

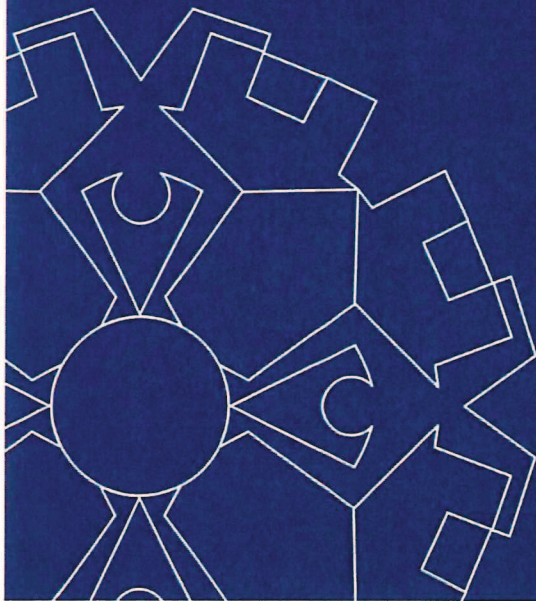


GEOLYSE

**ENVIRONMENTAL ASSESSMENT
MINOR MODIFICATION 7 TO EXISTING WIND FARM CONSENT (241/04)**

**PREPARED FOR
TARALGA WIND FARM PTY LTD**

NOVEMBER 2014



• Civil, Environmental & Structural Engineering • Surveying • Environmental • Planning • Architecture

ENVIRONMENTAL ASSESSMENT
MINOR MODIFICATION 7 TO EXISTING WIND
FARM CONSENT (241/04)

INSTALLATION OF UNDERGROUND ELECTRICITY SUPPLY

PREPARED FOR:
TARALGA WIND FARM PTY LTD

NOVEMBER 2014



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The preparation of this report has been in accordance with the project brief provided by the client and has relied upon the information, data and results provided or collected from the sources and under the conditions outlined in the report.

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ABBREVIATIONS

DA	Development Application
DP&E	Department of Planning and Environment
EA	Environmental Assessment
DSEWPC	Department of Sustainability, Environment, Water, Population and Communities
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
ISEPP	State Environmental Planning Policy (Infrastructure) 2007
LEP	Local Environmental Plan
LGA	Local Government Area
SEPPMD	State Environmental Planning Policy (Major Development) 2005

Introduction

1.1 BACKGROUND

Geolyse Pty Ltd has been commissioned by Taralga Wind Farm Pty Ltd to prepare an Environmental Assessment (EA) to support minor modification no. 7 of the existing consent 241/04. The original consent was approved as State Significant development pursuant to the *Environmental Planning and Assessment Act 1979* enabling the Taralga Wind Farm. The modification seeks to facilitate the installation of underground reticulated power supplies between turbines on land that falls outside of areas previously surveyed and assessed. The modification area involves approximately 640 metres of cabling that would be relocated to a position less than 100 metres away from the approved alignment.

1.2 SCOPE OF THIS REPORT

This EA has been prepared pursuant to Section 75W of the *Environmental Planning and Assessment Act 1979* and is provided in the following format.

- **Section 2** of this report provides a description of the subject sites and their locality.
- **Section 3** outlines the proposed modification.
- **Section 4** details the planning framework applicable to the subject site and proposed development.
- **Section 5** identifies the impacts of the proposed modification.
- **Section 6** provides a conclusion to the EA.

The Sites & Localities

2.1 THE SITES

The site area the subject of the modification application comprises a number of lots that are one part of the land to which the development consent relates. The specific lots and land on which the underground services are proposed are outlined in **Table 2.1** and depicted in **Figure 1**.

Table 2.1 – Lots affected by the Modification

Lot	DP	Length of Service	Area (ha)
Bannaby Road		40	N/A
216	750046	210	138.11
Unnamed road reserve		20	N/A
48	750046	325	16.40
55	750046	48	15.84
Total		643	170.32

The location of the lots affected by this modification are identified in the context of the approved wind farm site and turbine locations in **Figure 1**.

2.2 THE LOCALITY

The Taralga area is located in the Southern Tablelands of NSW, approximately 38 kilometres east of Crookwell, 35 kilometres north of Goulburn, and 140 kilometres south west of Sydney. The wind farm site and adjoining lands are primarily used for primary production. This has been the dominant land use for over 150 years, and is likely, in the foreseeable future, to remain the case. The district provides good grazing country and produces high quality merino wool.

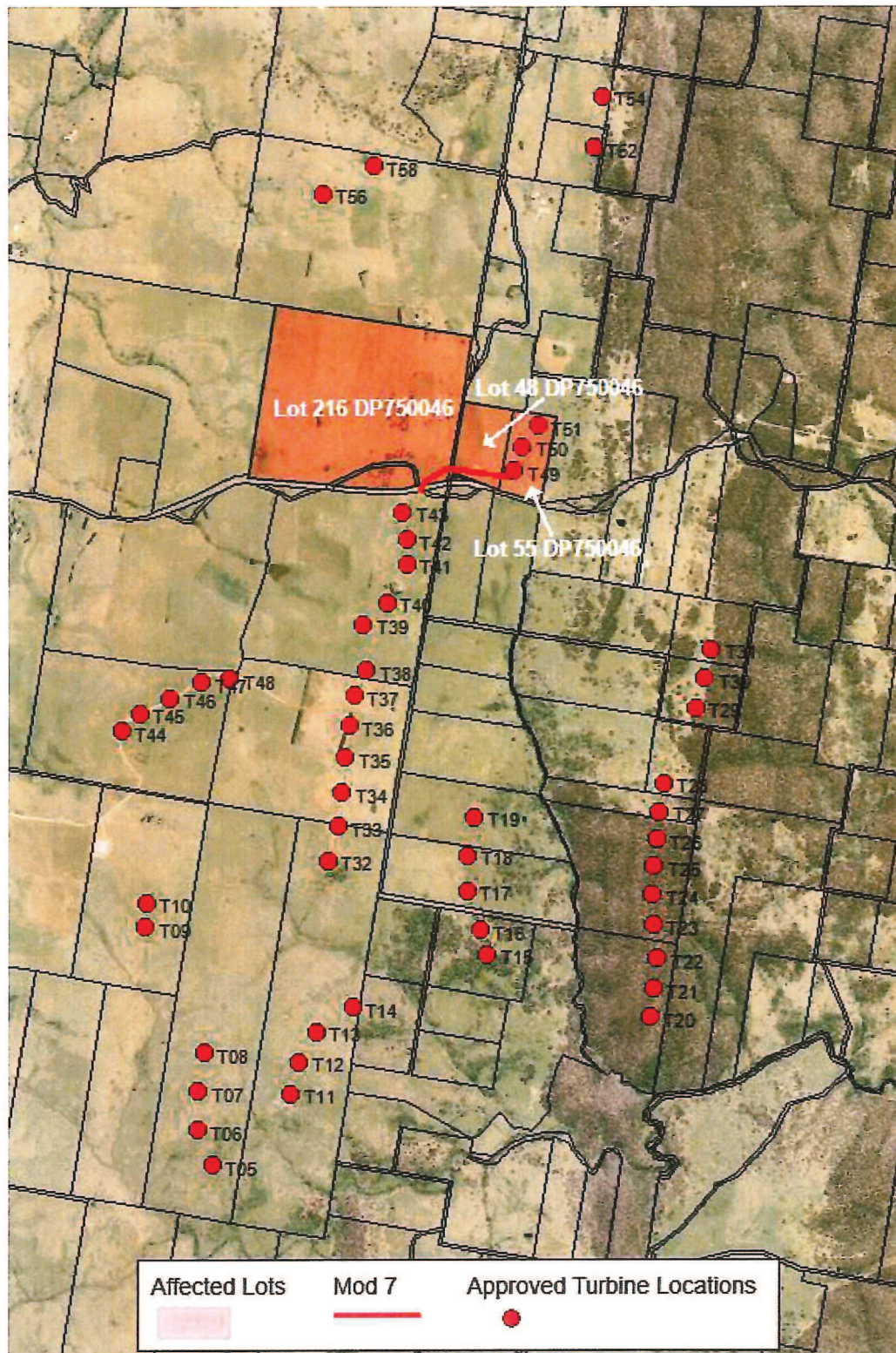


Figure 1: The subject site (Source: Bing Maps)

The Modification

3.1 HISTORY

The original application seeking consent for the wind farm was lodged with Upper Lachlan Shire Council as DA 241/04. Subsequent to the application being lodged, the development was the subject of a direction of the Minister for Planning on 15 December 2004 which resulted in the development being considered State Significant Development pursuant to Section 76A(7) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

Consent was granted for the wind farm development on 23rd February 2007 by the Land and Environment Court following an appeal.

The original consent has subsequently been the subject of a number of modification applications, the nature and description of which are described in **Table 3.1**:

Table 3.1 – Chronology of previous modifications

Mod Number	Mod Description	Date Lodged	Purpose	Status/Decision Date
1	Taralga Wind Farm Project: Application for Modification of Development Consent DA 241/04 granted by the L&EC 23 Feb 2007 pursuant to section 96(8) of the EP&A Act	30 November 2007	To permit the construction and operation of a wind farm consisting of 61 x 1.5-3 megawatt turbines each consisting of a tower, nacelle and rotor with three fibreglass blades with a maximum overall height of 131.5 metres to the top of the rotor at its apex and a maximum rotor diameter of 103 metres, associated access tracks, transformer units, electrical substation and control building, network of electrical connections linking each turbine to the electrical substation and a TV transmitter tower at various locations and subject to conditions.	Approved 20 April 2009
2	Modification of development consent to decrease the number of turbines from 61 to 51 and make changes to relevant conditions (Mod 2)	November 2012	Reduce number of turbines from 61 to 51 and make consequential changes to relevant conditions	Approved 18 June 2013
3	Modification of consent to enable the relocation of the site compound	September 2013	To facilitate operational efficiencies, the application proposed an alternative location of the temporary ancillary facility (compound) approximately 4.2 km east of the Old Showground Road/Taralga Road intersection, as well as a minor amendment to the access track network linkage in and around the proposed compound.	Approved 6 November 2013
4	Modification of consent to enable the erection of meteorological monitoring masts	September 2013	Construction of 5 temporary and eight permanent meteorological monitoring masts, with only eight being erected at any one time	Approved 6 November 2014

Table 3.1 – Chronology of previous modifications

Mod Number	Mod Description	Date Lodged	Purpose	Status/Decision Date
5	Modification of consent to enable five modification elements	January 2014	Modification application for the following: - relocation of some underground 33kv cabling; - relocation of portion of overhaul transmission line 33kv - gully span; - minor change of alignment of access tracks; - confirm location of Operation & Maintenance Building; and - enlargement of hardstand area for Turbine 54.	Awaiting determination
6	Modification of consent to enable a change to the nominated heavy vehicle route for the development	February 2014	A proposed new route for over length and heavy vehicles, through Goulburn turning off the Hume Highway, proceeding along Garroorigang Road onto Sloane Street, travelling along the length of Sloane Street until reaching Grafton Street, and then onto Chantry Street and then travelling along Taralga Road.	Approved 20 June 2014

Drawing 22-23722_A - Modification 7 – Study Area Location and Layout provides the approved modified layout of the wind farm at the time of writing and showing the area the subject of this modification identified as a red rectangle.

3.2 MODIFICATION DESCRIPTION

This application seeks a minor modification to the approved DA 241/04 – refer **Appendix B**.

This proposed modification application seeks consent to modify the current consent to enable the minor re-routing of approximately 640 metres of approved underground electricity reticulation that connects turbine T43 with turbine T49.

The electricity service would be trenched to a depth of approximately 1 metre below natural ground level.

Parts of the proposed route of the underground cabling are outside of areas previously surveyed from a heritage and ecological perspective and therefore this requires a modification and additional survey and assessment.

The timeframe for works associated with the proposed modification is anticipated to be approximately two weeks, however this may need to be extended in the event of extenuating circumstances such as bad weather or the like. Proposed construction hours for the modification would be consistent with the provisions of the consent conditions, specifically condition 40 – refer **Sections 5.14** and **5.17**. Equipment to be utilised for the installation of the modified reticulation route include either a Vermeer T755 trenching machine or 20+ tonne excavator, together with a cable reeling machine (including challenger tractor), grading machine, sand cart with prime mover, front end loader and backhoe.

