## Biodiversity

- 8.7 ha of native vegetation clearance.
- Habitat for three threatened species impacted:
  - Southern Myotis – 1 ha;
  - Austral Pillwort – 1 ha; and
  - Squirrel Glider – 0.05 ha.
- 175 ecosystem credits and 38 species credits would be retired.

## Heritage

- 3 stone artefact of low significance would be salvaged.
- No sites or items of historic heritage within the development footprint.



# Cumulative impacts

- Jindera Solar Farm
  - Generation capacity: 120 MW
- Walla Walla Solar Farm
  - Generation capacity: 300 MW
- Culcairn Solar Farm
  - Generation capacity: 350 MW
- Key cumulative impacts considered:
  - loss of agricultural land;
  - traffic; and
  - visual impacts



Local Government Area

Local Government Area

NSW/ VIC Border

Glenellen Solar Farm

Jindera Solar Farm

Walla Walla Solar Farm

Hume Battery Energy Storage System

Howlong Sand and Quarry Expansion

Wodonga Solar Farm

Culcairn Solar Farm

Corowa Solar Farm

Wangaratta Solar Farm

0 5 10 20  
Kilometres

Datum/Projection:  
GDA 1994 MGA Zone 55  
Service Layer Credits: Source:  
Esri, Maxar, GeoEye, Earthstar  
Geographics, CNES/Airbus DS,

N  
eco  
logical  
AUSTRALIA  
www.ecoaus.com.au

Prepared by: EB, KR Date: 12/06/2020

# Decommissioning and Rehabilitation

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- Operational life is likely to be 20 to 30 years.
- The *Large-Scale Solar Energy Guideline* identifies four key decommissioning and rehabilitation principles:
  1. Return land to pre-existing use
  2. Remove project infrastructure
  3. Rehabilitate and return land to its pre-existing use (including LSC Class)
  4. The owner/operator should be responsible for the decommissioning and rehabilitation
- Solar farm would be suitably decommissioned and rehabilitated at the end of the project life, or within 18 months if operations cease unexpectedly.

# Other Issues

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- Department also conducted detailed assessment of the following:
  - Noise impacts
  - Dust impacts
  - Heat island effect
  - Water and erosion
  - Hazards analysis
  - Bushfire risk
  - Socio-economic impacts



- The Department has assessed the application, documents, submissions and advice, as per the requirements of the EP&A Act.
- The Department acknowledges that some members of the community remain strongly opposed to the project, and that the project would result in residual environmental and amenity impacts.
- Changes made to the project through the assessment process have significantly reduced the residual impacts of the project.
- With these changes and the implementation of the recommended conditions, the Department considers that the environmental and amenity impacts of the project can be managed to achieve acceptable outcomes.
- The project would:
  - provide significant economic and social benefits to the region
  - contribute to the transition of the NSW economy away from a reliance on fossil fuels
  - maximise the efficiency of the solar resource while minimising the potential impacts on surrounding land uses, local residents, and the environment.