



3rd May 2017

Mr Iwan Davies
Resource Assessments
Department of Planning & Environment
320 Pitt Street
GPO Box 39
Sydney, NSW 2001

Dear Mr Davies,

Re: Flyers Creek Wind Farm MP 08_0252 – Modification 3

1. Introduction

Flyers Creek Wind Farm ("the Project") is a proposed wind farm development located approximately 20 kilometres south of Orange in the Blayney Shire local government area.

Project approval MP 08_0252 was granted under Part 3A of the *Environmental Planning and Assessment Act 1979 (NSW)* ("EP&A Act") to Flyers Creek Wind Pty Ltd ("the Proponent") for the Project by the NSW Planning and Assessment Commission on 14 March 2014 ("Project Approval").

The Proponent forms part of the Infigen Energy corporate group ("Infigen"). Infigen is focused on continuing to invest in new and existing renewable energy projects to extend the current development pipeline. Infigen's current operating wind and solar farms generate enough renewable energy to meet the needs of over 250,000 homes and represents a saving of approximately a million tonnes of carbon dioxide a year. Infigen's development pipeline comprises approximately 1,200 megawatts of large-scale wind and solar projects in Australia. The Project forms an integral part of Infigen's development pipeline.

The Proponent seeks a modification to the Project Approval under section 75W of the EP&A Act ("Modification 3") so as to:

- remove 4 wind turbines from the Project, reducing the total number of wind turbines authorised by the Project Approval from 42 turbines to 38 turbines; and
- make changes to associated access tracks and cabling and the alignment of the approved 33 kilovolt (kV) overhead power line.

Modification 3 is required to excise 3 properties which have exited from the Project.

Further details of Modification 3 is provided below.

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2. Project Approval History

The Project Approval as originally granted, authorised the:

- construction and operation of a wind farm with up to 42 turbines;
- associated infrastructure including access tracks, local road infrastructure upgrades and electrical connections between the turbines (both underground cable and under and aboveground power lines);
- an on-site substation (inclusive of switch room, control room and auxiliary services building); and
- a transmission line from the on-site substation to the Essential Energy 132kV transmission line on the Cadia Mine site to the north-west of the site.

A modification to the Project Approval was approved on 13 March 2015 (“Modification 1”) and authorised a 6 month extension to comply with the deferred commencement condition provisions.

A second modification to the Project Approval was approved on 14 September 2015 (“Modification 2”) and authorised the:

- removal of the 132kV transmission line proposed to connect the wind farm substation to the electrical grid (on the existing Orange to Cadia Mine 132kV line) from the scope of the Project Approval;
- removal of deferred commencement conditions B1 and B2;
- a revised substation location and access tracks; and
- minor changes to the Project Approval conditions including related to provision for alternative locations to monitor background noise if required.

As part of Modification 2 it was foreshadowed that:

- A new 132kV transmission line alignment would be separately assessed and approved. The new 132kV transmission line alignment is being assessed under Part 5 of the EP&A Act by Essential Energy as the determining authority.
- A further modification, being Modification 3, would be lodged in the future to excise 3 properties from the Project and realign the approved 33 kV overhead power line.

3. Proposed Modification 3

Overview

The Proponent seeks a number of modifications to the approved Project so as to excise the 3 properties which have exited from the Project (“Exiting Properties”). Details of the Exiting Properties are set out in table 1 below.

Table 1 – Exiting Properties

Property 1	Lot 68 DP 750358
Property 2	Lot 7 DP 750358 Lot 65 DP 750358 Lot 66 DP 750358
Property 3	Lot 41 DP 750367 Lot 28 DP 750367

A schedule of the properties involved in the Project is included at Appendix A.

The following changes are proposed to be made to the approved Project as part of this Modification:

- Part A - Removal of the Project infrastructure from the Exiting Properties: This includes the deletion of:
 1. 4 wind turbines and associated access tracks and cabling; and
 2. the 33 kV overhead power line.

The removal of the Project infrastructure from the Exiting Properties requires a number of changes to the Project as outlined in Parts B and C below.

- Part B - Alternative alignment of the 33 kV overhead power line to along Errowanbang Road.
- Part C – Minor changes to access tracks and a laydown area location.
- Part D - Minor changes to underground cabling.
- Part E – Subdivision or subdivision for lease purposes of the substation site.
- Part F – Subdivision for lease purposes for electrical connections.

In addition, a number of clarifications are sought to the conditions of the Project Approval as part of Modification 3 as outlined in section 6 below.

Further details on the proposed modifications are provided in the following sections and appendices.

Appendix B contains a table listing the locations of the remaining 38 turbines and replaces Attachment 1 contained at pg 3-32 of the *Flyers Creek Wind Farm Environmental Assessment* (May 2011). No changes are proposed to the locations of any turbines as part of this Modification 3.

Appendix C contains:

- Figure 1 which shows the Wind Farm Layout as currently authorised by the Project Approval;
- Figure 2 which shows the revised Project layout incorporating Modification 3 (**Revised Layout**). The Revised Layout contained in Figure 2 remains subject to further micro-siting of Project components as authorised by the Project Approval conditions; and

- Figure 3 which shows the key modifications being proposed in the context of the layout as currently authorised by the Project Approval.

Part A - Removal of Project Infrastructure from the Exiting Properties

All Project related infrastructure is proposed to be removed from the Exiting Properties. This requires:

- The deletion of 4 approved wind turbines from the Project, being turbine 4, turbine 13, turbine 14 and turbine 16. This will reduce the total number of wind turbines authorised by the Project Approval from 42 turbines to 38 turbines.
- The deletion of the currently approved alignment of the 33kV overhead power line (the proposed realignment as outlined in Part B below).
- The deletion of the access tracks and cabling between:
 - o Beneree Carcoar Road to turbine 4;
 - o turbine 4 to turbine 3;
 - o turbine 9 to turbine 13;
 - o turbine 13 to turbine 14;
 - o turbine 14 to turbine 15;
 - o turbine 14 to turbine 16; and
 - o turbine 15 to turbine 16.

The changes to access tracks and underground cabling proposed are outlined in Part C below).

- The relocation of the currently approved laydown area located on the access track from Beneree Carcoar Road to turbine 4 (which is proposed to be relocated as outlined in Part C below).

Part B – Alternative alignment of the 33kV overhead power line to the Errowanbang Road

The Project Approval authorises the construction and operation of a duplicated 33kV overhead transmission line connecting the turbines in the southern half of the site to the substation and turbines in the north-western part of the site. Figure 1 of Appendix C shows the currently approved alignment in blue.

The Proponent seeks to modify the route alignment of the approved 33kV overhead power line from the alignment shown in Figure 1 of Appendix C to an approximately 100m wide route corridor following the alignment of the Errowanbang Road as generally shown in Figure 2 of Appendix C.

Errowanbang Road is a local road for which Blayney Shire Council (“Council”) is the roads authority. The Proponent has consulted with the Council in relation to the proposal to locate the 33kV overhead power line within the road reserve for Errowanbang Road and the Council provided a letter of approval on 09 June 2015. A copy of this letter is contained in Appendix D.

Approval is sought to locate the 33kV overhead power line required to transport power from the approved wind turbines to the approved substation anywhere within the approximately 100m wide route corridor indicated in Figure 2 of Appendix C. This approximately 100m wide route corridor has been selected as the Council is currently upgrading Errowanbang Road with works expected to be completed in mid to late 2018. The existing alignment of the Errowanbang Road will be subject to minor rerouting by the Council during the upgrade works. The approximately 100m wide route corridor will ensure that the 33kV power line will remain wholly or mostly within the road reserve for Errowanbang Road after the upgrade works are completed.

The proposed route corridor starts approximately 800m south of the junction of Errowanbang Road and Halls Road and follows the Errowanbang Road as far north as the junction with Panuara Road, where the 33kV overhead power line would turn east and cross the Project site to connect into the approved substation. From the turn off location on Errowanbang Road to the substation, the corridor would also include the 132kV overhead power line, which will, as outlined at section 2 above, be assessed under Part 5 of the EP&A Act by Essential Energy as the determining authority.

Part C – Minor changes to access tracks and a laydown area

The removal from the Project of the Existing Properties requires a number of minor changes to be made to the Project as follows:

- **Access Tracks:** Replacement of the access tracks removed with new access tracks as shown on Figure 2 of Appendix C. These new access tracks are described below:
 - o Access track from turbine 3 to turbine 5 – amended location of access along existing track to ensure turbine 3 is accessible from turbine 5 as it is no longer accessible from the east;
 - o Access track from Errowanbang Road to turbine 22 – removal and alternative access proposed from Errowanbang Road to turbine 23 to make use of single entrance; and
 - o Access tracks between:
 - o Errowanbang Road and turbine 23;
 - o turbine 23 and turbine 22;
 - o turbine 23 and turbine 25; and
 - o turbine 26 and turbine 31,
 to allow for flexible access track configurations.
- **Lay Down Area:** Addition of a new option for a further laydown area (bring the total to 5) as generally shown in Figure 2 of Appendix C.

Part D – Minor changes to underground cabling

Modification 3 includes replacement of the underground cabling removed with new underground cabling as shown on Figure 2 of Appendix C (noting that the cabling will follow the access track route corridor where not separately shown). The new underground cabling is described below:

- cabling between turbine 10 and the approved substation (which was relocated as part of Modification 2);
- cabling connecting turbine 15 and turbine 18;
- cabling between turbine 19 and Errowanbang Road; and
- amendment to the cabling between Errowanbang Road and turbine 22 to follow existing access track.

Part E – Subdivision or subdivision for lease purposes of the substation site

This modification also clarifies that the project includes either the subdivision of Lot 8 in DP 750358 so as to either allow a separate lot to be created for the approved substation site or so as to enable the registration of a long term lease over the substation site.

Part F – Subdivision for lease purposes for electrical connections corridor

This modification also clarifies that the project includes the subdivision of Lot 180 in DP 75035863 for lease purposes so as to enable the registration of a long term lease over part of this lot for the 132kV electrical line.

4. Environmental Assessment

This Section 4 assesses the environmental impacts of the proposed Modification 3.

Overview

Modification 3 will generally result in a reduction of the environmental impacts from those arising from the currently approved Project layout. This is because it will:

- reduce the total number of wind turbines authorised by the Project Approval from 42 turbines to 38 turbines;
- relocate the approved 33kV overhead power line from the approved duplicate line within the middle of the Project site to a duplicate line located within the road reserve of Errowanbang Road; and
- reduce the overall footprint of the Project.

Ecological (Flora and Fauna) Impacts

Keith Mills & Associates Pty Limited (KMA) consultants completed a Flora and Fauna assessment for the Project as part of the *Flyers Creek Wind Farm Environmental Assessment* (May 2011). KMA also completed an additional survey in June 2015.

The Proponent engaged KMA to carry out a Flora and Fauna Assessment of Modification 3. A copy of this assessment is contained in Appendix E. As detailed in the Flora and Fauna Assessment of Modification 3, the modifications proposed as part of Modification 3:

- are minor in nature and significantly reduce the scale of the project footprint; and

- are not likely to have a significant impact on any flora or fauna species or community listed under the *Environment Protection Biodiversity Conservation Act 1999 (Cth)* or the *Threatened Species Conservation Act 1995 (NSW)*.

Noise Impacts

A noise impact assessment was carried out in 2010 as part of the *Flyers Creek Wind Farm Environmental Assessment* (May 2011) by Vipac Engineering & Scientists Ltd.

Condition G7 of the Project Approval requires that the Project be designed, operated and maintained to ensure that noise levels at non-associated residential receivers do not exceed the greater of:

- 35 dB(A); or
- the existing background noise level (L_{A90} (10-minute)) correlated to the integer wind speed at hub height at the wind farm site by more than 4 dB(A).

Condition G8 of the Project Approval requires that a revised noise assessment be prepared for the final turbine model and layout prior to commissioning the wind farm. The revised noise assessment must demonstrate the consistency of the final layout with the predictions contained in the *Flyers Creek Wind Farm Environmental Assessment* (May 2011) and the ability of the final layout to meet the noise limits contained in condition G7.

Proposed Modification 3 reduces the number of wind turbines by four, from 42 to 38. No changes to the approved locations of the other approved wind turbines are proposed as part of Modification 3. Accordingly, Modification 3 is expected to result in lower noise emissions from the Project as a whole.

However, proposed Modification 3 also formalises the removal of the Exiting Properties from the Project. As a result, the 3 residences located on the Exiting Properties (being R014, R024 and R056) will no longer be associated with the Project and so the noise limits contained in condition G7 of the Project Approval will now apply to these properties. Updated modelling for the reduced turbine numbers proposed as part of Modification 3 was undertaken for each of R014, R024 and R056 using the noise profile of the GE 2.5xl model wind turbine which was assessed as part of the *Flyers Creek Wind Farm Environmental Assessment* (May 2011). The results are provided in Table 2 below and a technical note is available in Appendix F.

