

Oxley Solar Farm

Independent Planning Commission - Public Meeting

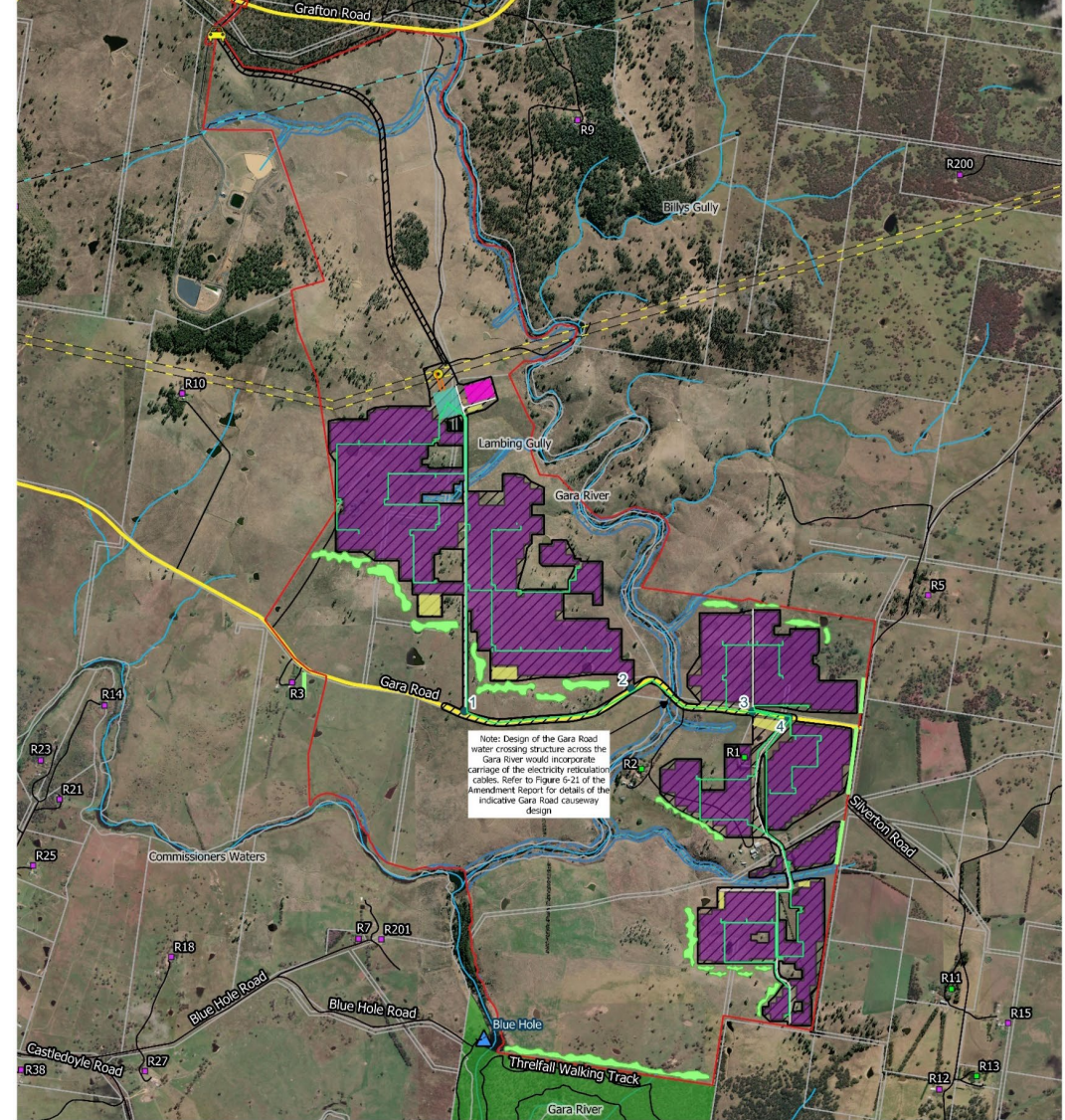
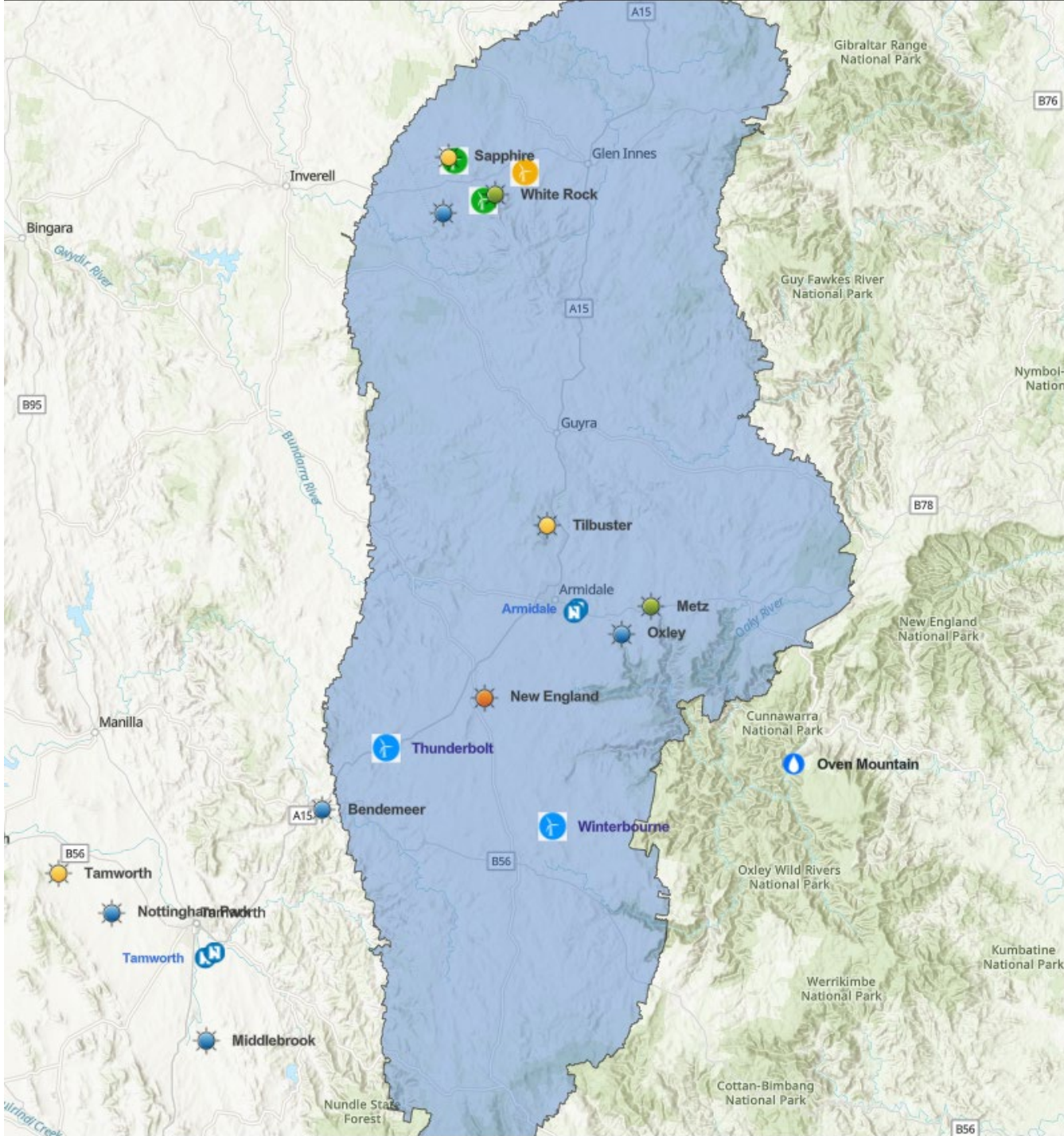
Iwan Davies
Director, Energy Assessments

