Bonshaw Solar Farm

State Significant Development

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Executive Summary

GAIA Australia Pty Ltd (GAIA) proposes to develop a new 200 megawatt (MW) solar farm with up to 300 MW of battery storage approximately 16 kilometres (km) south of Bonshaw and 66 km north of Inverell, in the Inverell Local Government Area (LGA).

The project site is located in close proximity to Bruxner Highway in a rural area in the New England North West region (south of the Queensland border), with the nearest non-associated residence located about 700 m away from the proposed development footprint. The proposed site has direct access to the electricity network via the TransGrid Dumaresq 330 kilovolt (kV) Substation.

The project is classified as State significant development under the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it is development for the purpose of electricity generating works with a capital investment value of more than $30 million. The Independent Planning Commission (the Commission) is the consent authority for the development as GAIA has disclosed a reportable political donation.

Engagement

The Department exhibited the Environmental Impact Statement for the project and received 2 submissions (including 1 objection). Advice was provided by 13 government agencies including Inverell Shire Council (Council). The Department also consulted with relevant government agencies throughout the assessment.

Council supports the project and none of the agencies object to the project, subject to the implementation of appropriate mitigation and management measures.

In response to agency advice and submissions on the project, GAIA amended the project by removing areas of infrastructure to avoid impacts on biodiversity and Aboriginal cultural heritage values identified on the site. The project was also amended to revise the proposed transport routes, relocate the site access point and include a short transmission connection to the Dumaresq substation.

The project amendments have led to better outcomes by avoiding vegetation communities and heritage items and improving road safety by consolidating access to the site with the existing Dumaresq substation access road.

Assessment

The Department has undertaken a comprehensive assessment of the merits of the project and considered all potential issues in accordance with the requirements of the *Environmental Planning and Assessment Act 1979*. The key assessment issues identified for the project are land use compatibility, biodiversity, visual, and traffic and transport.

The project site current land use is grazing, and the proposed development footprint includes soils that are classified as Class 3, 5 and 7 under the *Land and Soil Capability Mapping in NSW* (OEH, 2017). The development footprint (149.24 hectares) includes 54.4 ha (36.5 %) of mapped Biophysical Strategic Agricultural Land (BSAL) that is also Class 3 land. In addition, the Department notes that the

development footprint occupies approximately 40 % of the site, allowing agricultural practices on the remaining 60 % (approximately 218 ha) of the site.

The Department considers that the project would not significantly reduce the overall agricultural productivity of the region and is satisfied that the site could be returned to agricultural uses in the future. The Department also notes that GAIA intends to continue grazing concurrently with the operation of the solar farm.

The project has been designed and refined to avoid and minimise biodiversity impacts, however it would result in clearing of 29.17 ha of native woodland and 11.8 ha of derived native grassland, which would be offset in accordance with the *Biodiversity Conservation Act 2016*. The layout of the solar farm has also been designed to entirely avoid impacts on Aboriginal heritage.

Importantly, neither BCD or Heritage NSW raised any concerns about the impacts of the project on biodiversity and heritage values subject to the implementation of appropriate design, construction and operational measures.

The Department recognises that the introduction of the project would represent a change to the local rural landscape, but considers that the visual impacts would not be significant with the proposed mitigation measures including retaining existing vegetation along fence lines and road reserves and planting a landscaping buffer along the northern and north-western boundary, and to the east of the TransGrid Dumaresq substation access road.

There are five non-associated residences located within 2 km of the site with the closest residence about 700 m north of the development footprint (R06). The solar arrays are relatively low-lying structures and the proposed vegetation buffers, once established, would assist to reduce potential impacts on the landscape from nearby residences and public vantage points. GAIA confirmed the solar panels would be mounted on single-axis tracking system, to avoid potential glare impacts on Bruxner Highway that might result from fixed angle solar panels. Further, neither Council nor TfNSW raised any concerns about visual impacts from the project.

Construction impacts would be relatively short-term, minor in nature and can be managed in accordance with Government policy. The site access routes have been designed to satisfy the relevant road safety standards and the requirements of Council and TfNSW. The Department has recommended conditions requiring a comprehensive Traffic Management Plan.

Given the distance of the project from other proposed projects in the region, with the closest solar farm (Dumaresq Solar Farm with the application yet to be submitted) located about 20 km from the site, there would be minimal localised cumulative impacts, including in regard to potential visual, noise and traffic impacts.

To address the residual impacts of the project, the Department has recommended a range of detailed conditions, developed in conjunction with agencies and Council, to ensure these impacts are effectively minimised, managed or offset.

Evaluation

Overall, the Department considers the site to be appropriate for the project as it has good solar resources and available capacity on the existing electricity network and is consistent with the Department's *Large-Scale Solar Energy Guideline*.

The project is consistent with the Commonwealth's *Renewable Energy Target* and NSW's *Climate Change Policy Framework* and the *Net Zero Plan Stage 1: 2020 – 2030*, as it would contribute 200 MW of renewable energy to the National Electricity Market, including a battery storage facility with up to 300 MW of capacity. Importantly, the battery would enable the project to store solar energy for dispatch to the grid outside of daylight hours and / or during periods of peak demand, which has the potential to contribute to increased grid stability and energy security.

The project would also provide flow-on benefits to the local community, including up to 180 construction jobs and a capital investment of about $237 million.

The Department considers that the project would result in benefits to the State of NSW and the local community and is therefore in the public interest.

Contents

1 Project

1.1.1 GAIA Australia Pty Ltd (GAIA) proposes to develop a new State significant development solar farm approximately 16 kilometres (km) south of Bonshaw, in the Inverell Shire (see Figure 1).

1.1.2 The project involves the construction of a new solar farm with a generating capacity of approximately 200 megawatts (MW) with up to 300 MW / 300 MW hour (MWh) of battery storage. It also involves the upgrading and decommissioning of infrastructure and equipment in the future. While the capacity of the project may increase over time as technology improves, the footprint of the development would not increase without further planning approval.

1.1.3 The solar farm would connect by an overhead transmission line to TransGrid's existing Dumaresq 330 kilovolt (kV) substation located approximately 150 metres (m) from the western portion of the project site.

1.1.4 The key components of the project are summarised in **Table 1**, illustrated in **Figure 2**, and described in the Environmental Impact Statement (EIS) (see **Appendix B**), Submissions Report (see **Appendix D**) and Amendment Report (see **Appendix F**).

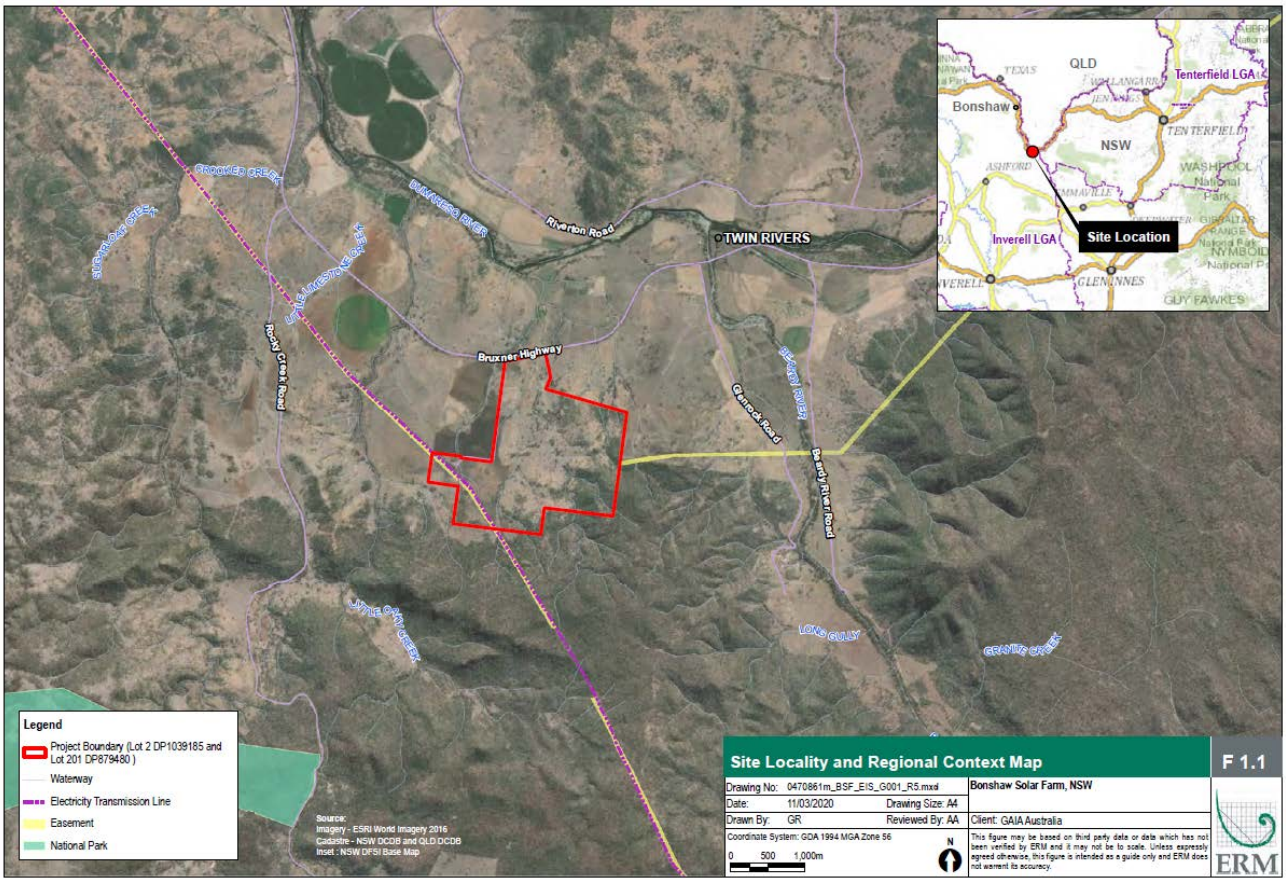

Figure 1 | Regional Context

Figure 2 | Project site

Table 1 | Main Components of the Project

Aspect	Description
Project summary	The project includes: • a generating capacity of approximately 200 MW; • approximately 580,000 solar panels mounted on single-axis tracking system (up to 4.2 m high); • an on-site substation and a new 150 m overhead connection to TransGrid's 330 kV Dumaresq Substation west of the site • a lithium-ion Battery Energy Storage System (BESS) with up to 300 MW / 300 MWh) capacity located at the ancillary infrastructure area, near the existing TransGrid substation; and • internal access tracks, staff amenities, control buildings (up to 5 m high), maintenance shed, offices, laydown areas, car park, creek crossings, vegetation screening and security fencing.
Project area	• Site: 368 ha • Development footprint: 149.24 ha
Access routes	The proposed haulage routes are: • from Port of Brisbane (north) via Cunningham Highway (QLD), New England Highway, Sunnyside Platform Road and Bruxner Highway; and • from Port of Newcastle (south) via New England Highway and Bruxner Highway. The return route is through Ashford, Inverell and Glen Innes, and includes Bonshaw Road, Ashford Road and Gwydir Highway.

