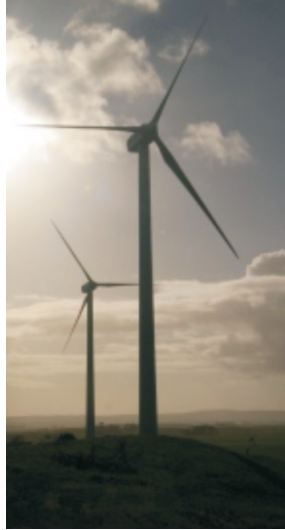


Woodlawn Wind Farm



Heritage Issues

9

9. Indigenous Heritage Issues

9.1 Introduction

This chapter of the SEE provides a review of assessments of the indigenous heritage values of the project area for the amended Woodlawn Wind Farm to confirm the potential impact and the controls to be incorporated for the amended project. Stages of assessment have included the following:

- an assessment undertaken by Biosis Research for the original proposal. The assessment involved, background research, surface observations in consultation with stakeholders and analysis and reporting of findings in the 2004 EIS. The details of the 2004 assessment are provided in Section 9.2.
- sub-surface investigations based on the 2004 EIS findings and subsequent sub-surface investigation permits. The findings are provided in the Biosis report of July 2005 and summarised in Section 9.3.
- on 12 September 2005, Biosis Research was granted a 'Consent to Destroy and Permit to Salvage' (Permit/Consent # 2288 and 2289) that enabled salvage of recorded Aboriginal objects from sites on the Woodlawn Wind Farm Site. The proponent is arranging the conduct of the activities defined under the Permit/Consents.
- 2010 Austral Archaeology assessment of the proposed 33kV line from Woodlawn Wind Farm to Capital Wind farm Substation (reported by Austral 2010). Details of the assessment are summarised in Section 9.4.

The above stages of assessment are described below and based on the status of assessment and the amended project description this chapter identifies the potential impacts and proposed mitigation measures for the amended project.

9.2 Woodlawn Wind Farm site assessment, 2004

A detailed assessment of the wind farm site, turbine array and ancillary aspects was undertaken by Biosis and documented in the 2004 EIS for the Woodlawn Wind Farm.

The 2005 Biosis Report states that, Biosis Research, the Pejar LALC and Buru Ngunawal undertook several surveys of the proposed Woodlawn Wind Farm development throughout 2004. The surveys focussed on the access road and turbine locations, two options for a 66 kV electricity transmission line and a proposed public viewing platform area. The work was regarded by Biosis as a very intensive survey, in excellent conditions of archaeological exposure and visibility due to ground disturbance from mining activities and a prolonged drought. The surveys covered 38.41 hectares with an effective archaeological coverage of 13.92 hectares or 36% of the surveyed area. The anticipated impact area of the wind farm was 15.17 hectares of which 6.15 hectares (or 41%) was effectively surveyed.

During the Woodlawn surveys 21 previously unknown archaeological sites were discovered. All the sites discovered were stone artefacts sites and all but one were surface stone artefact sites in areas of erosion and exposure. The sites were categorised as follows:

- ten of the sites were isolated stone artefacts,
- eight contained less than ten artefacts
- two sites contained between ten and fifteen artefacts
- one of the sites contained buried artefacts exposed in a gully section and this site contained at least 70 individual artefacts – This site was assessed as being of high significance

Five of the recorded sites were assessed as having higher than usual potential for sub-surface artefacts. In most cases, however, the exposure levels (including many proposed turbines sites that were located on bare rock outcrops) and shallow soils were indicated to have suggested that substantial buried archaeological deposits were probably not present in most of the proposed impact areas.

The Biosis assessment recommended that archaeological sub-surface testing focussing on known archaeological sites be undertaken at Woodlawn. The focus of the recommended testing was to better define the archaeological potential of the archaeological sites that would be impacted by the proposed development and to test the boundaries of those archaeological sites that were within close proximity to the proposed impact areas. The Development Consent included General Terms of Approval in respect of Aboriginal heritage as Attachment A of the Consent Instrument.

9.3 Sub-surface archaeological investigation, 2005

In 2005, Biosis Research undertook archaeological subsurface testing of the site of the proposed Woodlawn Wind Farm under Preliminary Research Permit and Consent # 2201 and 2202. The findings are contained in the Biosis report of July 2005 and a summary of key aspects is provided below.