17 October 2023

Assessment Process

- Environmental Planning & Assessment Act 1979
- State Significant Development
- Department of Planning, Industry & Environment
- Whole of Government Assessment
- Independent Planning Commission – Determination (> 50 Objections)





Development Footprint

Legend

- | | | |
|---------------------------|--------------------------------|---|
| Project Boundary | Array area | BATTERY STORAGE |
| Development Footprint | CONTROL ROOM | PV-PCU |
| Roads | Shed | Site road |
| Key roads | Laydown areas | Solar array |
| National Park | Substation | Internal electricity reticulation cables (underground in trench within development footprint including Gara Road) |
| Travelling Stock Reserves | Waterway buffers | Transmission line electrical connection (overhead) |
| Blue Hole Picnic Area | Waterway >1st order (strahler) | |

Electricity transmission lines

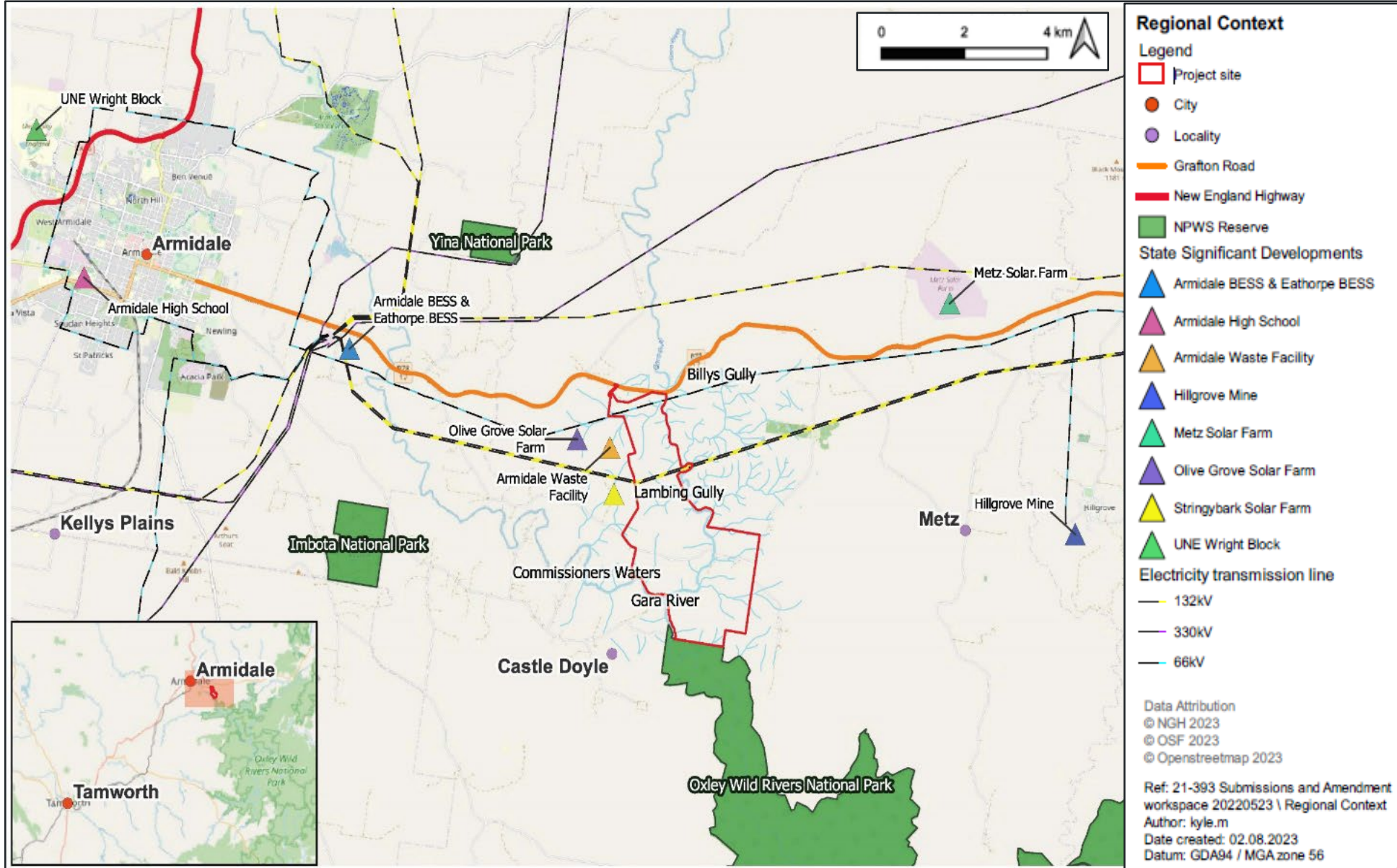
- 132kV
- 66kV
- Associated residences
- Non-associated residences
- Vegetation screening
- Site access
- Gara Road access points
- Waterway buffers
- Waterway >1st order (strahler)