Table 2 - Predicted Noise Profile at Properties R014, R024 and R056 relative to the Applicable Noise Criteria

Wind Speed (m/s), 10mAGL	3 m/s	4 m/s	5m/s	6m/s	7m/s	8m/s	9m/s
Noise Criteria from background levels measured at R012 (dBA)	35	36	38	39.5	40.5	41.5	42.5
Predicted Noise Profile R014 (dBA)	27	30	33	36	38.5	38.5	38.5
Noise Criteria from background levels measured at R025 (dBA)	35	35	36	37.5	38.5	40	40.5
Predicted Noise Profile R024 (dBA)	22	25	28	31	33.5	33.5	33.5
Noise Criteria from background levels measured at R078* (dBA)	35	35	35	35	36.5	38.5	40.5
Predicted Noise Profile R056 (dBA)	22	25	28	31	33.5	33.5	33.5

*using updated measured background noise levels at R078

This demonstrates that the predicted noise levels at each of R014, R024 and R056 will remain compliant with the noise limits which apply to non-associated residential receivers under condition G7 of the Project Approval. In fact the predicted noise levels at these residences has decreased from those predicted in the *Flyers Creek Wind Farm Environmental Assessment* (May 2011) as a result of the deletion of turbines. Given this, Modification 3 is considered not to result in any increase in noise impacts.

Visual Impacts

Modification 3 is expected to reduce the visual impacts of the Project. In particular:

- the deletion of 4 of the currently approved turbines will result in a reduction of the overall visual impacts of the Project;
- the relocation of the approved 33kV overhead power line from the approved duplicate line within the middle of the Project site to a duplicate line located within the road reserve for Errowanbang Road will also reduce the overall visual impacts of the Project;
- all non-associated residences within 5 km of turbines, including the 3 residences located on the Exiting Properties (being R014, R024 and R056), will have the benefit of the visual screening treatments required under condition D24 of the Project Approval; and
- the Project will remain fully compliant with the shadow flicker limits of a maximum of 30 hours per annum at any residence which apply under condition D28 of the Project Approval.

The deletion of 4 of the approved turbines will result in a lessening of the potential visual impacts of the Project on nearby properties. In particular, the removal of these 4 turbines is expected to reduce the visual impact from the approved Project on the 3 residences located on the Exiting Properties (being R014, R024 and R056) by removing the closest turbines and therefore reducing the dominance of the turbines in the field of view from these properties. Further information on the residual visual impacts on each of these three residences is set out below:

- **Property R014:** This property will experience a reduced visual impact by the removal of turbines 13, 14 and 16 as part of this modification application. This will remove 3 of the 4 closest turbines to the property. The closest remaining turbine to this property is approved turbine 9 which will be approximately 1.3km north of the property. No changes are proposed to the currently approved location of turbine 9 as part of this modification. Views northwards from the property towards turbine 9 will be partially screened by existing scattered trees and the property will be able to access further visual screening under condition D24 of the Project Approval.
- **Property R024:** This property will experience a reduced visual impact by the removal of the closest turbine 4 as part of this modification application. The closest remaining turbine to this property is approved turbine 3 which is a distance of approximately 1.8km west of the property (being 0.5km further away from the property than turbine 4 which is being removed). No changes are proposed to the currently approved location of turbine 3 as part of this modification. Views westwards from the property towards turbine 3 will be partially screened by trees immediately adjacent to the west of the property and the property will be able to access further visual screening under condition D24 of the Project Approval.
- **Property R056:** This property will experience a reduced visual impact by the removal of turbines 4, 13, 14 and 16 as part of this modification application. This will remove 3 of the 4 closest turbines to the property. The closest remaining turbine to this property is approved turbine 15 which is located approximately 0.9km south of the property and remains unchanged from the approved layout to the proposed layout. No changes are proposed to the currently approved location of turbine 15 as part of this modification application. This property is surrounded by trees which will provide existing screening of views towards turbines to the south and the property will be able to access further visual screening under condition D24 of the Project Approval.

The relocation of the approved 33kV overhead power line from the approved duplicate line within the middle of the Project site to a duplicate line located within the road reserve for Errowanbang Road will also reduce the overall visual impacts of the Project. The currently approved duplicate 33kV overhead power line ran through rural farmland in the centre of the Project site and so resulted in a level of visual impact. Modification 3 proposes the relocation of this to a duplicate power line which will follow the Errowanbang Road alignment. The potential visual impact of the power line on users of the Errowanbang Road are expected to be low. Errowanbang Road has existing overhead electricity lines in its vicinity with lines running approximately 200m west of the road which cross the road in some areas. Power lines are commonly viewed alongside roads and therefore will not appear out of context. Accordingly, the realignment of the 33kV overhead power line along the Errowanbang Road reserve will not appear out of place in the existing environment and will reduce the overall visual impacts of the project.

No change is proposed to the approved location of turbine 15 as part of this modification application. However, for completeness, it is noted that turbine 15 previously formed a cluster with turbines 13, 14 and 16 which are proposed for deletion from the Project as part of this modification application. Although turbine 15 will no longer form part of an immediate cluster of turbines, it will still be viewed in the context of the other approved turbines forming part of the Project. The landform of the site is small hills and valleys, with most turbines being located on higher elevations. In views

of the approved wind farm from all directions, a different number of turbines will be visible at any one time due to the nature of the landscape. In some views, turbines will appear in full view whilst others are hidden behind natural landforms. The position of turbine 15 in an area without an immediate cluster of turbines will not result in any increased visual impact.

Parsons Brinckerhoff provided a shadow flicker assessment as part of the *Flyers Creek Wind Farm Environmental Assessment* (May 2011). This assessment was undertaken using a 44 wind turbine project layout and concluded that:

- on a 'realistic case', no residences neighbouring the Wind Farm would experience more than 10 hours of shadow flicker, including residences involved in the Project; and
- on the 'worst case', no neighbouring residences would experience over 30 hours of shadow flicker per year, including residences involved in the Project.

The reduced number of turbines now proposed would accordingly remain fully compliant with the shadow flicker limits contained in condition D28 of the Project Approval.

Archaeological and Cultural Heritage

Austral Archaeology Pty Ltd consultants undertook the archaeological and cultural heritage assessment as part of the *Flyers Creek Wind Farm Environmental Assessment* (May 2011) and completed additional survey work in April and July 2015.

New South Wales Archaeology Pty Limited (NSWA) consultants completed survey work and an archeological addendum assessment of Modification 3 in March 2017. The full report is available in Appendix G. This archeological addendum assessment:

- identified one additional Aboriginal stone artefact scatter. There is no Project infrastructure planned on or near this scatter site and it will be avoided during construction. Information on the location of the stone artefact scatter will be included in the Construction Heritage Management Plan;
- concluded that the four survey areas assessed for Modification 3 were all found to be generally of low archaeological potential and sensitivity and, accordingly, no further heritage assessment is required in respect of Modification 3.

Accordingly, Modification 3 is not expected to have any significant archaeological or cultural heritage impacts.

5. Consultation

Ongoing community and stakeholder consultation has been carried out throughout the development of the Project.

Recent consultation specific to Modification 3 is outlined in Table 4 below:

Table 4 - Modification 3 Consultation

Consultee	Consultation Activity
Blayney Shire Council	- Meeting on 27th October 2016 during which an update was provided on the status of planning Modification 3 and Blayney Shire Council shared information on the proposed Errowanbang Road upgrades. - Meeting on 23rd February 2017 to discuss planning Modification 3, expected construction timelines and the Council plans for the upgrade of the Errowanbang Road. - Project newsletter issued 9th March 2017 (Appendix H).
Aboriginal Stakeholders	- The DPE has advised that for the purposes of the current assessment, consultation can be on-going with previously identified Registered Aboriginal Parties. - An email outlining the proposed changes and the results of the investigation, with a copy of a draft report was sent to the relevant Aboriginal groups who had previously registered their involvement at the start of the project. The email and draft report was issued on 6th February 2017 and no responses were received within the one month consultation time period.
Community Consultative Committee ("CCC")	- CCC Meetings take place approximately every 3 months. - Latest meetings where Modification 3 was discussed were 27th October 2016 and 21st March 2017. Minutes are available on Infigen's website: www.infigenenergy.com/our-business/development-pipeline/wind-energy-projects/ - Project newsletter issued 9th March 2017 (Appendix).
Landowners	- Meetings take place approximately every 4 months with email, face to face and phone communication ongoing. - Modification 3 was discussed specifically at meeting of 26th October 2016 and 22nd March 2017. - A letter detailing proposed changes associated with Modification 3 was issued on 28th November 2016. - Project newsletter issued 9th March 2017 (Appendix H). - All landowners will be notified of the lodgment of Modification 3 in accordance with clause 8F(3)(c) of the <i>Environmental Planning and Assessment Regulation 2000 (NSW)</i>.
CENREC (Central New South Wales Renewable Energy Cooperative)	- Monthly board meetings with update on project. Last meeting on 17th March 2017. - Project newsletter issued 9th March 2017 (Appendix H).
Community within 3km of wind turbine	Project newsletter issued 9th March 2017 (Appendix H).

6. Project Approval Conditions

The following clarifications are sought to the conditions of the Project Approval as part of Modification 3:

- Definition of Site** – The Proponent requests that this definition be updated to reflect that modifications the subject of Modification 3.

- **Condition C8** - The Proponent requests that this condition be modified in line with contemporary wind farm micro-siting conditions as follows:

The Proponent may micro-site the wind turbines and ancillary infrastructure without further approval provided:

- (a) *no wind turbine is moved more than 100 metres from the relevant GPS coordinates shown in Appendix A;*
- (b) *the revised location of a wind turbine is at least 50 metres from existing hollow-bearing trees; or where the proposed turbine location is already within 50 metres of existing hollow-bearing trees, the revised location of the turbine is not moved any closer to the existing hollow-bearing trees; and*
- (c) *the revised location of the wind turbine and/or ancillary infrastructure would not result in any noncompliance with the conditions of this consent.*

If this change is made then a separate definition of 'micro-siting' is no longer required to be included in the Project Approval.

- **Condition C17** – The Proponent requests that this condition be modified in line with contemporary wind farm conditions as follows:

Prior to the commencement of construction, the Proponent must submit detailed plans of the final layout of the Project to the Secretary, including:

- (a) *details on the micro-siting of any wind turbines and/or ancillary infrastructure; and*
- (b) *the GPS coordinates of the final wind turbine locations.*

- **Condition D1** - The Proponent will avoid the clearing of native vegetation where possible through careful micro-siting of all project components. However, the 1.1ha incorporated in this condition was an approximate figure provided in the Flora and Fauna Assessment prepared as part of the *Flyers Creek Wind Farm Environmental Assessment* (May 2011) which:

- o was specific to trees (as opposed to all types of native vegetation); and
- o remains subject to detailed design and further mapping of vegetation as required by the Biodiversity Offset Package requirements imposed under condition D9(a) and the Construction Flora and Fauna Management Plan required by condition F22(f) of the Project Approval.

To ensure that the Project is buildable whilst minimising the clearing of native vegetation, the Proponent seeks to have this condition clarified as follows:

The clearing of all native vegetation shall be limited to the minimal extent practicably required and carried out in accordance with the Construction Flora and Fauna Management Plan, through careful micro-siting of all project components. The final amount of cleared native vegetation will be offset as part of the Biodiversity Offset package as outlined in Condition D9. Details regarding the procedures for clearing vegetation and minimising the extent of clearing shall be clearly included in the Construction Flora and Fauna Management Plan as required by condition F22(f)."

- **Condition D20** - The Proponent requests that this condition be modified in line with contemporary wind farm conditions as follows:

The Proponent must ensure that the Project provides for asset protection in accordance with the RFS's Planning for Bushfire Protection 2006 and Standards for Asset Protection

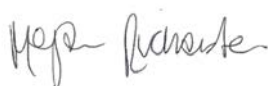
- **Reference to Errowanbang School in Conditions D24, E1, G7 and G9:** A number of conditions of the Project approval make specific reference to the *Errowanbang School (1257 Errowanbang Road)* which has now closed and recently been sold with development approval for conversion to a private residence. Given this, the Proponent requests that all specific references to Errowanbang School are removed from the Project Approval.

7. Conclusion

The proposed Modification 3 will remove 4 wind turbines from the approved Flyers Creek Wind Farm and make changes to associated access tracks and cabling and the alignment of the approved 33 kilovolt (kV) overhead power line.

This assessment establishes that Modification 3 will result in an overall reduction to the impacts of the approved Flyers Creek Wind Farm including lessening the footprint of the approved Project and reducing the visual impacts of the Project.