Statutory Planning Framework

4.1 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1997

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), an action (proposal) would require approval from the Minister for Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) if the action has, would have or is likely to have a significant impact on a matter of National Environmental Significance (and the action is not subject to an identified exception), including whether the activity is likely to have a significant impact on Commonwealth Land. The matters of National Environmental Significance (NES) under this Act are:

- World Heritage properties;
- National Heritage places;
- Ramsar wetlands of international importance;
- Threatened species or ecological communities listed in the EPBC Act;
- Migratory species listed in the EPBC Act;
- Commonwealth marine areas; and
- Nuclear actions (including uranium mining).

In addition to the above NES matters, consideration is also required in respect of proposals involving the Commonwealth. Matters involving the Commonwealth are identified as:

- Protection of environment from actions involving Commonwealth Land;
- Protection of Commonwealth Heritage Places outside the Australia jurisdiction; and
- Protection of the environment from Commonwealth Actions.

If a potential impact on a matter of NES, including Commonwealth Land, is identified, a significance assessment is required in accordance with the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) significant impact guidelines (Department of the Environment, Water, Heritage and the Arts, 2009). In determining the nature and magnitude of an actions impact, the following matters are relevant:

- Environmental Context;
- All onsite and offsite impacts;
- All direct and indirect impacts;
- The frequency and duration of the action;
- The total impact which can be attributed to that action over the entire geographic area affected, and over time;
- The sensitivity of the receiving environment;
- The degree of confidence with which the impacts of the action are known and understood;
- Impact avoidance, mitigation and measurement; and
- Significance of impacts.

If this assessment concludes a significant impact is likely, then approval is sought from the Minister for Department of Environment (DoE - formerly Department of Sustainability, Environment, Water, Population and Communities) through the referral process. The Minister would decide whether the action would, or is likely to, have a significant impact on any matters of NES, including proposals involving Commonwealth Land.

The initial Environmental Impact Statement (EIS) submitted in relation to the project concluded that no matters of national environmental significance on Commonwealth Land are likely to be impacted by the project.

The proposed modification would result in development being undertaken in areas of the project site that have not previously been identified as hosting development and have not previously been the subject of detailed environmental assessment. As such, updated ecology and heritage assessments specific to the modified reticulation route have been completed to determine whether the proposed disturbance would result in any impacts that would be likely to have a significant impact on the environment.

While particular emphasis is placed on the ecological and heritage assessments, more broadly all potential impacts are considered throughout **Section 5**.

The results of the assessment of potential impacts to ecology are provided in **Section 5.11**. The Heritage Assessment completed is provided as **Appendix A**. The significance of potential impacts to threatened species of national conservation significance and endangered ecological communities was assessed. The ecological assessment concludes that the modification is not likely to have a significant impact on threatened species, individuals, populations or communities. The heritage assessment confirms that the modification is unlikely to have a significant impact on items of heritage significance.

It is determined by this assessment that to no matters of NES would be affected by the proposal and the impact to Commonwealth Land would not be considered to be significant. On this basis, referral to the DoE is not deemed to be formally required.

It is noted in respect of the original environmental assessment that the relevant Minister determined that the proposed development was not a controlled action.

4.2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

4.2.1 AIMS & OBJECTIVES

In New South Wales (NSW), the relevant planning legislation is the *Environmental Planning and Assessment Act 1979* (EP&A Act). The EP&A Act instituted a system of environmental planning and assessment in NSW and is administered by the Department of Planning and Environment (DP&E). The objects of the EP&A Act are:

- (a) *to encourage:*
 - (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
 - (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
 - (iii) *the protection, provision and co-ordination of communication and utility services,*
 - (iv) *the provision of land for public purposes,*
 - (v) *the provision and co-ordination of community services and facilities, and*
 - (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*

- (vii) *ecologically sustainable development, and*
- (viii) *the provision and maintenance of affordable housing, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

4.2.2 PART 3A

It is noted that the original development application for the Taralga Wind Farm was lodged with Upper Lachlan Shire Council for assessment under Part 4 of the EP&A Act. The application was subsequently declared as State Significant by the Minister on the 15 December 2004, thereby making the then Minister for Infrastructure and Planning the consent authority for the project.

On 23 January 2007 the Land and Environment Court granted consent for the application under Section 80 of the EP&A Act.

By virtue of clause 8J of the EP&A Regs, which specifies the transitional provisions for Part 3A projects, and for the purpose of the modification only, the development consent is taken to be an approval under Part 3A of the EP&A Act, and therefore clause 75W of the Act applies to any modification of the consent.

In all other respects, the project is considered to represent a development under Part 4 of the EP&A Act; this has relevance for the appropriate assessment process in respect of Aboriginal heritage – refer **Section 5.6**.

4.2.3 SECTION 75W

Pursuant to Section 75W of the EP&A Act:

- (1) *In this section:*

Minister's approval means an approval to carry out a project under this Part, and includes an approval of a concept plan.

Modification of approval means changing the terms of a Minister's approval, including:

- (a) *revoking or varying a condition of the approval or imposing an additional condition of the approval, and*
 - (b) *changing the terms of any determination made by the Minister under Division 3 in connection with the approval.*
- (2) *The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part.*
- (3) *The request for the Minister's approval is to be lodged with the Director-General. The Director-General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.*
- (4) *The Minister may modify the approval (with or without conditions) or disapprove of the modification.*
- (5) *The proponent of a project to which section 75K applies who is dissatisfied with the determination of a request under this section with respect to the project (or with the failure of the Minister to determine the request within 40 days after it is made) may, within the time prescribed by the regulations, appeal to the Court. The Court may determine any such appeal.*
- (6) *Subsection (5) does not apply to a request to modify:*



- (a) *an approval granted by or as directed by the Court on appeal, or*
- (b) *a determination made by the Minister under Division 3 in connection with the approval of a concept plan.*
- (7) *This section does not limit the circumstances in which the Minister may modify a determination made by the Minister under Division 3 in connection with the approval of a concept plan.*

The proposed amendments to the electricity reticulation are necessary to avoid disturbing private land unrelated to the wind farm. The request for modification falls within the scope of Section 75W. The terms of 75W are wide and the Minister has approval to modify the approval with or without conditions.

4.2.4 PLANNING INSTRUMENTS AND DEVELOPMENT CONTROLS

The EP&A Act facilitates the preparation of Planning instruments and development controls, consisting of:

- Environmental Planning Instruments (EPIs) (including State Environmental Planning Policies (SEPP), Local Environmental Plans (LEP), and deemed EPIs); and
- Development Control Plans (DCP).

In relation to the proposed modification, the relevant planning instruments and development controls include:

- *Upper Lachlan Local Environmental Plan 2010;*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *State Environmental Planning Policy (Major Development) 2005;*
- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011; and*
- *Upper Lachlan Development Control Plan 2010.*

The requirements of these are discussed in the following sections.

4.3 ENVIRONMENTAL PLANNING INSTRUMENTS

4.3.1 UPPER LACHLAN LOCAL ENVIRONMENTAL PLAN 2010

4.3.1.1 Aims

The aims of the *Upper Lachlan Local Environmental Plan 2010* (ULLEP) are:

- (1) *This Plan aims to make local environmental planning provisions for land in Upper Lachlan in accordance with the relevant standard environmental planning instrument under section 33A of the Act.*
- (2) *The particular aims of this Plan are as follows:*
 - (a) *to provide planning controls for Upper Lachlan and to update and consolidate into one instrument the various planning controls that currently apply to Upper Lachlan,*
 - (b) *to encourage the sustainable management, development and conservation of natural resources,*
 - (c) *to promote the use of rural resources for agriculture and primary production including fishing, forestry, mining and related processing, service and value adding industries,*
 - (d) *to protect and conserve the environmental and cultural heritage of Upper Lachlan,*
 - (e) *to encourage new residents to Upper Lachlan by providing a range of housing opportunities in the main towns and villages,*

- (f) *to allow development only if it occurs in a manner that minimises risks due to environmental hazards, and minimises risks to important elements of the physical environment, including water quality,*
- (g) *to promote and coordinate the orderly and economic use and development of land in Upper Lachlan,*
- (h) *to protect and enhance watercourses, riparian habitats, wetlands and water quality within Upper Lachlan's drinking water catchments so as to enable the achievement of the water quality objectives.*

The proposed modification is generally consistent with these stated plan aims.

4.3.1.2 Mapping

A review of Local Environmental Plan mapping associated with the subject site identifies the following applicable land constraints:

Table 4.1 – Local Environmental Plan Mapping Constraints

Map	Applicability	Section of the EA Discussed
Land Application Map	Site is located within Upper Lachlan Local Government Area	No further discussion required
Land Zoning Map	Land is located within the RU1 zone	Section 4.3.1.3
Flood Planning Map	Not identified as being flood affected land	Not applicable
Lot Size Map	Applicable minimum lot size is 100 hectares	On the basis that neither subdivision nor development of a dwelling is proposed, no further discussion required
Land Reservation Acquisition Map	Land is not identified as being reserved for acquisition	No further discussion required
Heritage Map	Land is not identified as containing any items of heritage significance	Section 5.6 and Appendix B
Natural Resources Sensitivity – Biodiversity Map	Parts of the land are identified as containing sensitive biodiversity but these are not affected by the modification	Section 5.11 and Appendix A
Natural Resources Sensitivity – Land Map	The land is not identified as containing sensitive land	No further discussion required
Natural Resources Sensitivity – Water Map	Land is not identified as containing sensitive water	No further discussion required
Sewage Treatment Plant and Rubbish Tip Buffer Map	Land is not identified as being within the sewage treatment plant or tip buffers	No further discussion required

Source: Upper Lachlan Local Environmental Plan 2010

The above relevant maps are discussed in the following sections.

4.3.1.3 Zoning

The lots affected by this modification are located within the RU1 – Primary Production Zone pursuant to the ULLEP.

The objectives of the RU1 – Primary Production zone are:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To promote the use of agricultural land for efficient and effective agricultural production.*

- *To allow for the development of non-agricultural land uses that are compatible with the character of the zone.*
- *To allow the development of processing, service and value adding industries related to agriculture and primary industry production.*
- *To minimise the visual impact of development on the existing agricultural landscape character.*
- *To protect and enhance the water quality of watercourses and groundwater systems and to reduce land degradation.*
- *To maintain areas of high conservation value vegetation.*

The proposed modification would not be antipathetic to these zone objectives.

4.3.1.4 Land Use

A wind farm meets the standard instrument definition of an electricity generating works.

Electricity generating works facility is permitted with consent in the RU1 zone. The amendments to the electricity reticulation are ancillary to the electricity generating works and are therefore considered permissible with consent.

4.3.1.5 Natural Resource Sensitivity – Biodiversity

As noted in **Table 4.1**, part of the land affected by the modification is identified via Council's LEP mapping as containing sensitive biodiversity. The specific reticulation route is plotted on **Figure 2** and **Figure 3**, showing its location in relation to the mapped biodiversity and vegetation on site.