Data Attribution
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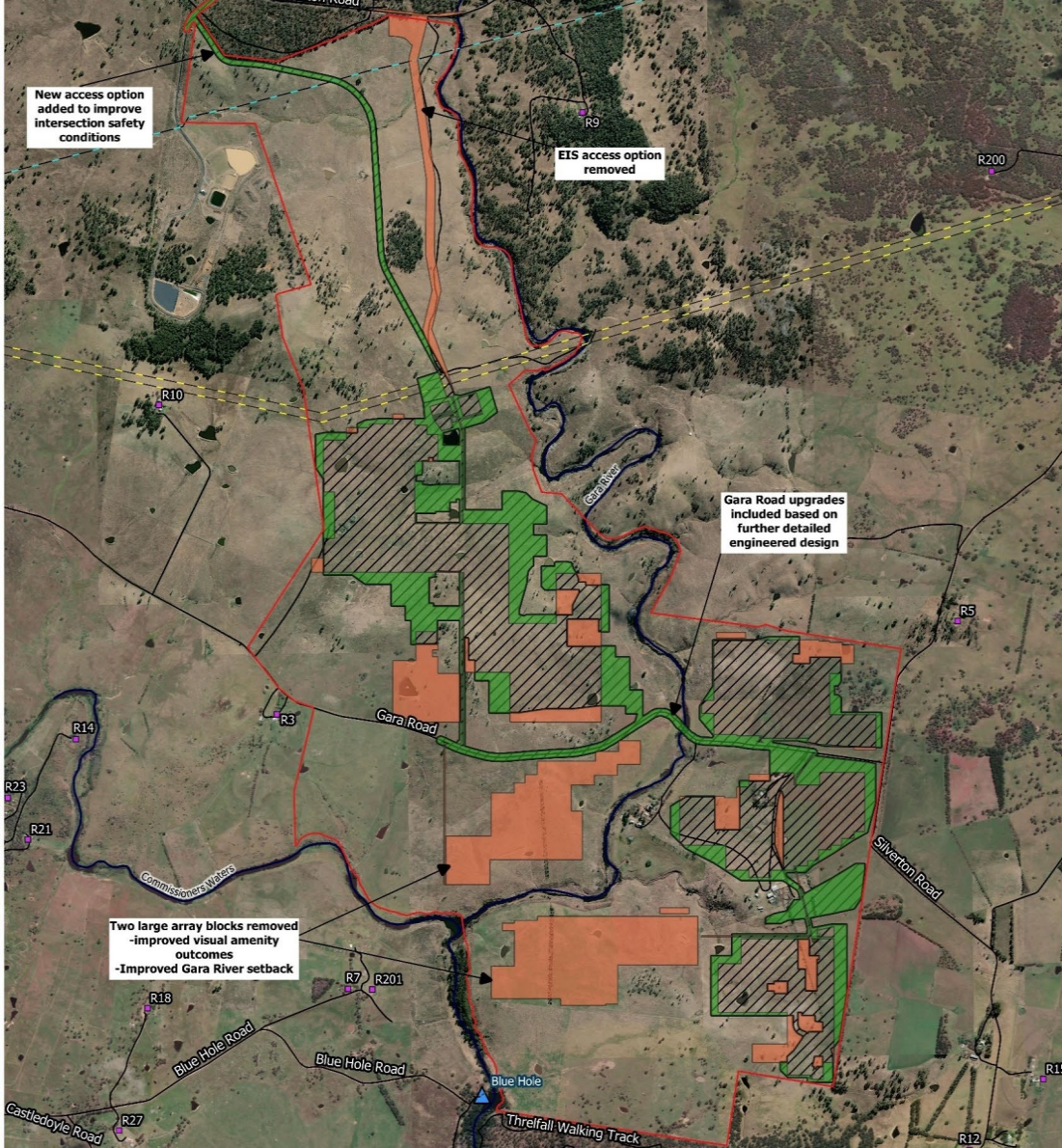
Ref: 21-393 Submissions and Amendment workspace
 20220523 \ Development Footprint
 Author: kyle.m
 Date created: 18.09.2023
 Datum: GDA94 / MGA zone 56