Regards,



Megan Richardson
Development Manager
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Appendices

- Appendix A Schedule of Properties
- Appendix B Turbine Locations (with 4 turbines deleted)
- Appendix C Flyers Creek Wind Farm Layouts
 - Figure 1: Approved Wind Farm Layout
 - Figure 2: Proposed Wind Farm Layout
 - Figure 3: Wind Farm Layout -Key Modifications
- Appendix D Letter from Blayney Shire Council (09 June 2015)
- Appendix E Keith Mills & Associates Pty Limited Flora and Fauna Assessment
- Appendix F Vipac Noise Assessment Letter
- Appendix G New South Wales Archaeology Pty Limited Archaeological and Cultural & Heritage Assessment
- Appendix H Community Newsletter – March 2017

Appendix A

Schedule of Properties

Appendix A – Flyers Creek Wind Farm – Schedule of Properties

Landowner	Lot	DP
Landowner 1	75	750358
Landowner 2	8	750358
	52	750358
Landowner 3	1	927568
	78	750359
Landowner 4	63	750358
Landowner 5	202	750359
Landowner 6	163	750358
	427	1067009
Landowner 7	69	750358
Landowner 8	201	750359
Landowner 9	204	750359
Landowner 10	6	1031238
Landowner 11	6	550053
Landowner 12	66	750359
	72	750359
	208	750359
Landowner 13	5	1031238
Landowner 14	12	1063204
Landowner 15	62	750358
	181	750358
Landowner 16	533	749105
Landowner 17	1	1071270
Landowner 18	50	750358
	53	750358
	76	750358
Landowner 19	83	750359
Landowner 20	162	750358
Landowner 21	161	750358

Landowner	Lot	DP
Landowner 22	425	1067009
	426	1067009
Landowner 23	67	750358
Landowner 24	1	519767
	2	519767
	206	750359
	841	1130733
Landowner 25	1	396680
	1	1079963

The project site will also be taken to include:

- a. any crown land, including road reserves, contained within the project site;
- b. the approved transmission line corridor along the Errowanbang Road reserve; and
- c. any land which is required for the road upgrades required under this approval.

Appendix B

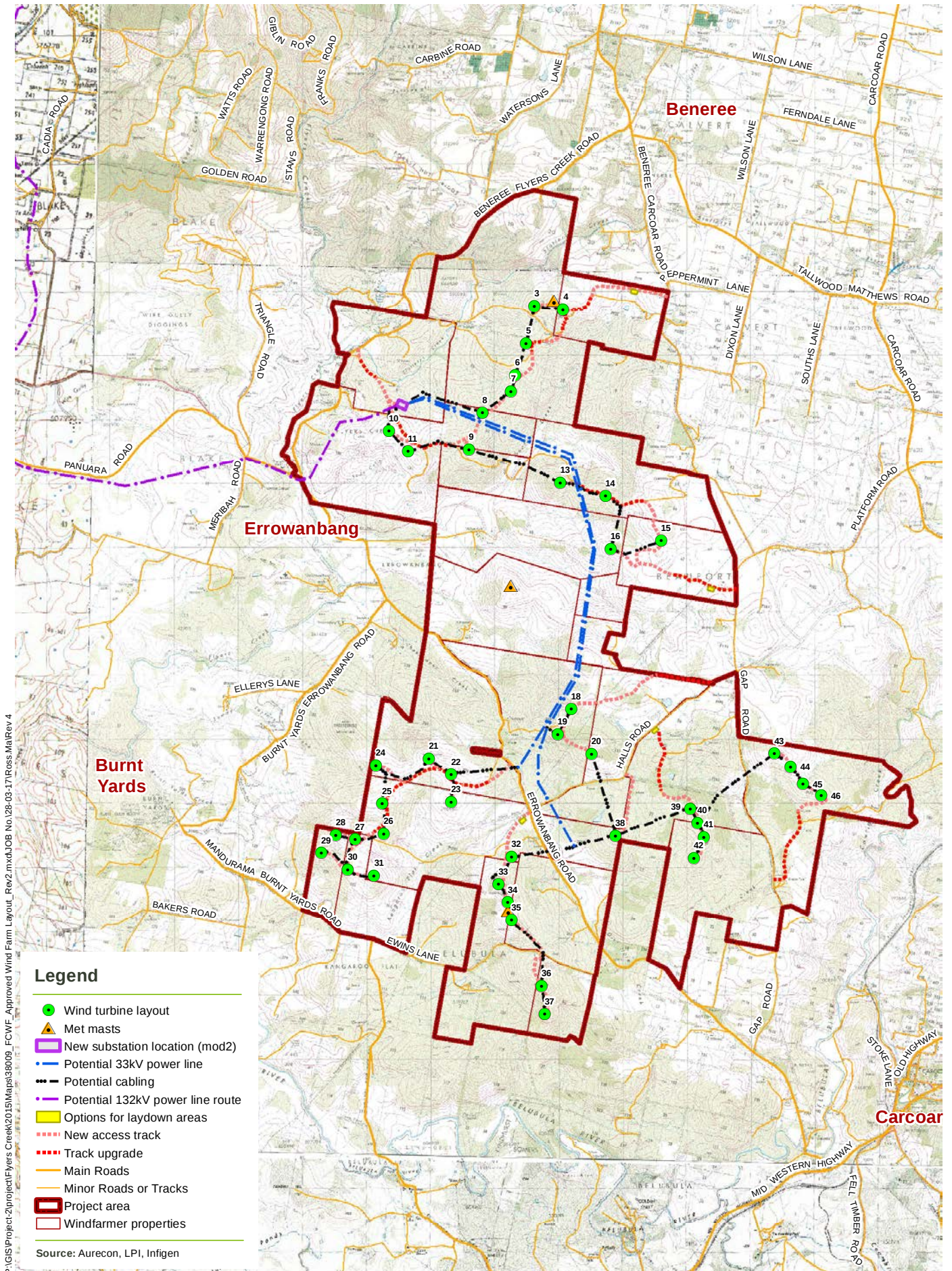
Wind Turbine Locations

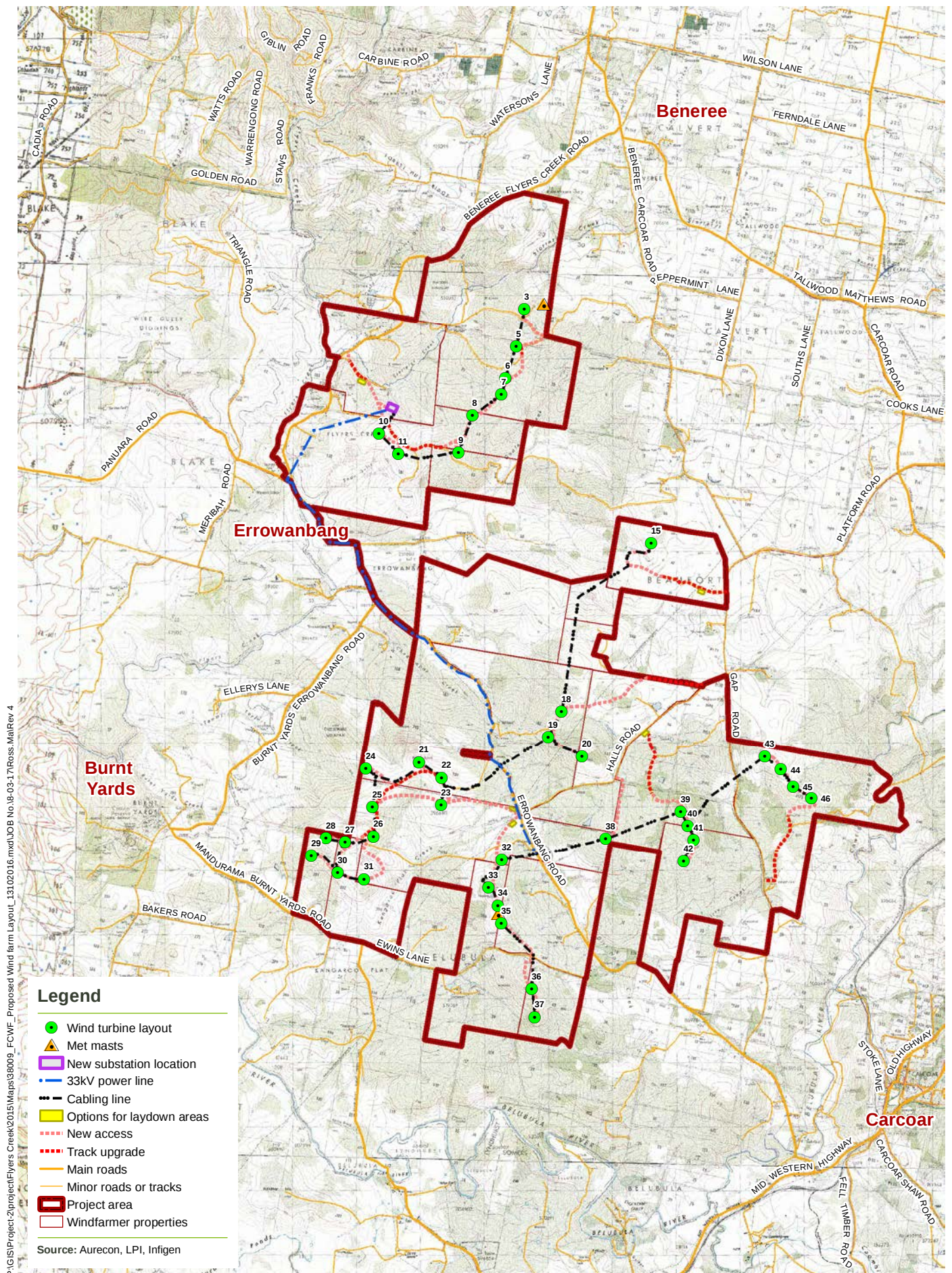
Appendix B – Flyers Creek Wind Farm – Wind Turbine Locations

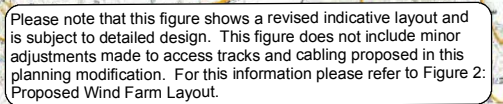
Wind Turbine	MGA Coordinates		Latitude & Longitude	
Ref Number	Easting (m)	Northing (m)	Latitude	Longitude
3	692738	6290953	33° 30' 13"	149° 4' 30"
5	692610	6290375	33° 30' 32"	149° 4' 26"
6	692438	6289879	33° 30' 48"	149° 4' 19"
7	692375	6289621	33° 30' 57"	149° 4' 16"
8	691922	6289293	33° 31' 7"	149° 3' 58"
9	691710	6288716	33° 31' 26"	149° 3' 50"
10	690463	6289008	33° 31' 18"	149° 3' 4"
11	690764	6288686	33° 31' 28"	149° 3' 14"
15	694720	6287294	33° 32' 10"	149° 5' 49"
18	693315	6284663	33° 33' 37"	149° 4' 55"
19	693106	6284262	33° 33' 50"	149° 4' 48"
20	693633	6283962	33° 33' 59"	149° 5' 10"
21	691091	6283878	33° 34' 4"	149° 3' 32"
22	691440	6283635	33° 34' 11"	149° 3' 47"
23	691436	6283205	33° 34' 25"	149° 3' 47"
24	690258	6283778	33° 34' 7"	149° 3' 0"
25	690357	6283178	33° 34' 27"	149° 3' 4"
26	690381	6282714	33° 34' 42"	149° 3' 4"
27	689933	6282625	33° 34' 45"	149° 2' 49"
28	689635	6282686	33° 34' 43"	149° 2' 35"
29	689403	6282413	33° 34' 52"	149° 2' 28"
30	689820	6282149	33° 35' 1"	149° 2' 42"
31	690231	6282050	33° 35' 3"	149° ° 3' 0"
32	692382	6282353	33° 34' 52"	149° 4' 23"
33	692173	6281920	33° 35' 6"	149° 4' 16"
34	692320	6281639	33° 35' 15"	149° 4' 19"
35	692379	6281358	33° 35' 25"	149° 4' 23"
36	692852	6280328	33° 35' 58"	149° 4' 41"
37	692897	6279893	33° 36' 12"	149° 4' 44"
38	694007	6282678	33° 34' 41"	149° 5' 24"
39	695178	6283099	33° 34' 26"	149° 6' 11"
40	695285	6282880	33° 34' 33"	149° 6' 14"
41	695383	6282655	33° 34' 40"	149° 6' 18"
42	695229	6282331	33° 34' 51"	149° 6' 14"
43	696494	6283966	33° 33' 57"	149° 7' 1"
44	696745	6283761	33° 34' 4"	149° 7' 12"
45	696940	6283488	33° 34' 12"	149° 7' 19"
46	697221	6283308	33° 34' 18"	149° 7' 30"

Appendix C

Flyers Creek Wind Farm Layouts







Appendix D

Letter from Blayney Shire Council

**Blayney Shire Council**

Council Office 91 Adelaide Street, Blayney **Postal Address** PO Box 62, Blayney NSW 2799
Telephone (02) 6368 2104 **Facsimile** (02) 6368 3290
Email council@blayney.nsw.gov.au **Web** www.blayney.nsw.gov.au
ABN 47 619 651 511

9 June 2015

Our Ref: DB.AB.505

Senior Development & Government Affairs Manager
Infigen Energy
Level 22
56 Pitt Street
SYDNEY NSW 2000

Attn: Mr Jonthan Upson

Dear Jonathan

RE: Flyers Creek Wind Farm - Power Line

Reference is made to our recent meeting to discuss the proposed power line options currently being considered by Infigen along Errowanbang Road.

Council notes your request for Council to provide a letter of approval for the proposed transmission line, along Errowanbang Road from Panuara Road to a proposed location approximately 770m south of the Halls Road Reserve (take off into private lands).

In accordance with Section 139 of the Roads Act 1993, Council will grant consent for the erection of the power transmission line upon the route subject to the following:

- Any road crossings are at least 350mm above the minimum required clearance for the specified line voltage capacity. This is to ensure adequate safe clearance is provided for future road rehabilitation works.
- Poles are to be placed a minimum of 6m clear of the road edge (in the clear zone).
- The final location of poles shall be optimised to ensure they are located on the "inside" of curves in order to minimise the opportunity for vehicle impact.

