



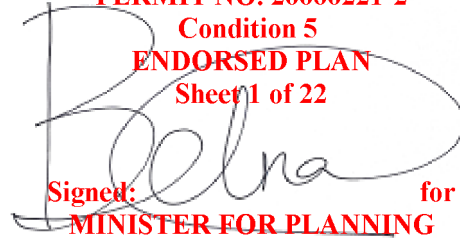
**PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME**

PERMIT NO. 20060221-2

Condition 5

ENDORSED PLAN

Sheet 1 of 22

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**Signed: for
MINISTER FOR PLANNING**

Date: 1 March 2024



**OFF SITE LANDSCAPING PROGRAM
HAWKESDALE WIND FARM**

Hawkesdale Wind Farm

FINAL

December 2023



OFF SITE LANDSCAPING PROGRAM HAWKESDALE WIND FARM

Hawkesdale Wind Farm

FINAL

Prepared by
Umwelt (Australia) Pty Limited
on behalf of
Hawkesdale Asset Pty Ltd

Project Director: Lockie Curran
Project Manager: Matthew Frame
Report No. 21637_HDWF_Off-Site Landscaping Program_V0
Date: December 2023

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This report was prepared using
Umwelt's ISO 9001 certified
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Acknowledgement of Country

Umwelt would like to acknowledge the traditional custodians of the country on which we work and pay respect to their cultural heritage, beliefs, and continuing relationship with the land. We pay our respect to the Elders – past, present, and future.



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Document Status

Rev No.	Reviewer		Approved for Issue	
	Name	Date	Name	Date
V1	Lockie Curran	15/12/23	Lockie Curran	15/12/23

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1.0 Introduction

Umwelt has been commissioned by Hawkesdale Asset Pty Ltd (HAPL, a wholly-owned subsidiary of Global Power Generation Australia Pty Ltd) to prepare an Off-Site Landscaping Program for the approved Hawkesdale Wind Farm (the Project).

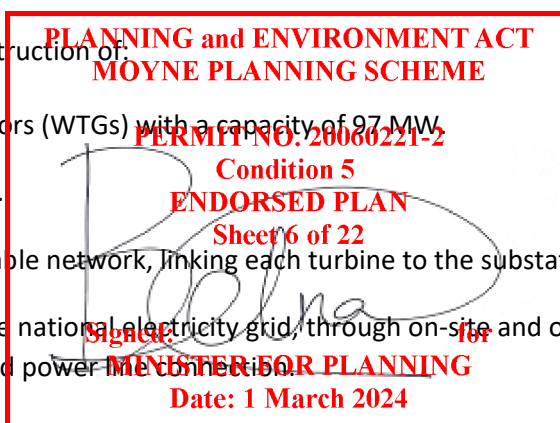
Planning approval (Planning Permit No. 20060221) was granted under the Moyne Planning Scheme for the development of the Hawkesdale Wind Farm, by the then Minister for Planning on 21 August 2008. The latest amendment to the permit was granted on 20 October 2022 and Planning Permit 20060221-2 (the Planning Permit) was issued for the Project. This Off-Site Landscaping Program has been prepared in response to the requirements of Condition 5 of the Planning Permit.

1.1 Project Description

The Project is located within the Shire of Moyne, adjacent to the intersection of the Woolsthorpe-Heywood Road and the Peshurst-Warrnambool Road, approximately 230 kilometres west of Melbourne. The Project area is primarily located on freehold agricultural land that covers an area of approximately 2,280 hectares.

The Project includes the construction of:

- 23 Wind Turbine Generators (WTGs) with a capacity of 97 MW.
- 132 kV on-site substation.
- Underground electrical cable network, linking each turbine to the substation.
- External connection to the national electricity grid, through on-site and off-site high voltage electrical substations and associated power line connections.
- Control room/facilities building.
- Access via Woolsthorpe-Heywood Road.
- A network of internal access tracks.



1.2 Planning Permit

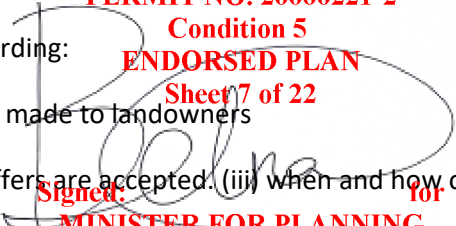
Planning Permit 20060221 was originally issued for the Project on 21 August 2008 by the Minister for Planning. The latest amendment to the permit was granted on 20 October 2022 and Planning Permit 20060221-2 was issued, applying to land in Hawkesdale, Woolsthorpe and Warrong. Development Plans in accordance with Condition 1 of the Permit were endorsed by the Minister for Planning on 6 December 2022.