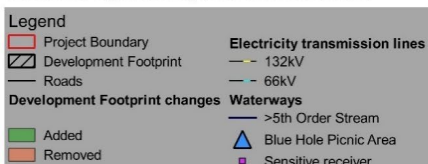
Regional Context



Project amendments



Development Footprint changes from EIS (EIS indicative layout compared to Amendment)



0 500 1,000 m

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 Author: kyle.m

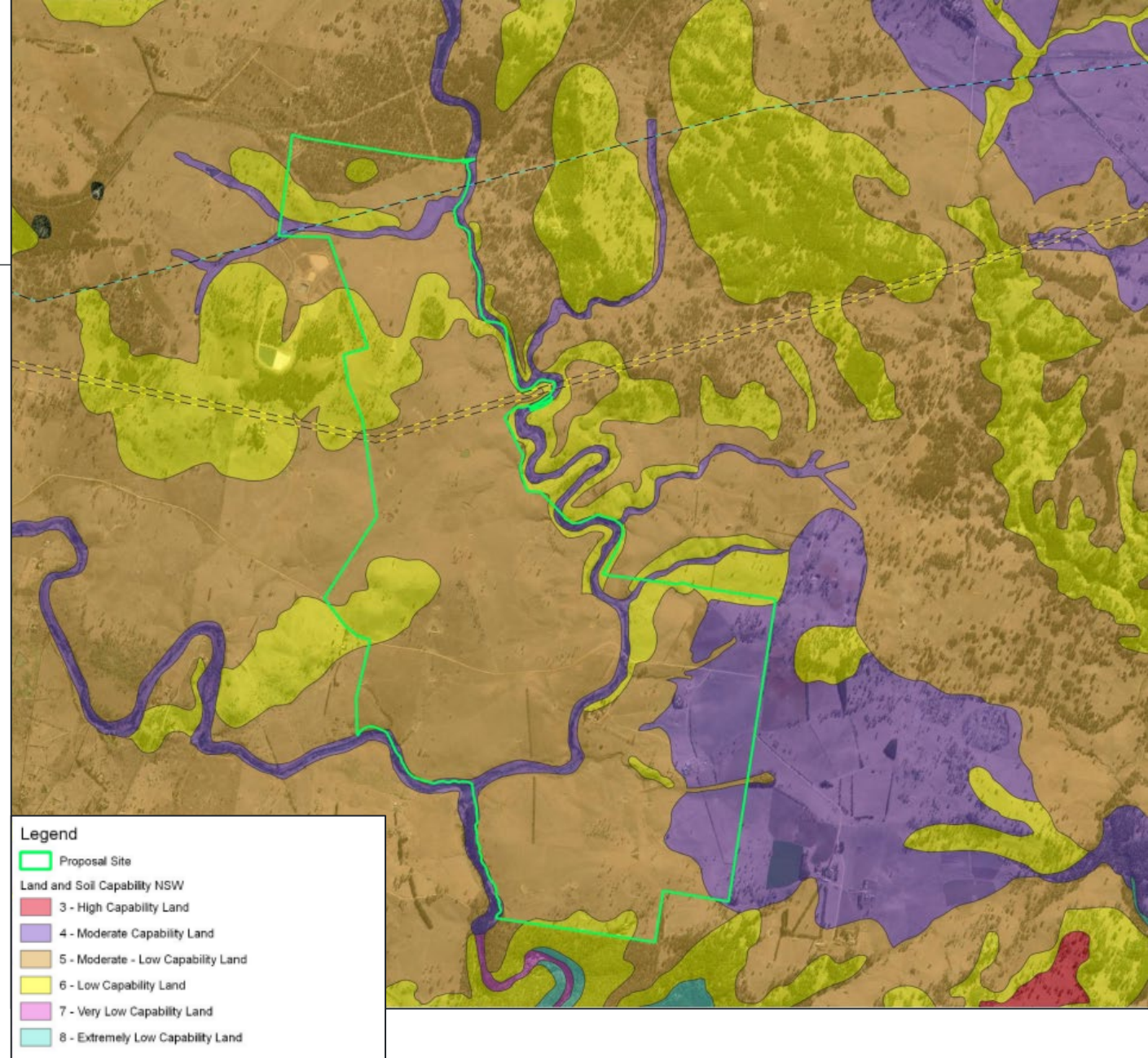
- Development footprint reduced by 627 ha (from 895 ha to 268 ha);
- Setbacks from residences and National Park:
 - R3 - additional 181 m setback, from 597 m to 778 m;
 - R5 – additional 69 m setback, from 684 m to 615 m;
 - R201 – additional 845 m setback, from 739 m to 1,584 m;
 - Blue Hole Picnic Area: additional 810 m setback, from 475 m to 1,285 m
 - Threlfall Walking Track: additional 498 m setback, from 667 m to 1,165 m
- Biodiversity:
 - avoidance of 451.43 ha (83%) of the 544.21 ha of native vegetation on site;
 - reduction of Box Gum Woodland impact zones from 6.67 ha to 2.6 ha;
- Revised site access point from Armidale Regional Landfill access road via Waterfall Way
- Revised upgrades, including Gara Road / Gara River Causeway

Energy Transition

- 215 MW generating capacity that would power about 80,000 homes
- Project would play an important role in the New England REZ:
 - Increasing renewable energy generation and capacity of the NEM;
 - Firming the grid by including 50 MW / 50 MWh energy storage; and
 - Contributing to the transition to a cleaner energy system as coal fired generators retire.
- 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