Site entry and road upgrades	• All vehicles would access the site via an existing entry point off Bruxner Highway, which is currently used to access the Dumaresq Substation. • The site entry upgrades are an Auxiliary Left Turn (AUL(S)) and Basic Auxiliary Right (BAR) treatments. There are no other proposed road upgrades.
Construction	• The construction period would be approximately 12 months. • Construction hours would be limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm.
Operation	The expected operational life of the infrastructure is approximately 30 years. However, the project may involve infrastructure upgrades that could extend the operational life.
Decommissioning and rehabilitation	The project also includes decommissioning at the end of the project life, which would involve removing all infrastructure.
Hours of operation	Daily operations and maintenance would be undertaken Monday to Friday 7 am to 6 pm, and on Saturday 8 am to 1 pm.
Employment	Up to 180 construction jobs and up to 10 operational jobs.
Capital investment value	$237.68 million

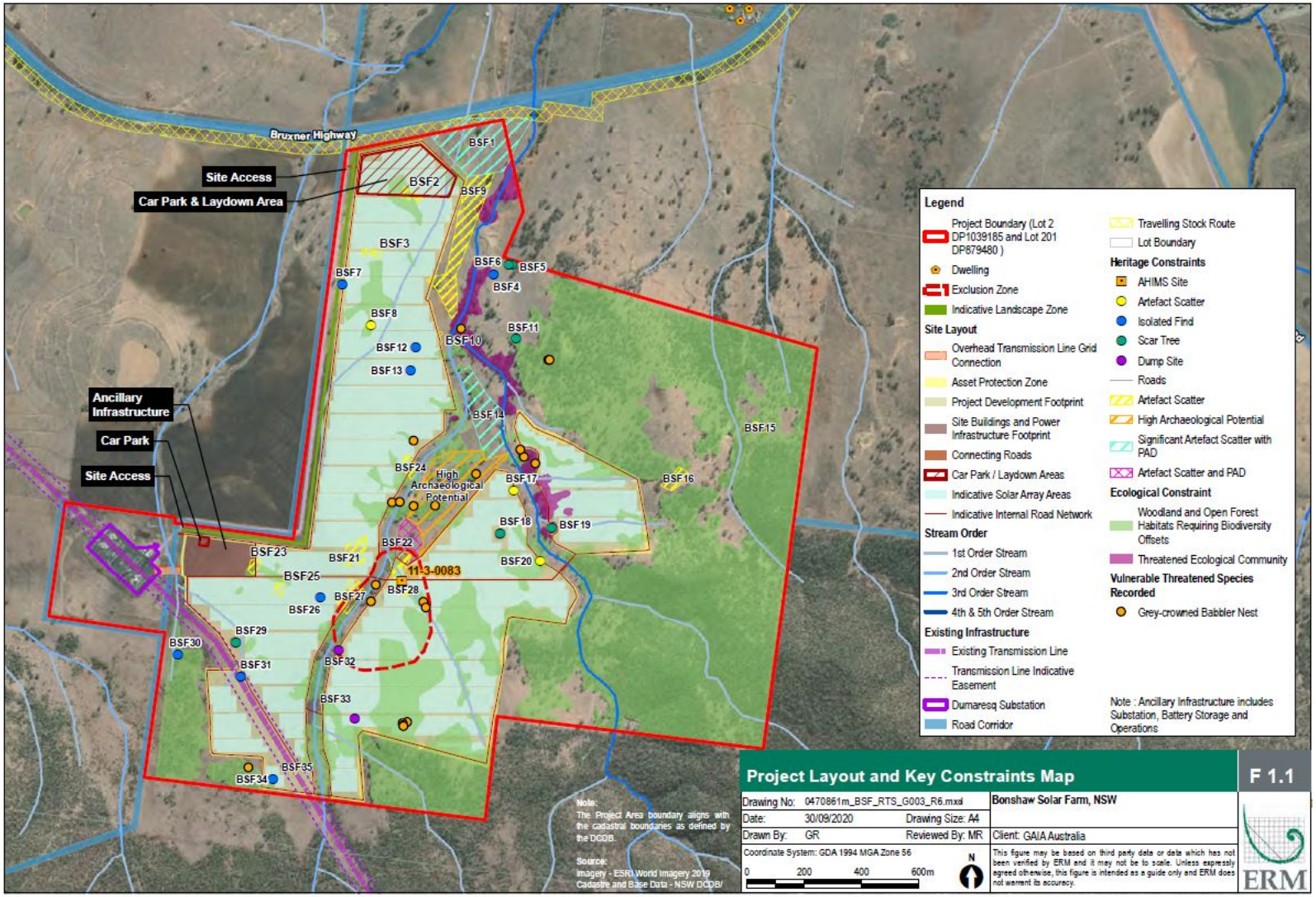

Figure 3 | Project layout

2 Strategic context

2.1 Site and Surrounds

2.1.1 The project is located on a 368 hectare (ha) site on the northern fringes of the New England North West region of NSW. The site is zoned RU1 (Primary Production) under the *Inverell Local Environmental Plan 2012* (Inverell LEP) and is used for agricultural purposes, including cropping and grazing (sheep and cattle). Land surrounding the site is also zoned RU1 and is used for agricultural purposes (cropping and livestock grazing).

2.1.2 The proposed development footprint is 149.24 ha and was designed to avoid site constraints; including large areas of intact native vegetation, Threatened Ecological Communities (TEC) and Aboriginal heritage items, particularly along riparian corridors (see Figure 3).

2.1.3 Vegetation within the development footprint is predominantly disturbed grassland (107.79 ha) with areas of native woodland (29.17 ha) and derived native grasslands (11.80 ha).

2.1.4 The site is predominantly Class 5 land capability with areas of Class 3, 6 and 7. About 28 % of the total project site (and 36.5 % of the development footprint) is Class 3 and this land corresponds to mapped Biophysical Strategic Agricultural Land (BSAL). The development footprint would be located on 54.43 ha of the 86 ha of BSAL on the site.

2.1.5 The topography in the area is gently undulating and located between two low ridge lines, forming a slight bowl. The project area drains to the north to ephemeral watercourses tributaries of the Dumaresq River. The catchment area of the unnamed tributaries upstream of the project is approximately 1,245 ha.

2.1.6 There are five non-associated residences located within 2 km of the site (R02, R03, R04, R06 and R07). The closest residence is about 700 m north of the development footprint (R06).

2.1.7 The 330 kilovolt (kV) Dumaresq substation is located immediately west of the project site and the existing 330 kV transmission line transects the south west corner of the project site. The solar farm would connect to the transmission line via an overhead transmission line within a proposed 30 m wide easement.

2.2 Other Solar Farms

2.2.1 The New England North West region of NSW has attracted interest from solar developers given the presence of major transmission lines and existing electricity substations. There are two approved State significant development solar projects in the Inverell LGA, with the closest proposed solar farm located approximately 20 km to the northwest of the site (see **Table 2** and **Figure 4**).

Table 2 | Nearby solar farms

Project	Capacity (MW)	Status	Approximate distance from the project (km)
Dumaresq Solar Farm	180	Proposed	20
Sapphire Solar Farm	180	Approved	60
Sundown Solar Farm	600	Proposed	70
White Rock Solar Farm	20	Operational	70

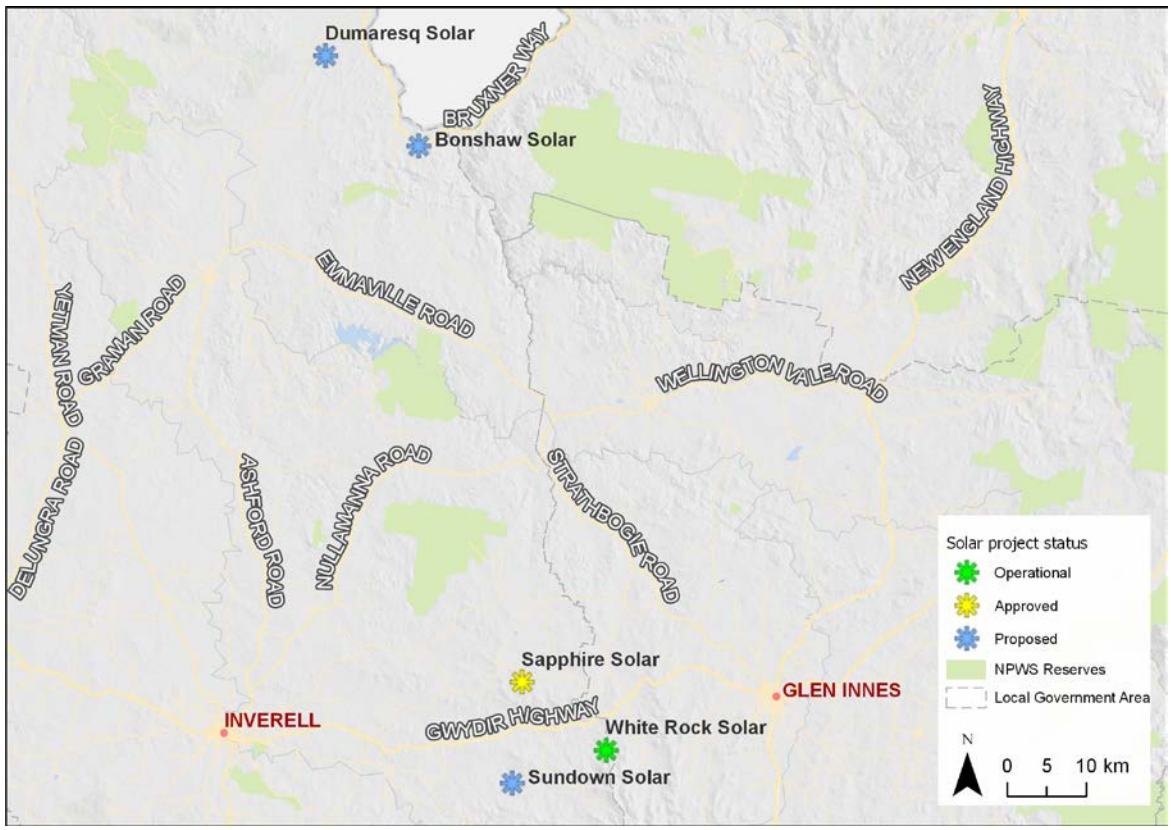

Figure 4 | Nearby solar farms

2.2.2 Potential cumulative impacts relate to loss of agricultural land, traffic, workforce accommodation and visual amenity. Dumaresq and Sundown Solar projects are at a preliminary stage with no application yet submitted to the Department, White Rock Solar is operational and Sapphire Solar is approved but not yet constructed.

2.2.3 Given the distance of the Bonshaw Solar Farm from other approved and proposed projects in the region, there would be no significant cumulative visual or noise impacts.

2.2.4 The project is proposing to use State and regional road network routes for heavy and light vehicles and these networks are expected to have sufficient capacity for these projects. The Department has recommended conditions to minimise any potential cumulative impacts with other solar farms. Potential cumulative traffic impacts from the project have been considered in **section 5.4**.

2.2.5 Workforce accommodation would be sourced from the local and wider region, including neighbouring towns and LGAs, as discussed further in **section 5.5**.

2.2.6 The broader potential cumulative impacts on agricultural land in the region are discussed further in **section 5.1**.

2.3 Energy Context

2.3.1 In 2019, NSW derived approximately 18.7 % of its energy from renewable sources. The rest was derived from fossil fuels, including 76.7 % from coal and 4.1 % from gas. However, there are currently no plans for the development of new coal power stations in NSW, and the development of renewable energy sources, like wind and solar farms, is experiencing rapid growth.

2.3.2 This is highlighted in the 2017 *Independent Review into the Future Security of the National Electricity Market* (the Finkel Review), which outlines a strategic approach to ensuring an orderly transition from traditional coal and gas fired power generation to generation with lower emissions. It notes that Australia is heading towards zero emissions in the second half of the current century.

2.3.3 The *United Nations Framework Convention on Climate Change* has adopted the Paris Agreement, which aims to limit global warming to well below 2°C, with an aspirational goal of 1.5°C. Australia's contribution towards this target is a commitment to reduce greenhouse gas emissions by 26 % to 28 % below 2005 levels by 2030.

2.3.4 The *NSW Climate Change Policy Framework*, released in November 2016, sets an aspirational objective for NSW to achieve net zero emissions by 2050. The *NSW Net Zero Plan Stage 1: 2020 – 2030*, released in March 2020, builds on the framework and sets out how the NSW Government will deliver on this objective and fast-track emissions reduction over the next decade.

2.3.5 The Department released the *Large-Scale Solar Energy Guideline* in December 2018 to provide the community, industry and regulators with guidance on the planning framework for the assessment of large-scale solar projects, and identify the key planning considerations relevant to solar energy development in NSW.

2.3.6 The Guideline aims to support the growth of the solar industry, whilst ensuring that impacts are adequately assessed, effective stakeholder engagement is undertaken, and that attracting investment is balanced with considering the interests of the community. The EIS submitted by GAIA in October 2019 and its assessment is consistent with the principles of the Guideline.

2.3.7 The Guideline also acknowledges that large scale solar projects could help to reduce reliance on fossil fuels, thereby contributing to reductions in air pollution and greenhouse gas emissions, whilst also supporting regional NSW through job creation and investment in communities that may not have similar opportunities from other industries.

2.3.8 NSW is one of the nation's leaders in large-scale solar, with 13 major operational projects and eight under construction.