A total of 204 spade probes were excavated by Biosis at the Woodlawn Wind Farm site between 23 and 27 May 2005. The average size of each probe was 0.3 metres by 0.3 metres and 50 mm to 300 mm in depth giving overall coverage of 18.36 m² and total excavated volume of 2.46 m³. Eight artefacts were recovered from eight separate locations during the sub-surface testing. On this basis 4% of the test pits yielded artefacts.

Biosis stated that the most notable outcome of the sub-surface testing was the lack of sub-surface archaeological material. This was attributed by Biosis to the isolated ridge with sparse rocky soils and extensive erosion that had likely exposed all the archaeological record that is present.

Based on the findings of the sub-surface testing Biosis recommended that the proponent seek a Consent to Destroy under Section 90 of the NPW Act 1974 for those archaeological sites to which impact cannot be avoided. It was recommended that the Section 90 must contain a component of archaeological salvage for the sites that will be impacted with salvage involving the collection of surface artefacts prior to and during impact and the storage and suitable display of the artefacts in the Woodlawn Bioreactor education centre. The sites where Biosis recommended salvage are listed in Table 9.1.

Table 9.1 – Sites where Biosis recommended salvage of artefacts

Site	Reference number	Easting (AMG)	Northing (AMG)	Site type	Recommendation
WL1	57-3-0366	734,400	6,111,660	Isolated artefact	Surface and sub-surface, S90 with Salvage
WL2	57-3-0367	733,890	6,114,790		
WL4	57-3-0369	734,290	6,114,239		
WL5	57-3-0370	733,880	6,115,500		
WL6	57-3-0371	733,870	6,114,840		
WL9	57-3-0374	734,550	6,111,990	Artefact scatter	Surface site only, S90 with salvage
WL11	57-3-0376	733,860	6,114,970		Surface and sub-surface, S90 with Salvage
WL12	57-3-0377	734,250	6,114,550		
WL13	57-3-0378	734,970	6,113,270		Surface and sub-surface, S90 with Salvage. Minimise and contain impact as much as possible
WL14	57-3-0379	734,940	6,112,680		

Subsequently on 12 September 2005, Biosis Research was granted a 'Consent to Destroy and Permit to Salvage' (Permit/Consent # 2288 and 2289) that enabled salvage of recorded Aboriginal objects from sites on the Woodlawn Wind Farm Site.



The Permit granted in September 2005 allows salvage of all recorded Aboriginal objects from specific sites (57-3-0366, 57-3-0367, 57-3-0369, 57-3-0370, 57-3-0371, 57-3-0374, 57-3-0376, 57-3-0377, 57-3-0378, 57-3-0379) in conjunction with Buru Ngunawal Aboriginal Corporation, and the Pejar LALC prior to construction. The Consent also requires Biosis Research and representatives of the Buru Ngunawal Aboriginal Corporation and the Pejar LALC to monitor each site during construction and salvage any Aboriginal objects that are observed.

The proponent has commenced planning for the salvage work and has contacted Biosis to provide a proposal to undertake the required salvage. The site work will be scheduled to be completed prior to commencement of construction.

9.4 Assessment of proposed 33 kV transmission line in 2010

Austral Archaeology Pty Ltd was engaged by Woodlawn Wind Pty Ltd to undertake an Aboriginal archaeological and cultural heritage assessment of the route of the 33 kV line from the wind farm to the Capital Wind Farm substation. The results of the assessment are provided in the Austral report of January 2010 and are summarised in this section.

The field assessment took place on the 11 and 12 November 2009 and addressed the Aboriginal archaeological and cultural heritage of the proposed transmission line route, including a 15 metre easement along each side of the transmission line route. The survey assessed the line route from the Woodlawn Wind Farm ridgeline to a point approximately one kilometre south of Taylors Creek road. The route further south of this point has been assessed in a previous report undertaken for the Capital Wind Farm project by Austral Archaeology in 2005. The total length of the route assessed in the 2010 Austral assessment report is approximately 8 kilometres.

The purpose of the report was to identify Aboriginal archaeological and cultural heritage values present along the proposed transmission route. The relevant stakeholders included in the consultation process included the Buru Ngunawal Aboriginal Corporation (BNAC), Ngunawal/Ngambri Local Aboriginal Land Council (NLALC), Pejar Local Aboriginal Land Council (PLALC) as well as the Native Title Claimants, the Gundungurra Tribal Council Aboriginal Corporation (GTCAC).

