

22 April 2020

Nicole Brewer
A/Director Resource and Energy
Assets
Department of Planning, Industry and
Environment
Locked Bag 5022
PARRAMATTA NSW 2124



Dear Nicole,

Re: 17-323 Jindera Solar Farm Revised Visual Impact Assessment

This revised Visual Impact Assessment accompanies the Amendment Report for the Jindera Solar Farm ('the proposal'). It details the amendments to the State Significant Development (SSD) Application # 9549. Amendments to the design of the solar farm layout have been proposed and were included in the Amendment Report to reduce visual amenity impacts, primarily for residents along Glenellen Road, north of the development site. A number of additional vegetation screening buffers of approximately 15 m, comprising three rows of shrubs and trees would also be planted along the development site boundary at the request of Transport for NSW (TfNSW) to reduce visual impacts from public roads and other surrounding residences.

A revised Visual Impact Assessment (VIA) has been completed to reassess the likely visual impacts of the new landscaping plan on adjacent residences with a potential view within 1 km of the development site. This is in line with Section 5.2.3, Table 5-6 of the original VIA presented within the Environmental Impact Statement (EIS). The unmitigated and residual visual impacts on these 29 residences is provided in Appendix A.

Amendments to the SSD application include changes to the proposed layout (Appendix B.1.). Since submission of the EIS, Jindera Solar Farm has been in consultation with Greater Hume Shire Council (Council) and neighbouring residents to address the concerns detailed in their submissions including visual impacts.

The updated Landscaping Plan is described in section 2.3 of the Amendment Report.

Yours sincerely,

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Appendix A Revised Visual Impact Assessment

ADDITIONAL SCREENING AND 60 M SETBACK ALONG GLENELLEN ROAD

The original design for the proposal presented in the EIS included a vegetative buffer located parallel with the Glenellen Road. The buffer ensured a minimum distance from the boundary of Glenellen Road to any solar farm infrastructure of at least 50 m. The proposed feature included landscape planting located within the buffer.

Following the submissions by Greater Hume Shire Council, adjacent residents, and members of the community Jindera Solar Farm decided to reconfigure the layout of site infrastructure including solar panels and trackers to achieve better outcomes in respect of land adjacent to Glenellen Road and views into the site. The width of the buffer has now more than doubled, to ensure the minimum distance from the southern boundary fence of Glenellen Road to the nearest solar farm infrastructure (solar panels) is 120 m. The previously proposed 50 m wide landscaping screen would be retained and incorporated into the buffer.

Updated details of the proposal are detailed within Section 2.2 of the Amendment Report, with the updated landscape plan and cross section details for Glenellen Road included in Appendix B.2. and B.3. below.

SCREENING ALONG ORTLIPP ROAD, URANA ROAD, WALLA WALLA JINDERA ROAD AND THE NORTH WESTERN BOUNDARY

In addition to the above proposed screening and increased buffers on Glenellen Road, additional vegetation screening has been proposed along the subject land boundary to address comments raised in submissions and also in some locations to specifically satisfy the requirements of the Transport for NSW submission (Section 4.2.8 of the RTS).

“A landscaped buffer (at least 5 metres in width planted with a variety of species endemic to the area and growing to a mature height ranging from 2 metres to at least 5 metres) shall be established and maintained within the subject property along the frontages of the site to any road to a standard to minimise distraction of the travelling public.”

Additionally, some of the existing proposed screening is to be thickened / widened to deliver increased effect. The additional vegetation screening delivers greater visual amenity and impact mitigations.

All of the areas of screening that are proposed are of at least 15 m depth, consisting of 3 rows of planting and thus exceeding the requirements of Transport for NSW.

Updated details of the proposal are detailed within Section 2.3 of the Amendment Report, with the updated landscape plan included in Appendix B.2. below.

VISUAL IMPACT ASSESSMENT

The unmitigated and residual impacts on nearby residences, incorporating the changes listed above, are detailed in Table 1 below. The location of each potentially affected residence is shown in the constraints map and landscape plan for the proposal (Appendix B.1. and B.2.).