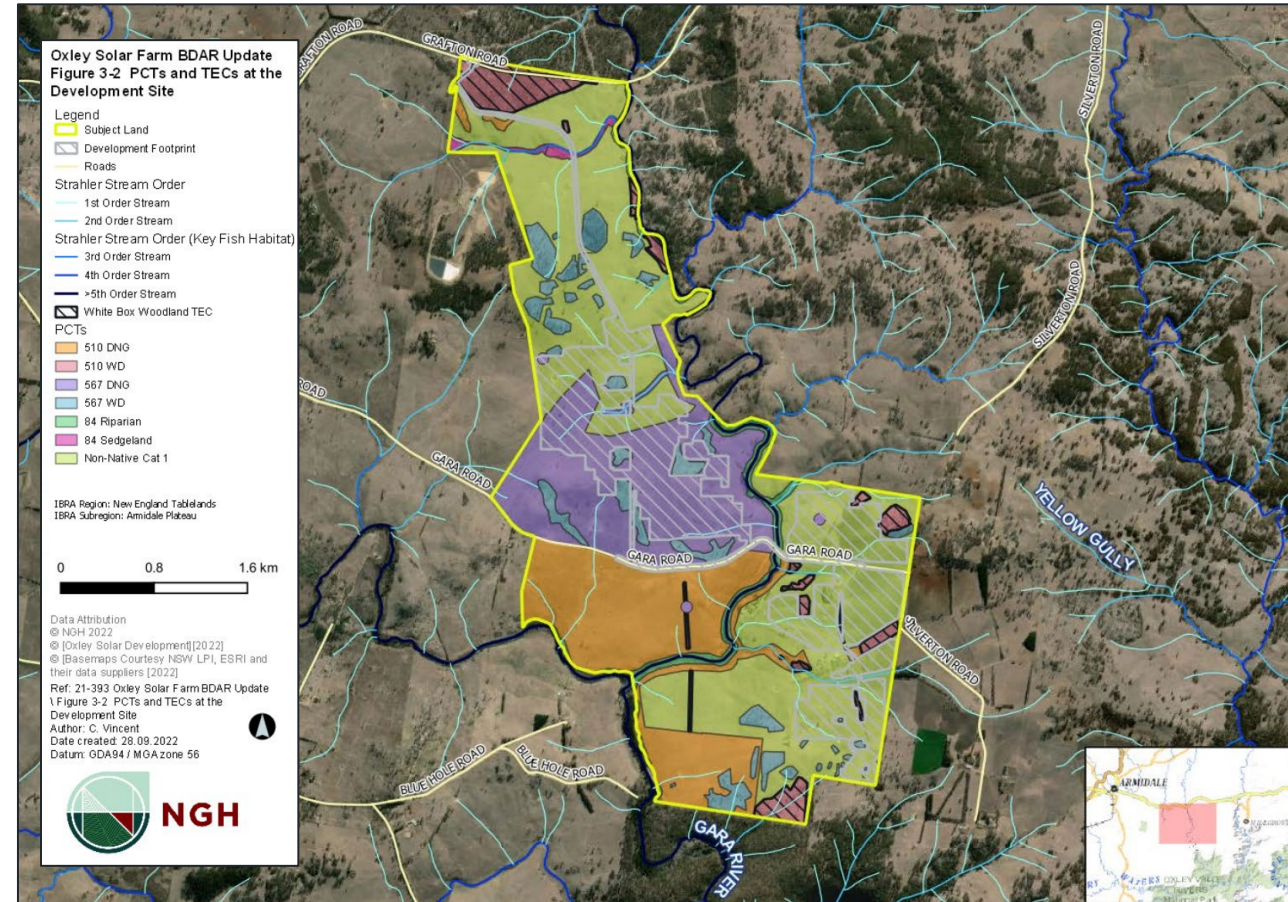
Land Use Compatibility

- Most common issues raised in submissions
- Land is zoned RU1 under Armidale LEP
- Site is predominately used for grazing with limited cropping occurring
- Sheep grazing may be enabled within the project site whilst the solar farm is operational
- Development footprint is 30% Class 4, 67% Class 5 and 3% Class 6 under Land and Soil Capability Mapping for NSW
- Manage and restore land capability for agriculture following decommissioning
- The combined area of projects in the area is 5,302 ha, which represents 0.07% of the 7.9 million ha of land currently used for agriculture within the New England North West region