A search of the NSW DECCW's Aboriginal Heritage Information Management System (AHIMS) register has shown that 26 Aboriginal archaeological sites exist within proximity to the Woodlawn Wind Farm transmission line study area. These include open artefact scatters and isolated finds. It was predicted that small open artefact scatters would be the most likely site type discovered, and that the lower slopes and alluvial flats, followed by the crests and ridgelines would have the highest archaeological potential.

The Woodlawn Wind Farm Transmission line field assessment methodology consisted of a pedestrian survey of the area, identifying Aboriginal archaeological and cultural sites, identifying potential areas of archaeological deposit and landscapes, as well as consulting the Aboriginal stakeholders in relation to the cultural values of the areas and discussing possible techniques to mitigate the impact on Aboriginal heritage in the area.

The field assessment that took place on the 11 and 12 November 2009 was attended by representatives from NLALC, PLALC, BNAC and GTCAC. Austral's 2010 report indicates that the methodology was adhered to and correctly implemented, with the results summarised during the survey to ensure agreement of participants. The cultural significance of the results was discussed, along with the potential mitigation measures and recommendations.

Three survey units were covered in the field assessment comprising northern, central and southern sections). Two isolated finds and three open artefact scatters were visible in the study area. Seven areas of archaeological potential were identified in the study area, two of which in association with surface artefact material while the remainder were determined based on landform characteristics alone. One particular site (WLTL-C SITE 3) was estimated as having 80 – 100 artefacts scattered across the surface. Typical artefact types included ground edge axes, flakes and nodules.

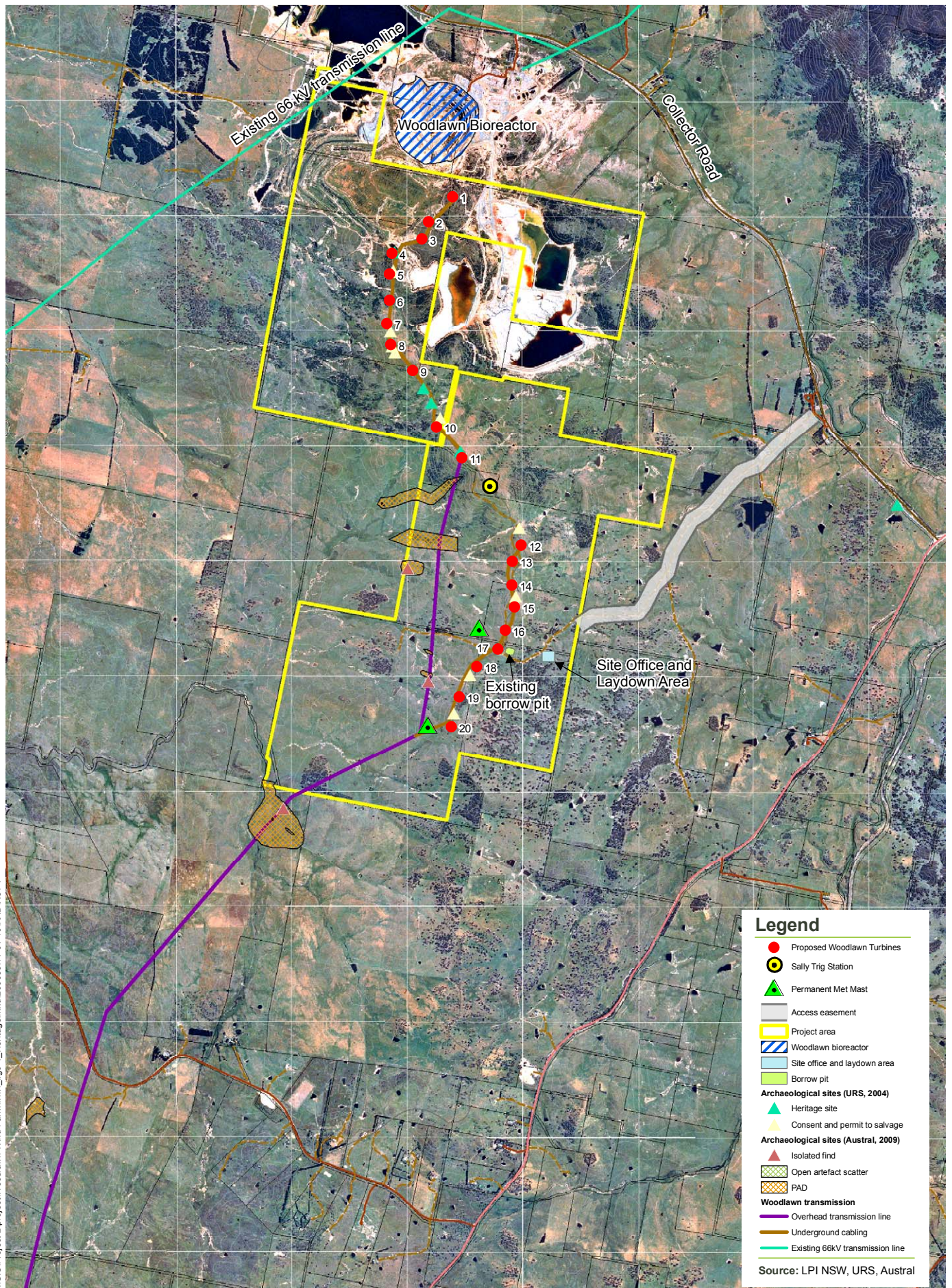
Most of the individual sites assessed in the study area had a low potential for new information, except for WLTL-C SITE 3 (moderate) and WLTL-C PAD 3 (high). The rarity of the findings at each individual site were assessed as low in most of the sites, except for WLTL-C SITE 2 (moderate), WLTL-C SITE 3 (moderate - high) and WLTL-C PAD 3 (moderate). These three sites also contained a moderate to high research potential.