Should the technical aspects of the line have changed, Council requests you provide it with updated information for consideration.

In relation to that section of Errowanbang Road (pink on your provided plan) in which the power line may remain within private property, Council wishes to remind Infigen Energy that it is presently preparing design plans for a major road realignment through the area. Subject to negotiations, works are programmed to be undertaken over the forthcoming two financial years, with completion expected by June 2017.

Council welcomes the opportunity to discuss the specific location of the line and associated poles as design work progresses both for the road realignment and along the existing road reserve.

Should you require further information in relation to the design of the road realignment please contact Council's Design Engineer, Mr Ian Evans, on (02) 6368 2104.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'Grant Baker', with a long horizontal line extending to the right.

Grant Baker

Director Infrastructure Services

Appendix E

Kevin Mills & Associates Pty Ltd Flora and Fauna Assessment

**FLORA AND FAUNA ASSESSMENT
MODIFICATION 3 TO APPROVED FLYERS CREEK WIND FARM
CENTRAL TABLELANDS, NEW SOUTH WALES**

KEVIN MILLS & ASSOCIATES PTY LIMITED

*12 Hyam Place
JAMBEROO NSW 2533 NSW*

for

INFIGEN ENERGY PTY LIMITED

*Level 22, 56 Pitt Street
SYDNEY NSW 2000*

February 2017

14/21/3

Document Reference

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as trustee for Kevin Mills & Associates Trust*

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This report was prepared for Infigen Energy Pty Limited in accordance with the study brief developed between that company and Kevin Mills & Associates. The report should be used only by the previously named, and only for the stated purpose and not for any other purpose.

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1. INTRODUCTION

The Flyers Creek Wind Farm project received Project Approval from the Department of Planning early in 2014 (MP 08 0252); this was followed by two modifications (Modification 1 and Modification 2) later the following year. The Proponent seeks to modify the Project Approval due to the removal of some properties previously included in the project area, which in turn has led to changes to the design of the project infrastructure. These changes require assessment for their potential to impact upon flora and fauna.

This report and the assessment of the proposed changes are based on field investigations undertaken across the site between 2009 and 2015 (KMA 2009, 2011a, 2011b, 2015). During that period, the properties concerned were extensively surveyed, their flora and fauna documented and the presence or likely presence of significant matters recorded and assessed. Two key matters were assessed in considerable detail, namely the Endangered Ecological Community White Box - Yellow Box - Blakely's Red Gum Woodland and the Superb Parrot. The community is listed by the Commonwealth and New South Wales (NSW), while the Superb Parrot is listed by both jurisdictions as vulnerable.

2. PROPOSED MODIFICATION

The application to modify the Flyers Creek Wind Farm project consists of the following changes to the approved infrastructure.

- Part A – Removal of three properties from the Project, resulting in the removal of four wind turbine generators (WTG), associated access tracks and cabling and the 33kV overhead power line.

This infrastructure is as follows:

- 4 WTG (T4, T13, T14, T16);
- Access tracks and cabling between:
 - Beneree Carcoar Road to T4;
 - T4 to T3;
 - T9 to T13;
 - T13 to T14;
 - T14 to T15;
 - T14 to T16;
 - T15 to T16;
- Laydown area located on access track from Beneree Carcoar Road to T4; and
- 33kV overhead power line (entire line).

- Part B – Alternative alignment of the 33kV overhead power line along Errowanbang Road.

It is proposed that the route corridor for the assessment of the power line would be 100 metres (m) wide and that the final easement of the power line would be 45 metres wide and that the power line would be located in the road reserve. The power line would start approximately one kilometre south of the junction of Errowanbang Road and Halls Road and follow the route of Errowanbang

Road as far north as the junction with Panuara Road where the power line would turn east and cross the project site to meet the substation.

From the turn off point on Errowanbang Road to the substation the corridor would also allow for a 132kV power line. The 33kV power line would transport power from the wind farm into the substation and the 132kV power line would transport power from the substation to the proposed grid connection point near Cadia Mine. It should be noted that the route of the 132kV power line from the junction of Errowanbang Road and Panuara Road westwards to the grid connection point does not form part of this modification and is subject to a separate approval from Essential Energy.

- Part C – The following minor changes to access tracks.
 - Addition of option for laydown area alongside access track at location of original substation;
 - Access track from T3 to T5 – amended location of access along existing track to ensure T3 is accessible from T5 as no longer accessible from the east;
 - Access track from Errowanbang Road to T22 – removal and alternative access proposed from Errowanbang Road to T23 to make use of single entrance; and
 - Addition of access tracks between Errowanbang Road and T23, T23 and T22, T23 to T25, T26 to T31 to allow for flexible access track configurations. This would include the addition of an option for laydown area.
- Part D – the following minor changes to underground cables.
 - Removal of cabling between T8 and old substation location and removal of cabling between T10 and old substation location and new cabling between T10 and revised substation (the revised substation location was approved as part of Modification 2)
 - Addition of cables connecting T15 to T18;
 - Removal of cables between T20 and T38 and replacement with cable between T19 and Errowanbang Road; and
 - Amendment to cable between Errowanbang Road and T22 to follow existing access track.

3. ASSESSMENTS OF PROPOSED MODIFICATIONS

The following assessment describes the proposed modifications, based on the above listing of these changes to the project.

Part A – Removal of three properties from the Project

This modification, the reduction in the size of the wind farm project area, will not impact upon flora and fauna and no further consideration is given to this change. The removal of these properties reduces the footprint of the project.

Significant Impact Potential: nil.

Part B – Alternative alignment of 33kV overhead power line

This proposal involves routing the power line along Errowanbang Road, part of which has recently been realigned and resealed as part of a Blayney Shire Council funded project. This route was previously surveyed and it was found that the majority of the route was treeless. In a few locations,

there are groups of trees where the Superb Parrot was regularly observed (see Figure 2 in KMA 2011b and **Appendix 1** here). The infrastructure associated with the four locations shown on that figure will be designed to retain the trees in each area.

These trees are also part of the endangered ecological community known as White Box - Yellow Box - Blakely's Red Gum Woodland. It is considered possible to avoid these small stands of trees through careful design of the power line. Detailed design of the power line and in particular location of poles will be carried out prior to construction and any infrastructure designed to avoid sensitive areas of vegetation (e.g. trees) will be demonstrated and reported on in the Construction and Environmental Management Plan.

Significant Impact Potential: nil; detailed design of power line will ensure trees are avoided.

Part C – Minor changes to access tracks and laydown areas

Due to the deletion of several turbines and other refinements to the project, some minor modifications to the routes of access tracks are required, as set out below in *italics*.

1. Addition of option for laydown area at location of original substation.

The original laydown area was previously assessed as a proposed location for a substation, the location of which was amended at Modification 2, and found not to impact upon any significant vegetation or habitats (KMA 2009).

Significant Impact Potential: nil.

2. Access track from T3 to T5 – amended location of access along existing track to ensure T3 is accessible from T5 as no longer accessible from the east.

This route follows an existing farm vehicle track, partly through a stand of old trees. The wide spacing of the trees means that an upgrade of the existing track would not necessitate the removal of any of these trees.

Significant Impact Potential: nil; no trees to be removed.

3. Access track from Errowanbang Road to T22 – removal and alternative access proposed from Errowanbang Road to T23 to make use of single entrance.

The route between the road and T23 is cleared treeless land supporting exotic pasture.

Significant Impact Potential: nil.

4. Addition of access tracks between Errowanbang Road and T23, T23 and T22, T23 to T25, T26 to T31 to allow for flexible access track configurations. This would include the addition of an option for laydown area.

These new track routes are across cleared paddocks and do not involve tree removal. The route between T23 and T25 passes a group of trees that can readily be avoided.

The option for a laydown area is next to Errowanbang Road. The site is treeless and support exotic pasture.

Significant Impact Potential: nil; track between T23 and T25 to avoid stand of trees.

Part D – Minor changes to underground cables

Several cable routes have been abandoned and these are not discussed here (see Part A above); new cable routes are discussed below.

1. New cabling between T10 and revised substation

The revised substation location was approved as part of Modification 2. The new cable route traverses exotic pasture and no trees are present.

Significant Impact Potential: nil.

2. Addition of cables connecting T15 to T18

This cable route follows the previously approved 33kV line (now rerouted) and traverses paddocks of exotic pasture with only occasional trees that can readily be avoided through detailed design of the cable route. The trees just to the north of T18 are somewhat denser, but can be avoided due to the limited disturbance involved during the installation of a cable trench.

Significant Impact Potential: nil; route cable to avoid trees north of T18

3. Addition of cable between T19 and Errowanbang Road

This cable route follows the previously approved 33kV line (now rerouted) and is treeless exotic pasture, and is routed through a gap in the trees along the road, thus avoiding the need to remove any trees.

Significant Impact Potential: nil; ensure utilisation of the gap in trees along Errowanbang Road.

4. Amendment between Errowanbang Road and T22 to follow existing access track

The amended cable route follows an already approved access track, which itself follows an existing farm track. No significant impact anticipated.

Significant Impact Potential: nil.

4. PRESENCE OF LISTED MATTERS

Presence of listed communities

The remnant trees and patches of trees in the area are largely part of the listed White Box - Yellow Box - Blakely's Red Gum Woodland. These trees are mainly in paddocks supporting improved pasture, with very few native plants. While some of the infrastructure is adjacent to these remnants, the construction of this infrastructure does not impact upon the remnants of the community. The impact on the listed woodland is negligible, as measures can readily be taken in the routing of the infrastructure to avoid tree removal.

Presence of listed animal species

The previous investigations contained extensive lists of animal species for the locality and described habitats and significant features for native animals. Records of threatened species previously observed in the locality were assessed in the earlier report by KMA (2011). A subsequent study specifically targeted the Superb Parrot (KMA 2015). It was found that this species was associated primarily with stands of native trees, particularly Yellow Box *Eucalyptus melliodora*. The Modification 3 proposals can be constructed without the need to remove trees, as explained above. In fact, the significant reduction in the scale and hence footprint of the project reduces the overall environmental impact.

5. IMPACT ASSESSMENT

5.1 Commonwealth Assessment

The impact of a proposed action on matters of national environmental significance is assessed under the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Matters of national environmental significance are:

- World Heritage properties,
- National Heritage places,
- wetlands of international importance (RAMSAR wetlands),
- listed threatened species and ecological communities
- migratory species;
- Commonwealth marine areas;
- Great Barrier Reef Marine Park;
- nuclear actions (including uranium mining);
- a water resource, in relation to coal seam gas development and large coal mining development

An action must be referred to the Commonwealth Minister if the action has, will have, or is likely to have a significant impact on matters of national environmental significance. In addition to setting out "significant impact criteria" for the various matters of national environmental significance, e.g. endangered species, vulnerable species, endangered ecological communities and listed migratory species, the *Guidelines* provide the following important definitions.

"A *significant impact* is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. You should consider all of these factors when determining whether an action is likely to have a significant impact on matters of national environmental significance."

"To be *likely*, it is not necessary for a significant impact to have a greater than 50% chance of happening, it is sufficient if a significant impact on the environment is a real or not remote chance or possibility."

"*Population*, in relation to critically endangered, endangered or vulnerable, threatened species, means:

- a geographically distinct regional population, or collection of local populations; or
- a regional population, or collection of local populations occurring within a particular bioregion."

"An *important population* is a population that is necessary for a species' long-term survival and recovery. This may include populations identified as such in recovery plans, and/or that are:

- key source populations either for breeding or dispersal,
- populations that are necessary for maintaining genetic diversity, and/or
- populations that are near the limit of the species' range.

"*Habitat critical to the survival of a species or ecological community*" refers to areas that are necessary:

- for activities such as foraging, breeding, roosting, or dispersal;
- for the long-term maintenance of the species or ecological community (including the maintenance of species essential to the survival of the species or ecological community, such as pollinators);
- to maintain genetic diversity and long term evolutionary development, or
- for the reintroduction of populations or recovery of the species or ecological community."

Such habitat may be, but is not limited to: habitat identified in a recovery plan for the species or ecological community as habitat critical for that species or ecological community; and/or habitat listed on the Register of Critical Habitat maintained by the Minister under the EPBC Act.

The Superb Parrot is the only nationally listed threatened species known to occur in the study area. Most remnant trees in the area are part of the White Box - Yellow Box - Blakely's Red Gum Woodland complex, listed as a threatened community. The impact of the proposed modification 3 infrastructure on the species and the community are assessed below by applying the significant impact criteria for the vulnerable species and the endangered ecological community. The impact on listed migratory species has also been assessed below, by applying the significant impact criteria for migratory species.

Significant Impact Criteria for Vulnerable Species

An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

- lead to a long-term decrease in the size of an important population of a species;
- reduce the area of occupancy of an important population;
- fragment an existing important population into two or more populations;
- adversely affect habitat critical to the survival of a species;
- disrupt the breeding cycle of an important population;
- modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline;
- result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat;
- introduce disease that may cause the species to decline; or
- interfere substantially with the recovery of the species.

Impact of the proposed modification 3 infrastructure on the Superb Parrot

The critical habitat components for the Superb Parrot are tree hollows that are of a size that provide breeding sites and box-gum woodland that provides foraging habitat. The modification 3 infrastructure can be built without the need to remove trees. The Biodiversity Sub-Plan of the Conservation and Environmental Management Plan will contain provisions to ensure that the infrastructure routes achieve this.