Table 1 Potentially affected residences adjacent to the proposal (including clearing for transmission line where relevant)

Receiver impact prior to mitigation	Unmitigated Impact	Mitigation Measures	Residual Impact
R01 Klinberg Road: The receiver would have solar infrastructure visible to the north and west of the residence. Views to the north-west and west would be indistinct due to placement of panels and existing native vegetative screening. The closest panel infrastructure is located approximately 300 m to the north-east, and 500 m to the north of the residence. Existing large 330 kV transmission lines cross the property to the north and west, in front of proposed infrastructure.	MEDIUM	<ul style="list-style-type: none"> Ongoing consultation with the receiver. A 15 m wide vegetative buffer would be established to the north and west of the residence within the project boundary to screen views of the proposal. Additional screening outside of the TransGrid transmission line easement would be implemented to fill gap in lieu of planting in the easement itself. Vegetative screening to be placed in front of security fence to obscure views of infrastructure. Temporary fencing discussed with the receiver may also assist screening until vegetation has established as an effective screen. 	LOW
R02 Klinberg Road: The receiver would have solar infrastructure partially visible to the north-east and north-west of the residence. Views will be broken due to existing native vegetation screening. The closest panel infrastructure is location approximately 500 m north-east of the residence. Existing large 330 kv transmission lines cross the adjacent property to the north, in front of proposed infrastructure.	LOW	<ul style="list-style-type: none"> A 15 m wide vegetative buffer would be established to the north-east and north-west of the residence within the project boundary to screen views of the proposal. Vegetative screening to be placed in front of security fence to obscure views of infrastructure. Existing vegetation directly north of the residence to be retained. 	LOW
R03, R04, R05, R07 and R08 Walla Walla Jindera Road: Views of the proposal would be barely discernible or indistinct in the landscape due to existing dense native vegetative screening and distance to infrastructure. The closest receiver residence, R08, is approximately 450 m from the closest panel infrastructure to the north-east. None of these receivers are likely to perceive any clearing required for Ortlipp Road, given intervening riparian vegetation and distance (greater than 1.5 km for closest receiver).	LOW	<ul style="list-style-type: none"> A 15 m wide vegetative buffer would be established on the southern boundary of the proposal including along both the eastern and western sides of Walla Walla Jindera Road. Existing vegetation screening along the southern boundary of the proposal would be retained. 	LOW
R09 Ortlipp Road: The receiver would have solar infrastructure visible to the north of the residence. Views would indistinct due to placement of panels and existing native vegetative screening. The	MEDIUM	<ul style="list-style-type: none"> Ongoing consultation with the receiver. A 15 m wide vegetative buffer would be established to the north of the residence within the project 	LOW