2.3.9 In March 2018, the NSW Government's *Transmission Infrastructure Strategy* identified 10 potential Energy Zones across three broad regional areas including the New England, Central West and South West regions of NSW. While the project is not located within a Renewable Energy Zone, the NSW Government has a clear policy to encourage investment in new electricity infrastructure and unlock additional generation capacity in order to ensure secure and reliable energy in NSW, subject to appropriate site selection, detailed assessment and community consultation.

2.3.10 The project would have access to the electrical grid at a location with available network capacity. With a capacity of 200 MW, the project would generate enough electricity to power about 74,800 homes, and is therefore consistent with both the *NSW's Climate Change Policy Framework,* and the *Net Zero Plan Stage 1: 2020 -2030.*

2.3.11 The project also includes an energy storage facility, with a capacity of 300 MW/300 MWh, that would enable the project to store solar energy for dispatch to the grid outside of daylight hours and / or during periods of peak demand, which has the potential to contribute to increased grid stability and energy security.

3 Statutory Context

3.1 State significant development

3.1.1 The project is classified as State significant development under Section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in Clause 20 of Schedule 1 of *State Environmental Planning Policy) (State and Regional Development) 2011* (SRD SEPP), as it is development for the purpose of electricity generating works with a capital investment value of more than $30 million.

3.1.2 Under Section 4.5(a) of the EP&A Act and clause 8A of the SRD SEPP, the Independent Planning Commission (the Commission) is the consent authority for the development as GAIA has disclosed a reportable political donation under section 10.4 of the EP&A Act.

3.2 Amended application

3.2.1 In accordance with Clause 55 of the *Environmental Planning and Assessment Regulation 2000 (*EP&A Regulations), a development application can be amended at any time before the application is determined. GAIA has sought to amend its application, the details of which are summarised in **section 4.4** of this report.

3.2.2 Under clause 55 of the EP&A Regulation, an application can be amended with the agreement of the consent authority (i.e. the Commission for this development), however, under the delegation of 4 August 2020, the Executive Director, Energy, Resources and Compliance can agree to amendments to an application.

3.2.3 The Department considers that it can accept GAIA's amended application because:

- the amended application directly responds to the key issues raised in submissions received by the Department during the exhibition of the original application;
- GAIA has assessed the impacts of the amended project (see **Appendices F** and **G);**
- the Department made the additional information available online; and
- matters raised by the community regarding the amended application have been considered by the Department, and the Department is satisfied that these concerns could be addressed with appropriate recommended conditions of consent.

3.3 Permissibility

3.3.1 The site is located wholly within land zoned RU1 Primary Production under the Inverell LEP. The RU1 zone includes various land uses that are both permitted with and without consent. As a solar farm is not expressly listed as permitted with or without consent, it is a prohibited land use under a strict reading of the LEP. However, the LEP expressly references the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) and acknowledges that electricity generating works are regulated by the Infrastructure SEPP, rather than the LEP.

3.3.2 Under the Infrastructure SEPP, electricity generating works are permissible on any land in a prescribed rural, industrial or special use zone. Land zoned RU1 Primary Production is a prescribed rural zone pursuant to the Infrastructure SEPP. Consequently, the project is permissible with development consent.

3.4 Integrated and other approvals

3.4.1 Under Section 4.41 of the EP&A Act, a number of other approvals are integrated into the State significant development approval process, and therefore are not required to be separately obtained for the proposal.

3.4.2 Under Section 4.42 of the EP&A Act, a number of further approvals may be required, but must be substantially consistent with any development consent for the project.

3.4.3 The only other approvals required for the project under these provisions relate to the upgrading of the existing site access under the *Roads Act 1993*.

3.4.4 Nonetheless, the Department has consulted with the relevant government agencies responsible for the integrated and other approvals, considered their advice in its assessment of the project, and included suitable conditions in the recommended conditions of consent to address these matters (see **Appendix I**).

3.4.5 GAIA considers that the project does not currently need to obtain approval from the Commonwealth Minister for the Environment and Energy under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as surveys have not identified any significant impacts on matters of national environmental significance listed under the EPBC Act.

3.5 Mandatory matters for consideration

3.5.1 Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. These matters are summarised as:

- the provisions of environmental planning instruments (including draft instruments), development control plans, planning agreements, and the EP&A Regulations;
- the environmental, social and economic impacts of the development;
- the suitability of the site;
- any submissions; and
- the public interest, including the objects in the EP&A Act and the encouragement of ecologically sustainable development (ESD).

3.5.2 The Department has considered all these matters in its assessment of the project, as well as GAIA's consideration of environmental planning instruments in its EIS, as summarised in **section 5** of this report. The Department has also considered relevant provisions of the environmental planning instruments in **Appendix H** and concluded that the project is consistent with objectives of those instruments.

4 Engagement

4.1 Department's engagement

4.1.1 The Department publicly exhibited the EIS from 6 November 2019 until 4 December 2019, advertised the exhibition in the *Inverell Times, Goondiwindi Argus* and the *Macintyre Gazette*, and notified adjoining landowners adjacent to the project boundary.

4.1.2 The Department also consulted with Council and the relevant government agencies throughout the assessment.

4.1.3 The Department notified and sought comment from TransGrid, and Transport for NSW (TfNSW) in accordance with the Infrastructure SEPP and this is discussed further in **section 4.5** of this report.

4.2 GAIA's engagement

4.2.1 GAIA undertook engagement with the surrounding community as detailed in the EIS, including newspaper advertisements, community meetings and information sessions, individual meetings with adjacent landowners and made information about the proposal available via a project newsletter. GAIA also undertook consultation with the Department, relevant government agencies and electricity network providers during the assessment process.

4.3 Submissions and Submissions Report

4.3.1 During the exhibition of the EIS, the Department received two public submissions, consisting of one objection and one comment.

4.3.2 Advice was received from 13 government agencies, including Inverell Shire Council.

4.3.3 Full copies of the submissions are attached in **Appendix C**.

4.3.4 GAIA provided a response to all matters raised in submissions (see **Appendix D**). GAIA has also provided additional information during the Department's assessment (see **Appendix G**).

4.4 Amended Application

4.4.1 Following consideration of submissions on the project, GAIA has sought to amend its application, and amended its application through an Amendment Report and additional information (see **Appendices A** and **F**).

4.4.2 The amended application includes:

- reducing the development footprint from 167 ha to 149 ha;
- an additional overhead transmission connection to the Dumaresq substation and the substation site Lot 201 / DP 879480 to facilitate connection to the grid;

- reconfiguring the existing substation site access as the project site access, instead of constructing a new project site access; and
- using single-axis tracking mounts to avoid potential glare impacts on Bruxner Highway that might result from fixed angle solar panels; and
- including an exclusion zone around an additional Aboriginal cultural heritage item (AHIMS 11-3-0083).

4.5 Key issues – Government agencies

4.5.1 **Inverell Shire Council** (Council) noted the benefits of the project, such as improved electricity supply, employment and reduced greenhouse gas emissions. Council also sought to ensure the project is constructed and operated in a way that any potential negative impacts on the local and wider communities are minimised. It considered that suitable conditions should be included in relation to Council involvement in road dilapidation, design, assessment and approval of the site access off Bruxner Way, the Traffic Control Plan and the Construction Traffic Management Plan. The Department has recommended conditions of consent to address these issues, which are discussed in **section 5**. Council has confirmed it supports the recommended conditions and has no residual concerns.

4.5.2 The **Department's Water Group** (DPIE Water) requested additional information about water supply, watercourses buffers, flooding and management plans addressing erosion, sediment and water management in consultation with DPIE Water. These matters were addressed by GAIA in its Submissions Report. GAIA identified three potential water suppliers and committed to soil water and erosion management. The Department has recommended conditions of consent in consultation with DPIE Water to address these issues, which are discussed in **section 5.**

4.5.3 **Transport for NSW** (TfNSW) (formerly RMS) requested information about intersection impacts, swept path analysis, site access, road dilapidation, construction traffic management, on-site parking, glare assessment, crash data and site distance. GAIA responded to these issues in its Submissions Report, including relocating the site access to an existing access point off Bruxner Highway and revising the haul routes in consultation with TfNSW. The Department has assessed these matters in **section 5.4** and has recommended conditions in consultation with TfNSW.

4.5.4 The **Biodiversity Conservation Division** within the Department (BCD) initially raised concerns about Aboriginal cultural heritage and biodiversity. BCD requested the Biodiversity Development Assessment Report (BDAR) and associated calculations be reviewed, updated and resubmitted. GAIA amended its BDAR and BCD recommended the mitigation measures outlined in the amended BDAR be included in consent conditions. The Department has considered these matters in **section 5.2** and has recommended conditions in consultation with BCD.

4.5.5 **Heritage NSW** (formerly part of BCD) expressed concern that an identified Aboriginal scarred tree previously identified on the site had not been located in the Cultural Heritage Assessment. In response, GAIA has since identified the tree and committed to an exclusion zone around the scarred tree. The Department's consideration of Aboriginal Cultural Heritage is in **section 5.5**

and has included appropriate conditions in consultation with Heritage NSW, including an additional exclusion area.

4.5.6 **Department of Primary Industries - Agriculture** (DPI Agriculture) noted that all the infrastructure (including below ground cabling) must be removed at the end of the project and included as a condition of consent if approved. DPI Agriculture also raised concerns about:

- the potential impacts on long term agricultural production rates of using reflective sand on the site to improve energy production;
- the potential impacts on rehabilitation of large concrete footings being used for solar panel mountings; and
- that works near watercourses should be in accordance with the *Policy and Guidelines for Fish Habitat Conservation and Management 2013*.

4.5.7 GAIA confirmed that reflective sand would not be used (and would be the subject of a modification application if they are to be used) and that solar mounts would be screw piers, which are easily removed during decommissioning. The Department has recommended conditions in consultation with DPI Agriculture for works near watercourses, decommissioning and rehabilitation.

4.5.8 **Regional NSW – Mining, Exploration & Geoscience** (MEG) requested to be consulted on the proposed location of any biodiversity offset areas both on and off site to ensure there is no impacts to mineral exploration, or potential for sterilisation of mineral or extractive resources. The Minister for the Environment is required to carry out this consultation under section 5.5(3) of the *Biodiversity Conservation Act 2016* and it therefore does not require a specific condition of consent.

4.5.9 The **Hunter New England Local Health District** required clarification on the source(s) of potable water to be used onsite during construction and for operational staff. GAIA identified three potential suppliers, which would be confirmed prior to construction commencing.

4.5.10 The **Rural Fire Service** (RFS) and **Fire & Rescue NSW** (F&R NSW) recommended specific construction and operating requirements related to bushfire and hazard management, which have been incorporated into the recommended conditions of consent in consultation with RFS and F&R NSW.

4.5.11 **TransGrid** requested the grid connection be included as part of development application. GAIA provided an Amendment Report including the grid connection into the Dumaresq substation as part of the project (see **section 3.2** Amended application).

4.5.12 The **Environment Protection Authority**, **Heritage Council of NSW** and **Crown Lands** raised no concerns about the project and made no recommendations.

4.6 Key issues – Community

4.6.1 The Department received two submissions (one objection and one comment) from the public. Both submissions raised concerns about the project and are from landowners in the district. There were no submissions on the project from neighbouring landowners.

4.6.2 The objection raised concerns about the potential visual impacts of the project on the local landscape. The Department's consideration of potential visual and landscape impacts is discussed in **section 5.3**.

4.6.3 The other submission expressed concern about the potential impacts of the project on property values. This is addressed in **section 5.5**.

4.6.4 **Section 5** of this report provides the Department's consideration of these matters and recommended conditions.

5 Assessment

5.0.1 The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the key issues, namely land use compatibility, biodiversity, visual, and traffic and transport.

5.0.2 The key constraints for the project are illustrated in (**Figure 3**). The Department has also considered the full range of potential impacts associated with the project and has included a summary of the conclusions in **section 5.5**. A list of the key documents that informed the Department's assessment is provided in **Appendix A**.

5.1 Compatibility of proposed land use

Provisions of the Inverell LEP

5.1.1 The project site is wholly located within the RU1 Primary Production under the Inverell LEP. As discussed in **section 3.3**, a solar farm is prohibited land use under a strict reading of the LEP.

5.1.2 However, based on a broader reading of the LEP, and considering the objectives of the RU1 zone and other strategic documents for the region, the Department considers that there is no clear intention to prevent the development of a solar farm on the project site.