It is concluded that the modification 3 infrastructure on the approved wind farm at Flyers Creek is not likely to “adversely affect habitat critical to the survival of a species” (that is, tree hollows and foraging habitat), and therefore will not have a significant impact on the Superb Parrot.

Significant Impact Criteria for Critically Endangered and Endangered Ecological Communities

An action is likely to have a significant impact on a critically endangered or endangered community if there is a real chance or possibility that it will:

- reduce the extent of an ecological community;
- fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines;
- adversely affect habitat critical to the survival of an ecological community;
- modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns;
- cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting;
- cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to:
 - assisting invasive species, that are harmful to the listed ecological community, to become established; or
 - causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community; or
 - interfere with the recovery of an ecological community.

Impact of the proposed modification 3 infrastructure on White Box - Yellow Box - Blakely's Red Gum Woodland and derived grasslands

The field assessments previously found that few areas meet the minimum criteria for the listed White Box - Yellow Box - Blakely's Red Gum Woodland and Derived Grassland community. None of the areas impacted by the infrastructure proposed as part of Modification 3 meet the minimum criteria set by the Commonwealth for the Box-Gum Woodland or derived grassland.

It is concluded that the proposed modification 3 infrastructure on the approved Flyers Creek Wind Farm will not have any of the above impacts upon the White Box - Yellow Box - Blakely's Red Gum Woodland and Derived Grassland listed community.

Significant Impact Criteria for Listed Migratory Species

An action is likely to have a significant impact on a migratory species if there is a real chance or possibility that it will:

- substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species;
- result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species; or
- seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.

An area of "important habitat" for a migratory species is:

- habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species; and/or
- habitat that is of critical importance to the species at particular life-cycle stages; and/or
- habitat utilised by a migratory species which is at the limit of the species range; and/or
- habitat within an area where the species is declining.

Listed migratory species cover a broad range of species with different life cycles and population sizes. An "ecologically significant proportion" of a population therefore varies from species to species. In relation to migratory species, "population" means the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries including Australia.

Impact of the proposed modification 3 infrastructure on listed migratory species

The proposed Modification 3 infrastructure is not likely to have a significant impact on listed migratory species. There is no "important habitat" for such species on any of the sites involved and the habitat in these areas is not likely to support an "ecologically significant proportion" of a population of such species. This conclusion is reached because listed migratory species in the Flyers Creek area are only present in small numbers and do not congregate in large numbers. This conclusion is consistent with that reached in the original, larger wind farm project, which has now been reduced in scale.

Conclusion, EPBC Act

The infrastructure proposed for Flyers Creek Wind Farm in Modification 3 is not likely to have a significant impact on matters of national environmental significance listed under the *Environment Protection and Biodiversity Conservation Act*. Referral to the Commonwealth Minister for the Environment for assessment and approval is therefore not warranted.

5.2 State Assessment - Assessment under Part 3A

Guidelines that identify matters relevant to the assessment of potential impact on threatened species, populations or ecological communities of proposed development under Part 3A of the *Environmental Planning and Assessment Act 1979* (NSW) have been prepared by the then Department of Environment and Conservation (now Office of Environment and Heritage) and the then Department of Primary Industries (DEC July 2005).

The *Guidelines for Threatened Species Assessment* identify the following objectives with regard to conserving threatened species, etc.:

- “Maintain or improve biodiversity values (i.e. there is no net impact on threatened species or native vegetation).
- Conserve biological diversity and promote ecologically sustainable development.
- Protect areas of high conservation value (including areas of critical habitat).
- Prevent the extinction of threatened species.
- Protect the long-term viability of local populations of a species, population nor ecological community.
- Protect aspects of the environment that are matters of national environmental significance.”

The *Guidelines* outline a broad five-step process for assessing impacts on threatened species. Note that ‘threatened species’ refers here to species, populations and communities listed as threatened under the *Threatened Species Conservation Act 1995* (NSW) or the *Fisheries Management Act 1994* (NSW). As this project is being assessed under Part 3A of the EP&A Act, this investigation and report follow the *Guidelines* where relevant; these are provided in italics below. The assessment process under the TSC Act commonly known as the ‘assessment of significance’ is switched off for Part 3A matters. The matters to be considered in the assessment of a Part 3A development are determined by the Minister for Planning for each development.

This same Part 3A assessment procedure was undertaken for the original and larger wind farm at Flyers Creek. The conclusion then was the project would not have a significant impact upon listed threatened species, populations or ecological communities. The reduction in the scale of the project with Modification 3 changes reduces further the possibility of significant impact. We have, however, undertaken the assessment afresh below.

Step 1 – Preliminary Assessment

“The main purpose of a preliminary assessment is to determine the likelihood of the study area and subject site supporting threatened species” (Guidelines, page 2). As noted in the Guidelines, this step is primarily a ‘desktop’ study, using existing information, literature and data bases to identify relevant threatened species. The Guidelines state that the following matters should be included in the preliminary assessment:

“a description of the location and nature of the proposed development;

*a description of dominant vegetation types;'
a description of habitat features;
a list of threatened species that are known or likely to occur within the study area;
an assessment of which of the threatened species that are known or likely to occur are likely to be directly or indirectly affected by the proposal provides a list of factors for consideration in identifying adverse impacts. This list is not necessarily exhaustive and is not development-specific."*
(Guidelines, page 3)

Step 1 – Preliminary Assessment

The *Guidelines* state that certain matters should be included in the preliminary assessment. These are primarily concerned with descriptions of the development, the vegetation types, habitats, the threatened species known and likely to occur in the area and those threatened species that may be impacted by the proposed development. Descriptions of the project area and its environments associated with the wind farm are provided in previous reports (KMA 1011a, 2011b, 2015).

The character of each of the sites for the modification 3 infrastructure is described above. The known and potential threatened species in the locality were discussed in detail in previous reports relating to the Flyers Creek Wind Farm. The two key matters to be considered here are Box-Gum Woodland and the Superb Parrot.

Step 2 – Field Survey and Assessment

As noted in the Guidelines, "the required intensity and extent of survey will vary greatly depending upon the species likely to be present, size of the development area, the level of biological and habitat diversity on the site, and the type and complexity of vegetation on the site." (Guidelines, page 3)

The Guidelines point out the need "to ensure that a reliable assessment of the presence or absence of threatened species can be made" (Guidelines, page 3). It is also noted that consideration needs to be given to the relevance of climatic or seasonal conditions for the target species.

Where relevant, the survey methods set out in the document titled Threatened Biodiversity Survey & Assessment: Guidelines for Developments and Activities (DECC 2004) should be followed. As noted above, the level of the survey will very much depend upon site conditions.

The outcome of Step 2 should be that adequate field surveys are undertaken for all target species identified in Step 1 such that confident statements can be made regarding the potential for the presence of the species on the subject site. In some instances, the precautionary principle should be adopted and the presence of a species assumed for the purposes of impact assessment.

Field surveys were undertaken in the study area in several times in spring-summer in 2008, 2009, 2010 and 2014. The 2008-2010 surveys included general flora and fauna surveys of the entire study area, where all species were identified and documented, including plant communities and habitats. The assessments of the Step 1 results and the field survey results, particularly with regard to the presence of threatened species, etc. were detailed in previous reports and known or potential threatened species and communities were discussed and assessed.

The relevant listed matters to be assessed for the proposed modification 3 infrastructure are box-gum woodland and the Superb Parrot.

Step 3 – Evaluation of Impact

This step involves identifying the potential magnitude and extent of the impact, if any, the development will have on each of the target species.

The Guidelines suggest that “impacts will be more significant if:

- areas of high conservation value are affected;*
- individual animals and/or plants and/or subpopulations that are likely to be affected by the proposal play an important role in maintaining the long-term viability of the species, population or ecological community;*
- habitat features that are likely to be affected by the proposal play an important role in maintaining the long-term viability of the species, population or ecological community;*
- the duration of impacts are long-term;*
- the impacts are permanent and irreversible.” (Guidelines page 4)*

The potential impact of the modification 3 infrastructure is assessed in several key areas below.

Threatened Plant Species

The various surveys of the Flyers Creek Wind Farm did not find any threatened plant species and none are expected to occur in the area, particularly in those locations involved in the proposed modifications. The highly modified landscape, most of which is pasture improved with little native vegetation, and the exotic grassland cover of most areas, precludes the likelihood of threatened plants occurring in these areas. No such species have been recorded locally.

Threatened Animal Species

Several threatened woodland birds have been found in the study area and a few others no doubt occur there from time to time. Woodland is the most important habitat for these species, as well as hollow-bearing trees, including remnant paddock trees. The impact on these species is not likely to be significant, as long as woodland is avoided and remnant trees are retained.

The Superb Parrot requires particular consideration as it is a regular spring/summer breeding migrant to the locality and has special habitat requirements. The proposed modifications can be constructed without removing old trees containing hollows. With incorporation of measures in the Biodiversity Sub-Plan of the Conservation and Environmental Management Plan to retain trees, there will be no impact upon the Superb Parrot.

Threatened Communities

Most of the woodland remnants in the vicinity of the modifications are part of the White Box - Yellow Box - Red Gum listed endangered ecological community. Similarly, the remnant paddock trees are also part of that listed community. These features can be avoided through appropriate alignment of the infrastructure. The most important stands of trees are identified in this report.

Step 4 – Avoid, mitigate and then offset

Where there is a potential to impact on threatened species, this should be addressed through, firstly, avoiding the impact; this may mean making some changes to the proposed development. If avoidance is not possible, then some form of mitigation may be required. Finally, if neither avoidance nor

mitigation is possible, then some form of offset or compensation will be required. This could entail the rehabilitation of similar habitat nearby.

As noted elsewhere, impacts on significant features can be avoided through careful design of the infrastructure. Measures to be incorporated into the Biodiversity Sub-Plan of the Conservation and Environmental Management Plan will ensure such features are retained.

Step 5 – Key thresholds

The Guidelines state that “the development application needs to contain a justification of the preferred option based on the following”:

whether or not the proposal, including actions to avoid or mitigate impacts or compensate to prevent unavoidable impacts will maintain or improve biodiversity values

The proposed modifications will not diminish biodiversity values in the area. The land affected is highly modified grazing and cropping land. Stands of woodland and old trees can be avoided.

whether or not the proposal is likely to reduce the long-term viability of a local population of the species, population or ecological community

The proposed modifications are not likely to reduce the long-term viability of a local population of a threatened species, the Superb Parrot or any other listed species, known or likely to occur in the area. The Biodiversity Sub-Plan of the Conservation and Environmental Management Plan will ensure that there are no such impacts.

whether or not the proposal is likely to accelerate the extinction of the species, population or ecological community or place it at risk of extinction

The wind farm modifications are located in road reserves and paddocks that support improved exotic pasture. Measures can and will be taken to avoid tree removal through the routing of infrastructure; this will be detailed in the Biodiversity Sub-Plan of the Conservation and Environmental Management Plan. The modifications are not likely to accelerate the extinction of any species or ecological community, or place any such species or community at risk of extinction.

whether or not the proposal will adversely affect critical habitat.

There is no declared critical habitat within or in the vicinity of the locations involved in the proposed modifications.

6. CONCLUSION

This assessment of the infrastructure proposed at Flyers Creek Wind Farm as part of Modification 3 found that the infrastructure can be located such that there will be no impact upon listed matters under NSW or Commonwealth legislation. To ensure that this is achieved, the section of the Conservation and Environmental Management Plan which considers micro-siting to protect Biodiversity will set out the measures to avoid, retain and protect trees. Where infrastructure traverses treed areas, it is recommended that an ecologist be involved in the establishment of the detailed route of the track, cable or power line.

The Modification 3 changes to the Flyers Creek Wind Farm are minor in nature; the proposals significantly reduce the scale of the project footprint. The changes remove four turbines and the proposed new infrastructure consists of no new turbines, routes access tracks and cabling and the an electrical line from farmland to an already disturbed road reserve. It is noted that the project already has approval and this is a minor amendment that will likely result in a reduction in environmental impacts.

7. REFERENCES

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New South Wales (1994). *Fisheries Management Act 1994*. NSW Government, Sydney.

New South Wales (1995). *Threatened Species Conservation Act 1995*. NSW Government, Sydney.

Appendix 1

Figure 2 from KMA (2011b).