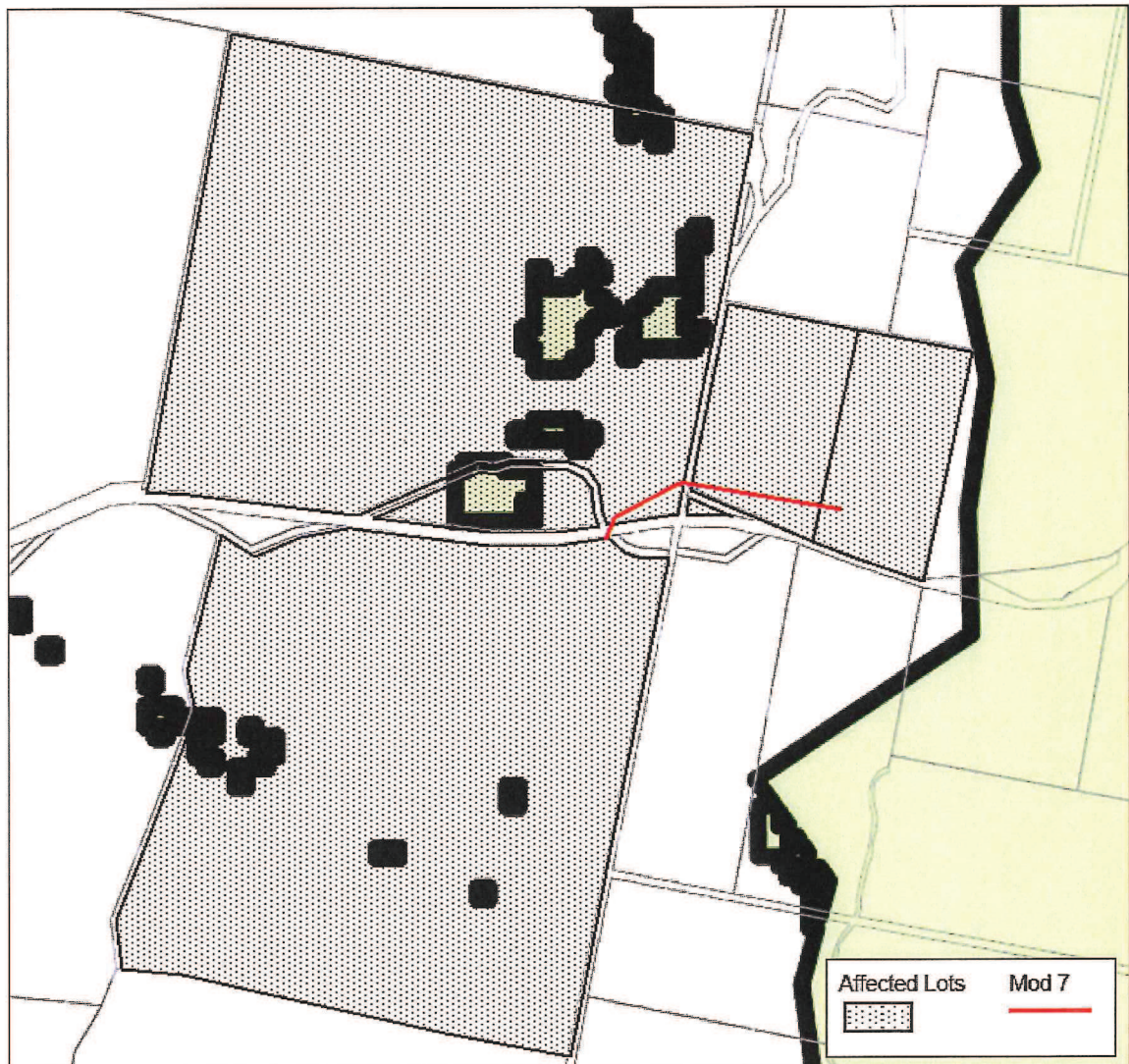


Figure 2: Extent of modification 7 in the context of mapped sensitive biodiversity

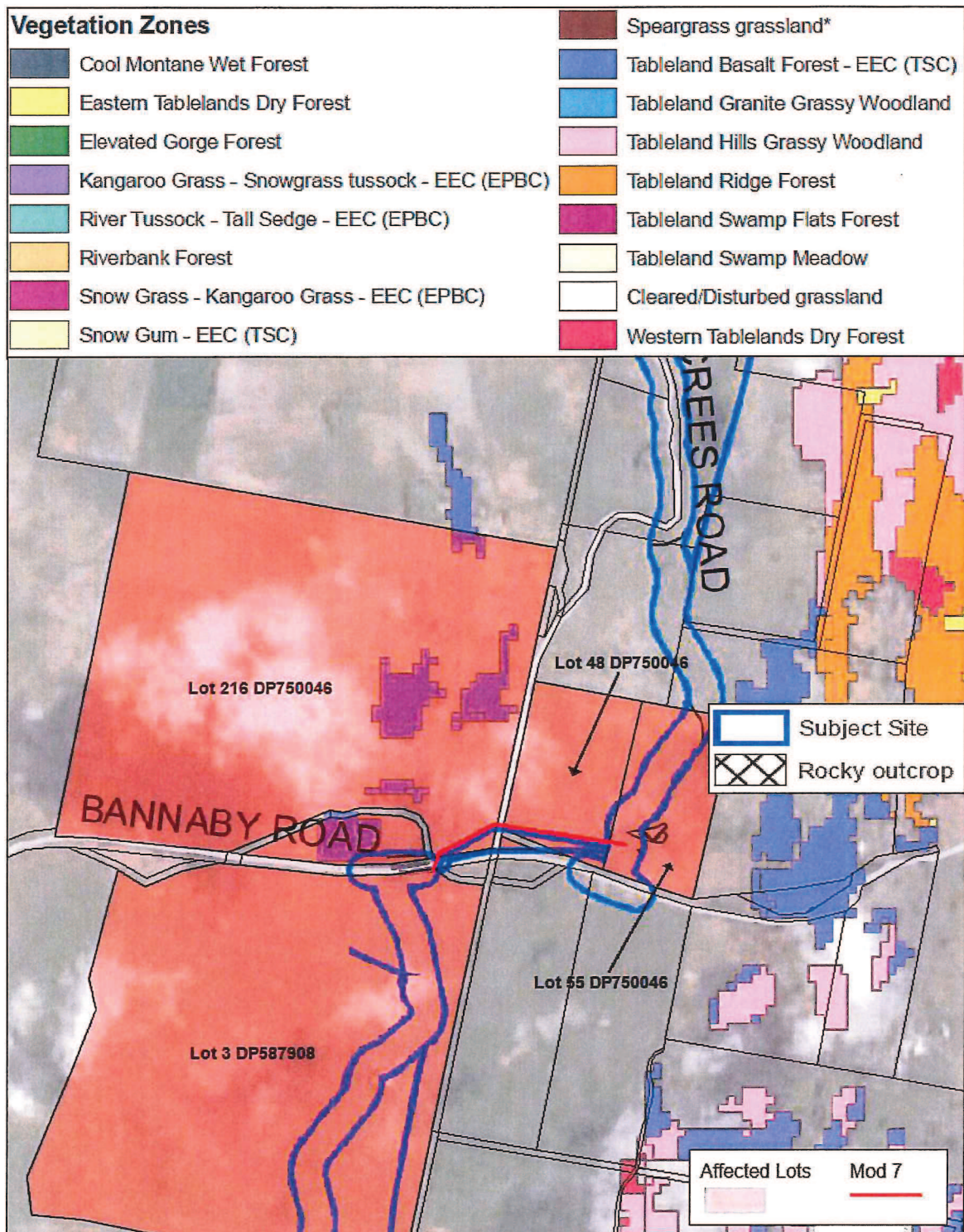


Figure 3: Vegetation Map and lots affected by Mod 7 (Source: GHD)

The assessment at **Section 5.11** concludes that the proposed electricity reticulation is not likely to have a significant impact on flora and fauna, including species, populations and communities listed under the *Threatened Species Conservation Act 1995*, the *Fisheries Management Act 1994* and the *Environment Protection and Biodiversity Conservation Act 1999*. The preparation of a Species Impact Statement and referral to the Commonwealth Minister for assessment and approval are therefore not warranted.

4.3.2 STATE ENVIRONMENTAL PLANNING POLICY

4.3.2.1 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) aims to facilitate the effective delivery of infrastructure across the State.

Clause 34 of the ISEPP permits development of land for the purpose of electricity generating works by any person on land within prescribed zones. Clause 33 of the ISEPP confirms that the RU1 zone is a prescribed zone.

The ISEPP identifies that electricity generating works have the same definition as the standard instrument. The standard instrument defines electricity generating works as:

means a building or place used for the purpose of making or generating electricity.

On the basis that the electricity reticulation is an element of an electricity generating works development, it is considered that they are also permitted with consent. This modification seeks consent for the rerouting of the electricity reticulation.

4.3.2.2 State Environmental Planning Policy (Major Development) 2005

State Environmental Planning Policy (Major Development) 2005 (SEPPMD) identifies major projects to which former Part 3A and now Schedule 6A of the *EP&A Act* applies.

- (1) *On the repeal of Part 3A of the Act, this Policy is subject to Schedule 6A to the Act.*

Note. Schedule 6A of the Act sets out those projects which will continue as Part 3A projects (transitional Part 3A projects) and revokes the declaration of any other Part 3A project.

- (2) *The repeal of clauses 6–6C and Schedules 1, 2 and 5 of this Policy, and the other amendments made to this Policy, by the State Environmental Planning Policy (State and Regional Development) 2011 do not affect any of the following:*

- (a) the declaration under this Policy of a project as a project or a critical infrastructure project under Part 3A, if that project is a transitional Part 3A project,*
- (b) any certificate in force under clause 6C immediately before that repeal.*

Clause 6(1) of SEPP Major Development defines Part 3A projects as:

“Development that, in the opinion of the Minister, is development of a kind:

- (a) that is described in Schedule 1 or 2, or*
- (b) that is described in Schedule 3 as a project to which Part 3A of the Act applies, or*
- (c) to the extent that it is not otherwise described in Schedules 1–3, that is described in Schedule 5.”*

The proposed modification of consent 241/04 is a State Significant development to which, for the purposes of the modification, Part 3A applies. However, approval for the overall development has already been obtained and this proposal seeks simply to modify that approval. The modification does not involve any change to the number of turbines proposed within the project area but will reroute associated electricity reticulation to avoid unrelated lots.

This assessment supports an application to the Minister for Planning under Section 75W of the *EP&A Act* to modify the existing development consent 241/04. The EA assesses the environmental impacts of the proposed modification in accordance with the requirements of Section 75W and 79C(1)(a)(ii) of the *EP&A Act*.

4.4 DEVELOPMENT CONTROL PLANS

4.4.1 UPPER LACHLAN DEVELOPMENT CONTROL PLAN 2010 (ULDCP)

The ULDCP provides detail and criteria for development within Upper Lachlan Local Government Area.

Part 3.17 of the ULDCP relates to a Community Enhancement Program (CEP) relevant to Major Projects where the DP&E is consent authority. Through the CEP Council aims to:

- *address issues directed at improving the quality of life for the people of the Shire, and*
- *be prepared to advocate for reasonable contributions towards the provision of community facilities and services from developments having a significant social impact on the community*

At clause 3.17(i) the ULDCP specifically identifies a monetary figure for contributions for wind farms on a per turbine basis. As the proposed modification makes no changes to turbine numbers, it is considered that the provisions of 3.17(i) are not applicable to this modification application and a nexus for further contributions does not exist.

The ULDCP supports the statutory requirements of the ULLEP. The proposed modification would be consistent with the requirements of the ULDCP and sufficient information is provided in **Section 5** of this report to enable the consent authority to assess the modification against the relevant provisions of the ULDCP.

Environmental Impacts

5.1 INTRODUCTION

Pursuant to Schedule 1 of the *EP&A Regulation*, this section of the report outlines the environmental impacts of the proposed modification and any measures required to protect the environment or lessen the harm to the environment.

The impacts have been identified through an assessment of the proposed modification against the provisions of sections 75W and 79C(1)(b) and the former NSW Department of Urban Affairs and Planning's (nd) *Guide to Section 79C*.

5.2 CONTEXT AND SETTING

The subject area comprises one contiguous length (approximately 640 metres) of underground electricity reticulation which connects turbines T43 and T49 within the existing approved wind farm.

The electricity service would be trenched to a depth of approximately 1 metre below natural ground level.

The area in which the specific activity would be undertaken is a cleared paddock currently understood to be in use for grazing purposes. The unobtrusive nature of the works ensures that this may be maintained in the future post completion of works.

5.3 ACCESS, TRANSPORT AND TRAFFIC

Primary impacts in respect of access and transport would be the need for an excavator with a trenching implement for the purposes excavating the trench, a cable reeling machine, grading machine, sand cart, front end loader and backhoe, together with associated light construction vehicles.

It is anticipated vehicles would require access to the affected area for approximately two weeks (subject to weather). The extent of disturbance would therefore be limited, and given the results of the ecological and heritage surveys, would not be anticipated to have any detrimental impacts to the local environment.

5.4 PUBLIC DOMAIN

Given that the services are underground, it is considered that the proposed modification would not result in any modification to the visual elements of the development by comparison to that which was approved.

Overall, it is considered the modification represents no greater impact on the public domain than applicable as per the current consent.

5.5 SERVICING

Existing reticulated electricity services are available to the site and these would be rerouted by virtue of this modification application to avoid disturbance to unrelated sites. **Figure 4** demonstrates the extent of the proposed modification by comparison to the approved underground reticulation plan. The modification requires the rerouting of approximately 640 metres of reticulation a distance of approximately 90 metres from the approved alignment.

Water, sewer and stormwater services are neither required nor included in the provisions of the proposed modification.