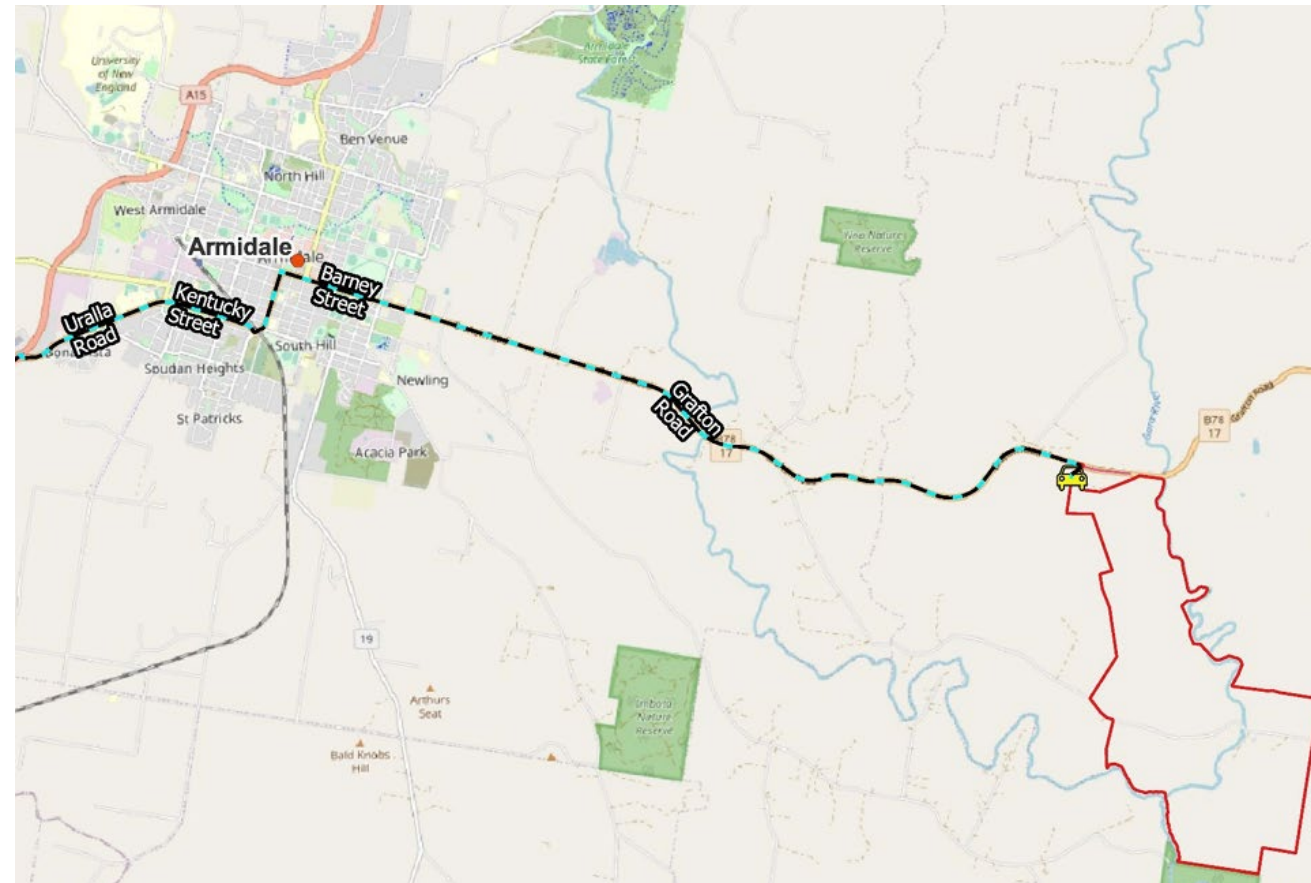
Biodiversity

- Site is comprised mostly of paddocks that have been cleared for agricultural purposes
- Much of the site (65 %) is considered Category 1 exempt land in accordance with the *Local Land Services Act 2013*
- Project was amended to reduce impacts and avoid higher quality areas of native vegetation
- Increased setback from Gara River to avoid impacts on better condition native vegetation within the riparian corridor
- Disturbance requires 1,459 ecosystem credits and 1,978 species credits to be retired on accordance with the NSW Biodiversity Offset Scheme.