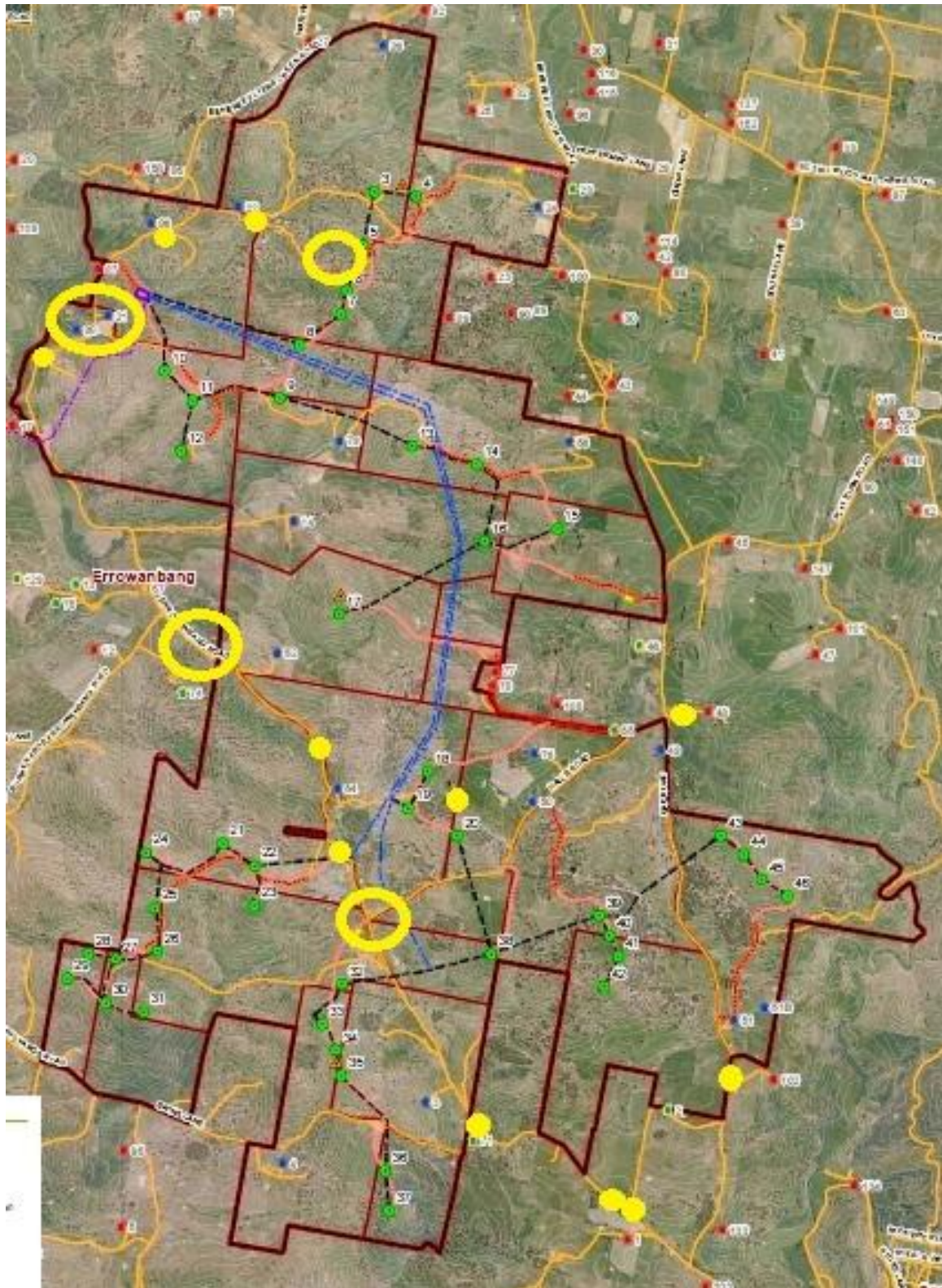


Figure 2. Location of Superb Parrot observations in the Study Area.
(Yellow dots indicate observations, circles indicate multiple observations.)

Appendix F

Vipac Noise Assessment Letter



Vipac Engineers and Scientists Limited

Level 2, 146 Leichhardt Street, Spring Hill, QLD 4000, Australia

PO Box 47, Spring Hill, Qld, 4000 Australia

t. +61 7 3377 0400 | f. +61 7 3377 0499 | e. brisbane@vipac.com.au

w. www.vipac.com.au | A.B.N. 33 005 453 627 | A.C.N. 005 453 627

Flyers Creek Wind Farm Pty Ltd
Level 22, 56 Pitt Street,
Sydney NSW 2000

19 Apr 2017

Ref: 70Q-12-0329-TRP-541411-0

Attention: Megan Richardson

Dear Megan,

Flyers Creek Wind Farm NSW – Noise Assessment of Planning Modification 3

Vipac Engineers & Scientists Ltd (Vipac) provides the following statement of the assessment of noise impacts of Planning Modification 3 to the Flyers Creek Wind Farm.

1. Introduction

A noise assessment has been performed of the likely noise impacts of Flyers Creek Wind Farm Planning Modification 3. This assessment has been performed by Peter Teague who was the technical reviewer for the noise assessment carried out as part of the Environmental Assessment (EA) in 2010 [1].

This assessment is based on:

- 1) A review of the amendments proposed as part of the Planning Modification 3 to the Flyers Creek Wind Farm.
- 2) A review of the noise assessment [1] carried out as part of the Flyers Creek Wind Farm EA.
- 3) An assessment of the noise impacts of Planning Modification 3 generally and relative to the original proposal.

2. References

Ref [1] *Flyers Creek Wind Farm - Noise Impact Assessment*, Vipac report 50B-08-0089-TRP-773906-2, dated 21 December 2010.

Ref [2] *Flyers Creek Wind Farm – R78 Additional Background Noise Measurements*, Vipac report 50B-08-0089-TRP-797028-0, dated 28 January 2015.

Ref [3] *Environmental Noise Guidelines – Wind Farms*, SA Environment Protection Authority, South Australian Government, February 2003 (referenced in the original assessment and project approval).

Ref [4] *Project Approval Conditions - Flyers Creek Wind Farm*, Application No. MP 08_0252 (Mod 2, 14 September 2015), NSW Planning Assessment Commission.

19 Apr 2017

3. Planning Modification 3

The amendments to the project layout proposed in Planning Modification 3 have been assessed. The proposed modification includes:

- Part A – Removal of three (3) properties from the Project, to include removal of: four (4) wind turbine generators (WTG); associated access tracks and cabling; and a 33 kilovolt (kV) overhead power line.
- Part B – Alternative alignment of the 33 kV overhead power line to Errowanbang Road;
- Part C – Minor changes to access tracks;
- Part D – Minor changes to underground cables.

The modification reduces the number of wind turbine generators (WTGs) by four, from 42 to 38 (or by six, from 44, compared to that in the original EA noise assessment). Apart from the deletion of 4 WTGs, no changes to the approved locations of the WTGs are proposed.

Three associated properties, identified as R014, R024 and R056 in the EA noise assessment, have been removed from the Project as part of this modification (Part A). These properties were previously assessed against the associated (i.e. 'non-relevant') receiver noise criterion of 45 dB(A). These properties will now be subject to assessment against the non-associated (i.e. 'relevant') receiver noise criteria of 35 dB(A) or background noise plus 5 dB(A) [3].

4. Noise Predictions and Assessment

In order to model noise predictions based on the modified layout of 38 turbines at properties R014, R024 and R026 the noise model used in the EA was modified. Six WTGs were removed from the model, which included WTG 12 and 17 which were deleted from the project at the preferred project report stage and WTG 4, 13, 14, and 16 which are proposed for deletion as part of this planning modification. In line with the EA noise assessment the predicted noise outputs were modelled using the GE 2.5xl (hub height 85m) WTG with a sound power output measured at 10m AGL in accordance with IEC 61400-11. The standard ISO9613 noise propagation algorithm was used as before, with a ground absorption factor set to fully reflective (G factor set to 0), and the noise model run using the SoundPLAN ver6.5 software.

Table 1 provides the predicted noise profile at relevant residential receivers R014, R024 and R056 relative to the applicable noise criteria determined from the measured background noise levels (at the nearest relevant background noise monitoring location).

Table 1: Predicted Noise Profile at Properties R014, R024 and R056 relative to the Applicable Noise Criteria

Wind Speed (m/s), 10mAGL	3 m/s	4 m/s	5m/s	6m/s	7m/s	8m/s	9m/s
Noise Criteria from background levels measured at R012 (dBA)	35	36	38	39.5	40.5	41.5	42.5
Predicted Noise Profile R014 (dBA)	27	30	33	36	38.5	38.5	38.5
Noise Criteria from background levels measured at R025 (dBA)	35	35	36	37.5	38.5	40	40.5
Predicted Noise Profile R024 (dBA)	22	25	28	31	33.5	33.5	33.5
Noise Criteria from background levels measured at R078* (dBA)	35	35	35	35	36.5	38.5	40.5
Predicted Noise Profile R056 (dBA)	22	25	28	31	33.5	33.5	33.5

*using updated measured background noise levels at R078 [Ref. 2].

As summarised in Table 1, the predicted noise profile at the three properties which were previously associated properties will meet the applicable noise criteria of 35 dB(A) or 5 dB(A) above the measured background noise level (with an additional safety margin of 2 dB(A)).

Compared to the EA noise assessment, the predicted noise levels have reduced by between 3 and 4 dB(A) at R014 and R024 and between 7 to 8 dB(A) at R056. This is to be expected with the reduction of six WTGs from the 44 modelled at the EA stage to the 38 modelled in this scenario.

As a result of the reduction in WTG numbers proposed in Planning Modification 3, the predicted noise levels at other receivers will be similar to or less than those predicted in the EA noise assessment in 2010.

5. Summary

In summary, the proposed modification to Flyers Creek Wind Farm is likely to generate a slight reduction in predicted noise levels at some receivers compared to the original EA assessment and is expected to meet the applicable noise criteria at all relevant receivers.

The Proponent notes that a Project Approval Condition [4] precedent to commissioning the Wind Farm (Project Approval Condition G8) is the provision of a revised noise assessment for the final turbine model and turbine layout selected. This noise assessment shall demonstrate consistency with the EA and the ability of the final turbine model and layout to meet the requirements of Condition G7 (measured background noise levels). Properties R014, R024 and R056 will be included in this assessment with the relevant non-associated receiver noise criteria applied.

Yours sincerely,

Vipac Engineers & Scientists Ltd



Dr Peter Teague, MAAS

Principal Acoustic Consultant

Appendix G

New South Wales Archaeology Pty Ltd Archaeological and Cultural & Heritage Assessment

final
Flyer Creek Wind Farm
Modification 3
Addendum Report

Date: 20 March 2016
Author: Dr Julie Dibden
Proponent: Infigen Energy



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INTRODUCTION

The Flyers Creek Wind Farm project was granted development approval in 2014. Infigen Energy is currently seeking a modification to the Development Approval.

The Modification (Mod 3) application is currently being prepared for submission to the NSW Department of Planning and Environment. NSW Archaeology Pty Ltd has been engaged to conduct an heritage assessment of the Modification in areas not previously assessed. This report will form an Appendix to the Modification application documentation.

The changes to the project layout are:

- Removal of three properties from the Project, to include removal of: four wind turbine generators (WTG); associated access tracks and cabling; and the 33kV overhead power line.
- Alternative alignment of the 33kV overhead power line to Errowanbang Road.
- Minor changes to access tracks.
- Minor changes to underground cables.

Austral Archaeology Pty Ltd has previously conducted the following heritage assessments of the project:

- May 2011 Flyers Creek Wind Farm Project Aboriginal Archaeological & Cultural Heritage Assessment Combined Desktop And Field Assessment Report.
- April 2015 Transmission & Substation, Flyers Creek Wind Farm, Cadia, New South Wales. Aboriginal Archaeological Report.
- July 2015 Transmission & Substation, Flyers Creek Wind Farm, Cadia, NSW. Aboriginal Archaeological Report. Volume 2: Panuara Road, Errowanbang Road and Gap Road Access track.

The current report can be considered an addendum to those above.

A process of Aboriginal community consultation has previously been undertaken by Austral Archaeology Pty Ltd. The process of consultation and Registered Aboriginal Parties for the project have been documented in the previous Austral Archaeology reports. The NSW Department of Planning and Environment has advised that for the purposes of the current assessment, consultation can be on-going with previously identified Registered Aboriginal Parties.

The current heritage assessment has been conducted in respect of minor changes to access tracks and underground cables in areas not previously assessed. Four Survey Areas have been subject to survey and assessment (Survey Units 1-4). The survey was conducted with four members of the Orange Local Aboriginal Land Council.

An email outlining the proposed changes and the results of the investigation, with a copy of a draft report was sent to the relevant Aboriginal groups who had previously registered their involvement at the start of the project. The email and draft report was issued on 6 February 2017 and no responses were received by 6 March 2017.

As a result of the assessment, the following conclusions are made:

1. One aboriginal stone artefact scatter has been recorded during the current assessment. It is recommended that the site is avoided if feasible.
2. The four Survey Units have all been found to be generally of low archaeological potential and sensitivity.
3. No further heritage assessment is required in respect of the Modification application.