5.1.3 Firstly, the LEP expressly references the Infrastructure SEPP and acknowledges that electricity generating works are regulated by the Infrastructure SEPP, rather than the LEP. As described above, a solar farm is permitted with consent on land zoned RU1 under the Infrastructure SEPP.

5.1.4 Further, the project is not inconsistent with the objectives of the RU1 zone, particularly in relation to:

- encouraging diversity in primary industry enterprises and systems appropriate for the area; and
- minimising the fragmentation and alienation of resource lands.

5.1.5 While the Inverell LGA has traditionally relied upon agriculture, the introduction of solar energy generation would contribute to a more diverse local industry, thereby supporting the local economy and community.

5.1.6 The project is consistent with the *New England North West Regional Plan 2036* which aims to grow the region as a renewable energy hub of NSW noting that it has the second highest solar penetration in the state, as well as protecting and enhancing productive agricultural lands.

5.1.7 In addition, the *Inverell Community Strategic Plan 2009 - 2029* aims to reduce the consumption of non-renewable resources. Its associated *Delivery Plan 2017-2021* seeks to *"promote and encourage Inverell Shire as an alternative renewable energy region/shire to businesses which generate electricity."*

5.1.8 The project would not fragment or alienate resource lands in the LGA, as the land could be easily returned to agricultural land following decommissioning as the inherent agricultural capability of the land would not be affected in the long term, and grazing would be allowed to continue during the operational life of the solar farm.

5.1.9 Finally, and most importantly, Council supports the project, subject to the implementation of appropriate environmental mitigation measures.

Potential impacts on agricultural land

5.1.10 The project site is located in the New England and North West region of NSW, which has a strong and diverse agricultural sector, with around 67,000 square kilometres or 67 % of the region under productive agricultural uses, including extensive areas of livestock grazing.

5.1.11 The project site has historically been used primarily for sheep grazing and cropping. The project site contains Class 3, 5, 6, and 7. The development footprint is predominantly Class 3 and 5 (36.5 % and 58.3 % respectively) (see **Table 3** and **Figure 5**).

Table 3 | Land and Soil classes and BSAL

Class	Project Site ha (%)	Footprint ha (%)
3 and BSAL	101.6 (28 %)	54.4 (36.5 %)
5	179.4 (49%)	87.1 (58.3 %)
6	23.8 (6 %)	0
7	63.2 (17 %)	7.7 (5.2 %)
Total	**368**	**149.2**

5.1.12 The development footprint would impact about 54.4 ha out of a total 86 ha of BSAL (down from 58.3 ha in the original application) and about 94.8 ha of Class 5 and 7 land. Class 3 land (and its corresponding BSAL designation for this site) means that the land has a high capability for agricultural land uses with only moderate limitations relating to soil erosion. Class 5 and 7 indicate moderate-low and very low agricultural capability.

5.1.13 The project site would continue to be used for sheep grazing concurrently with the operation of the solar farm. While there may be some temporary reduction in potential output of the project site, the Department notes that the development footprint occupies approximately 40 % of the site, allowing agricultural practices on the remaining 60 % (approximately 218 ha) of the site. The 54.4 ha of BSAL impacted by the project represents approximately 0.00002 % of the total land area mapped as BSAL within NSW.

5.1.14 The development footprint of the project combined with the other approved and/or operational State significant solar farms in the New England North West region (approximately 2,491 ha), solar farms are a very small fraction (0.037 %) of the 6.7 million ha of land being used for agricultural output in the region.

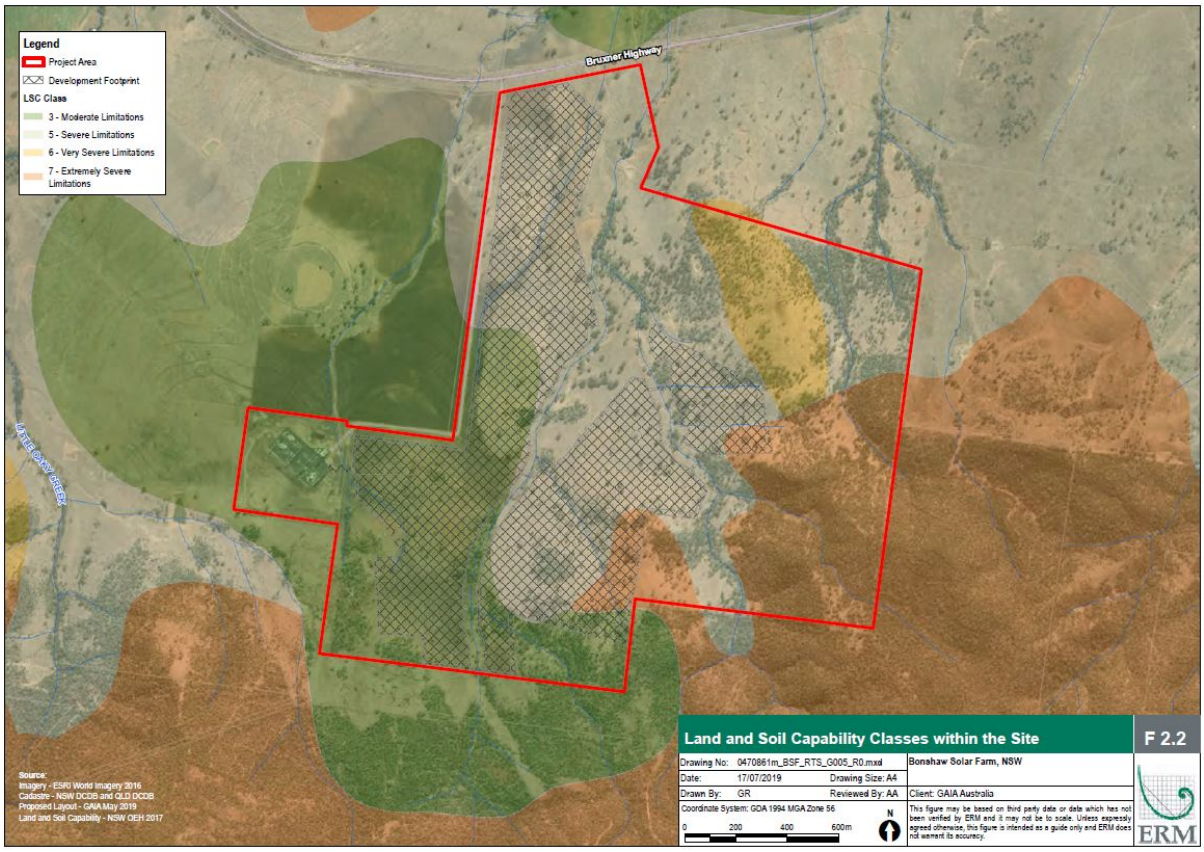

Figure 5 | Mapped BSAL on the project site, including an overlay of the project layout

5.1.15 The Department notes that the inherent agricultural capability of the project site would not be affected by the project due to the relatively low scale of the development. In addition, the Department's recommended conditions would require GAIA to maintain the capability of the agricultural land following construction, and to fully reinstate the agricultural capability of the land following decommissioning of the project, which includes the removal of all project infrastructure.

5.1.16 Additionally, the Department has recommended strict land management conditions to control the growth of weeds, reducing the potential spread of weeds to neighbouring properties at affecting the agricultural values of neighbouring land. In this regard, GAIA would be required to restore the ground cover of the site following construction or upgrading, maintain the ground cover with appropriate perennial species and manage weeds within this ground cover.

5.1.17 The Department also notes that neither Council nor DPI – Agriculture raised concerns that the operation of the project would compromise the long-term use of the land for agricultural purposes, subject to adequate decommissioning and rehabilitation conditions and this is provided for in the recommended conditions of consent.

5.1.18 The temporary change of use for a small area of Class 3 / BSAL land in the region must be balanced against:

- the broader strategic goals of the Commonwealth and NSW Governments for the development of renewable energy into the future;
- the environmental benefits of solar energy, particularly in relation to reducing greenhouse gas emissions;

- the economic benefits of solar energy in an area with good solar resources and available capacity in the existing electricity network; and
- the benefits of dispatchable energy for grid stability and reliability.

5.1.19 Based on these considerations, the Department considers that the proposed solar farm represents a compatible use of the land within the region.

5.2 Biodiversity

5.2.1 The development footprint largely comprises disturbed grasslands (107.79 ha or 72%). Native woodland is also present on site and comprises 29.17 ha (19.5%), derived native grasslands comprising 11.8 ha (8%) and the remaining 0.48 ha (0.5%) of the site includes cleared lands. There are also six farm dams within the site. Good quality native vegetation and habitat areas are located in the eastern section of the site and would remain undisturbed (see **Figure 6**).

Avoidance and mitigation

5.2.2 GAIA has designed the development footprint to avoid large areas of intact vegetation communities in the eastern and south eastern areas of the project site, as shown in **Figure 6**. GAIA has also designed the development footprint to avoid most Threatened Ecological Communities (TEC) under the *Biodiversity Conservation Act 2016* (BC Act), with the exception of 0.83 ha of a TEC (low condition vegetation Plant Community Type (PCT) 544). **Table 4** summarises the vegetation types avoided by the proposed project.

5.2.3 In addition to native vegetation in **Table 4**, the development footprint has completely avoided:

- seven identified native vegetation communities (woodland and grassland);
- five of the eleven rocky areas recorded on the site, which provide habitat for amphibians and reptiles; and
- second and third order streams, with riparian buffers on both sides of the streams (20 m on each side for second order and 30 m for third order streams).

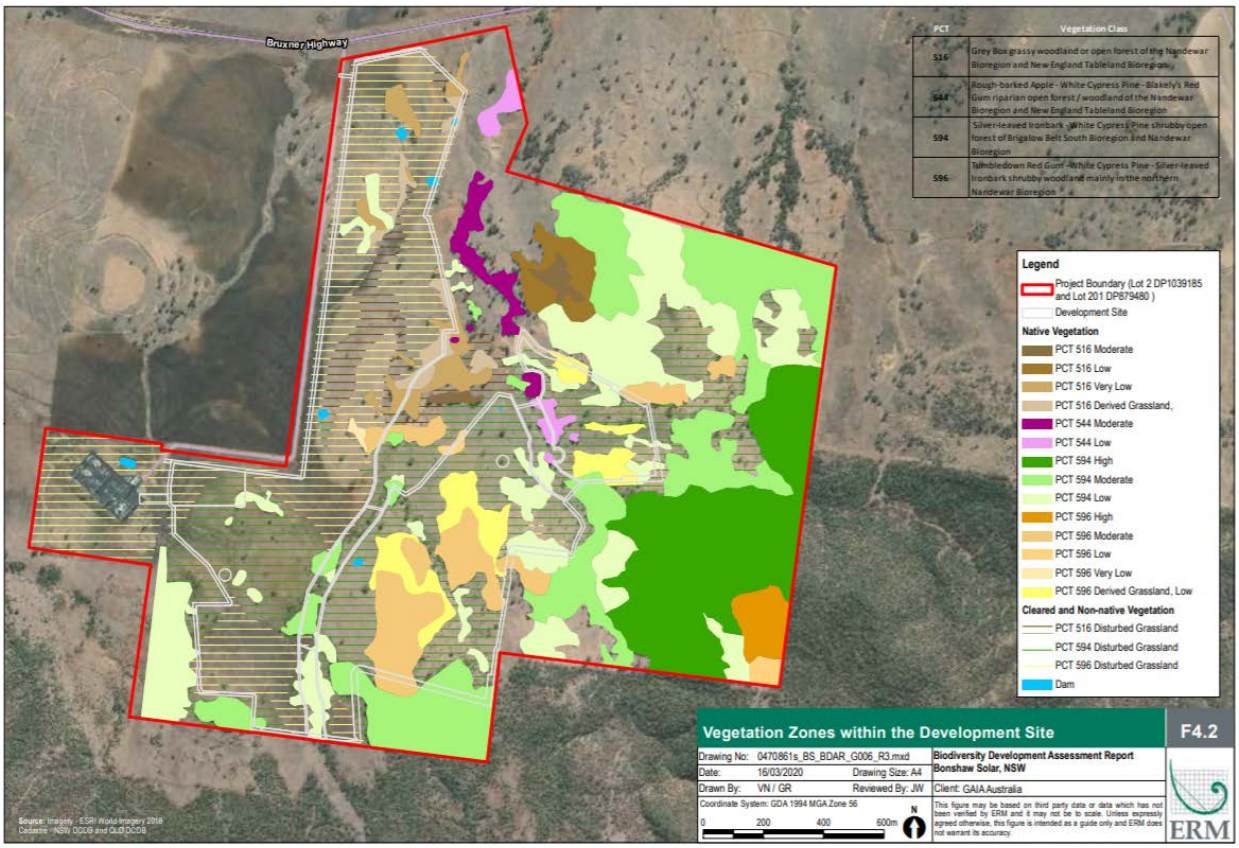

Figure 6 | Vegetation zones within the site

Table 4 | Summary of vegetation types avoided

Item	Project site / buffer area[1] (ha)	Development footprint (ha)	Avoidance (%)
PCT 516 Grey Box grassy woodland or open forest of the Nandewar Bioregion and New England Tableland Bioregion	42.04	5.76	86.3
PCT 544[2] Rough-barked Apple - White Cypress Pine - Blakely's Red Gum riparian open forest/woodland of the Nandewar Bioregion and New England Tableland Bioregion.	8.37	0.83	90.1
PCT 594 Silver-leaved Ironbark - White Cypress Pine shrubby open forest of Brigalow Belt South Bioregion and Nandewar Bioregion	225.39	13.64	93.1
PCT 596 Tumbledown Red Gum - White Cypress Pine - Silver-leaved Ironbark shrubby woodland mainly in the northern Nandewar Bioregion	366.21	20.74	94.3

(1) Buffer area is defined as 1500 m of land around the project site, applicable for all PCTs in the table.