Traffic and transport

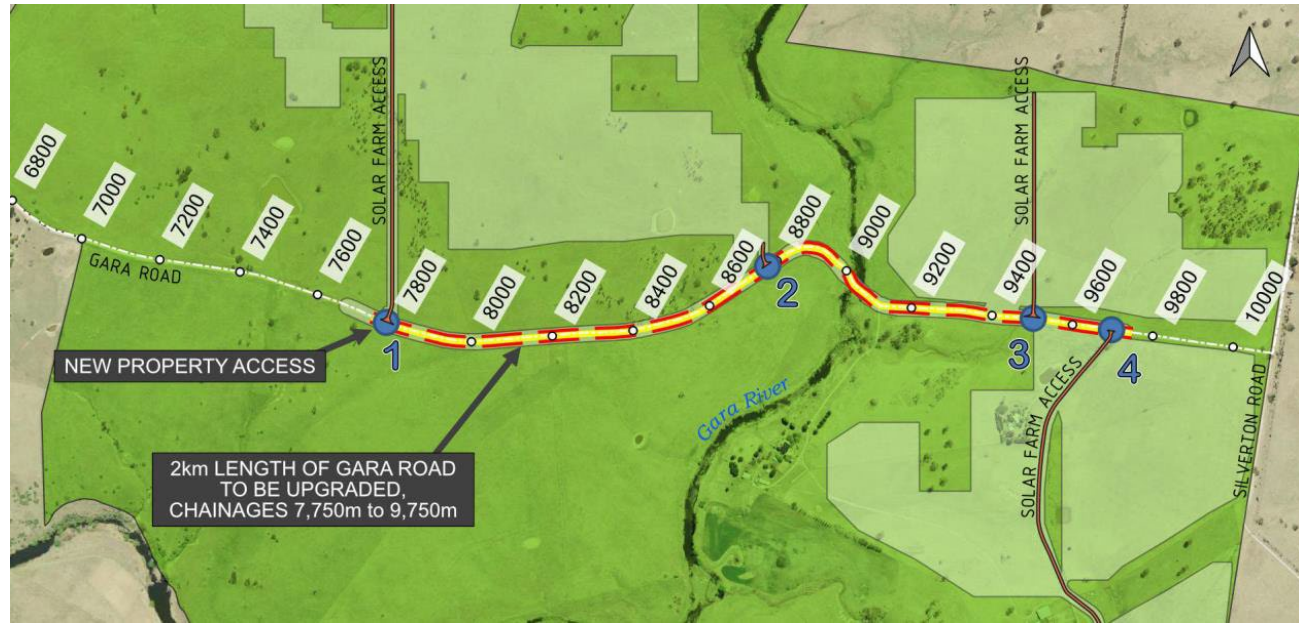
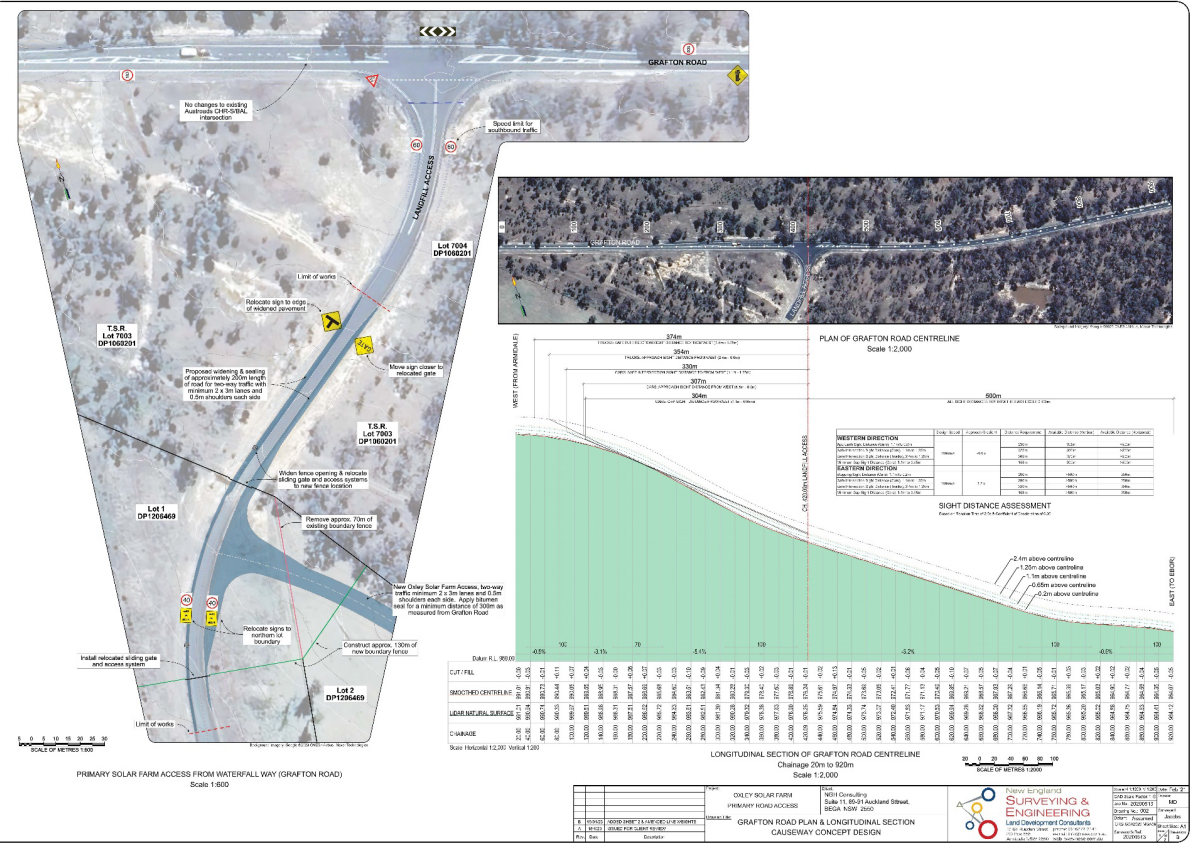
- Transport route: Port of Newcastle or Sydney via the New England Highway, Uralla Road, Kentucky Street, Dangar Street, Barney Street, Waterfall Way and Armidale Regional landfill facility (ARL) access road
- Vehicle movements during construction, up to:
 - 46 heavy vehicle movements per day (during 9-month peak)
 - five heavy vehicles requiring escort movements during construction, upgrading or decommissioning
- Operation: 5 light vehicle movements and up to 2 heavy vehicle movements per day with most occurring early in the morning and late in the afternoon
- Road Upgrades required prior to commencing:
 - widening a 200 m section of the landfill access road
 - Constructing the primary site access point off the landfill access road
 - upgrading a 2km section of Gara Road
 - constructing four secondary access points on Gara Road
 - upgrade of the Gara Road River Causeway
- No use of local roads surrounding the site, other than a 2 km section of Gara Road in the centre of the site.