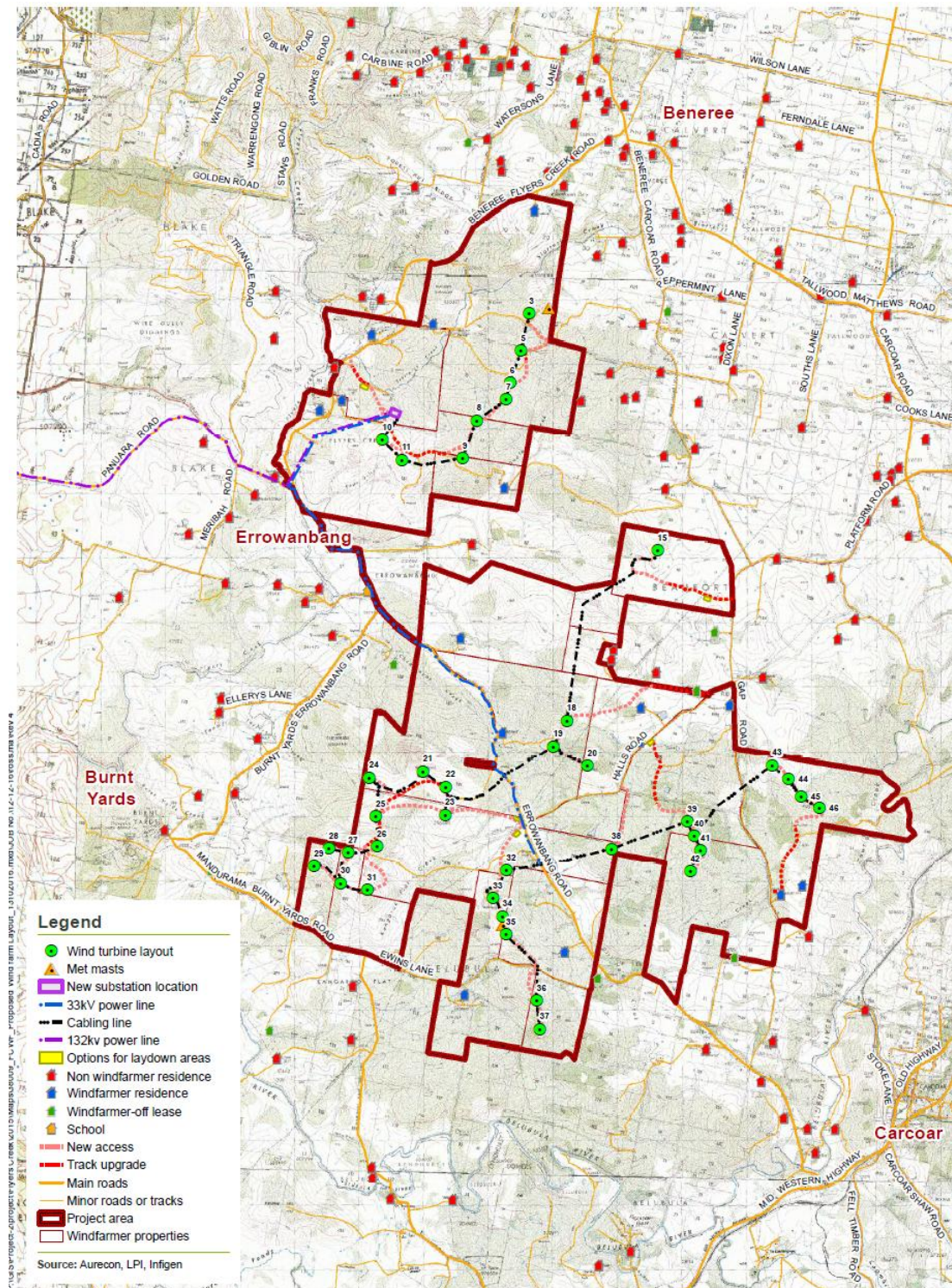


Figure 1 The activity area.

1. MODIFICATION

A Modification (Mod 3) application is currently being prepared for submission to the NSW Department of Planning and Environment. NSW Archaeology Pty Ltd has been engaged to conduct an heritage assessment of the Modification. This report will form an Appendix to the Modification application documentation.

This heritage assessment has been conducted in respect of minor changes to access tracks and underground cables.

1.1 Proposed Impacts

The following changes to access tracks and cables have been assessed (See Figure 3):

- Addition of access tracks between Errowanbang Road and T23, T23 and T22, T23 to T25, T26 to T31 to allow for flexible access track configurations. This would include the addition of an option for a laydown area.
- Addition of cables connecting T15 to T18;
- Addition of cable between T19 and Errowanbang Road;
- Amendment to cable between Errowanbang Road and T22 to follow existing access track.

2. AHIMS DATABASE SEARCH AND LANDSCAPE ASSESSMENT

2.1 AHIMS Site Search Results

An updated search of the NSW OEH Aboriginal Heritage Information Management System (AHIMS) has been undertaken in respect of this modification assessment (Search #261085). The search covered an area of 165 square kilometres, encompassed by Eastings: 688000 – 699000 and Northings: 6278000 – 6293000, with a buffer of 50 metres (see Appendix 1; Table 1).

A total of 10 Aboriginal object sites are listed on AHIMS for the search area (Figure 2), nine of which were recorded during earlier assessments of the proposal area.

Table 1 The AHIMS sites as per search #261085.

Site ID	Site name	Easting	Northing	Site features	Recorders
44-5-0126	FCWF-IF-03	690131	6289577	Artefact	Austral Archaeology Pty Ltd, Mr. Alan Hay
44-5-0127	FCWF-PAD-01	693875	6283030	Potential Archaeological Deposit (PAD)	Austral Archaeology Pty Ltd, Mr. Alan Hay
44-5-0128	FCWF-PAD-02	690238	6289870	Potential Archaeological Deposit (PAD)	Austral Archaeology Pty Ltd, Mr. Alan Hay
44-5-0129	FCWF-S-01	690308	6283001	Artefact	Austral Archaeology Pty Ltd, Mr. Alan Hay
44-5-0130	FCWF-S-02	692802	6283859	Artefact	Austral Archaeology Pty Ltd, Mr. Alan Hay
44-5-0131	FCWF-S-03	694720	6283765	Artefact	Austral Archaeology Pty Ltd, Mr. Alan Hay
44-5-0132	FCWF-S-04	691021	6288725	Artefact	Austral Archaeology Pty Ltd, Mr. Alan Hay
44-5-0124	FCWF-IF-01	690470	6284243	Artefact	Austral Archaeology Pty Ltd, Mr. Alan Hay
44-5-0125	FCWS-IF-02	693507	6286597	Artefact	Austral Archaeology Pty Ltd, Mr. Alan Hay, Mr. David Marcus
44-5-0070	Dirty Creek;DC-ST-1;	694500	6280570	Modified Tree (Carved or Scarred)	Mr. Mark Rawson

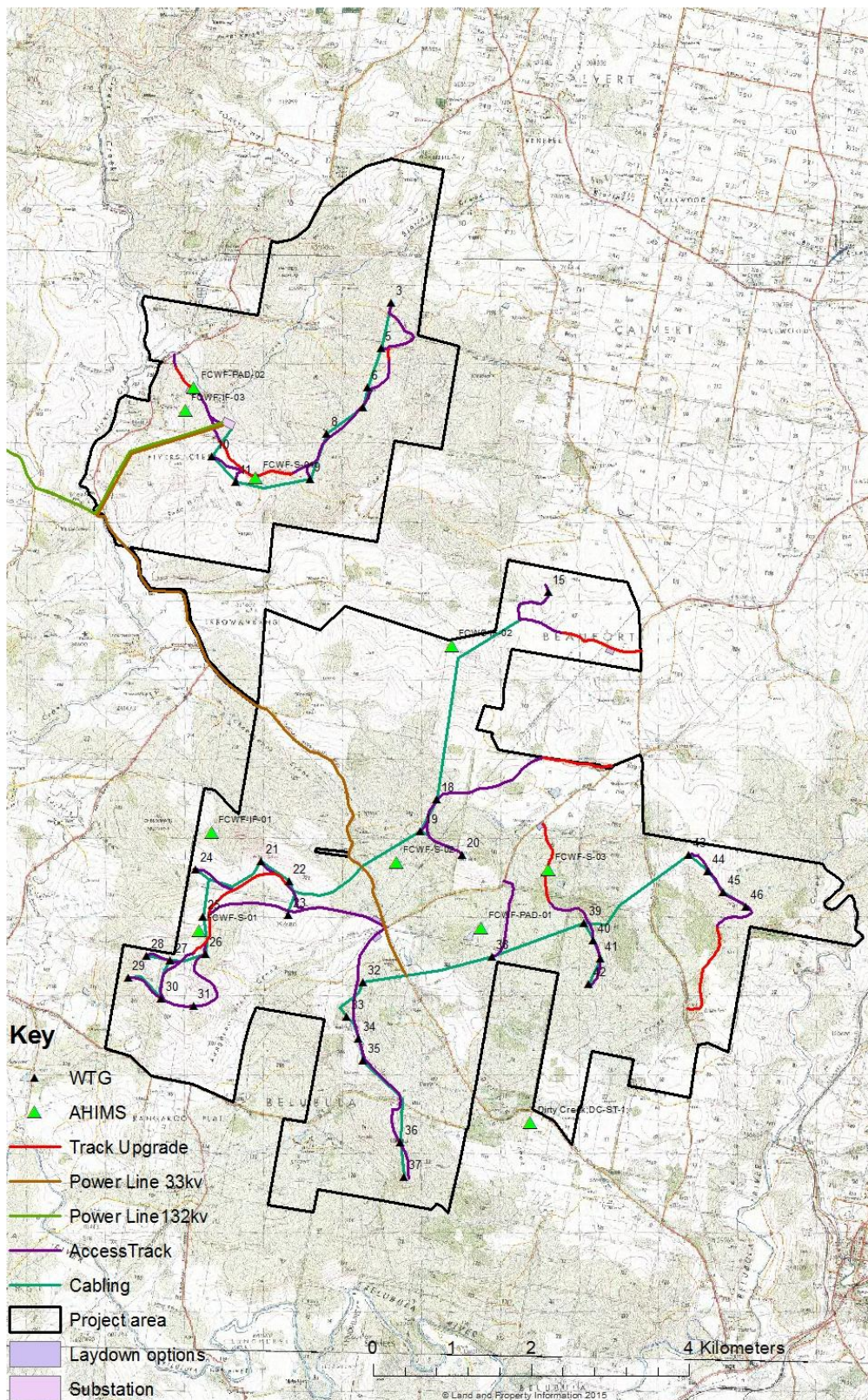


Figure 2 Location of Aboriginal object sites as per AHIMS site search.

3. FIELD INSPECTION

A field inspection was undertaken on the 7th December 2016. The inspection was conducted by Dr Julie Dibden, NSW Archaeology Pty Ltd. Field assistance was provided by Andrew Pearce, NSW Archaeology Pty Ltd, Michael Nichols, Trae Cooper and Greg Ingham, Orange Local Aboriginal Land Council.

3.1 Field Inspection

A field inspection was undertaken of the four specified areas as set out in the table below and shown on Figure 3:

Table 2 Survey Unit data.

SU	Impacts	Description	Site	Archaeological Potential
SU1	Cable between WTG15 and WTG18 <i>Plate 1</i>	This cable would traverse a number of moderate/steep simple slopes	FCWF-S-05 artefact scatter <i>Plates 2 & 3</i>	Generally very low/ negligible
SU2	Cable between WTG19 and Errowanbang Road <i>Plate 4</i>	This cable would traverse a moderate simple slope	nil	Generally very low/ negligible
SU3	Cable between Errowanbang Road and WTG22	This cable would follow an existing track along an undulating ridge crest	nil	Generally very low/ negligible
SU4	Tracks between Errowanbang Road and WTG23; WTG23 and WTG22; WTG23 to WTG25, WTG26 to WTG31 <i>Plate 5</i>	This cable would traverse a moderate simple slopes and ridge crests	nil	Generally very low/ negligible

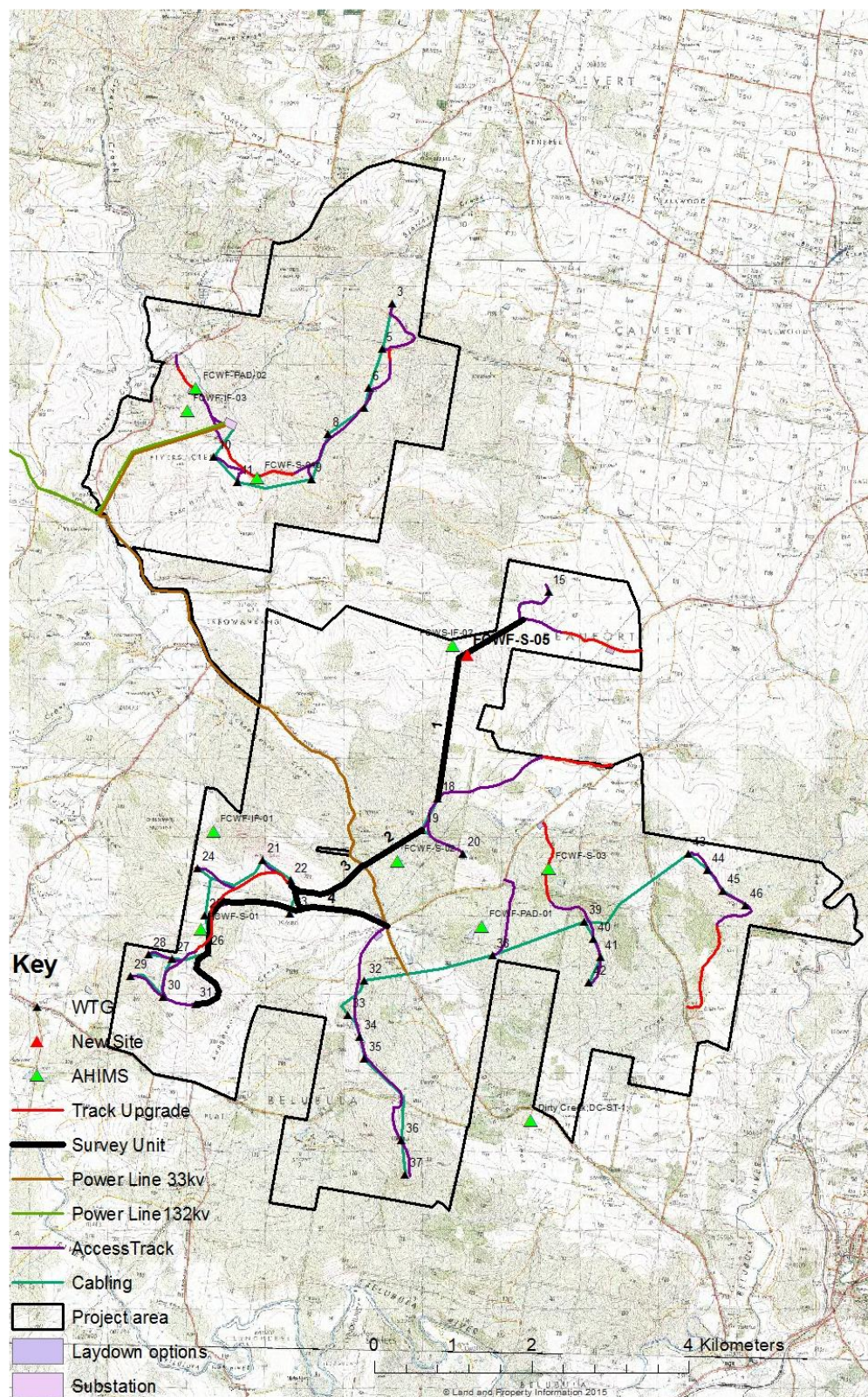


Figure 3 The location of the Survey Units and the Aboriginal site found during the current assessment.