(2) PCT 544 corresponds to the BC Act listed endangered ecological community (EEC) White Box Yellow Box Blakely's Red Gum Woodland, which also corresponds to part of the EPBC listed critically endangered ecological community (CEEC) White Yellow Box Blakely's Red Gum Woodland.

5.2.4 Two of the rocky areas are in the middle of cleared paddocks and will not be avoided. The remaining four may be able to be avoided during detailed design. The six farm dams would not be avoided, which is not considered to have significant broader environmental impacts given their lack of interaction with rivers, streams or wetlands.

5.2.5 The Department is satisfied GAIA has avoided large areas with high biodiversity values and it has further reduced the development footprint in response to issues raised from agencies, including biodiversity impacts (see **section 3.2**).

5.2.6 GAIA also proposes a range of mitigation and management measures to address potential indirect impacts on threatened species, communities and their habitats. These include:

- fencing off areas of vegetation to delineate boundaries and protect retained vegetation;
- clearing to be supervised by an experienced ecologist;
- monitoring of tree hollows prior to removal to avoid impacting any breeding females or juveniles;
- replacement of hollow bearing trees at a rate of 2:1, with minimum 68 trees be planted within the riparian corridor;
- installation of nest-boxes suitable prior to removal of hollow bearing trees;
- enforcing site speed limits to reduce risk of vehicle strike on threatened fauna; and
- noise, dust and erosion and sediment management measures to minimise impacts on biodiversity.

Vegetation clearing

5.2.7 The project would clear 40.97 ha of native woodland and derived grassland representing potential habitat for a range of threatened fauna species and 107.79 ha of highly disturbed grassland (previously cleared). It would also impact 34 hollow-bearing trees. **Table 5** provides a summary of the impacts of the project on each native vegetation type, as well as the ecosystem credit liability under the *NSW Biodiversity Offset Scheme*.

Table 5 | Native Vegetation Communities, Disturbance Area and Ecosystem Credit Liability

Description and condition	Area (ha)	Credits
PCT 516 Grey Box grassy woodland or open forest of the Nandewar Bioregion and New England Tablelands Bioregion	**5.76**	**65**
Very Low	3.00	31
Derived grassland - Moderate	2.76	34
PCT 544 Rough-Barked Apple - White Cypress Pine - Blakely's Red Gum riparian forest / woodland of Nandewar Bioregion of New England Tableland Bioregion	**0.83**	**15**
Low	0.83	15
PCT 594 Silver-leaved Ironbark - White Cypress Pine shrubby open forest of Brigalow Belt South Bioregion and Nandewar Bioregion	**13.64**	**249**
Moderate	4.10	110
Low	9.54	139

Description and condition	Area (ha)	Credits
PCT 596 Tumbledown Red Gum - White Cypress Pine – Silver-leaved Ironbark shrubby woodland mainly in the northern Nandewar Bioregion	**20.74**	**269**
Moderate	11.15	262
Low	0.25	4
Very Low	0.30	3
Derived Grassland – Low	9.04	0
PCT 516 Disturbed Grassland	**7.39**	0
PCT 594 Disturbed Grassland	**49.81**	0
PCT 596 Disturbed Grassland	**50.59**	0
Cleared land / dams	**0.48**	0
Total	***149.24***	***598***

Threatened Fauna Species

5.2.8 Thirty threatened fauna species listed under the BC Act are predicted to occur in the project area. Of those species:

- eight have no suitable habitat on the site and were excluded from targeted field surveys;
- 20 are listed as vulnerable under the BC Act;
- two are listed as vulnerable under the EPBC Act; and
- two are listed as potential serious and irreversible impact (SAII) under the Biodiversity Assessment Methodology (BAM).

5.2.9 Further field surveys for the remaining threatened species under both BC Act and EPBC Act concluded that 14 species are present on site, including birds and bats.

5.2.10 Both SAII species were excluded due to lack of suitable breeding habitat on site, therefore the project does not contain SAII in any species.

5.2.11 Considering species recorded on site and habitat suitability assessments on site concluded that offsets would be required for four species, as described in **Table 6**.

Table 6 | Impacts on threatened species and credits required

Species Impacts	Plant Community Types	Credits
Habitat for the Bristle-faced Free-tailed Bat	516, 544, 594 and 596	827
Foraging habitat for Eastern Cave Bat	516, 544, 594 and 596	1,030
Potential breeding habitat for Masked Owl	516, 544, 594 and 596	104
Potential breeding habitat for Barking Owl	516, 544, 594 and 596	283
	Total	***2,244***

Biodiversity offsets summary

5.2.12 Under the BC Act, the impact on native vegetation and native species would generate 598 ecosystem credits and 2,244 species credits. The credit requirement would be retired in accordance with the *NSW Biodiversity Offset Scheme*, which includes following options:

- acquiring or retiring 'biodiversity credits' within the meaning of the BC Act;
- making payments into an offset fund; or
- funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the *NSW Biodiversity Offsets Scheme*.

5.2.13 GAIA has indicated that it intends to set up a biodiversity stewardship agreement on the remainder of the project site, and any residual obligation would be retired by payment into an offset fund.

5.2.14 No offset requirements under the EPBC Act have been identified for the proposed development.

Recommended conditions

5.2.15 The Department has recommended conditions requiring GAIA to:

- avoid the disturbance of native vegetation or fauna habitat located outside the development footprint;
- retire the applicable biodiversity offset credits in accordance with the Biodiversity Offsets Scheme; and
- prepare and implement a Biodiversity Management Plan in consultation with BCD, including measures to minimise clearing and avoid unnecessary disturbance of vegetation located within the development footprint.

5.2.16 With these measures, the Department and BCD consider that the project is unlikely to result in a significant impact on the biodiversity values of the locality.

5.3 Visual

5.3.1 The two public submissions raised concerns about the visual impacts of the project. The submissions cited impacts on the landscape and the scenic rural qualities of the area. One of the submitters is a nearby landowner, located about 550 m south of the southern edge of the development footprint and there is no dwelling on the land. The other submitter resides about 60 km from the project site.

Visual context

5.3.2 The project lies between the southern edge of the Dumaresq River flood plain and the foothills of a ridgeline running east-west between Hetherington's Sugarloaf and Hasselmann Pinnacle. The project site is gently undulating. Topography rises moderately in the east and west, and sharply to the south. The locality is mostly characterised by agricultural land, with patches of remnant native woodland, riparian vegetation and roadside vegetation.

5.3.3 The nearest residence to the project site is 700 m to the north (R06). There are four other non-associated residences (R02, R03, R04 and R07) located between 1 and 2 km of the project site (see **Figure 7**).

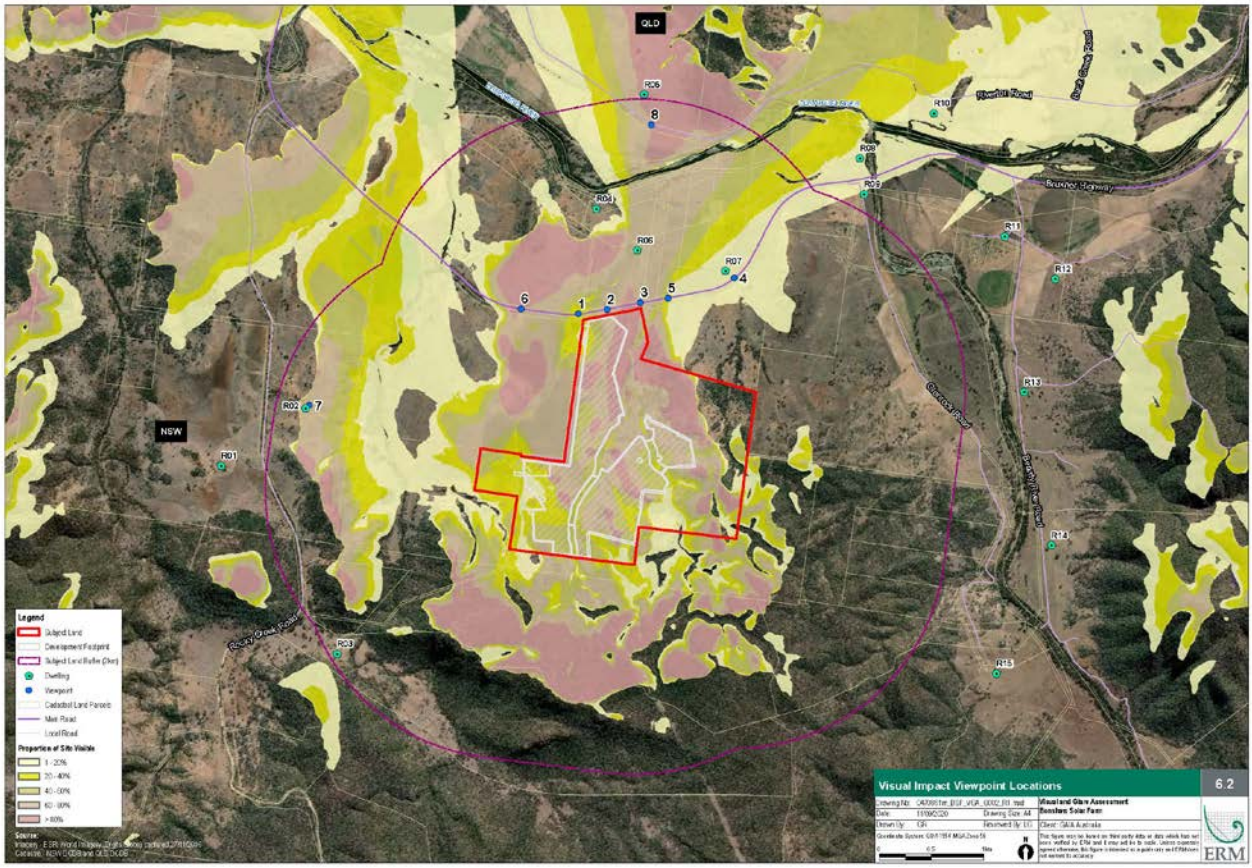

Figure 7 | Site visibility analysis

Visual mitigation

5.3.4 The solar panels would be relatively low-lying structures (up to 4.2 m) that largely follow the topography of the land. The operation and maintenance buildings, BESS and switch yard would be located near to the existing Dumaresq substation and transmission lines, more than 1 km from public vantage points along Bruxner Highway. Inverters would be similar in size and scale to many structures found in the area such as sheds and equipment storage.

5.3.5 The glass protecting each solar panel is treated so that any glare from reflected sunlight is less intense than the glare from normal glass. The single axis tracking system ensures solar panels are facing the sun, avoiding the creation of glare impacts at low elevations (such as for drivers on the Bruxner Highway) that might result from fixed angle solar panels.