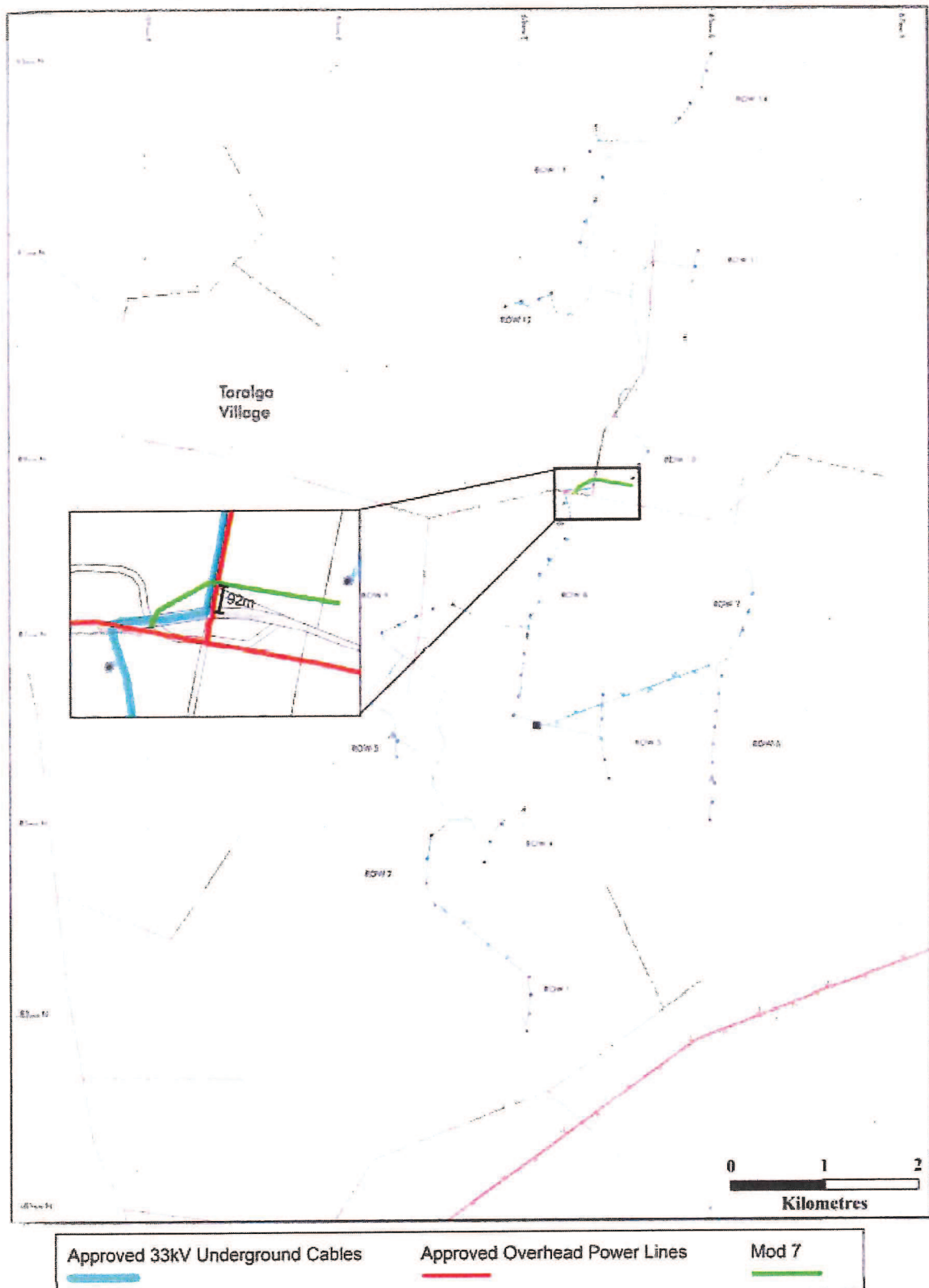


Figure 4: Modification by comparison to approved reticulation alignment

5.6 HERITAGE

An assessment of the Indigenous and non-indigenous heritage was undertaken as part of the EIS investigations, for areas affected by the wind farm. The findings of this initial heritage assessment are displayed in **Figure 5** together with a geo-referenced GIS plot of the reticulated route.

5.6.1 INDIGENOUS HERITAGE

A due diligence assessment of indigenous heritage has been completed in relation to the proposed modification by Dr Julie Dibden of NSW Archaeology. This assessment included a desktop study and field assessment – refer **Appendix A**.

The Due Diligence Assessment is considered to represent the appropriate mechanism for assessing the potential impacts associated with the development on the basis that the development was originally lodged and approved via Part 4 of the EP&A Act. Whilst the development was identified as being State Significant, and subsequent modifications have been addressed via Section 75W of Part 3A of the Act, the development is not considered to represent a Part 3A development. It is acknowledged that the OEH does not approve or certify compliance with the due diligence requirements of the Code of Practice.

The Due Diligence Code outlines a number of steps to be adhered to in order to exercise due diligence when activities are undertaken that have the potential to cause harm to Aboriginal objects. The code stipulates that these steps should be followed in order to:

- identify whether or not Aboriginal objects are or are likely to be present in an area;
- ascertain whether or not the proposed activities are likely to harm Aboriginal objects (if present); and
- determine whether an Aboriginal Heritage Impact Permit (AHIP) application is required.

Consistent with the provisions of the adopted Heritage Sub-Plan, if Aboriginal objects are present or likely to be present and an activity will harm those objects, then an AHIP is required.

In order to determine if Aboriginal objects are likely to be present in the impact area, a field inspection was conducted by Julie Dibden, NSW Archaeology Pty Ltd, on 8th August 2014.

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

- There are nine previously recorded Aboriginal object sites in the Taralga Wind Farm area, none of which are located within the proposed modification area (cf. AHIMS Site Search #114329 and, see Dibden 2013);
- No Aboriginal sites were found during the field assessment;
- The impact area has been assessed to be of very low archaeological sensitivity; and
- An AHIP is not required in respect of the proposed modification.

Given the distance to indigenous heritage sites to the proposed underground electrical works it is considered that the modification will not have any detrimental effects on items with known items of Aboriginal heritage significance. If however an Aboriginal site is identified during construction, work in that area would cease and the Office of Environment and Heritage (OEH), the Pejar Local Aboriginal Land Council and the Gundungurra Tribal Council Aboriginal Corporation would be contacted to discuss with how to proceed.

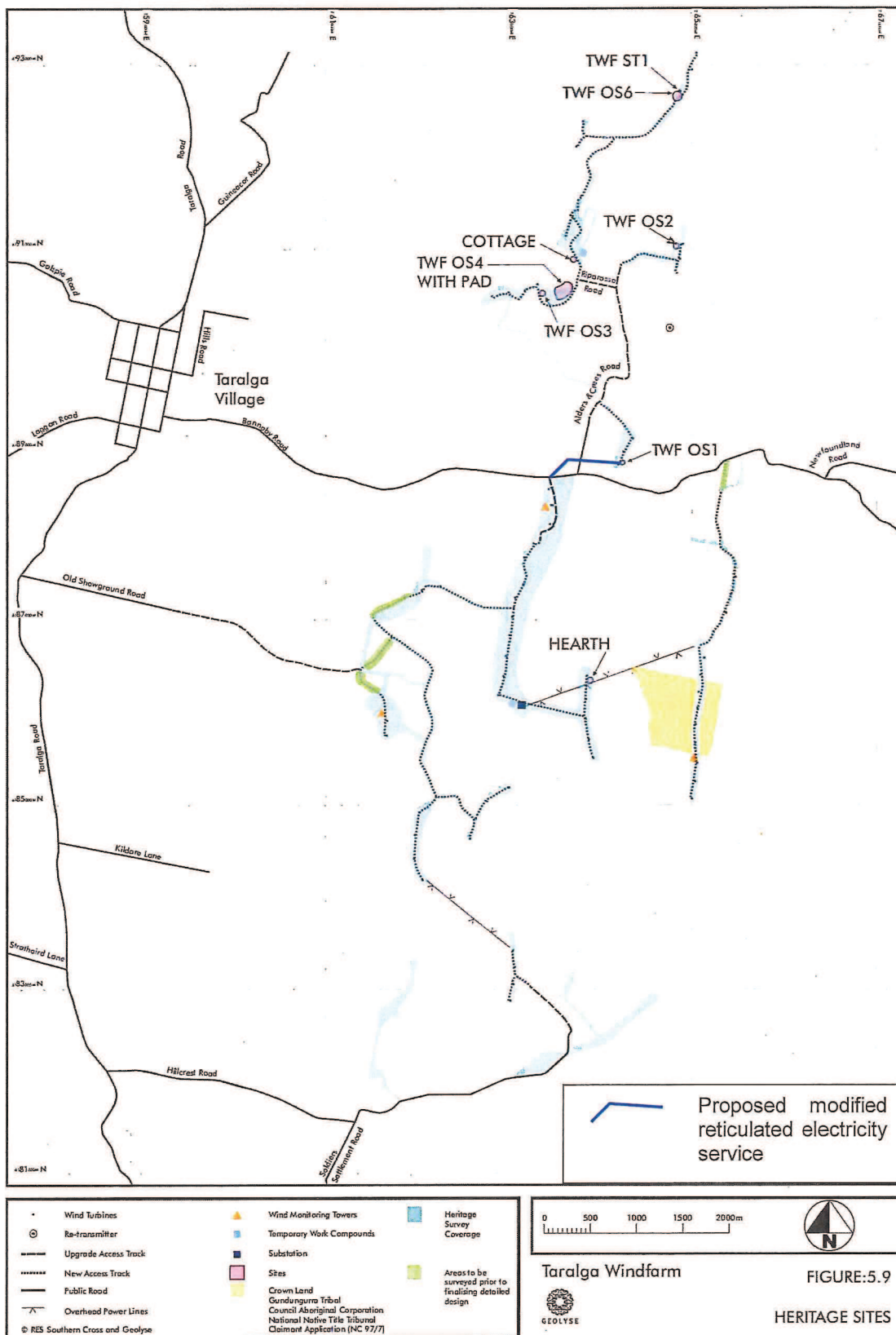


Figure 5: Location of recorded heritage sites (Source: EIS Taralga Windfarm, 2004)

5.6.2 NON-INDIGENOUS HERITAGE

Taralga is a historic village and the surrounding district has a long association with farming. A number of items within and around Taralga village are considered to have significant heritage value. The village boundary itself is listed as an Urban Conservation Area, and many of the buildings in the village are listed individually.

As part of the investigation for the EIS, a heritage survey was undertaken over the area of the proposed wind farm by OzArk. The survey recorded two ruins, which included the remains of a stone cottage and a stone hearth (refer **Figure 5**). Both of these items were considered to be of low significance and it was concluded that they do not meet the NSW State Heritage criteria used for assessing significance for entry in the Heritage Register. In any event, neither of the ruins would be impacted by the modification.

The rerouted electricity reticulation would maintain the required connection between turbines whilst limiting impacts to unrelated land. The modification would therefore not contribute to a loss of non-indigenous heritage value.

5.7 OTHER LAND RESOURCES

As the subject land is in the area already approved for the wind farm, and avoids affecting unrelated land, it is not considered that the proposed modification will result in the loss of any existing land resources.

The proposed modification results in a rerouting of underground reticulated electricity approximately 90 metres from the approved alignment over a distance of approximately 640 metres. The impacts to land resources would be limited to an approximately two week period (subject to weather) of installation after which time the current grazing use may continue.

5.8 WATER

As part of the investigations for the EIS prepared in 2004, a detailed Water Cycle Management Plan was prepared for the entire proposed wind farm site. This management plan identified that there are no major constraints that would detrimentally impact on the management of water quality. The rerouting of reticulated electricity services would follow the same procedures for those of the approved turbines, and therefore no additional water impacts are anticipated as a result of the modification, nor will the modification result in any greater impact than that which was approved.

5.9 SOILS

This modification proposes changes that would result in the same construction and operation impacts on soil as the approved turbine development. The EIS details the four various soil landscapes impacted as a result of the development;

- (i) Taralga Soil Landscape;
- (ii) Macalister Soil Landscape;
- (iii) Midgee Soil Landscape; and
- (iv) Lickinghole Soil Landscape.

Soil impacts associated with the proposed modification would be limited to short term impacts during the construction period; these would be managed via the implementation of appropriate mitigation measures, provided in **Section 5.17**.

5.10 AIR AND MICROCLIMATE

Impacts to air and microclimate as a result of the rerouting of reticulated electricity would be limited to short term impacts during the construction period. Due to the underground nature of the service, its ongoing use would not result in any long terms impacts to air or microclimate.

Short term construction impacts would be effectively controlled via the measures proposed in **Section 5.17**.