One Aboriginal site was recorded in Survey Unit 1 during the field assessment, as described below:

FCWF-S-05 AHIMS #44-5-0170

grid ref: 693693.6286479

Three artefacts were found in an area of severe gully erosion in an area measuring 6 x 3m (Plate 2). The landform is a terminal spur crest with a gentle gradient and westerly aspect.

The artefacts are:

- milky quartz flake; size class 3; hertzian initiation and feather termination;
- brown chert flake; size class 3; hertzian initiation and feather termination; and
- brown chert flake; size class 3; hertzian initiation and feather termination.

The landform is predicted to contain artefacts in very low density. The site is highly disturbed due to erosion.

The site is assessed to be of low significance due to the low artefact density and high disturbance. Given the low significance value, there are no constraints in regard to further impacts. However, it is recommended that the site be avoided, if feasible.



Plate 1 Survey Unit 1 north end; looking 210°.



Plate 2 The location of Aboriginal site FCWF-S-05; looking 110°.



Plate 3 Artefacts in site FCWF-S-05.



Plate 4 Survey Unit 2 north end; looking 220°.



Plate 5 Survey Unit 4 mid area; looking west.

4. CONCLUSIONS AND RECOMMENDATIONS

As a result of the assessment, the following conclusions and recommendations are made:

1. One aboriginal stone artefact scatter has been recorded during the current assessment. There is no project infrastructure planned on or near to the site. It will be avoided during construction.
2. The four Survey Units subject to assessment in the Modification area have all been found to be generally of low archaeological potential and sensitivity.
3. No further heritage assessment is required in respect of the Modification application.
4. There are no identified heritage constraints in regard to the Modification.

5. REFERENCES

- Austral Archaeology Pty Ltd May 2011 Flyers Creek Wind Farm Project Aboriginal Archaeological & Cultural Heritage Assessment Combined Desktop And Field Assessment Report.
- Austral Archaeology Pty Ltd April 2015 Transmission & Substation, Flyers Creek Wind Farm, Cadia, New South Wales. Aboriginal Archaeological Report.
- Austral Archaeology Pty Ltd July 2015 Transmission & Substation, Flyers Creek Wind Farm, Cadia, NSW. Aboriginal Archaeological Report. Volume 2: Panuara Road, Errowanbang Road and Gap Road Access track.

APPENDIX 1 – AHIMS DATABASE SEARCH

 Office of Environment & Heritage AHIMS Web Services (AWS) Extensive search - Site list report									
SiteID	SiteName	Datum	Zone	Eastings	Northings	Contact	Site Status	SiteFeatures	SiteTypes
44-5-0126	FCWF-IF-03	GDA	55	690131	6289577	Open site	Valid	Artefact :-	Reports 102269
Recorders									
44-5-0127	FCWF-PAD-01	GDA	55	693875	6283030	Open site	Valid	Potential Archaeological Deposit (PAD) :-	Permits 102269
Contact									
44-5-0128	FCWF-PAD-02	GDA	55	690238	6289070	Open site	Valid	Potential Archaeological Deposit (PAD) :-	Permits 102269
Recorders									
44-5-0129	FCWF-S-01	GDA	55	690308	6283001	Open site	Valid	Artefact :-	Permits 102269
Contact									
44-5-0130	FCWF-S-02	GDA	55	692802	6283859	Open site	Valid	Artefact :-	Permits 102269
Contact									
44-5-0131	FCWF-S-03	GDA	55	694720	6283765	Open site	Valid	Artefact :-	Permits 102269
Contact									
44-5-0132	FCWF-S-04	GDA	55	691021	6288725	Open site	Valid	Artefact :-	Permits 102269
Contact									
44-5-0124	FCWF-IF-01	GDA	55	690470	6284243	Open site	Valid	Artefact :-	Permits 102269
Contact									
44-5-0125	FCWF-S-02	GDA	55	693507	6286597	Open site	Valid	Artefact :-	Permits 102269
Contact									
44-5-0070	Dirty Creek DC-ST-1;	AGID	55	694500	6280570	Open site	Valid	Modified Tree (Carved or Scarred) :-	Permits Scarred Tree
Contact									
Recorders									
Mr. Mark Rawson									

Report generated by AHIMS Web Service on 06/01/2017 for Julie Didden for the following area at Datum : GDA, Zone : 55, Eastings : 688000 - 699000, Northings : 6279000 - 6293000 with a Buffer of 50 meters. Additional Info : Archaeological assessment. Number of Aboriginal sites and Aboriginal objects found is 10
This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Appendix H

Community Newsletter (March 2017)

Flyers Creek Wind Farm Newsletter

March 2017



Welcome to the latest project newsletter from Infigen Energy about the Flyers Creek Wind Farm located near Errowanbang Road, Blayney Shire Council.

Planning Modification

The Flyers Creek Wind Farm proposal was granted planning approval by the New South Wales (NSW) Government Planning Assessment Commission (PAC) in March 2014.

Infigen has been preparing a planning modification for the project which will enable three landowners to discontinue their participation in the project. The modification will include: removal of four wind turbines and associated infrastructure; an alternative alignment of the 33kV overhead power line along Errowanbang Road; and minor changes to the location of access tracks and underground cables. The updated project layout can be viewed on the next page of this newsletter.

The modification will be lodged with the Department of Planning and Environment in April 2017.

Project Facts

Number of Wind Turbines	38
Approximate capacity (with 3.6 MW wind turbine)	136.8 MW
Turbine tip height	150m
Annual generation	~350 GWh
Equivalent number of houses powered per annum	~50,000

Planning modifications and other updates can be viewed on the Department's website at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2644

Community

The Flyers Creek Wind Farm Community Consultation Committee (CCC) continues to meet on a quarterly basis to discuss the project. The latest meeting was on 26 October 2016. Minutes of the meetings are available on the Infigen website.

<https://www.infigenenergy.com/flyers-creek/>



CENREC

Infigen is grateful for the support of the Central NSW Renewable Energy Co-operative (CENREC). This community-led co-operative was formed in October 2012 with a primary purpose to enable community investment in the local area, including the Flyers Creek Wind Farm project. CENREC is also looking at opportunities for investments in solar energy projects. More information is available at:

www.cenrec.com.au



Our generation, your future

Project Layout

The map shows the updated project layout which will be lodged with the Department of Planning and Environment as part the planning modification.

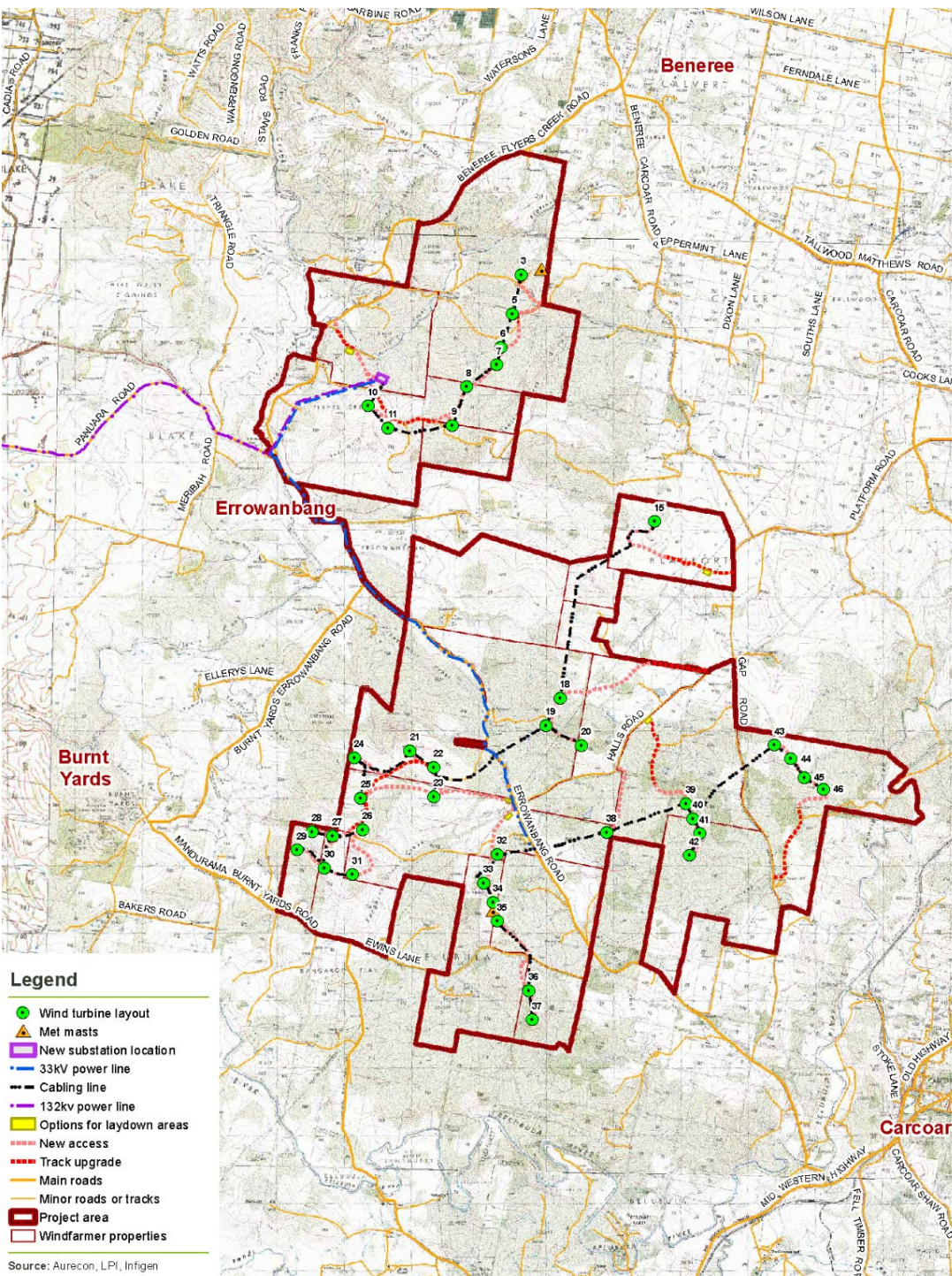
Wind Turbines

Infigen has Project Approval to install wind turbines up to 150 metres to tip height. Since the Project Approval in 2014 there have been significant advancements in turbine technology and we expect to install greater capacity wind turbines capable of producing more energy without increasing the tip height. Infigen will run a competitive process for wind turbine supply to ensure that the optimal wind turbine model is selected for the Flyers Creek Wind Farm project.

Mailing List

If you would like to be added to the Flyers Creek Wind Farm mailing list please contact:

megan.richardson@infigenenergy.com



Next Steps

Infigen Energy is advancing its Central NSW renewable energy portfolio. Our Manildra 42.5 MW solar farm was awarded ARENA (Australian Renewable Energy Agency) funding in September 2016. Construction of the project is expected to commence in the coming months. A Power Purchase Agreement with Energy Australia for Infigen's Bodangora Wind Farm, located near Wellington, was signed in February 2017 and is progressing towards a final investment decision. Flyers Creek Wind Farm is an important part of our Central NSW portfolio and we look forward to advancing the project to a construction ready position this year.

Please contact us if you have any questions or would like to meet to discuss the project.

Megan Richardson

Ph: 02-8031-9900

E: megan.richardson@infigenenergy.com

W: www.infigenenergy.com

Our generation, your future