Road upgrades

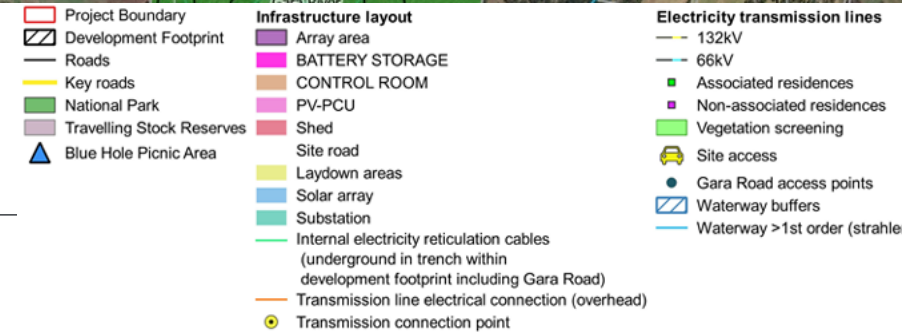
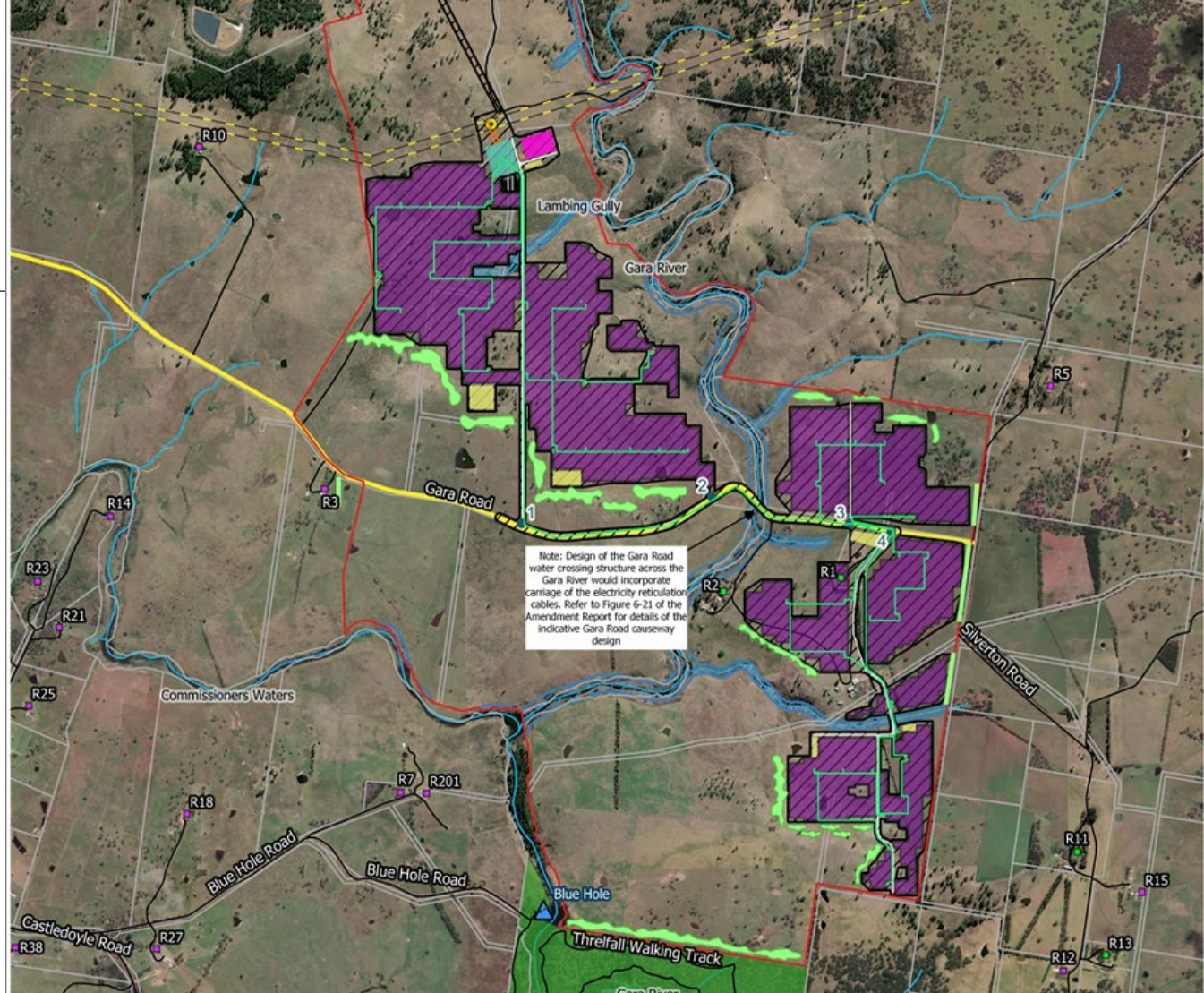
Landfill access road upgrade and primary site access point

Gara Road upgrade and secondary site access points



Visual and Noise Impacts

- 11 non-associated residence within 2km of the development footprint
- Project amended to set back infrastructure from R3, R5, R7, R201 and nearby roads.
- Five residences would have no views of the project
- Six would experience low or very low visual impacts
- Landscape plantings would further reduce views of the project
- OSD will consult with these landowners to implement vegetation planting to further reduce residual impacts.
- Potential for glare to be experienced at 9 residences. Existing and proposed vegetation would reduce potential glare.
- Construction noise would be well below the 'highly affected' noise criterion in the *Interim Construction Noise Guideline* and would not exceed the noise management level.
- Operational noise would be below the lowest intrusive noise criteria in the *NSW Noise Policy for Industry*.



Project benefits

- Up to 300 construction jobs
 - Up to 5 operational jobs
 - Around \$370 million in capital investment
 - Contributions to Council of:
 - a lump sum payment of \$2,790,000 on commencement of construction;
 - an annual payment of \$139,500 for 20 years from commencement of construction;
 - an agreement to assist Council with purchasing solar panels and steel components at OSD's corporate rates;
 - annual sponsorship of Project Zero30 of \$20,000 for 10 years from commencement of construction; and
 - the provision of four electric vehicle charging stations at agreed locations no later than commencement of operation.
 - Generate renewable energy to power about 80,000 homes
 - Save over 455,600 tonnes of greenhouse gas emissions per year
 - Consistent with NSW and Commonwealth policies
-

Decommissioning and Rehabilitation

- Operational life is likely to be 20 to 30 years, with potential to operate longer if panels are upgraded over time, as permitted under the recommended conditions of consent.
- 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
- With the implementation of objective-based conditions and monitoring requirements, the Department considers that the solar farm would be suitably decommissioned at the end of the project life, or within 18 months if operations cease unexpectedly, and that the site be appropriately rehabilitated.

- 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.