5.11 FLORA AND FAUNA

An assessment of the proposed route of the electricity service for impacts to flora and fauna has been completed by GHD and the results are identified on **Drawing 22-23722_A - Modification 7 - Location of Rocky Outcrops**. Broader vegetation types within the confines of the wind farm are shown on **Drawing 22-23722_A - Modification 7 – Vegetation Map**.

As noted in **Drawing 22-23722_A - Modification 7 - Location of Rocky Outcrops** the vegetation type within the area of the proposed modification is identified as disturbed pasture. It has been noted that the area of the rocky outcrop to the east of the modification area has the potential, subject to timing of survey, to be classified as Natural Temperate Grassland (NTG). It was initially suspected that the rocky outcrop may be habitat for threatened reptiles or the threatened orchid *Diruis aequalis*. NSW OEH officers have inspected the site and confirmed that they do not consider that the subject rocky outcrop is habitat for threatened reptiles or the threatened orchid *Diruis aequalis*. It is understood that OEH have communicated this position to the Department of Planning and Environment.

In any event, as the proposed modification area will not impact upon the adjacent rocky outcrop it is not considered the status of this area (whether NTG or otherwise) is significant in the context of this assessment.

On this basis the installation of the proposed electricity reticulation is not likely to have a significant impact on flora and fauna, including species, populations and communities listed under the *Threatened Species Conservation Act 1995*, the *Fisheries Management Act 1994* and the *Environment Protection and Biodiversity Conservation Act 1999*. The preparation of a Species Impact Statement and referral to the Commonwealth Minister for assessment and approval are therefore not warranted.

On the above basis, no further consideration of the impacts to flora and fauna is deemed necessary.

5.12 WASTE

Waste associated with the modification is limited to short term impacts associated with the construction phase. The impacts associated with construction would be effectively controlled via the measures proposed in **Section 5.17**.

5.13 NOISE & VIBRATION

The proposed modification would result in a 640 metre length of underground electricity reticulation being rerouted a distance of approximately 90 metres to the north by comparison to the approved alignment – refer **Figure 4**. **Figure 6** depicts 'associated' and 'not associated' dwellings within the project area in the context of the approved reticulation alignment and the proposed modification alignment. Of the closest four dwellings to the modification area, three are associated and one is not associated. The not associated dwelling is the furthest of these four dwellings at a distance of approximately 1250 metres. Sited between the modification area and the 'not associated' dwelling is a range of approved development including three turbines, access roads and electricity reticulation as well as a natural east-west orientated ridgeline. The modification area and the 'not associated' dwelling are located at approximately 915-920 AHD while the ridgeline extends to a height of approximately 945-950 AHD (Source: Google Earth).

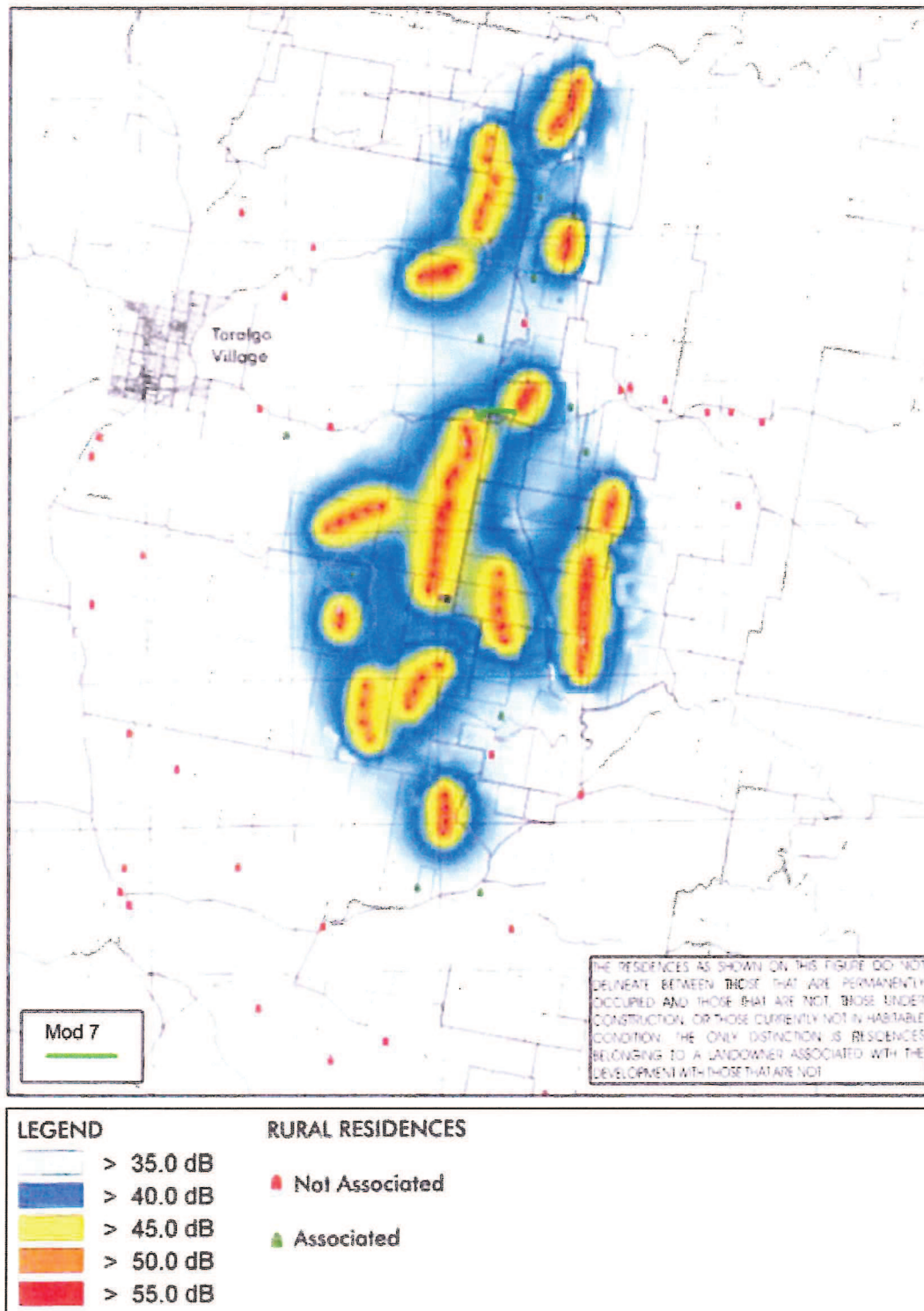


Figure 6: Approved and proposed modification to electricity infrastructure

The proposed modification would result in minor predicted noise and vibration levels during construction. The machinery and plant that will be used for the construction of the underground electricity service is outlined in **Section 3.2** and is consistent with machinery used elsewhere on site for the construction of the wind farm and installation of approved electricity reticulation. Given that the service being rerouted is yet to be installed, and the extent of change to the alignment is minor (approximately 90 metres) it is considered that the modification would result in no greater output of noise and vibration than would have

resulted from the originally approved alignment. The offset from the modification area to the closest 'not associated' dwelling results in only a minor reduction in the distance as approved. Additionally, the low ridgeline between the modification area and the dwellings to the north provides topographic shielding between the dwellings and the modification works which would counteract the reduction in the offset. The modification is therefore unlikely to lead to any greater noise impacts than would have occurred by comparison to the approved alignment.

In order to limit the noise and vibration at the site, construction activities associated with the development, including heavy vehicles entering and exiting the site, would be limited to day time working hours of 7:00 am and 6:00 pm, Monday to Friday inclusive, and between 8:00 am and 1:00 pm on Saturdays. No work is to be carried out on Sundays or Public Holidays. As outlined in Condition 40(a) of the Notice of Consent, any works that do not cause noise emissions to be audible at any nearby residence not located on the site may occur outside of the above hours.

The reticulated electricity service would not generate any noise or vibration during its operational life.

In respect of the above, the proposed modification is considered acceptable.

5.14 NATURAL HAZARDS

The minor modification will not present any change to the likely incidence of natural hazard at the site over and above those considered via the original application.

5.15 SOCIAL IMPACT

The proposed modification is to reroute underground electrical services and as such social (specifically visual) impacts are not anticipated. By avoiding unrelated land the proposed modification reduces the impact to land not owned by the wind farm development, thereby reducing the potential for impacts to third parties.

The siting of the proposed reticulated electricity supply does not impede the social impact of any areas that have not already been assessed during the EIS investigations, and the proposed modification is considered acceptable.

5.16 SITE DESIGN

The re-routed electrical service is sited to avoid impacts to an unrelated parcel of land and the design is considered to be appropriate for this reason.

5.17 CONSTRUCTION IMPACTS

The construction of the re-routed electricity service is consistent with impacts associated with the remainder of the service, which connects each turbine with the grid/substation. An existing reticulated service was provided via the original approval and this modification simply reroutes a short section to avoid affecting unrelated land. As such, overall impacts would be unchanged as a result of the modification.

The contractors employed to complete the installation of the reticulated electricity service will have a comprehensive list of Safe Work Method Statements (SWMS) and Job Safety and Environment Analysis (JSEA) protocols to ensure the construction is undertaken with minimal risk to both themselves and the environment.

As reflected in the original EIS, the following principles would be applied during construction to mitigate any impacts and would consistent with the provisions of the relevant sub plans ,including the Soil and Water Management Sub Plan, the Heritage Sub Plan and the Bush Fire Sub Plan:

- Contractors undertaking site works would be required to install site specific erosion and sediment control on site including a range of erosion and sediment control measures such as diversion drains, banks, sediment traps, sediment filters, fencing and batter stabilisation;
- Excavations would be left open for as short a time as possible and sites would be stabilised and restored promptly after works are undertaken;
- Where disturbed sites are to be reinstated and revegetated, follow up maintenance would be undertaken until the areas are satisfactorily stabilised and restored;
- Fuels or oil storage on site would be within the lay down yard and volumes would be kept to a minimum to reduce the severity of an incident;
- Any onsite refuelling would be undertaken with appropriate precautions;
- All packaging, general construction debris and domestic waste would be removed off-site and disposed of in accordance with waste regulations. For the avoidance of doubt, no waste would be buried or burned on site;
- Measures would be adopted to prevent the introduction of invasive species. Weeds would be monitored on disturbed sites and controlled as necessary;
- All construction personnel would undertake site induction concerning cultural heritage issues (locations and legislative obligations not to disturb);
- In the event any Aboriginal site is identified during construction, work in that area would cease and the Office of Environment and Heritage, the Pejar Local Aboriginal Land Council and the Gundungurra Tribal Council Aboriginal Corporation would be contacted to discuss how to proceed;
- Measures to control dust would include wetting, stabilising topsoil stockpiles; restoration of disturbed areas as soon as possible; and where practical, placement of stockpiles in sheltered locations to minimise dispersal by high winds; and
- Noise from construction activities will be controlled by limiting construction hours within the limits specified in the Condition 40 of development consent:
 - Between 7:00 am and 6:00 pm Monday to Friday
 - Between 8:00 am and 1:00 pm on Saturdays
 - At no time on Sundays and public holidays
 - Outside of the above hours, condition 40 notes:
 - works may be carried out provided that do not cause noise emissions to be audible at any nearby residences not located on the site;
 - material deliveries may occur;
 - emergency works may occur
- All construction works will be subject to, and undertaken in accordance with, the conditions of development consent.

5.18 CUMULATIVE IMPACTS

The proposed modification will not result in any increase in noise, water run-off or traffic movements, nor will the modification detrimentally affect air quality or existing flora and fauna. As such the proposed modification will not have any impacts that have the potential to act in unison in terms of:

- Individual impacts so close in time that the effects of one are not dissipated before the next (time crowded effects);
- Individual impacts so close in space that the effects overlap (space crowded effects);
- Repetitive, often minor impacts eroding environmental conditions (nibbling effects); or
- Different types of disturbances interacting to produce an effect which is greater or different than the sum of the separate effects (synergistic effects).

Conclusion

6.1 JUSTIFICATION FOR THE MODIFICATION

The proposed modification to reroute reticulated electricity services is consistent with the existing consent for the wind farm. The electricity service is ancillary to the development for a wind farm and is a necessary component of the overall development.

The wind farm development is state significant development which, for the purposes of the modification, Section 75W of the now repealed Part 3A of the EP&A Act applies. Section 75W provides the framework for modifications to state significant development, where the proposed changes are consistent with the approved development.

The electrical infrastructure is below ground and therefore there is no visual impact associated with the proposal. The primary implication of the modification will be short term construction impacts associated with the installation of the reticulation.

An assessment of the environmental impacts of the proposed modification is contained in **Section 5** of this report.