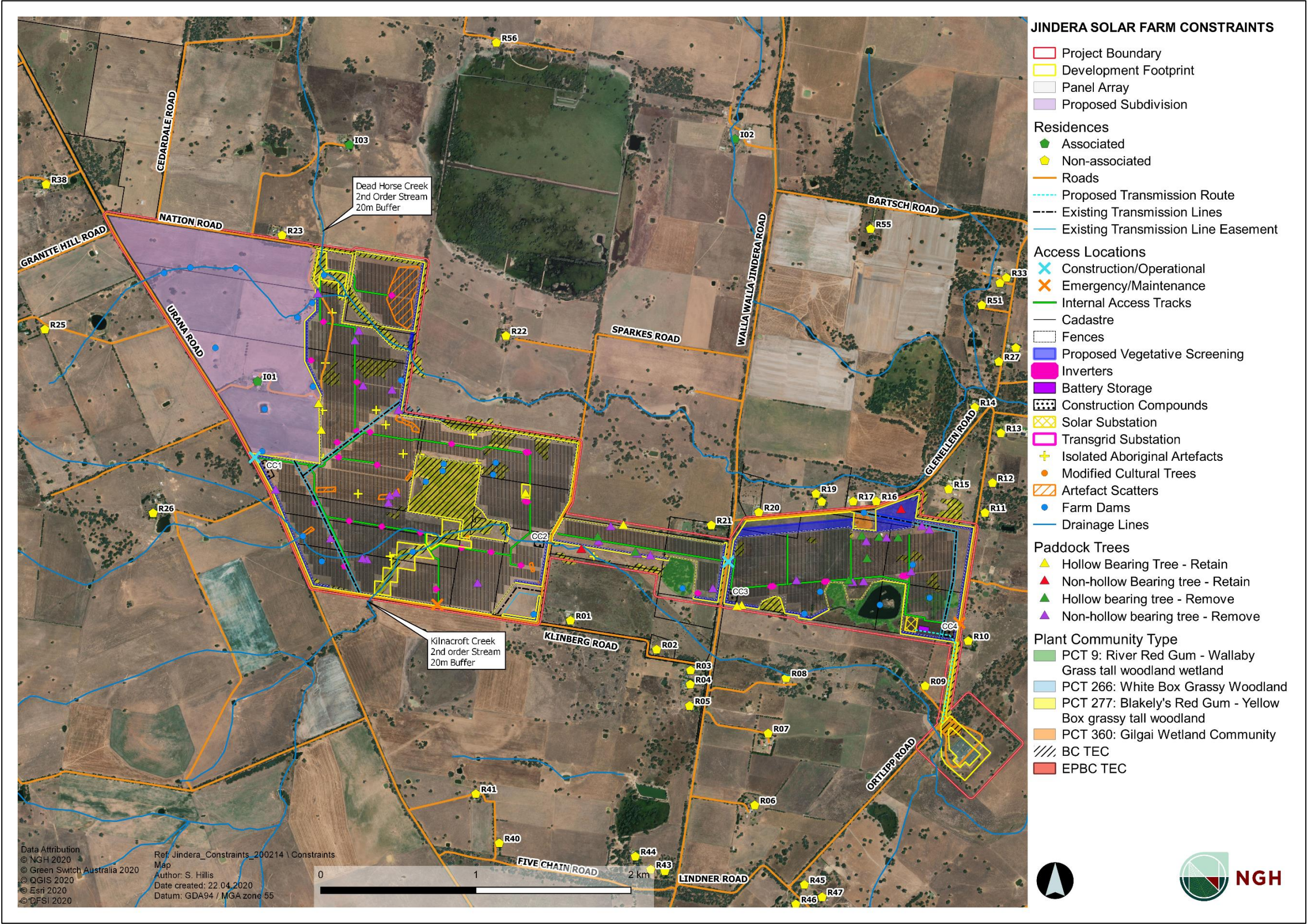
Receiver impact prior to mitigation	Unmitigated Impact	Mitigation Measures	Residual Impact
<p>closest panel infrastructure is located approximately 450 m to the north of the residence.</p> <p>If any clearing is required for Ortlipp Road, it may be perceived (approximately 200 m away from residence) however vegetation around the house lot is likely to screen this direction to a large extent (views to the north east are obscured).</p>		<p>boundary to screen views of the proposal.</p> <ul style="list-style-type: none"> • Vegetative screening to be placed in front of security fence to obscure views of infrastructure. • Views of the TransGrid substation would be effectively screened by dense existing vegetation. 	
<p>R10, R11 and R12 Ortlipp Road:</p> <p>Face to face consultation with landowners was undertaken in July of 2018. Receivers 10, 11 and 12 on Ortlipp Road were visited, and the residences were considered unoccupied but were still assessed. The original offset was 80 m from the edge of the subject land to the nearest panel array, incorporating the existing transmission line easement. This has been increased to 95 m by the additional 15 m of screening within the development site boundary</p> <p>If any clearing is required for Ortlipp Road it may be perceived from R10 (less than 100 m away from residence) however vegetation around the house lot is likely to screen this direction to a large extent (views to the south are obscured).</p>	LOW	<ul style="list-style-type: none"> • A 15 m vegetative buffer for the full length of Ortlipp Road would be established to screen views of the proposal. • An additional 15 m strip of vegetation screening would be planted behind existing vegetation along the boundary between Ortlipp Road and Glenellen Road. • Vegetative screening to be placed in front of security fence to obscure views of infrastructure. • Existing vegetative screening to be retained. 	LOW
<p>R13 and R14 Ortlipp Road and Glenellen Road</p> <p>Views of the proposal would be barely discernible or indistinct in the landscape due to existing native vegetative screening and distance to infrastructure. The closest receiver residence, R13, is approximately 710 m from the closest panel infrastructure to the north-east.</p>	LOW	<ul style="list-style-type: none"> • Existing vegetation between these residences and the proposal would effectively obscure views of solar panels. • A 15 m vegetative buffer for the full length of Ortlipp Road would be established to screen views of the proposal. • An additional 15 m strip of vegetation screening would be planted behind existing vegetation along the boundary between Ortlipp Road and Glenellen Road. 	LOW
<p>R15 Glenellen Road:</p> <p>The receiver would have solar infrastructure partially visible to the south of the residence. Views will be broken due to existing native vegetation screening. The closest panel infrastructure is location approximately 270 m south of the residence. Existing 330 kV transmission lines cross the subject</p>	LOW	<ul style="list-style-type: none"> • Up to 250 m of vegetative screening is proposed to the west of the residence. • An additional 15 m strip of vegetation screening would be planted behind existing vegetation along the boundary between Ortlipp Road and Glenellen Road. • Vegetative screening to be placed in front of security fence to obscure views of infrastructure. 	LOW