The Planning Permit allows for the:

- Use and development of land for a Wind Energy Facility, removal of native vegetation and alteration of access to a Transport Zone schedule 2.

Condition 5 of the Permit states:

- Before any turbine is commissioned, an off-site landscaping program must be submitted to and approved by the Minister for Planning. When endorsed the program will form part of this permit. The off-site Landscaping Program must:
 - a. provide for off-site landscaping or other treatments to reduce the visual impact of the turbines from all dwellings that existed as at 2 September 2021 within four kilometres of the nearest turbine, and from owners of dwellings 40 and 47 as identified in Figure 20.45 of the report titled Hawkesdale Wind Farm Application for Planning Permit by Gamesa Energy Australia/TME Australia Volume 1 – Main Report September 2006
 - b. include a methodology for determining:
 - i. the type of landscaping treatments to be proposed
 - ii. a timetable for establishing and maintaining the landscaping for at least two years
 - c. include a process for making offers to affected landowners to:
 - i. undertake landscaping on the landowner's land; or
 - ii. make a cash contribution in lieu (which must be sufficient to cover the cost of the landowner establishing and maintaining the landscaping for a period of at least two years)
 - d. include a process for recording:
 - i. offers that have been made to landowners
 - ii. whether or not the offers are accepted, (iii) when and how offers are actioned following acceptance.

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Conditions 6 and 7 of the Planning Permit are also of relevance to the implementation and reporting requirements of the Off-Site Landscaping Program.

Condition 6 of the Planning Permit:

The endorsed Off-site Landscaping Program must be implemented to the satisfaction of the Minister for Planning. The endorsed Off-site Landscaping Program must not be altered or modified without the written consent of the Minister for Planning.

Condition 7 of the Planning Permit:

An initial progress report regarding the implementation of the endorsed Off-site Landscaping Program must be provided to the Minister for Planning within one year of the date of the endorsement of the plans. A further report must be provided upon the completion of the endorsed Off-site Landscaping Program. All access tracks associated with the wind energy facility must be constructed with local gravel and/or other surface material that will not unduly contrast with the landscape to the satisfaction of the Minister for Planning.

Since granting of the original Planning Permit, the permit has undergone a series of amendments as summarised in **Table 1.1**. Note, none of these amendments to the Permit have any implication on the scope of this Off-Site Landscaping Program.

Table 1.1 Summary of amendments to the Planning Permit

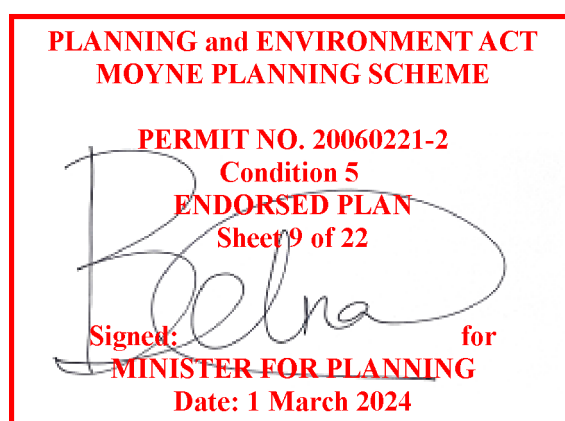
Date	Description
21 August 2008	Planning Permit 20060221 was granted for the Project under the Moyne Planning Scheme
15 November 2011	The Planning Permit was extended so that development must start no later than 15 March 2012.
31 October 2013	The Planning Permit was extended so that the permit will expire if the development is not completed by February 2016
09 April 2015	The Planning Permit was extended so that the permit will expire if works are not completed by 29 August 2019.
21 December 2017	Planning Permit 20060221-A was granted to include the following amendments: <ul style="list-style-type: none"> • An increase to the height of turbines; • A Reduction to the total number of turbines; • Modifications to conditions under the permit; and • An extension so that the permit will expire if works are not completed by 29 August 2020.
20 October 2022	Planning Permit 20060221-2 was granted to include the following amendments: <ul style="list-style-type: none"> • Remove three turbines; • Update the permit preamble and addresses; • Amend Condition 11 (d) of the Traffic Management Plan (TMP); • Update native vegetation removal permit conditions; • Amend Conditions 2, 5, 42 and 53 to refer to 2 September 2021 as the date dwellings must have existed to benefit from the noise and shadow flicker protections afforded by the permit; • Amend Condition 45 to reference to the Environment Protection Act 2017; • Replace EPA Publications with relevant up to date publications; • Add conditions requiring the provision of spatial information to emergency responders; and • Renumber decommissioning and permit expiry conditions.