Construction impacts are temporary, as well as being relatively minor, and are therefore manageable. As such, it is submitted that the proposed modification has minimal environmental impact and should be approved.

6.2 CONCLUSION

This assessment has considered the requirements of Sections 75W and 79 C(1)(a)(ii) of the *EP&A Act* and has assessed the environmental impacts of the proposed modification.

The terms of Section 75W are wide and the Minister has the discretion to approve the modification with or without conditions. In the circumstances of the proposed modification, which seeks to install a short section of underground electrical infrastructure, there is no increased environmental impact and the modification would not result in any discernible impacts to visual amenity, local biodiversity or local heritage. Construction impacts would be controlled via the implementation of appropriate and justifiable mitigation measures.

All existing conditions of the consent will continue to apply to the modified project.



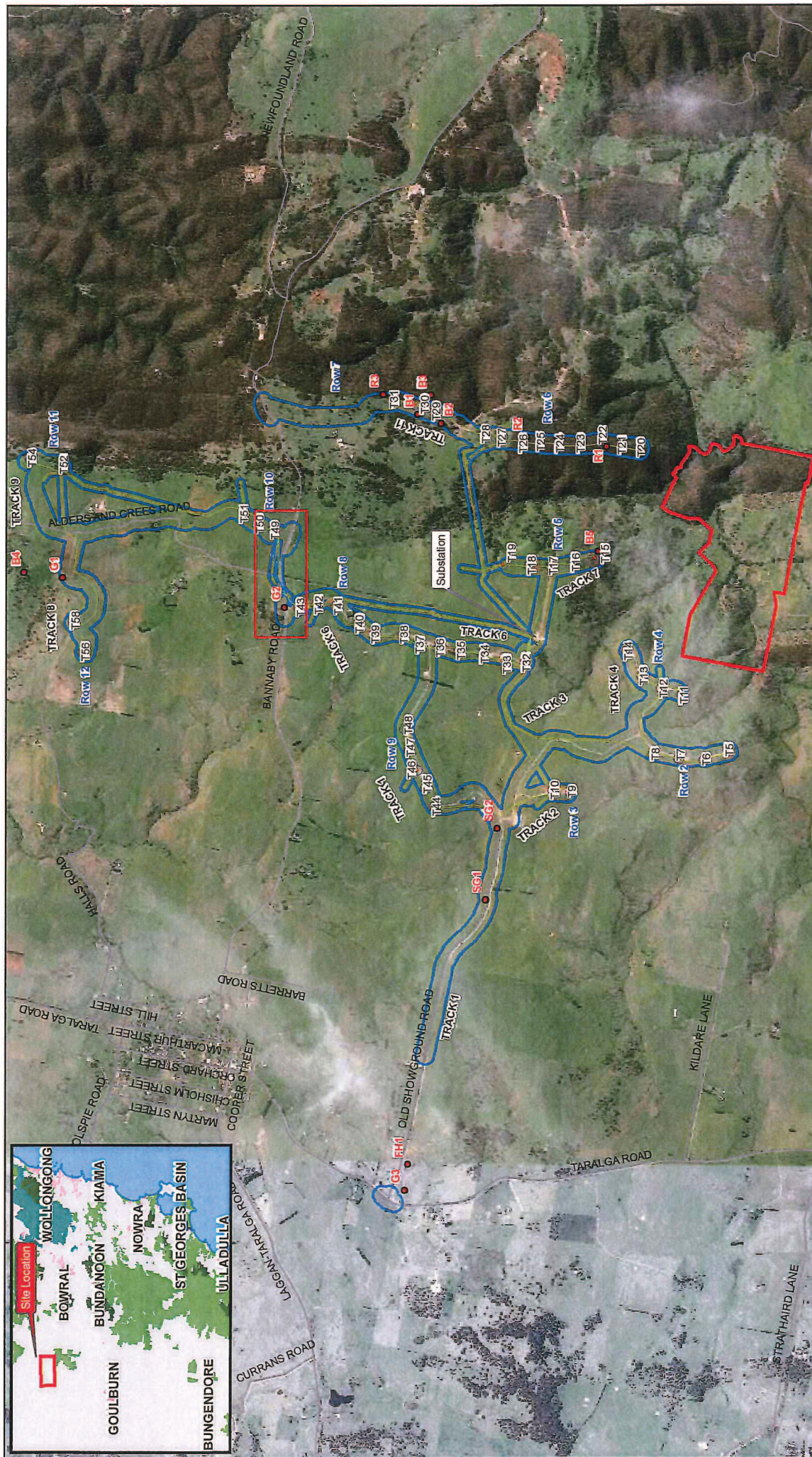
References

Department of Urban Affairs and Planning (DUAP). nd, *Guide to Section 79C*, NSW Department of Urban Affairs and Planning, Sydney.

Geolyse. 2004, Taralga Windfarm Environmental Impact Statement, for RES Southern Cross Pty Ltd

NSW Archaeology Pty Ltd. 2014, Minor Revision to Electrical Connections – Modification #7 Taralga Wind Farm Due Diligence Assessment

Drawings



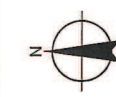
Job Number 21-23722
Revision A
Date 30 Jul 2014

HBW Ebsworth
Taralga Windfarm
Biodiversity Offset Package



LEGEND

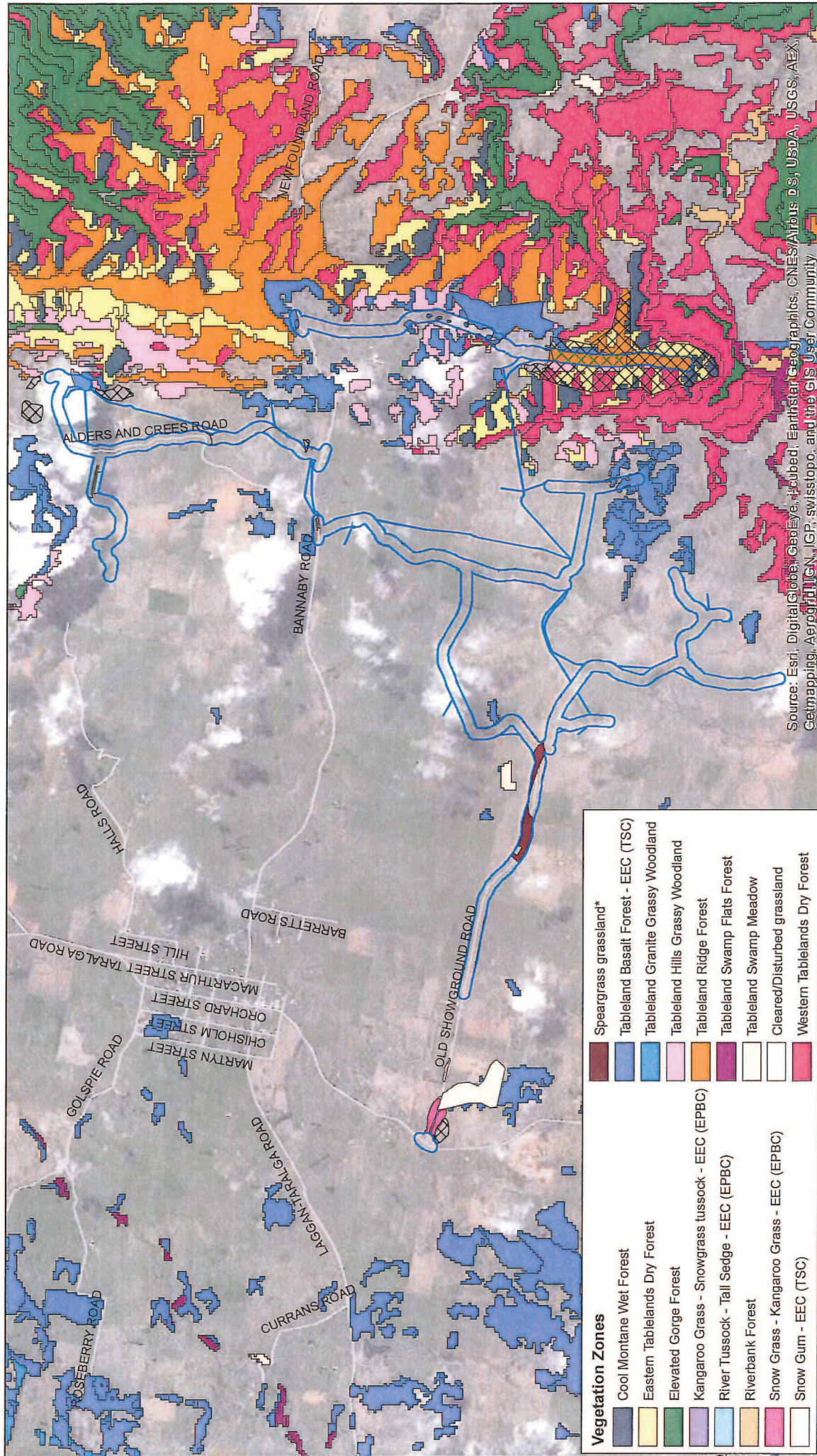
- Subject Site
- Proposed Offset Site
- Turbine Locations (T5 - T58)
- Roads
- Electrical Reticulation Design
- Plot Transects GHD



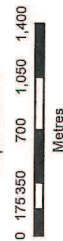
Paper Size A4
0 180 360 720 1,080 1,440
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1984
Grid: GDA94 MGA zone 55

Study Area Location and Layout Figure 1



Paper Size A4



Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1984
 Grid: GDA 1984 MGA Zone 55



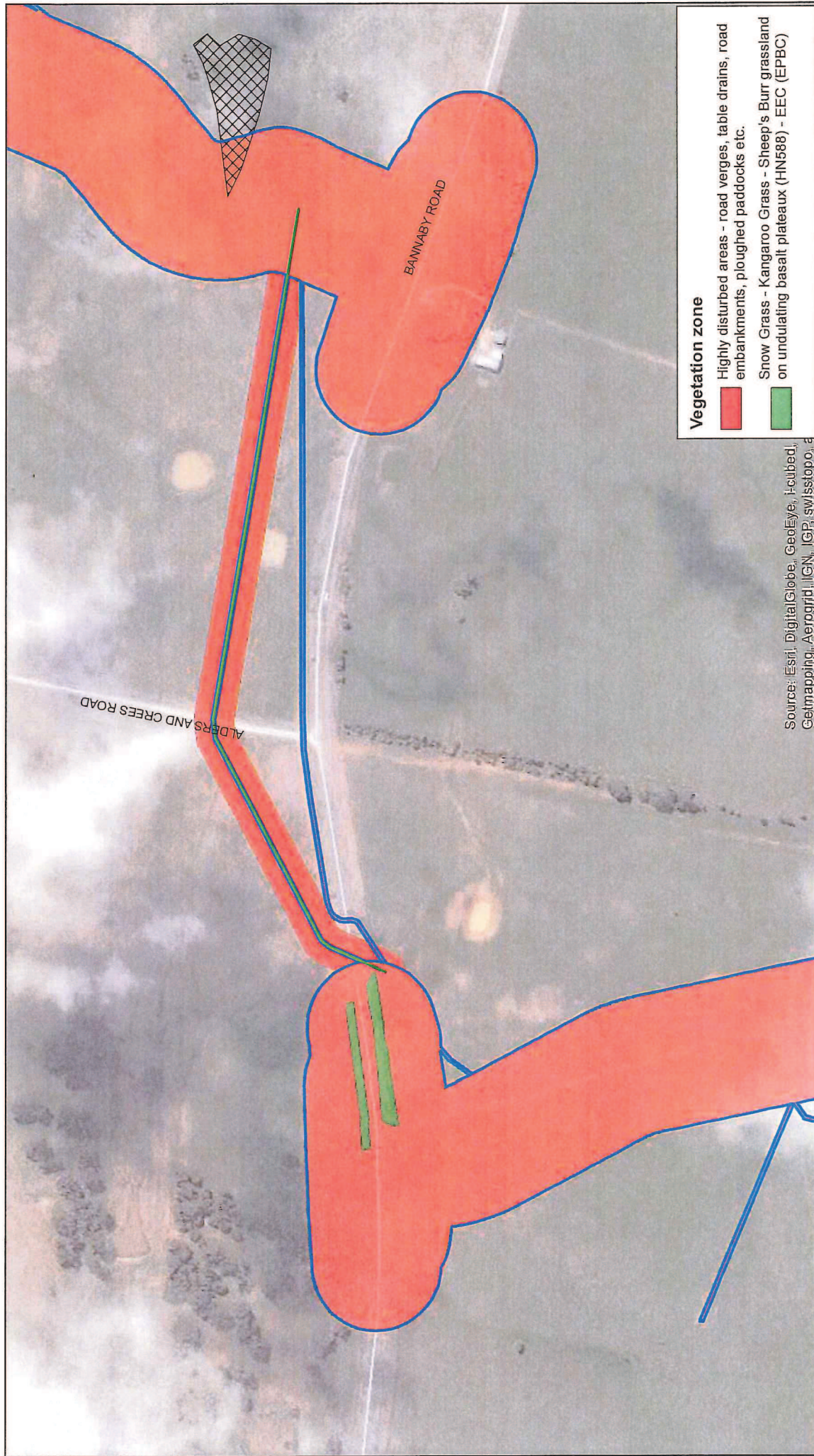
*Note: Low condition did not fit EEC criteria.