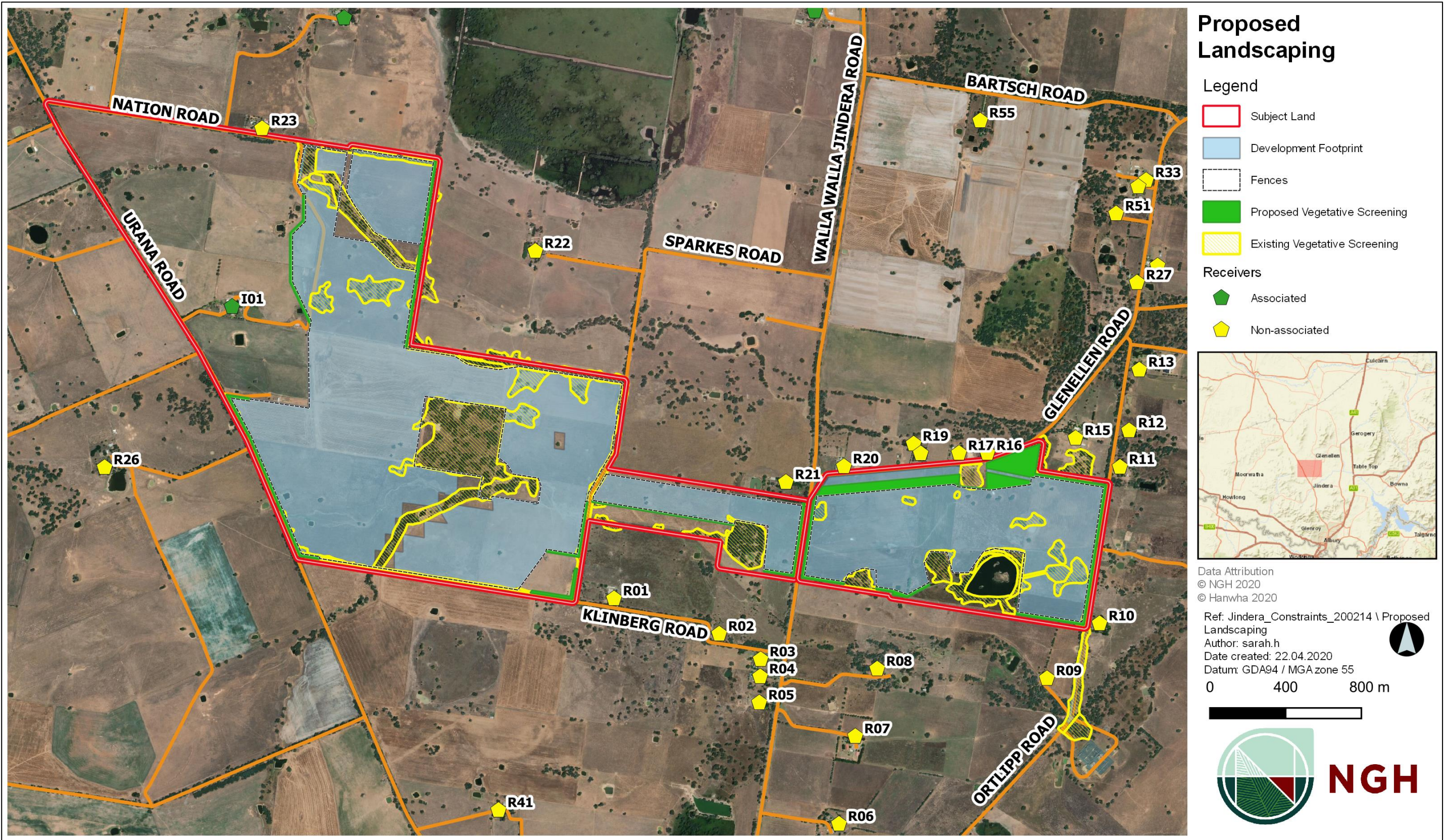
Receiver impact prior to mitigation	Unmitigated Impact	Mitigation Measures	Residual Impact
land to the south of the residence, in front of proposed infrastructure.		<ul style="list-style-type: none"> Existing vegetative screening to be retained. 	
R16, R17, R18, R19 and R20 Glenellen Road: All receivers would have solar infrastructure clearly visible to the south of the residence. The closest residence (R20) would be approximately 160 m from the nearest solar panel.	HIGH	<ul style="list-style-type: none"> Ongoing consultation with the receivers. A 50 m wide vegetative screen would be established for the full length of Glenellen Road within the project boundary to screen views of the proposal. An additional 60 m setback would be implemented to increase the distance between residential buildings and the solar panels. Temporary screening measure offered to receivers while planted vegetation establishes. Vegetative screening to be placed in front of security fence to obscure views of infrastructure. Existing vegetative screening to be retained. 	LOW
R21 Walla Walla Jindera Road: Views of the proposal would be barely discernible or indistinct in the landscape due to existing dense native vegetative screening on the property boundary. The receiver is located approximately 110 m from the closest panel infrastructure to the south and 200 m to the direct east.	LOW	<ul style="list-style-type: none"> Ongoing consultation with the receiver. Views of solar panels south of the residence obscured by existing vegetation screening. A 50 m vegetation screening buffer on the eastern side of Walla Walla Jindera Road. 	LOW
R22 Sparkes Road: The receiver is elevated in the landscape, with partial views through existing native vegetation screening from the residence to the west and south. The residence is located approximately 630 m at its closest point to panel infrastructure in both directions.	MEDIUM	<ul style="list-style-type: none"> Ongoing consultation with the receiver. A 15 m wide vegetative buffer would be established to the west of the residence within the project boundary to screen views of the proposal. Additional earthen bund proposed in large gap in existing native vegetative screening to screen elevated views. Vegetative screening to be placed in front of security fence to obscure views of infrastructure. Existing vegetation screening along the northern boundary, south of the residence would be retained. 	LOW
R23 Nation Road: Views of the proposal will be barely discernible or indistinct in the landscape due to existing native vegetative screening. The residence is located approximately 300 m from the	LOW	<ul style="list-style-type: none"> Existing vegetation screening would be retained. 	LOW

