

ASSESSMENT REPORT

Hillston Solar Farm

Panel Height Modification (SSD 7955 MOD 1)

EXECUTIVE SUMMARY

Hillston Sun Farm Pty Ltd is seeking to modify the Hillston Solar Farm to improve its energy generating efficiency by increasing its maximum panel height from 2 metres (m) to 4 m.

The Department's assessment has concluded that the modification would not result in any significant impacts beyond those that were already assessed and approved.

1. BACKGROUND

Hillston Sun Farm Pty Ltd (the Applicant) has approval to develop the Hillston Solar Farm (the project), a 85 megawatt (MW) solar farm located approximately 3.5 kilometres (km) south of Hillston, in the Riverina region of south-western NSW. The site is located within the Carrathool Shire Local Government Area (LGA).

The project was approved on 26 October 2017 by the Executive Director, Resource Assessments and Business Systems, as delegate of the Minister for Planning.

The consent allows for the construction, upgrading and decommissioning of a solar farm, including:

- approximately 300,000 solar panels and 22 inverter stations;
- a switchboard building and onsite substation;
- a 300 metre (m) overhead transmission line connecting the onsite substation to the electricity grid;
- internal access tracks, staff amenities, offices, car parking, laydown areas and security fencing; and
- vegetation screening along Kidman Way and the northern portion of the project's western boundary.

2. PROPOSED MODIFICATION

The Applicant has identified an opportunity to install a more efficient solar panel arrangement which increases panel surface area while reducing the amount of trenching for cabling. This optimisation would increase the energy generation output by approximately 0.8% and requires an increase to the maximum height of the panel arrays.

Accordingly, the Applicant is seeking to modify the development consent to increase the maximum height of the solar panels from 2 m to 4 m. This change results from a proposed increase in the height of the tracking base frame above the ground and utilises an alternate panel arrangement on each tracking row. No additional works are proposed in areas outside the approved development footprint.

As the solar panels would be built on a single axis tracking configuration to track the trajectory of the sun, the maximum solar panel height from the approved 2 m to proposed 4 m would typically occur during early morning and late afternoon periods (**Figure 1**).

The modification is described in detail in the Environmental Impact Statement (EIS) submitted in support of the application (see **Appendix A**).

3. STATUTORY CONTEXT

The project was originally approved under Section 4.38 (previously Section 89E) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). As such, any modification to this consent must be made under Section 4.55 of the EP&A Act.

Based on its assessment (see **section 5**), the Department is satisfied that the application can be characterised as a modification to the existing consent as the disturbance area of the development remains unchanged, and it would not significantly increase the environmental impacts of the development as approved.

The Minister for Planning is the approval authority for the modification application. However, under the Minister's delegation dated 11 October 2017, the Director, Resource and Energy Assessments, may determine the proposed modification as a political disclosure statement has not been made and Carrathool Shire Council did not object to the proposal.

4. CONSULTATION

The Department notified Carrathool Shire Council, Roads & Maritime Services (RMS) and Essential Energy about the proposed modification on 28 June 2018, and made the application publicly available on its website. Council, RMS and Essential Energy did not raise any concerns about the proposed modification.

5. ASSESSMENT

In assessing the merits of the proposal, the Department has considered the:

- existing conditions of consent;
- previous EIS for the project;
- modification application and supporting information;
- relevant environmental planning instruments, policies and guidelines; and
- requirements of the EP&A Act.

Solar Panel height increase

The project site is set in a semi-rural setting along Kidman Way, with 12 residences located within 2 km of the site and the nearest residences R1 and R2 located approximately 700 m north (see **Figure 1**).

With the proposed increase in solar panel heights from a maximum of 2 m to 4 m, the Applicant undertook a viewshed analysis to model the visibility of the project from the same representative viewpoints used in the EIS for the approved project.

Despite the proposed increase in maximum panel heights, existing woodland vegetation would continue to fully screen views from residences north of the project site (i.e. R1, R2, R3 and R21).

Minor increases in the visibility of the project are predicted to occur at dwellings located north-east, south-east and south-west of the site. The Department considers the increased visibility to be minor and manageable given:

- the separation distance between the impacted receivers and additional areas of visibility occur at distances greater than 1.5 km, making the increased panel heights difficult to discern;
- panels would only be at their full vertical position for a small portion of the day;
- the presence of woodland vegetation between the impacted receivers and the project site would continue to provide partial screening; and
- as part of the development consent, the Applicant is required to prepare, establish and maintain a mature vegetation buffer along the northern portion of the site's western boundary and Kidman Way.

While there is no existing screening between the project and dwelling R17 located approximately 1.6 km west of the site, the existing conditions require the preparation of a landscape plan in consultation with the owner and establishment of a vegetation buffer to screen views. Therefore, the Department considers no additional conditions are required to maintain the visual amenity from R17.

RMS did not raise any concerns to the proposed modification, noting the development consent already contains provisions for the mitigation and management of visual impacts from Kidman Way.

As no additional works are proposed in areas outside the approved development footprint, the Department is satisfied that the proposed modification would not result in any significant increase in environmental or amenity impacts.

5. RECOMMENDED CONDITIONS

The Department has drafted a recommended Notice of Modification (see **Appendix B**), and a consolidated version of the conditions of consent as modified (see **Appendix C**). The only change to the existing consent is an update to the definition of the EIS. The Applicant has reviewed the proposed changes to the conditions and does not object to them.