5.3.6 GAIA proposes mitigation measures to reduce visual impacts, including a 5 m landscaping buffer along the northern and north-western boundary, and to the east of the TransGrid Dumaresq substation access road boundary (see **Figure 3**). Further, GAIA would retain existing vegetation located along fence lines and road reserves (where possible) to minimise visual impacts.

Assessment

5.3.7 The visual impact assessment in the EIS analysed six viewpoints along the Bruxner Highway (see 1 to 6 in Figure 7 and viewpoint 1 in Figure 8), a viewpoint from R02 (see viewpoint 7 in Figure 9), and another adjacent about 2 km north of the site (viewpoint 8 in Figure 7).

5.3.8 The site is not visible from R03 to the south west due to distance (2 km), topography and intervening vegetation. The visual impact from R02 is low due to distance (1.7 km to the west), limited views of the site and the dominance of the mountains in the background (see **Figure 8**).

5.3.9 There are three residences within 2 km to the north of the project site (R04, R06 and R07). The site is not visible from residence R04, due to distance (1.2 km) and intervening topography (see **Figure 7**).

5.3.10 The visual impact at R07 would be negligible to low due to less than 20 % of the site being visible from the residence, screening and dominance of the ridge line and intervening vegetation. The visual impact at R06 would be low, due to topography screening the central and southern portions of the site. Further, existing vegetation would be retained along fence lines and GAIA has proposed additional planting in a 5 m landscaping buffer along the northern boundary.

Figure 8 | View from viewpoint 1 (Bruxner Highway)

5.3.11 One submitter that expressed concern about the project is a landowner of a 390 ha lot located about 550 m south of the southern edge of the development footprint at its closest point and approximately 2 km at its furthest point. The Department notes that there is no dwelling on the land and while there are dwelling entitlements, there are no development applications approved or on foot for dwellings on the lot. The Department considers that while there may be views of the solar farm from the property, a dwelling, if approved, could be located on the lot away from the proposed solar farm and oriented such that the potential visual impact of the solar farm could be minimised.

5.3.12 The visual impact assessment concluded that impacts to public vantage points along the Bruxner Highway were medium to low, and when considering the short road frontage and relatively low traffic volumes on the highway, these visual impacts could be considered low.

5.3.13 The glare impact assessment modelled glare impacts for solar panels mounted on single axis tracking systems and found no impacts at receiver locations to the east, north and west, including locations on the Bruxner Highway.

Figure 9 | View from viewpoint 7 (R02, 1.7 km to the west)

5.3.14 The Department recognises that the introduction of a solar farm represents a material change to the local rural landscape, but based on its assessment considers that the impacts would not be significant. The solar arrays are relatively low-lying structures and the proposed vegetation buffers, once established, would assist in reducing potential impacts on the landscape from nearby residences and public vantage points. Glare and glint impacts are unlikely from the solar arrays themselves, while any glare impacts from the metal panel mounts would be minor,short term and diminish further over time as the metal surfaces dull.

5.3.15 Neither Council nor TfNSW raised any concerns about visual impacts from the project.

5.3.16 To ensure the proposed mitigation measures are adequately carried out, the Department has recommended conditions of consent requiring GAIA to:

- establish and maintain a mature vegetation buffer (landscape screening) along the northern and north-western boundary, and to the east of the TransGrid Dumaresq substation, which must:
    - be planted prior to the commencement of construction;
    - be comprised of species that are endemic to the area;
    - minimise views from Bruxner Highway within 3 years of commencing operations; and
    - be properly maintained with appropriate weed management.
- prepare a detailed Landscaping Plan for the site which must include a description of measures that would be implemented to ensure the effectiveness of the vegetation buffer;
- minimise the off-site visual impacts of the development, including the potential for any glare or reflection;
- ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape; and not mount any advertising signs or logos on site, except where this is required for identification or safety purposes; and
- minimise the off-site lighting impacts of the development, and ensure that any external lighting is installed as low intensity lighting (except where required for safety or

emergency purposes), does not shine above the horizontal and complies with *Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting.*

5.3.17 Subject to the implementation of the recommended conditions, the Department considers that there would be no significant visual impacts on surrounding residences, and any impacts on the rural character and visual quality of the area would be minimised.

5.4 Traffic and transport

Transport routes

5.4.1 The project is in the far north of NSW with direct access to the Bruxner Highway, which is a State road, but ordinarily has low traffic volumes. The Bruxner Highway connects with the New England Highway east of the project site (just north of Tenterfield). This allows a northern haul route to the Port of Brisbane and a southern haul route to the Port of Newcastle. All electric componentry would be transported from one or both ports. Some construction materials (i.e. gravel) would also be delivered from localities to the west of the site such as Goondiwindi.

5.4.2 TfNSW requested that right hand turns into or out of Bruxner Highway to / from New England Highway be avoided by heavy vehicles during construction due to insufficient sight distance associated with a hill crest to the north of the site (see **Figure 10**). In consultation with TfNSW it was identified that heavy vehicles travelling:

- to the project site from the north would turn right onto Sunnyside Platform Road and join the Bruxner Highway west of the New England Highway junction (see **Figure 11**); and
- from the project site to the south would loop via Ashford, Inverell, and Glen Innes (see **Figure 12**). Note that this return route is the same distance as returning via Tenterfield.

5.4.3 The changes to the heavy vehicle transport deviations were refined in response to and in consultation with TfNSW, resulting in an amended Traffic Impact Assessment (see **Appendix G**).

Figure 10 | View from Bruxner Highway to the north along New England Highway showing hill crest

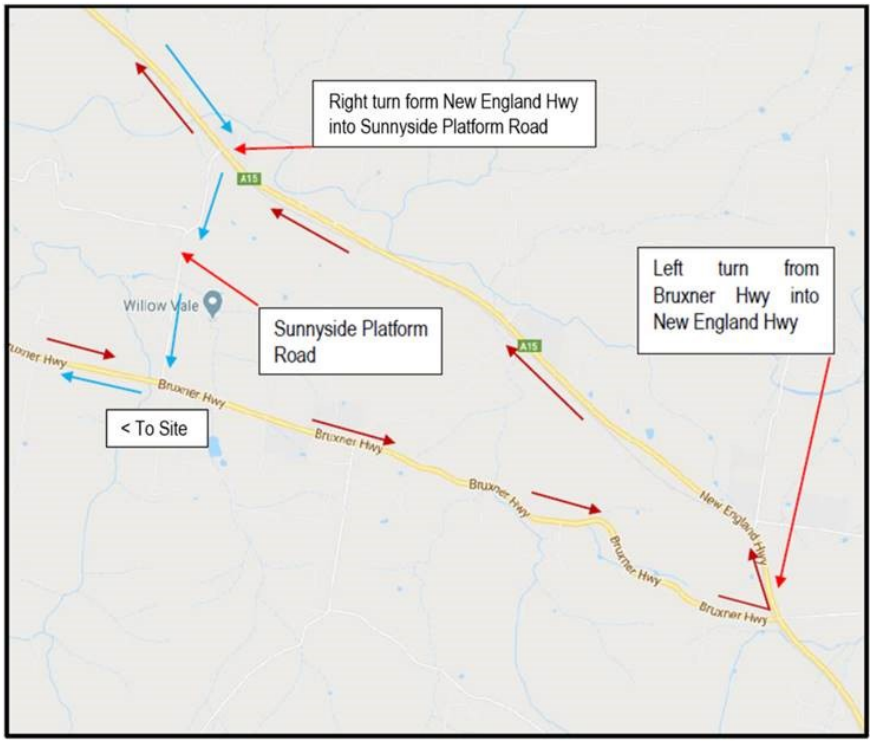

Figure 11 | Haul route to / from the north showing right turns at Sunnyside Platform Road

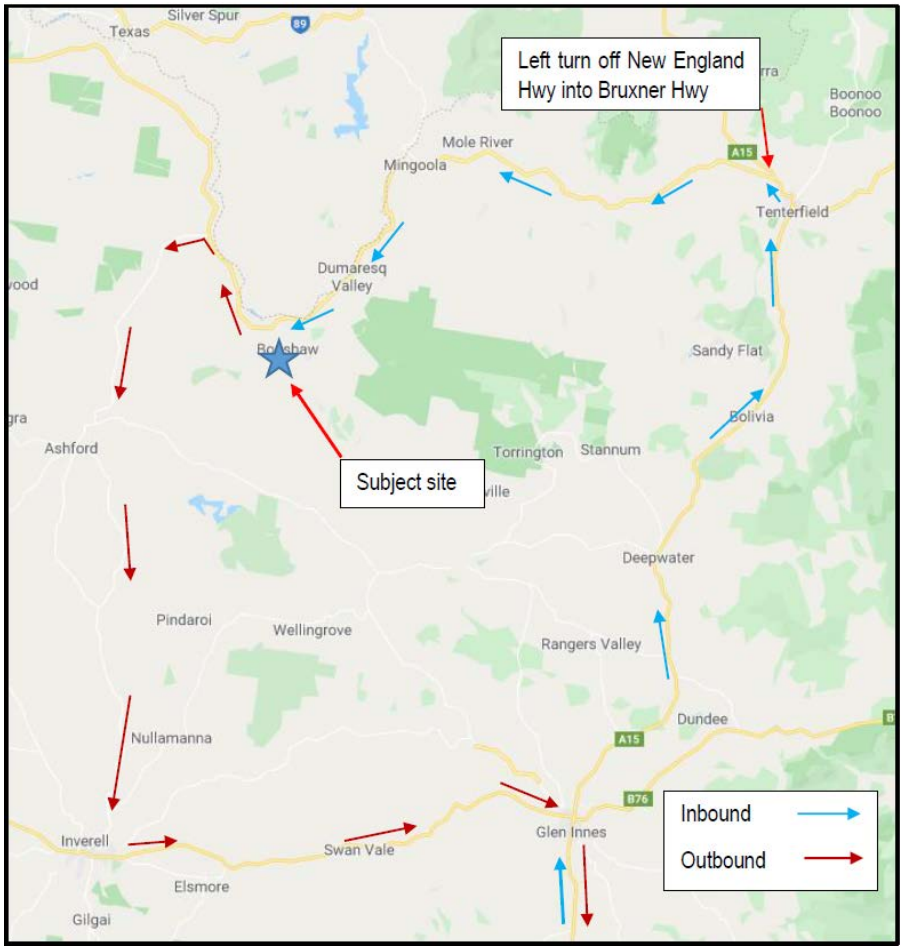

Figure 12 | Haul route to / from the south showing southern return loop

Site access

5.4.4 The project originally included a new site access off Bruxner Highway. However, after consulting with TfNSW, the project now utilises an existing access point off the Bruxner Highway that was constructed by TransGrid for its nearby substation. TransGrid has provided landowners consent to the application for this purpose. The existing access would be upgraded to include shortened Rural Auxiliary Left AUL(S) and Basic Auxiliary Right (BAR) treatments. Parking and manoeuvring areas would be provided on the project site.

Road Traffic Volumes

5.4.5 New England Highway is a State road that is an important north-south transport route traffic travelling to regional and interstate locations. It carried 2421 vehicles per day in 2011. Bruxner Highway is also a State road and it carried 213 vehicles per day in 2011 (23 % heavy vehicles).

5.4.6 Sunnyside Platform Road is a local road with a pavement width of 7 m, permitting two-way traffic movements.

5.4.7 The southern return loop comprises the following sealed two-way roads:

- Bonshaw Road to Ashford – regional road with an overall width of 7 m carrying 232 vehicles per day in 2012;
- Ashford Road to Inverell – regional road; and

- Gwydir Highway to Glen Inness – State road carrying 1442 vehicles per day in 2019.

5.4.8 All haul route roads are approved B-double routes.

5.4.9 The main increase in project related traffic would occur during the 12 month construction period. The estimated peak daily vehicle movements would be 15 heavy vehicles and 65 light vehicles, with the option of using shuttle buses to reduce light-vehicle demands. Most heavy vehicles would be 19 m semi-trailers transporting electrical componentry. Additionally, there would be a total of three over-dimensional vehicles to transport sub-station components.

5.4.10 Traffic generation during operation would be negligible (i.e. less than 10 light vehicles per day). A single B-Double truck up to three times per year may be required for panel or inverter replacement.

5.4.11 These traffic increases represent a small proportion of the existing traffic on the haul routes, which have capacity to cater for the additional traffic. Aside from the site access upgrade, no other road upgrades are necessary for the project.