HWL Ebsworth
 Taraiga Windfarm
 Biodiversity Offset Package

Job Number 22-23722
 Revision A
 Date 27 Aug 2014

Vegetation Map

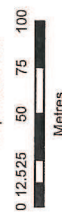


Vegetation zone

- Highly disturbed areas - road verges, table drains, road embankments, ploughed paddocks etc.
- Snow Grass - Kangaroo Grass - Sheep's Burr grassland on undulating basalt plateaux (HN588) - EEC (EPBC)

Source: ESRI, DigitalGlobe, GeoEye, i-cubed, Getmapping, Aerogrid, IGN, IGP, swisstopo, a

Paper Size A4



Map Projection: Transverse Mercator
Horizontal Datum: GDA 1984
Grid: GDA 1984 MGA Zone 55



- LEGEND**
- Modification 7
 - Subject Site
 - Rocky outcrop

Note: Impacts of associated cabling limited to disturbed pasture



Taralga Wind Farm
Taralga Windfarm
Biodiversity Offset Package

Job Number 22-23722
Revision A
Date 29 Aug 2014

Modification 7 Location of Rocky Outcrops



Appendix A

**HERITAGE SURVEY PREPARED BY
NSW ARCHAEOLOGY PTY LTD**

New South Wales Archaeology Pty Ltd ACN 106044366

Minor Revision to Electrical Connections - Modification #7
Taralga Wind Farm
Due Diligence Assessment

Date: 11 August 2014
Author: Dr Julie Dibden
Proponent: Geolyse, on behalf of Taralga Wind Farm Pty Ltd
Local Government Area: Upper Lachlan Shire Council



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INTRODUCTION

Geolyse Pty Ltd is preparing documentation to support modification of the existing Taralga Wind Farm development consent 241/04 for a minor change to the electrical layout (Modification #7). This report will form a component of that documentation.

The original development application for the Taralga Wind Farm was lodged with Upper Lachlan Shire Council for assessment under Part 4 of the EP&A Act. The application was subsequently declared as State Significant by the Minister on the 15 December 2004, thereby making the Minister for Infrastructure and Planning the consent authority for the project.

New South Wales Archaeology Pty Ltd has been commissioned to undertake a heritage assessment of the proposed modification (Figure 1). The assessment has been undertaken in accordance with the NSW Office of Environment and Heritage – NSW OEH (formally NSW DECCW) *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*¹ (NSW DECCW 2010). It has included a desktop study and a field assessment.

For the purposes of this project, due diligence means ‘taking reasonable and practical steps to determine whether a person’s actions will harm an Aboriginal object and, if so, what measures can be taken to avoid that harm’ (NSW DECCW 2010: 18).

The *Due Diligence Code* outlines a number of steps to be adhered to in order to exercise due diligence when activities are undertaken that have the potential to cause harm to Aboriginal objects. The code stipulates that these steps should be followed in order to:

- identify whether or not Aboriginal objects are or are likely to be present in an area;
- ascertain whether or not the proposed activities are likely to harm Aboriginal objects (if present); and
- determine whether an Aboriginal Heritage Impact Permit (AHIP) application is required.

If Aboriginal objects are present or likely to be present *and* an activity will harm those objects, then an AHIP is required.

In order to determine if Aboriginal objects are likely to be present in the impact area, a field inspection was conducted by Julie Dibden, NSW Archaeology Pty Ltd, on 8th August 2014.

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

- There are nine previously recorded Aboriginal object sites in the Taralga Wind Farm area, none of which are located within the proposed modification area (*cf.* AHIMS Site Search #114329 and, see Dibden 2013).
- No Aboriginal sites were found during the field assessment.
- The impact area has been assessed to be of very low archaeological sensitivity.
- An AHIP is not required in respect of the proposed modification.

¹ Hereafter referred to as the *Due Diligence Code*.

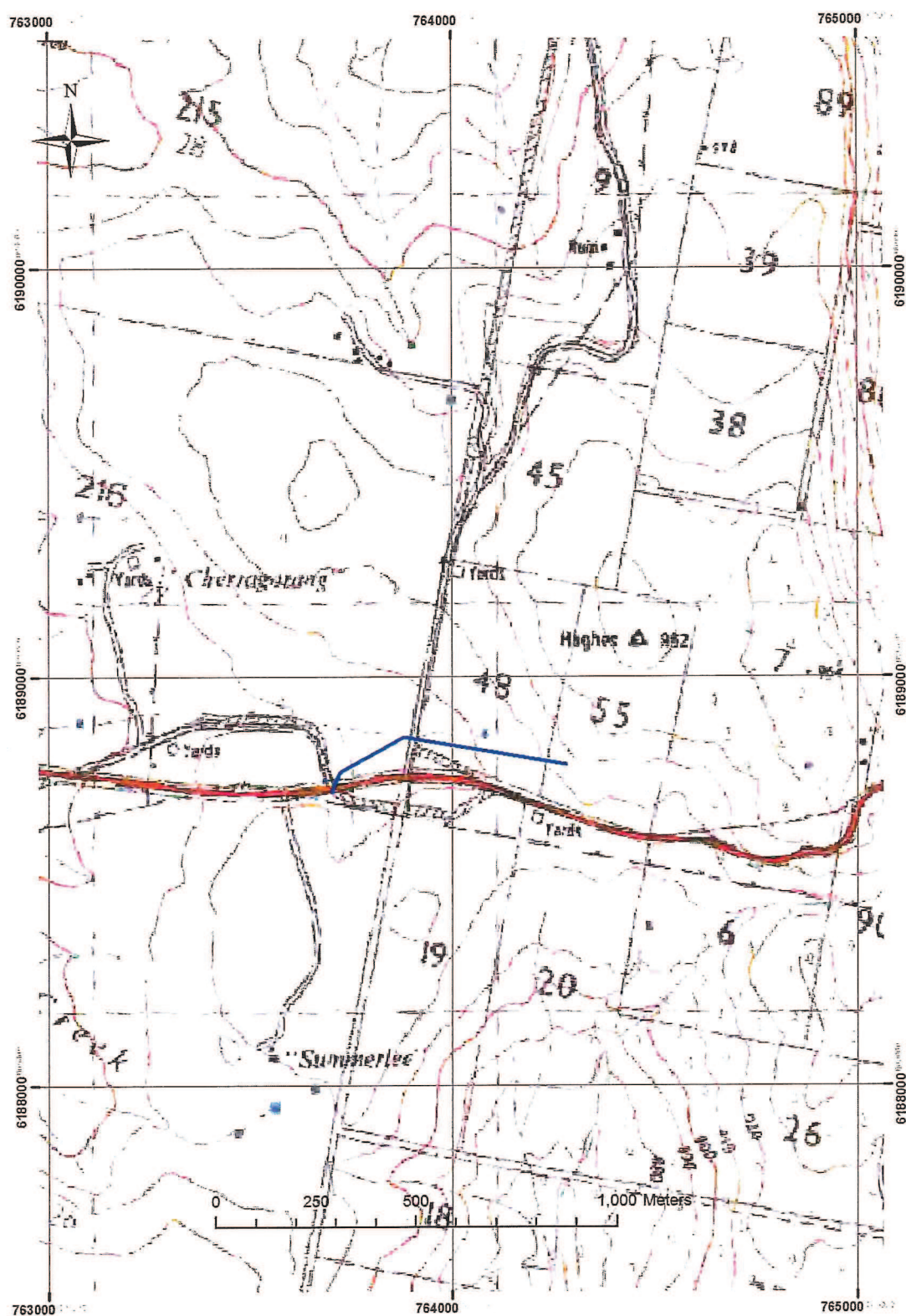


Figure 1 Location of the proposed electrical cable (Modification #7) in the vicinity of Bannaby Road.

1. IMPACT ASSESSMENT

The first question to be addressed in a process of due diligence is, *Will the activity disturb the ground surface or any culturally modified trees?* (NSW DECCW 2010: 11). If the proposed activity will disturb the ground surface there is a higher likelihood that Aboriginal objects will be harmed.

When machinery is used to dig, grade, bulldoze, scrape, plough or drill the ground, the accompanying disturbance to the ground surface is often significant, and consequently, there is a high likelihood for any Aboriginal objects which may be present to be harmed.

1.1 Proposed Impacts

It is proposed to install an electrical cable over a distance of approximately 600 metres (Figure 1). The cable would be installed via trenching to a depth of c. 1m.

Machinery will be used in the installation of the cable. The trench would measure less than 0.5 metres in width. It is calculated that c. 300 square meters of ground would be disturbed.

Given the nature of proposed impacts, there is potential for Aboriginal objects to be disturbed. No trees would be removed and, therefore, no culturally modified trees would be disturbed. Given the small areas of disturbance, it is emphasised that impacts would be minimal.

2. AHIMS DATABASE SEARCH AND LANDSCAPE ASSESSMENT

2.1 AHIMS Site Search Results

A search of the NSW OEH Aboriginal Heritage Information Management System (AHIMS) has been undertaken in respect of a previous modification (AHIMS Search Reference: Taralga; Client Service ID #114329). The search covered an area of 110 square kilometres, encompassed by Eastings: 758000–768000 and Northings: 6183000–6194000, with a buffer of 50 metres (Appendix 1).

The previously recorded Aboriginal object sites ($N = 9$) listed on the AHIMS search are presented in Table 1. None are located within the proposed activity area, although one is close (see Figure 2). This site, *TWF OS1*, is located near to the proposed electrical trench and is discussed further below.

During an inspections undertaken in October 2013 in respect of an earlier modification (Dibden 2013), two additional sites were found in the wind farm area.

It is worth noting that the AHIMS register only includes sites which have been reported to the NSW OEH. Generally, sites are only recorded during targeted surveys undertaken in either development or research contexts. Accordingly, this AHIMS search cannot be considered to be an actual or exhaustive inventory of Aboriginal objects situated within the local area or indeed within the subject area itself.

Table 1 AHIMS sites in search area.

Site ID	Site name	Datum	Easting	Northing	Context	Site features	Recorders
51-3-0019	TWF OS1	AGD	764255	6188686	Open site	2 quartz flakes	OzArk 2004
51-3-0020	TWF OS2	AGD	764839	6191024	Open site	9 artefacts	OzArk 2004
51-3-0021	TWF OS3	AGD	763504	6190699	Open site	14 artefacts	OzArk 2004
51-3-0022	TWF OS4	AGD	763620	6190540	Open site	Plus PAD, 3 artefacts	OzArk 2004
51-3-0023	TWF OS5	AGD	763756	6183146	Open site	10 artefacts	OzArk 2004
51-3-0024	TWF OS6	AGD	764856	6192642	Open site	50+ artefacts	OzArk 2004
51-3-0025	TWF ST1	AGD	764893	6192683	Open site	Scarred tree	OzArk 2004
51-3-0045	TME-OS8	GDA	766959	6186537	Open site	PAD	OzArk 2005
51-3-0046	Taralga PAD	AGD	760240	6190350	Open site	PAD	R Parkes

The Aboriginal site *TWF OS1* was recorded by OzArk in 2004 during the original survey for the proposed wind farm (see OzArk 2004: 19). The site is an artefact scatter consisting of two quartz artefacts. The location of the site is shown in the sketch plan on page 19 of the OzArk (2004) report. This locale was inspected during the current assessment, however, no artefacts were observed. It is noted that this site will not be subject to impacts as a result of the modification.