6. CONCLUSION

The Department has assessed the modification application in accordance with the relevant statutory requirements, having regard to the modification justification, agency advice and documentation relating to the original project. The Department's assessment has found that the proposed modification would not result in any significant impacts beyond those that were assessed and approved for the original project.

Consequently, the Department is satisfied that the proposed modification is in the public interest and should be approved.


7. RECOMMENDATION

It is recommended that the Director, Resource and Energy Assessments, as delegate of the Minister for Planning:

- **consider** the findings and recommendations of this report;
- **determine** that the request falls within the scope of section 4.55(1A) of the EP&A Act;
- **modify** the development consent (SSD 7955); and
- **sign** the attached notice of modification (**Appendix B**).

Recommended by:

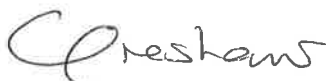
Recommended by:

 26/7/18
Ellen Jones
Environmental Assessment Officer
Resource and Energy Assessments

 26/7/18
Anthony Ko
Senior Environmental Officer
Resource and Energy Assessments

8. DECISION

The recommendation is: Approved / Not approved by:

 27/7/18
Clay Preshaw
Director
Resource and Energy Assessments
as delegate of the Minister for Planning

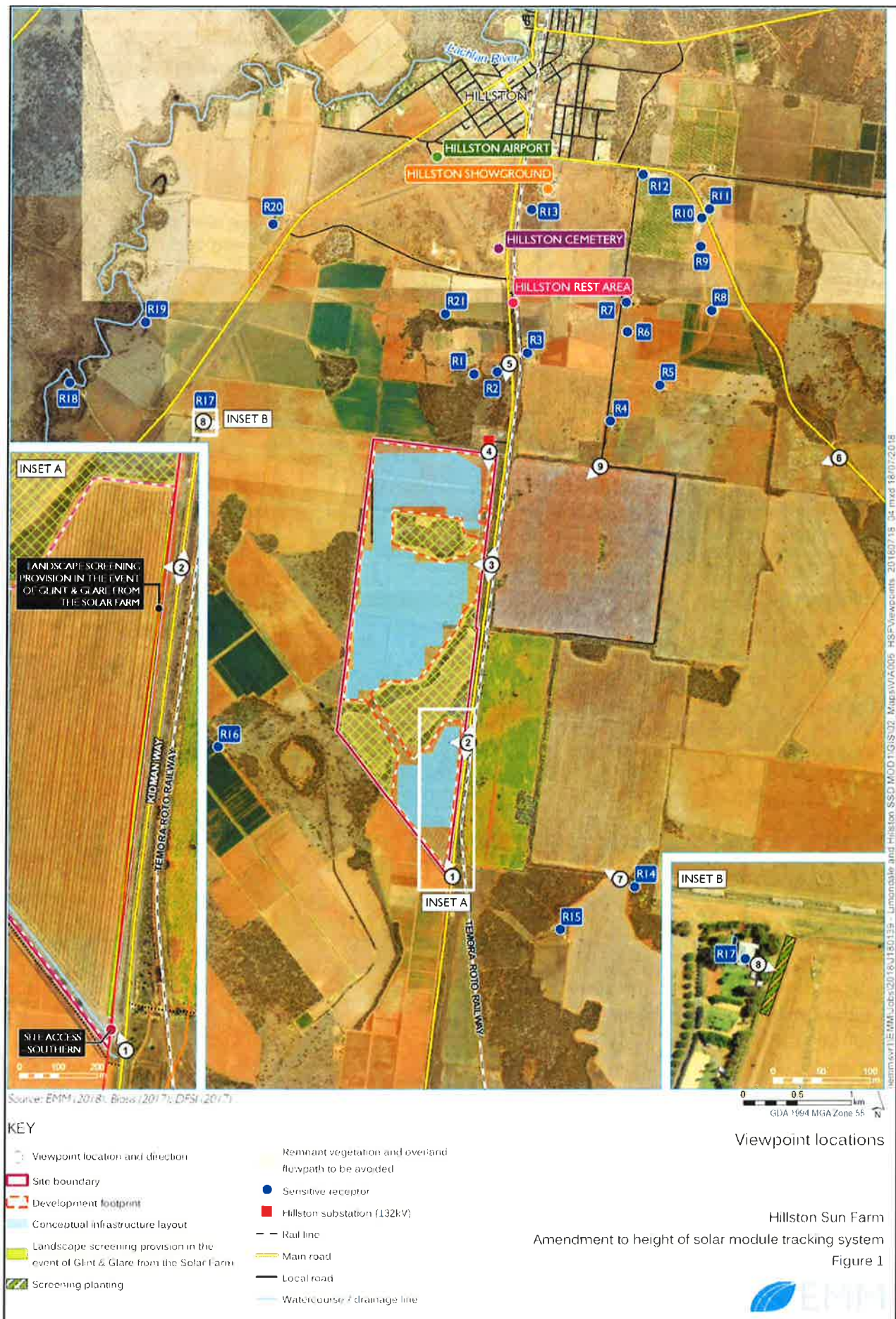


Figure 1: Project layout, residence and viewpoint locations

APPENDIX A:

ENVIRONMENTAL IMPACT STATEMENT

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9416

APPENDIX B:

NOTICE OF MODIFICATION

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9416

APPENDIX C:

CONSOLIDATED CONSENT

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9416