Receiver impact prior to mitigation	Unmitigated Impact	Mitigation Measures	Residual Impact
closest panel infrastructure to the south-east.			
R24 and R25 Urana Road: Views of the proposal would be barely discernible or indistinct in the landscape due to existing native vegetative screening and distance to infrastructure. The residences are located approximately 1.6 km from the closest panel infrastructure to the east.	LOW	<ul style="list-style-type: none"> A 15 m wide vegetative buffer would be established to the east of both residences within the project boundary to screen views of the proposal. Existing vegetation screening along Dead Horse Creek would be retained. 	LOW
R26 Urana Road: Views of the proposal would be barely discernible or indistinct in the landscape due to existing native vegetative screening and distance to infrastructure. The residence is located approximately 870 m from the closest panel infrastructure to the east.	LOW	<ul style="list-style-type: none"> A 15 m wide vegetative buffer would be established to the east of both residences within the project boundary to screen views of the proposal. 	LOW
R27 and R28 Ortlipp Road Views of the proposal would be barely discernible or indistinct in the landscape due to existing native vegetative screening and distance to infrastructure. The closest receiver residence, R28, is approximately 960 m from the closest panel infrastructure to the north-east.	LOW	<ul style="list-style-type: none"> Existing vegetation between the proposal and the development site would effectively eliminate views of solar panels. A 15 m wide vegetative buffer would be established along the western side of Ortlipp Road. 	LOW
R38 and R61 Ortlipp Road Views of the proposal would be barely discernible or indistinct in the landscape due to existing native vegetative screening and distance to infrastructure. The closest receiver residence, R38, is approximately 1890 m from the closest panel infrastructure to the north-west.	LOW	<ul style="list-style-type: none"> A 15 m wide vegetative buffer would be established to the east of both residences within the project boundary to screen views of the proposal. Existing vegetation screening along Dead Horse Creek would be retained. 	LOW

Appendix B Revised mapping and images

Appendix B.1. Updated constraints Map





Appendix B.3. Updated Glenellen Road Cross Section