5.4.12 Cumulative road and traffic impacts are not expected because:

- the Dumaresq Solar Farm, which may share a common haul route, has not yet lodged its application and the Department considers that the likelihood of both projects being constructed (if approved) at the same time is low; and
- the Sapphire Solar Farm, which shares a part of the Gwydir Highway as a haul route, was approved in August 2018 and any cumulative impacts with the southern return loop traffic from the project can be managed with scheduling in a Traffic Management Plan.

Recommended conditions

5.4.13 The Department has developed conditions of consent for road and traffic matters in consultation with TfNSW and Council. These conditions include requirements to:

- upgrade the site access with AUL(S) and BAR treatments;
- limit the number of heavy vehicles per day during construction;
- prohibit particular turns for heavy vehicles on the haul routes as noted in this report;
- ensure the length of heavy vehicles does not exceed 19 m, except where authorised by an over dimensional vehicle permit issued by TfNSW; and
- prepare a Traffic Management Plan in consultation with TfNSW and Council, which includes provisions for road dilapidation surveys and measures to address road safety, consideration of school buses, haulage scheduling conflicts, and conflicts other motorist and road users.

5.4.14 With the above conditions of consent, the Department, Council and TfNSW are satisfied that the project would not result in significant impacts on road network capacity, efficiency or safety.

5.5 Other issues

5.5.1 The Department's consideration of other issues is summarised in **Table 7**.

Table 7 | Summary of other issues raised

Findings	Recommendations
Heritage	

Aboriginal cultural heritage
• Surveys identified 35 Aboriginal heritage sites, including nine sites of moderate significance and 26 sites of low significance.
• There are no places listed in the Commonwealth Heritage List within or near the project site.
• Consultation with Registered Aboriginal Parties (RAPs) and BCD informed the project design and management measures.
• The project avoids:
  o the known sites of moderate significance; and
  o five known sites of low significance.
• The project footprint was refined to avoid impact on four additional sites of low or moderate significance in response to issues that Heritage NSW raised in the assessment (i.e. BSF18, 19, 22 and 29; three scarred trees and one artefact scatter site, to avoid a riparian occupation complex area).
• The Department notes that a previously identified scarred tree (AHIMS site 11-3-0083 shown in **Figure 2**) was not found during surveys of the project site for the project. Heritage NSW carried out its own investigation and discovered the scar tree had previously been recorded incorrectly. An exclusion zone is proposed around this scarred tree, which may be reviewed following additional investigation to determine the extent of the item and its associated scatters (see **Figure 2**).
• The remaining 20 sites of low significance (artefacts scatter) are expected to be impacted. GAIA has committed to:
  o physical demarcation of sites prior to construction, allowing for RAPs to ensure significant cultural heritage sites are appropriately managed;
  o surface collection/salvage of aboriginal heritage sites expected to be impacted to be undertaken by Aboriginal stakeholder groups and an appropriately qualified archaeologist prior to commencement of works;
  o prepare a Aboriginal Cultural Heritage Management Plan including a methodology for avoidance and procedures for surface collection, test excavation and archaeological salvage; and
  o cease all works and implement an unexpected finds procedure if Aboriginal artefacts or skeletal material are identified during construction.
• With these measures, the Department and Heritage NSW consider that the project is unlikely to result in significant impacts on the heritage values of the locality.
Historic heritage
• No heritage items listed on Commonwealth, National or State registers are located within the site.
• Two areas with historical items were observed during the field survey: a surface scatter of several miscellaneous historical items and a smaller surface scatters of glass bottles.
	• Ensure the development does not cause any direct or indirect impacts on any items located within exclusion zones or outside the approved development footprint.
	• Further investigation of the scarred tree (AHIMS 11-3-0083).
	• Prepare and implement a Heritage Management Plan, that would include comments from registered Aboriginal parties for the final interpretation and recommendations for the AHIMS 11-3-0083 site.
	• Salvage and relocate Aboriginal items to suitable alternative locations.

Findings	Recommendations
• The assessment of the sites concluded that are not considered to be of local historic heritage significance. • The Heritage Council was consulted regarding the project, but raised no concerns regarding the project, and advised it did not need to be further consulted regarding the proposal. • The Department is satisfied that, in light of the above, the project would not have any adverse impacts on local or State heritage items in the local area. Any unexpected finds of potential heritage significance on site can be appropriately managed by an unexpected finds protocol.	
Noise	
• Noise generated by the proposed construction activities was predicted to be well below the 'highly noise affected' criterion of 75 dB(A) in the EPA's *Interim Construction Noise Guideline* (the ICNG) at all nearby residences. • Of the 15 non-associated nearby residences, only one would experience construction noise above the 'noise affected' criterion of 45 dB(A) in the ICNG. • This residence is the closest non-associated residence (R06) and it is predicted to experience up to 49 dB(A) during construction in the two northern areas of the proposed project. The construction noise would be short term, intermittent and limited to standard day time construction hours. • In addition, GAIA has committed to implement noise mitigation work practices set out in the ICNG, including scheduling activities to minimise noise, using quieter equipment and establishing a complaint handling procedure. • The EIS makes predictions for potential noise impacts outside the ICNG hours of construction, although no such works are proposed, and the Department's recommended consent conditions limit any construction work that might be audible at a non-associated residence to ICNG construction hours. • Road traffic noise during construction of the project would comply with the relevant criteria in the EPA's *Road Noise Policy*. • Operational noise impacts are predicted to be below the lowest intrusive criteria in the EPA's *Noise Policy for Industry* at all nearby non-associated residences. • There would be no potential cumulative noise impacts with the nearest proposed solar project (Dumaresq Solar Farm) given the distance between both projects. • The Department has recommended conditions requiring GAIA to minimise noise during construction, upgrading or decommissioning by implementing noise mitigation work practices set out in the ICNG.	• Minimise the noise generated by any construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the ICNG. • Restrict construction hours to Monday to Friday 7 am - 6 pm, and Saturday 8 am - 1 pm unless inaudible at non-associated receivers.
Hazards	

• The eastern and southern portions of the site are vegetated and mapped as bushfire prone land.
• The development includes a 300 MW battery energy storage system (BESS).
• To manage fire hazards, GAIA would be required to comply with the RFS's *Planning for Bushfire Protection 2019*:
  o managing the site as an Asset Protection Zone (APZ), including a defendable space of at least 10 m around the perimeter of the solar array areas;
  o a 50,000 litre water supply, fitted with a 65 mm Storz fitting and a FRNSW compatible suction connection, located adjacent to the internal access road; and
	• Ensure that the development complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2006* and *Standards for Asset Protection Zones.*
	• Ensuring the defendable space and solar arrays are managed as an APZ and the development is suitably equipped to respond to fires

Findings	Recommendations
o the development and implementation of a comprehensive Emergency Plan. • GAIA completed a Preliminary Hazard Analysis (PHA) for the project and screening accordance with *SEPP No.33 – Hazardous and Offensive Development* (SEPP 33). • The screening concluded that the storage and transport of hazardous materials for the project (including the risks associated with the battery storage facility) would not exceed the relevant risk screening thresholds and the project is not considered to be 'potentially hazardous'. • The BESS would be located at least 2 km away from the nearest residence and 200 m away from the TransGrid substation. • In addition, the BESS would be certified with UL9540A (an international standards for batteries), which requires any fire to be contained within the BESS unit. • The PHA concluded that the BESS was located in the most appropriate location regarding surrounding hazards and constraints and potential risks could be managed. • The Department has included a recommended condition that requires a Fire Safety Study for the BESS as required by the Department's *Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Study Guidelines*. • The project would comply with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for electric, magnetic and electromagnetic fields. • Subject to the recommended conditions, the Department is satisfied that risks associated with the facility would be negligible.	including water supply tank and appropriate connectors. • The BESS associated with the development must not exceed a total capacity of 300 MW across the project site and must be installed in an arrangement consistent with the EIS. • Prepare a Fire Safety Study for the BESS and an Emergency Plan in consultation with RFS and FRNSW. • Store and handle all liquid chemicals, fuels and oils used on-site in accordance with all relevant Australian Standards and the *EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook.*
Water and erosion	
• Second and third order ephemeral unnamed tributaries of the Dumaresq River traverse the site from south to north. • The project has largely been designed to avoid streams in the site, and GAIA has committed to implement buffer zones consistent with the *Guidelines for Controlled Activities on Waterfront Land*. • Watercourse crossings would be required for internal access tracks, electrical cabling and security fencing and consistent with advice from DPIE Water, GAIA would design, construct and maintain crossings in accordance with the relevant guidelines. • GAIA would also minimise any potential impact to overland flow by installing drop-down fencing where necessary and this satisfies DPI Water's request for information about the impact of security fencing on floodwater and adjacent watercourses. • BCD and Council raised no concerns about flooding. • There are 6 farm dams within the site, which would be filled for construction of the project. • Any erosion and sedimentation risks associated with the project can be effectively managed by following the *Managing Urban Stormwater: Soils and Construction (Landcom, 2004).* The Department has included these requirements in the recommended conditions. • Fuels and chemicals would be stored to prevent water pollution and the project is not expected to affect groundwater resources. • The Department considers that the risks of impacts to soil and water from the project are acceptable because: the project has been designed to minimise impacts, GAIA has committed to implement mitigation measures, and recommended conditions would further mitigate any soil and water impacts.	• Ensure the solar panels and ancillary infrastructure (including security fencing) are designed, constructed and maintained to reduce impacts on surface water, flooding and groundwater at the site. • Minimise any soil erosion in accordance with *Managing Urban Stormwater: Soils and Construction (Landcom, 2004)* manual and ensure solar the project is constructed and maintained to avoid causing erosion on site. • Ensure all works are undertaken in accordance with *Guidelines for Controlled Activities on Waterfront Land* and *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings*.

Findings	Recommendations
Onsite water use	
• The project would require around 14.3 megalitres (ML) of water during construction (mainly for dust suppression) and around 1.5 ML of water annually during operation (mainly for cleaning panels). A static water supply (50,000 litres) would be established and maintained for fire protection. • DPIE Water and NSW Health Hunter New England Local requested clarification on water sources available. GAIA has identified three potential sources and the Department has recommended a condition requiring GAIA to ensure it has sufficient water for all stages of the project, and if necessary, adjust the scale of works to match the available water supply.	• Ensure there is sufficient water for all stages of the project, and if necessary, adjust the scale of the development to match available water supply.
Workforce accommodation	
• Up to 180 workers would be required during the construction period and would be sourced from the local and regional community where possible and the Department is satisfied that there is sufficient accommodation in nearby towns such as Tenterfield and Inverell. • There is no on-site workers accommodation facility proposed as part of this application. • Although there the potential for construction of the project to overlap with the construction of the approved Sapphire Solar Farm, the Department considers that it is unlikely the entire construction periods of these projects would overlap. • There is low potential for overlap with the construction for Dumaresq Solar (if approved) as an application not yet been lodged. • Council did not raise any issues about workforce accommodation.	• No specific conditions required.
Land values	
• One public submission raised concern that the project would have an adverse impact on neighbouring land value, as a result of visual impacts. • The Department notes that: o there is no clear evidence to suggest that solar farms in NSW are adversely affecting property values; o the project is permissible with development consent under the Infrastructure SEPP; o a detailed assessment of the merits of the project has found that the project is unlikely to generate any significant economic, environmental or social impacts; o the Department considers the visual impacts of the project on the surrounding residences and road users would be minimal; and o the residual impacts of the project can be further minimised by imposing suitable conditions on the project, and requiring a range of standard mitigation measures, such a vegetation screening, to be implemented. • Accordingly, the Department considers the project would not result in any significant or widespread reduction in land values in the areas surrounding the solar farm.	• No specific conditions required.

Findings	Recommendations
Decommissioning and rehabilitation	
• The Department has developed standard conditions for solar farms to cover this stage of the project life cycle, including clear decommissioning triggers and rehabilitation objectives such as removing all above and below ground infrastructure and restoring land capability to its pre-existing agricultural use. • DPI Agriculture noted that GAIA did not provide details about the type of piers to be used for the solar panels, which would impact the capacity to rehabilitate land. GAIA confirmed that piers for solar panels would be screw type, allowing easy removal and ground rehabilitation. GAIA also committed to remove all infrastructure at decommissioning. • With the implementation of the standard conditions, 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 would appropriately rehabilitated.	• Include rehabilitation objectives requiring the site to be rehabilitated within 18 months of cessation of operations.