1.3 Purpose and Objectives of the Off-Site Landscaping Program

The purpose of this Off-Site Landscaping Program is to provide a methodology to reduce the visual impact associated with the Hawkesdale Wind Farm on surrounding residential properties and to determine the extent to which off-site mitigation may be required.

The objectives of this Off-Site Landscaping Program are to:

- Address the requirements of Conditions 5, 6 and 7 of Planning Permit 20060221-2.
- Reduce the visual impact of turbines on all dwellings identified as of 2 September 2021 within four (4) kilometres of the nearest turbine, and from dwellings 40 and 47 as identified in Figure 20.45 of the report titled Hawkesdale Wind Farm Application for Planning Permit by Gamesa Energy Australia/TME Australia Volume 1 – Main Report September 2006.
- Outline a process for consultation with affected dwelling owners to either undertake landscaping on the dwelling owner’s land, or make a cash contribution in lieu.
- Outline a methodology for determining the type of landscaping treatments to be proposed.
- Outline a methodology for determining a timetable of establishing and maintaining the landscaping for at least two years.
- Outline a process for recording offer procedures, costing and methods to monitor and maintain landscaped areas over a two-year period.
- Outline a process for preparing and submitting progress reports.



2.0 Potentially Affected Properties

HAPL has identified dwellings that existed as of as of 2 September 2021 within four (4) kilometres of the nearest turbine, and from dwellings 40 and 47 as identified in Figure 20.45 of the report titled Hawkesdale Wind Farm Application for Planning Permit by Gamesa Energy Australia/TME Australia Volume 1 – Main Report September 2006, as illustrated in **Figure 2.1**.

2.1 Dwellings

For the purposes of this Off-Site Landscaping Program, including the process for developing Off-Site Landscaping Plans, a ‘dwelling’ is defined in accordance with the definition provided by the *Planning and Environment Act 1987*, which states:

‘dwelling means a building that is used, or is intended, adapted or designed for use, as a separate residence, (including kitchen, bathroom and sanitary facilities) for an occupier who has a right to the exclusive use of it.’

To ensure useable outdoor spaces are captured, the above definition of dwelling is applied and this plan also includes a 50 metre radius around dwellings when potential impacts are considered for this off-site landscape program. For exemptions to this definition, refer *the Planning and Environment Act 1987*.