Table 9.2 lists the sites identified in the 2010 Austral report for the area assessed.

Table 9.2 – Indigenous heritage sites associated with the 33 kV transmission line route

Site	Coordinates (MGA)		Austral recommendation
	Easting	Northing	
WLTL-N PAD 1	734,167 734,196	6,113,699 6,113,787	Avoid impact
WLTL-N PAD 2	734,116 734,145 733,966	6,113,285 6,113,439 6,113,346	Avoid impact
WLTL-N IF & Associated PAD	734,116	6,113,102	Avoid impact
WLTL-C PAD 1	734,316	6,112,356	Avoid impact
WLTL-C PAD 2	734,176	6,112,240	Avoid impact
WLTL_C IF 1	734,295	6,112,115	Avoid impact
WLTL-C SITE 1	733,043	6,111,015	Avoid impact
WLTL-C SITE 2	732,948	6,110,909	Avoid impact
WLTL-C SITE 3	733,056 733,062 733,071 733,087 733,101 733,135 733,118 733,106 733,091 733,071	6,110849 6110847 6110840 6110834 6110820 6110785 6110786 6110795 6110807 6110822	Avoid impact
WLTL-C PAD 3 -	Coordinates not provided. Shown on Figure 9.1		Avoid impact and apply for S.87 Preliminary Research Permit to characterise archaeological resources if avoidance is not possible.
WLTL-S PAD 1	730910	6108398	Avoid impact

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SCALE 1:45,000 @ A4

0 0.75 1.5km

Projection: MGA

Woodlawn Wind Farm **Statement of Environmental Effects**

FIGURE 9.1: Heritage Sites



As a result of the 2010 Austral Aboriginal archaeological and cultural heritage assessment of the Woodlawn Wind Farm 33 kV transmission line, the following recommendations were made:

- Avoidance of all Aboriginal archaeological material and areas of potential archaeological deposited identified by the assessment.
- Collection of Aboriginal artefact sites WLTL-N IF 1, WLTL-C IF 1, WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3 should direct development impacts not be avoided. The Aboriginal stakeholders (BNAC, PLALC, NLALC, GTCAC) should be consulted and participate in any collection programme. A 'Care and Control' agreement for the artefact material present is to be developed in consultation with the Aboriginal stakeholders prior to the collection programme commencing.
- Development of a methodology by a qualified archaeologist to allow the test excavation of WLTL-C PAD 3 and collection of sites WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3 should direct development impacts not be avoided. This methodology is to be developed in consultation with Woodlawn Wind Pty Ltd and the participating Aboriginal stakeholders (BNAC, PLALC, NLALC, GTCAC).
- In the event that any Aboriginal archaeological material not identified and discussed in the Austral 2010 assessment report is encountered, works must cease immediately to allow an archaeologist to make an assessment of the finds. The archaeologist may need to consult with the relevant Aboriginal stakeholder groups (BNAC, PLALC, NLALC, GTCAC) concerning the significance of any further Aboriginal archaeological material encountered. As required by Section 91 of the *NP&W Act 1974 (amended)*, previously unrecorded Aboriginal artefactual material must be reported to the NSW DECCW within a reasonable timeframe. In addition, as required by the *NSW Heritage Act 1977 (amended)*, in the event that historic relics are encountered, works must cease immediately to allow an archaeologist to make an assessment of the finds. The archaeologist may need to consult with the Heritage Branch Department of Planning concerning the significance of historic cultural material unearthed.
- Copies of the 2010 Austral report are to be forwarded to the Aboriginal stakeholder groups: PLALC, BNAC, GTCAC and NLALC.
- Copies of the 2010 Austral report and the resulting Aboriginal archaeological site cards are to be forwarded to the DECCW's AHIMS database Registrar.
- Restrict access to Aboriginal archaeological information in the event that the 2010 Austral report is to go on public exhibition.

9.5 Impacts of the amended project

The wind farm site has been extensively investigated, including subsurface investigations and salvage activities. As a consequence, the relatively minor variations to turbine sites within the previously assessed turbine envelope and following the proposed salvage activities do not appear to warrant further surface or sub-surface investigations at the wind farm site other than in response to any additional items observed during construction works. It is proposed that the construction at the wind farm site be implemented in accordance with:

- the outcomes of the site assessments to date
- consent conditions 57 and 58 in relation to indigenous heritage management
- the CEMP to be developed for the construction works including the Cultural Heritage Management Sub Plan prepared as part of the CEMP.
- requirements of Permit/Consent # 2288 and 2289 dated September 2005

The main variation for the amended proposal compared to the project for which consent was obtained is the construction of the 33 kV transmission line from Woodlawn Wind Farm to Capital Wind Farm.



The assessment of the line route by Austral Archaeology in November 2009 found a number of artefact sites and potential archaeological deposits which require avoidance of the identified areas or subsurface investigations and salvage under required Permit/Consents.

Progression of the Woodlawn Wind Farm project requires:

- salvage activities for specified indigenous artefacts in relation to wind farm site
- salvage in relation to the viewing area
- avoidance, where practical, of PADs and sites by the 33 kV line route and associated access tracks
- development of Cultural Heritage Management Sub-Plan under the project CEMP.

9.6 Mitigation measures to be included for the amended project

Implementation of the project as amended will include the following measures to mitigate the potential impacts on indigenous heritage values for the areas to be disturbed by the project construction works.

- Salvage and care of surface artefact items at the wind farm site as per the Permit/Consents # 2288 and 2289. The proponent is currently planning for this work to be undertaken prior to commencement of construction activities.
- Review of the proposed transmission line route to avoid potential archaeological deposit WLTL-C PAD 3. This can be achieved by relocating the line route slightly to both avoid and area of woodland mapped by KMA that is to the northeast of WLTL-C-PAD 3 and to cross Taylors Creek at the northern end of WLTL-C-PAD 3 avoiding the need to locate pole structures within the area of the PAD. The deviation of the line is a minor change to the overall route but avoids two areas of identified sensitivity.
- Elsewhere, to the extent practical, the poles for the 33 kV overhead line will be located to avoid identified PADs and sites that have been identified by the 2010 Austral assessment. In particular, the following PADs will be avoided by careful placement of pole structures:
 - the northern part of the 33 kV line near Turbine Site 11 will require the placement of pole structures to span WLTL-N-PADs 1 and 2. This area also requires the overhead line to span remnant native woodland on the western slope of the Woodlawn ridgeline. This can be achieved on this slope by stringing conductors sufficiently above the woodland without the need to clear the woodland.
 - Further to the south it will also be possible to span WLTL-C PADs 1 and 2 by selective placement of pole structures.
- No mitigation measures are required for the section of 33 kV line within the area of the Capital Wind Farm that has been previously assessed by Austral in 2005.