6 Recommended Conditions

6.1.1 The Department has prepared recommended conditions of consent for the project (see **Appendix I**).

6.1.2 The Department consulted with GAIA and the relevant agencies on the conditions for the project, particularly Heritage NSW, BCD and TfNSW in regard to Aboriginal Heritage, biodiversity and traffic impacts.

6.1.3 These conditions are required to:

- prevent, minimise, and/or offset adverse impacts of the project;
- ensure standards and performance measures for acceptable environmental performance;
- ensure regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

6.1.4 The recommended conditions use a risk-based approach that focuses on performance-based outcomes. This reflects current government policy and the fact that solar farms require relatively limited ongoing environmental management once the project has commenced operations.

6.1.5 In line with this approach, the Department has recommended operating conditions to minimise traffic, amenity, water, flooding, biodiversity, heritage and bushfire impacts, and required the following management plans be prepared and implemented:

- Traffic Management Plan;
- Biodiversity Management Plan;
- Landscaping Plan;
- Heritage Management Plan; and
- Emergency Plan.

6.1.6 The recommended conditions also require GAIA to provide detailed final layout plans to the Department prior to construction.

6.1.7 Other key recommended conditions include:

- *site access* – requiring the site access to be upgraded prior to the commencement of construction;
- *biodiversity offsets* – retiring biodiversity offset credits in accordance with the *NSW Biodiversity Offsets Scheme*;
- *operating hours* – undertaking construction, upgrading or decommissioning activities on-site during standard construction hours, unless these activities that are inaudible at non-associated receivers;
- *visual* – minimising the off-site visual and lighting impacts of the project, including the potential for any glare or reflection, and ensuring the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape;
- *water and flooding* – ensuring the solar panels and ancillary infrastructure (including security fencing) are designed, constructed and maintained to reduce impacts on surface water, flooding and groundwater at the site;

- *fire* - ensure that the development complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2019*; and
- *decommissioning* – returning the land to pre-existing uses (including restoring any mapped BSAL land to Class 3 agricultural land capability) following decommissioning of the project, including the removal of all underground cabling and project infrastructure.

7 Evaluation

7.1.1 The Department has assessed the development application, EIS, submissions, Submissions Report, Amendment Report and additional information provided by GAIA and advice received from relevant government agencies. The Department has also considered the objectives and relevant considerations under section 4.15 of the EP&A Act.

7.1.2 The site would have direct access to the electricity network with via TransGrid's existing Dumaresq Substation, located adjacent to the proposed development footprint.

7.1.3 The project site is located in a rural area, with the nearest non-associated residence located about 700 m to the north of the development footprint at its closest point.

7.1.4 The Department considers the site to be appropriate for a solar farm as it has good solar resources and available capacity on the existing electricity network. Further, Council supports the project.

7.1.5 The project has been designed to largely avoid key constraints, including BSAL, watercourses, remnant native vegetation and Aboriginal heritage sites. Any residual impacts would be relatively minor and can be managed through the recommended conditions of consent.

7.1.6 In response to agency advice and submissions on the project, GAIA amended the project by reducing its footprint, removing areas proposed around a central riparian zone to avoid impacts to an Aboriginal heritage site and to further avoid impacts to vegetation communities.

7.1.7 Distance, intervening topography and vegetation would provide natural screening from residences and roads. The Department considers that there would be no significant visual impacts on surrounding residences.

7.1.8 The project has been designed to largely avoid impacts on good quality native vegetation and threatened species in the locality and all unavoidable impacts (including clearing of 40.97 ha of disturbed native woodland) would be offset in accordance with Government policy, which is included as a requirement in the recommended conditions.

7.1.9 Further, GAIA also relocated the proposed site access and included the grid connection to the Dumaresq TransGrid substation as part of the project.

7.1.10 Given the distance of the project from other approved and proposed projects in the region, with the proposed Dumaresq Solar Farm located approximately 20 km north east of the site and the next closest solar farm (Sapphire Solar Farm) located about 60 km from the site, there would be minimal localised cumulative impacts, including no visual or noise impacts and no cumulative impact on local roads along the project's transport routes.

7.1.11 Both the Department and Council consider a solar farm development to be a suitable land use for the site. The project would not result in any significant reduction in the overall agricultural productivity of the region. Additionally, GAIA would manage ground cover within the site through sheep grazing, the site could be returned to agricultural uses after the project is decommissioned and the inherent agricultural capability of the land would not be affected in the longer term.

7.1.12 To address the residual impacts of the project, the Department has recommended a range of detailed conditions, developed in conjunction with agencies and Council, to ensure these

impacts are effectively minimised, managed and/or offset. GAIA has reviewed the conditions and does not object to them.

7.1.13 Importantly, the project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emissions sources. It would generate over 441,504 MWh of clean electricity annually, which is enough to power over 74,800 homes and save over 423,844 tonnes of greenhouse gas emissions per year. It is therefore consistent with the goals of the *Net Zero Plan Stage 1: 2020 – 2030*.

7.1.14 Further, the project includes an energy storage facility, with a capacity of 300 MW/300 MWh, that would enable the project to store solar energy for dispatch to the grid outside of daylight hours and / or during periods of peak demand, which has the potential to contribute to increased grid stability and energy security.

7.1.15 The Department considers that the project achieves an appropriate balance between maximising the efficiency of the solar resource development and minimising the potential impacts on surrounding land users and the environment. The project would also stimulate economic investment in renewable energy and provide flow-on benefits to the local community, through job creation and capital investment.

7.1.16 On balance, the Department considers that the project is in the public interest and is approvable, subject to the recommended conditions of consent (see **Appendix I**).

7.1.17 This assessment report is hereby presented to the Independent Planning Commission for determination.

5/11/20

Nicole Brewer
Director
Energy Assessments

5/11/20

Mike Young
Executive Director
Energy, Resources and Compliance

Appendices

Appendix A – List of referenced documents

Bonshaw Solar Farm - Environmental Impact Statement, ERM, October 2019

Bonshaw Solar Farm - Response to Submissions Report, ERM, 27 March 2020

Bonshaw Solar Farm - Amendment Report, ERM, 27 March 2020

Bonshaw Solar Farm - Additional information Letters dated 16 April 2020, 19 June 2020, 22 June 2020, 25 June 2020 and 4 September 2020

Appendix B – Environmental Impact Statement

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/project/9936

Appendix C – Submissions

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/project/9936

Appendix D – Submissions Report

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/project/9936

Appendix E – Consideration of Community Views

The Department exhibited the Environmental Impact Statement for the project from 6 November 2019 until 4 December 2019 (29 days) and received two submissions from the community (one objection and one comment).

The issues raised by the community and considered in the Department's Assessment Report are potential visual impacts and property devaluation.

Issue	Consideration
Visual impacts	*Assessment* • The site would be in a relatively isolated area with few nearby receivers. • The closest non-associated residence (R06) is located about 700 m from the development footprint at its closest point. A further 4 non-associated residences are located within 2 km of the development footprint (R02, R03, R04 and R07 located at 1700 m, 2000 m, 1200 m and 1000 m, respectively). • One objection was received from a landholder about 60 km from the site and raised concerns about impacts on scenery and visual incongruence with existing environment. • One submitter that expressed concern about the project is a landowner of a lot located about 550 m south of the southern edge of the development footprint at its closest point. The Department considers that while there may be views from the property of the solar farm, a dwelling, if approved, could be located on the lot away from the proposed solar farm and oriented such that the potential visual impact of the solar farm could be minimised. • GAIA proposed a five metres landscaping strip along the northern and north-western boundary to mitigate visual impacts. The mitigated overall impact from all viewpoints considered is low or negligible, therefore it is expected that the road users would not experience any significant visual impacts. • The Department considers that, subject to the implementation of proposed visual impact mitigation measures, the visual impact of the project on the landscape and local residents would be acceptable. *Conditions include*: • Establish and maintain a vegetation buffer along the northern and north-western boundary, and to the east of the TransGrid Dumaresq substation to minimise views from Bruxner Highway within 3 years of operation. • Prepare and implement a Landscaping Plan that includes a description of measures that would be implemented to ensure the effectiveness of the vegetation buffer. • Ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape, and not mount any advertising signs or logos on site, except where this is required for identification and safety purposes. • Minimise the off-site visual impacts of the development, including the potential for any glare or reflection. • Minimise the off-site lighting impacts of the development, and ensure that any external lighting is installed as low intensity lighting (except where required for safety or emergency purposes), does not shine above the horizontal and complies with *Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting*
Property devaluation	*Assessment* • Under the Inverell LEP and Infrastructure SEPP, the project is permissible with consent, and the Department's assessment demonstrates the project would not result in any significant amenity or environmental impacts. Accordingly, the Department considers the project would not result in any significant or widespread reduction in land values in the areas surrounding the project. *No specific conditions required beyond those proposed.*

Appendix F – Amendment Report

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/project/9936

Appendix G – Additional Information

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/project/9936

Appendix H – Statutory Considerations

In line with the requirements of Section 4.15 of the EP&A Act, the Department's assessment of the project has given detailed consideration to a number of statutory requirements. These include:

- the objects found in Section 1.3 of the EP&A Act; and
- the matters listed under Section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all of these matters in its assessment of the project and has provided a summary of this assessment below.

Aspect	Summary
Objects of the EP&A Act	The objects of most relevance to the Consent Authority's decision on whether or not to approve the project are found in Section 1.3(a), (b), (c), (e) and (f) of the EP&A Act. The Department is satisfied that the project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 5(c)), particularly as the project: • is a permissible land use on the subject land; • is located in a logical location for efficient solar energy development; • is able to be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard; • would contribute to a more diverse local industry, thereby supporting the local economy and community; • would not fragment or alienate resource lands in the LGA; • would allow agricultural activities to continue unimpeded on half of the project site; • is consistent with the goals of the *Net Zero Plan Stage 1: 2020 – 2030* and would assist in meeting Australia's renewable energy targets whilst reducing greenhouse gas emissions. The Department has considered the encouragement of ESD (Object 1.3(b)) in its assessment of the project. This assessment integrates all significant socio-economic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk-weighted consequences. In addition, the Department considers that appropriately designed SSD solar development, in itself, is consistent with many of the principles of ESD. GAIA has also considered the project against the principles of ESD. Following its consideration, the Department considers that the project can be carried out in a manner that is consistent with the principles of ESD. Consideration of environmental protection (Object 1.3(e)) is provided in **section 5.2** of this report. Following its consideration, the Department considers that the project is able to be undertaken in a manner that would improve or at least maintain the biodiversity values of the locality over the medium to long term and would not significantly impact threatened species and ecological communities of the locality. The Department is also satisfied that any residual biodiversity impacts can be managed and/or mitigated by imposing appropriate conditions and retiring the required biodiversity offset credits.

Aspect	Summary
	Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is provided in **section 5.5** of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality.
State significant development	Under Section 4.36 of the EP&A Act the project is considered a State significant development. Under Section 4.5(a) of the EP&A Act and clause 8A of the SRD SEPP, the Independent Planning Commission (the Commission) is the consent authority for the development as the development application was made by a person who disclosed a reportable political donation under section 10.4 to the EP&A Act in connection with the development application.
Environmental Planning Instruments	The *Inverell Local Environment Plan 2012* (Inverell LEP) applies and is discussed in sections **2.1, 3.3, 5.1** and **5.4** of this report, particularly regarding permissibility, land use zoning and bushfire. The project is permissible under the Infrastructure SEPP. In accordance with the Infrastructure SEPP, the Department has given written notice of the project to TransGrid and RMS. GAIA completed a preliminary risk screening in accordance with *SEPP No.33 – Hazardous and Offensive Development*. The Department's consideration of this analysis is discussed in **section 5.5**. The Department has considered the provisions of the *SEPP (Primary Production and Rural Development) 2019*. Of relevance to the project, the SEPP aims to facilitate the orderly economic use and development of lands for primary production, to reduce land use conflict and sterilisation of rural land and to identify State significant agricultural land. While the location of State significant agricultural land has not been finalised, the Department has considered all of these matters in **section 5.1** of this report. The Department has considered the provisions of *SEPP No. 55 – Remediation of Land*. A preliminary assessment of the land found no contaminated land within the project site, and the Department is satisfied the site is suitable for the development.

Appendix I – Recommended Conditions of Consent

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/project/9936