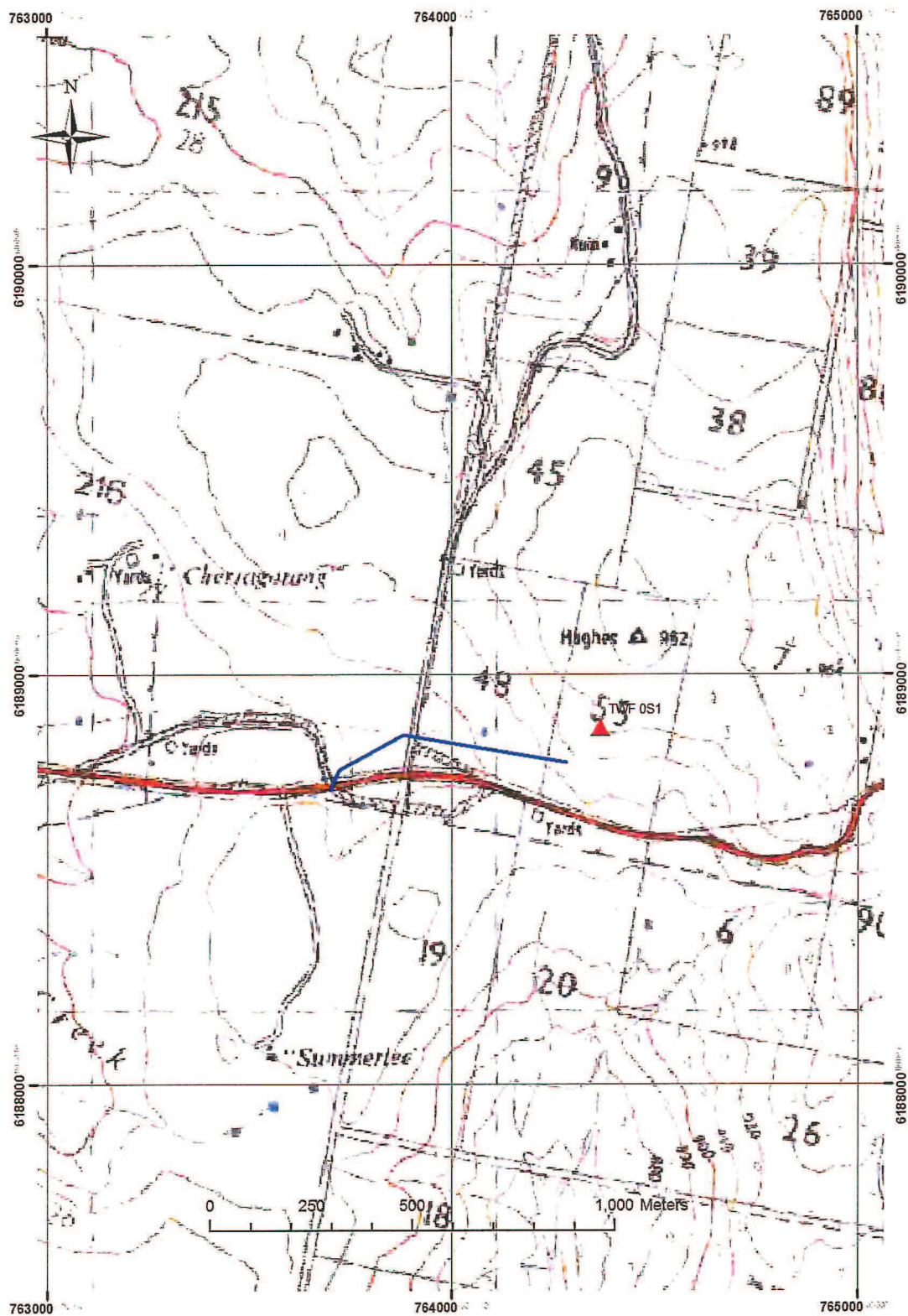


Figure 2 Location of AHIMS site in respect of the modification.

2.2 Assessment of the Archaeological Sensitivity of Landscape Features in the Proposed Impact Area

Regardless of the AHIMS search results and whether or not they indicate the presence of Aboriginal objects, it is a requirement to consider if Aboriginal objects are likely to be in the proposed activity area. *The Due Diligence Code of Practice - Step 2b (NSW DECCW 2010)* lists the following landscape features that indicate the likely existence of Aboriginal objects. Areas located:

- within 200 metres of waters (including the sea), or
- within a sand dune system, or
- on a ridge top, ridge line or headland, or
- within 200 metres below or above a cliff face, or
- within 20 metres of or in a cave, rock shelter, or a cave mouth; and
- on land that is not disturbed land (as defined on page 18 of the Due Diligence Code).

The Due Diligence Code of Practice does not, however, take into consideration other factors which could influence whether or not an area may contain Aboriginal objects, such as, for example, factors such as gradient (i.e. steep land is unlikely to contain Aboriginal objects) or rockiness (i.e. very rocky land, irrespective of its location, may not be archaeologically sensitive).

The relevant predictive model suggests that locally, sites would be located on landforms situated at the confluence of waterways, close to permanent water and in areas of (formerly) high biodiversity (*cf.* OzArk 2004; 2005; 2007). In the local area, sites in most cases are within 200 m of water, either in close proximity to a drainage feature, creek or river or, alternately, within a saddle of a ridge with a drainage feature or nearby natural spring. In all cases, the environment provide a degree of protection from the harsh winds of the area. While the predictive model indicates that certain features, such as stone formations (e.g. bora rings) and quarries, might be located on ridge tops, none have been identified during previous studies in the local area. However, such sites are unlikely to remain intact due to the heavy land use and disturbance ridges within the study corridor have undergone (*cf.* OzArk 2004; 2005; 2007).

The proposed activity is located on a gently undulating broad, ridge crest. The area is cleared agricultural land and used for grazing sheep or cattle. The new electrical cable would be installed north of Bannaby Road. It would extend from the south end of a turbine row, westward to join with a turbine row situated on the south side of the road. The cable installation would traverse at broad, flat and low lying landform on the ridge. The landform is assessed to be of low archaeological potential.



Plate 1 The proposed modification area looking west, as delineated by black dashed line.

2.3 Field Survey Results

No Aboriginal objects were recorded during the field assessment. However, ground exposure and associated archaeological visibility was negligible and therefore the ability to detect artefacts on ground surfaces was not possible. Accordingly, a consideration of the archaeological sensitivity of the landform is required in order to make an informed assessment of the modification area. Given the predictions as outlined above in Section 2.2, it is concluded that there is a low potential for Aboriginal objects to be impacted as a result of the proposed works.

2.4 Conclusion

The proposed activity area is assessed to be of very low archaeological sensitivity due primarily to remoteness from a permanent source of water and high exposure to wind and weather. The proposal area is located well away from reliable and abundant water, where focused Aboriginal occupation in the local area is expected to have occurred. In addition, it is located within an exposed and generally amorphous landscape. Given the above, the proposal area is assessed to be unlikely to have been targeted by Aboriginal people for intensive occupation which would result in significant levels of artefact discard. It is therefore predicted to be of generally low archaeological sensitivity, that is, to contain negligible or at best very low density artefacts only.

3. LEGISLATION

The National Parks and Wildlife Act 1974 (NPW Act) is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in NSW. One of the objectives of the NPW Act is:

... the conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including but not limited to: (i) places, objects and features of significance to Aboriginal people ... (s.2A(1)(b))

Part 6 of the NPW Act is administered by the NSW Office of Environment and Heritage (NSW OEH) and provides specific protection for Aboriginal objects and declared Aboriginal places by establishing offences of harm. Harm is defined to mean destroying, defacing or damaging an Aboriginal object or declared Aboriginal place, or moving an object from the land.

At this time, the proponent has sought to avoid causing harm to the Aboriginal object sites which have been found on the property and an AHIP would not be sought. Accordingly, measures would need to be implemented to ensure that harm, inadvertent or otherwise, would not occur to the two recorded sites.

Section 86 of the NPW Act, *Harming or desecrating Aboriginal objects and Aboriginal places*, sets out the penalties for harming an Aboriginal object. For an individual, the penalty for harming an object the person knows is an Aboriginal object, is imprisonment for up to 2 years and a significant fine (>\$200,000).

Anyone proposing to carry out an activity that may harm an Aboriginal object or declared Aboriginal place must investigate, assess and report on harm that may be caused by the activity they propose. An Aboriginal Heritage Impact Permit (AHIP) may be required if harm to Aboriginal objects and declared Aboriginal places is proposed. When this is the case, an Aboriginal Cultural Heritage Assessment Report (ACHAR) is required to support the AHIP application.

An AHIP is not required in respect of the proposed modification.

4. CONCLUSIONS AND RECOMMENDATIONS

1. No Aboriginal objects were recorded in the impact area.
2. The area is assessed to be of very low archaeological potential.
3. An AHIP is not required in respect of the proposed works.
4. If Aboriginal objects are found while undertaking the activity the proponent must stop work and notify the NSW OEH; an AHIP may need to be sought.
5. If human skeletal remains are found the proponent must stop work immediately, secure the area to prevent unauthorized access and contact the NSW Police and OEH.
6. No further archaeological assessment is required in respect of the works as described in this report.

5. REFERENCES

- Dibden, J. 2013 Erection of 5 Temporary and 8 Permanent Wind Monitoring Guyed Masts at Taralga Wind Farm. Due Diligence Assessment.
- OzArk Environmental & Heritage Management P/L (September 2004) Indigenous and Non-Indigenous Heritage Assessment: Taralga Windfarm.
- OzArk Environmental & Heritage Management P/L (July 2005) Indigenous and Non-Indigenous Heritage Assessment: Proposed Transmission Line from Taralga to Marulan, NSW.
- OzArk Environmental & Heritage Management P/L (May 2007) Addendum: Indigenous and Non-Indigenous Heritage Assessment: Remaining access tracks for the proposed transmission line from Taralga to Marulan, NSW.
- NSW DECCW 2010 Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales.

APPENDIX 1 – AHIMS DATABASE SEARCH

NSW

GOVERNMENT

Office of Environment & Heritage

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : Taralga

Client Service ID : 114333

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-3-0019	TWF 051	AGD	55	764255	6186686	Open site	Valid	Artefact :-		99898
	Contact	T Russell								
51-3-0020	TWF 052	Recorders	Docton-Jodie Benton	OzArk Cultural Heritage Management					Permits	
	Contact	T Russell						Artefact :-		99898
51-3-0021	TWF 053	Recorders	Docton-Jodie Benton	OzArk Cultural Heritage Management					Permits	
	Contact	T Russell						Artefact :-		99898
51-3-0022	TWF 054 WITH PAD	Recorders	Docton-Jodie Benton	OzArk Cultural Heritage Management					Permits	
	Contact	T Russell						Artefact :-		99898
51-3-0023	TWF 055	Recorders	Docton-Jodie Benton	OzArk Cultural Heritage Management					Permits	
	Contact	T Russell						Artefact :-		99898
51-3-0024	TWF 056	Recorders	Docton-Jodie Benton	OzArk Cultural Heritage Management					Permits	
	Contact	T Russell						Artefact :-		99898
51-3-0025	TWF 571	Recorders	Docton-Jodie Benton	OzArk Cultural Heritage Management					Permits	
	Contact	T Russell						Modified Tree (Carved or Scarred) :-		99898
51-3-0045	TWE-058	Recorders	Docton-Jodie Benton	OzArk Cultural Heritage Management					Permits	100599
	Contact	T Russell						Potential Archaeological Deposit (PAD) :-		
51-3-0046	Taralga PAD	Recorders	OzArk Cultural Heritage Management						Permits	
	Contact	Searle						Potential Archaeological Deposit (PAD) :-		100371,10086 2,101005
	Contact	Doctor-Rebecca Parkes							Permits	2948,2949,3038

Report generated by AHIMS Web Services on 16/10/2013 for Julie Dibden for the following area at Datum GDA Zone : 55, Eastings : 758000 - 768000, Northings : 6183000 - 6194000 with a Buffer of 50 meters. Additional Info : Archaeological Assessment. Number of Aboriginal sites and Aboriginal objects found is 9
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 act or omission.

Appendix B

SPECIFIC MODIFICATION SOUGHT

Attachment

Specific Modification sought

1. Amendment Required

The applicant seeks approval for the Consent to be modified in the following manner:

- 1.1 Amend the Development Consent description at Schedule 1 to state 'DA 241/04 granted by the Land and Environment Court on 23 February 2007 and modified on 20 April 2009, 18 June 2013, 6 November 2013 and 20 June 2014'.
- 1.2 Condition 3 – insert the following *"Application for Modification of Development Consent DA241/04 granted on 23 February 2007 for Taralga Wind Farm pursuant to Section 75W of the Environmental Planning and Assessment Act (Mod 7) Installation of Underground Electrical Supply dated 4 November 2014"*.