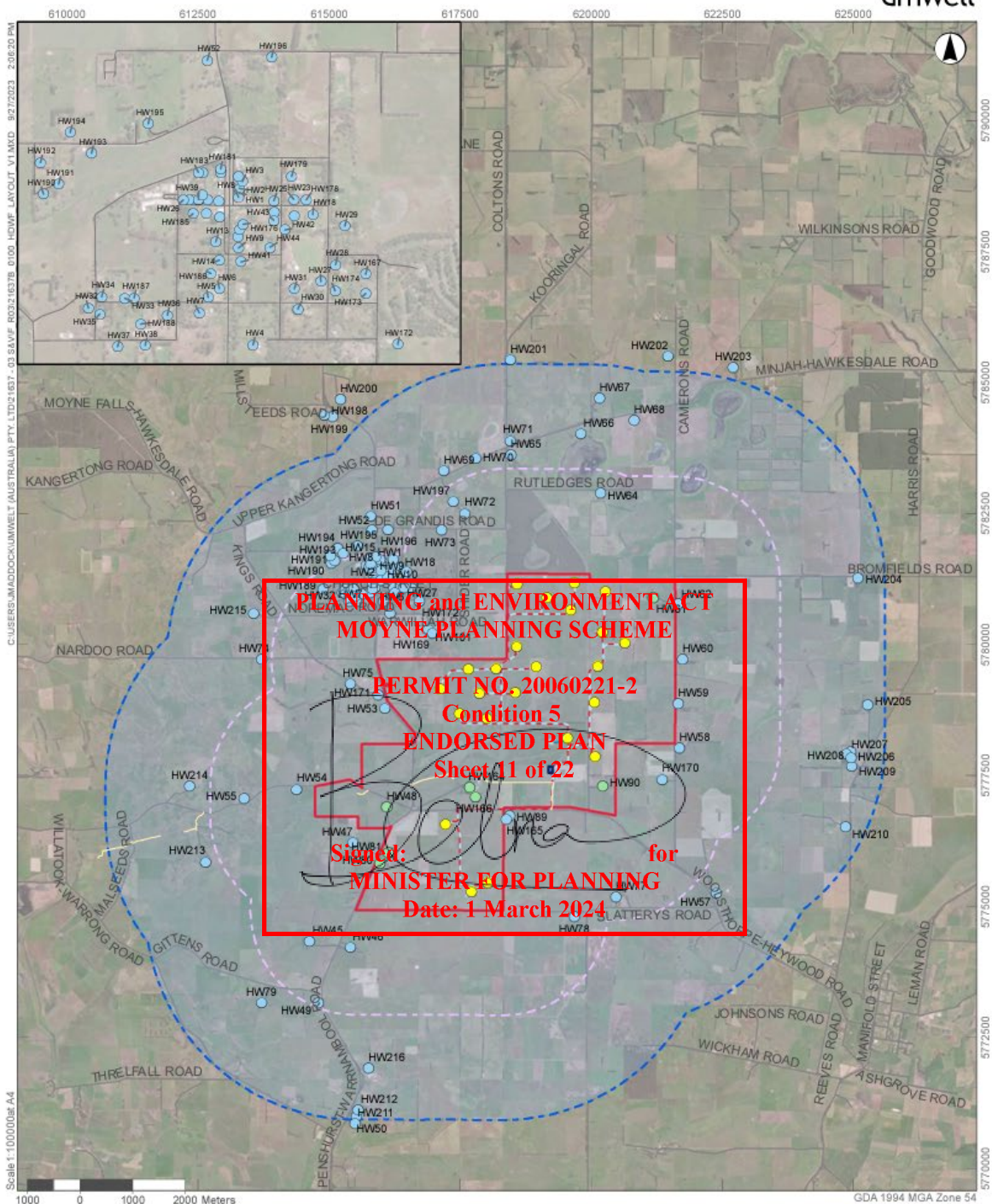


FIGURE 1

Detailed Proposed Layout Plan - 4km Buffer

- Legend**
- Project Area
 - 4km Turbine Buffer (Proposed Layout)
 - 2km Turbine Buffer (Proposed Layout)
 - Substation
 - Existing Site Access Tracks
 - Proposed Site Electricity Network
 - Proposed Site Access Tracks
 - Farm Dam Temporary Access Track
 - Road
 - Approved Turbine Location
 - Non-stakeholder Receiver
 - Stakeholder Receiver

Image Source: ESRI Basemap (2023) Data source: GPG Australia (2023)

Figure 2.1 4km buffer around Project site boundary

3.0 Methodology

3.1 Process for Developing Off-Site Landscaping Plans

The process to be undertaken by HAPL to develop Off-Site Landscaping Plans for the Hawkesdale Wind Farm is summarised below and in **Figure 3.1**.

Upon completion of commissioning of the final turbine, Hawkesdale Wind Farm’s community engagement officer will notify and provide application materials via registered post or in person to owners of dwellings existing on 2 September, 2021 within four (4) kilometres of the turbines and for dwellings 40 and 47 as identified in **Section 2.0**. Moyne Shire Council will assist with the dwelling owner information for notifications. A notice will also be included on the Hawkesdale Wind Farm website at <https://hawkesdalewindfarm.globalpower-generation.com.au/>.

Dwelling owners will be required to contact HAPL within six months of notification and the provision of application materials. A reminder will be sent to the dwelling owner after three months if no response is received.

An assessment of visual impact will be undertaken within eight weeks of dwelling owner response. The assessment will be undertaken via desktop review of the property and will be informed by local landforms, vegetation, and surrounding buildings. Where a dwelling is found to have no visual impact, the dwelling owner will be notified of this outcome.

Where a dwelling is identified by the desktop review as demonstrating potential to experience a visual impact, there will be two options for the dwelling owner:

Participation in the Off-Site Landscaping Program and proceeding to a detailed site inspection and assessment of the property. The site inspection and assessment will be undertaken by a qualified and experienced landscape architect, scheduled at a time that is agreed upon with the dwelling owner, and in line with seasonal constraints. On completion of the detailed site inspection, a landscape plan will be prepared to assist in the mitigation of visual impact to the dwelling.

Via a written agreement with HAPL, payment in lieu of participation in the off-site landscaping program for the purpose of the property owner carrying out landscaping works.

HAPL will pay an amount agreed between the two parties for landscaping and associated maintenance needs for two (2) years.

In the event this method of landscaping fails/does not survive, HAPL is not responsible for or required to provide additional payments.



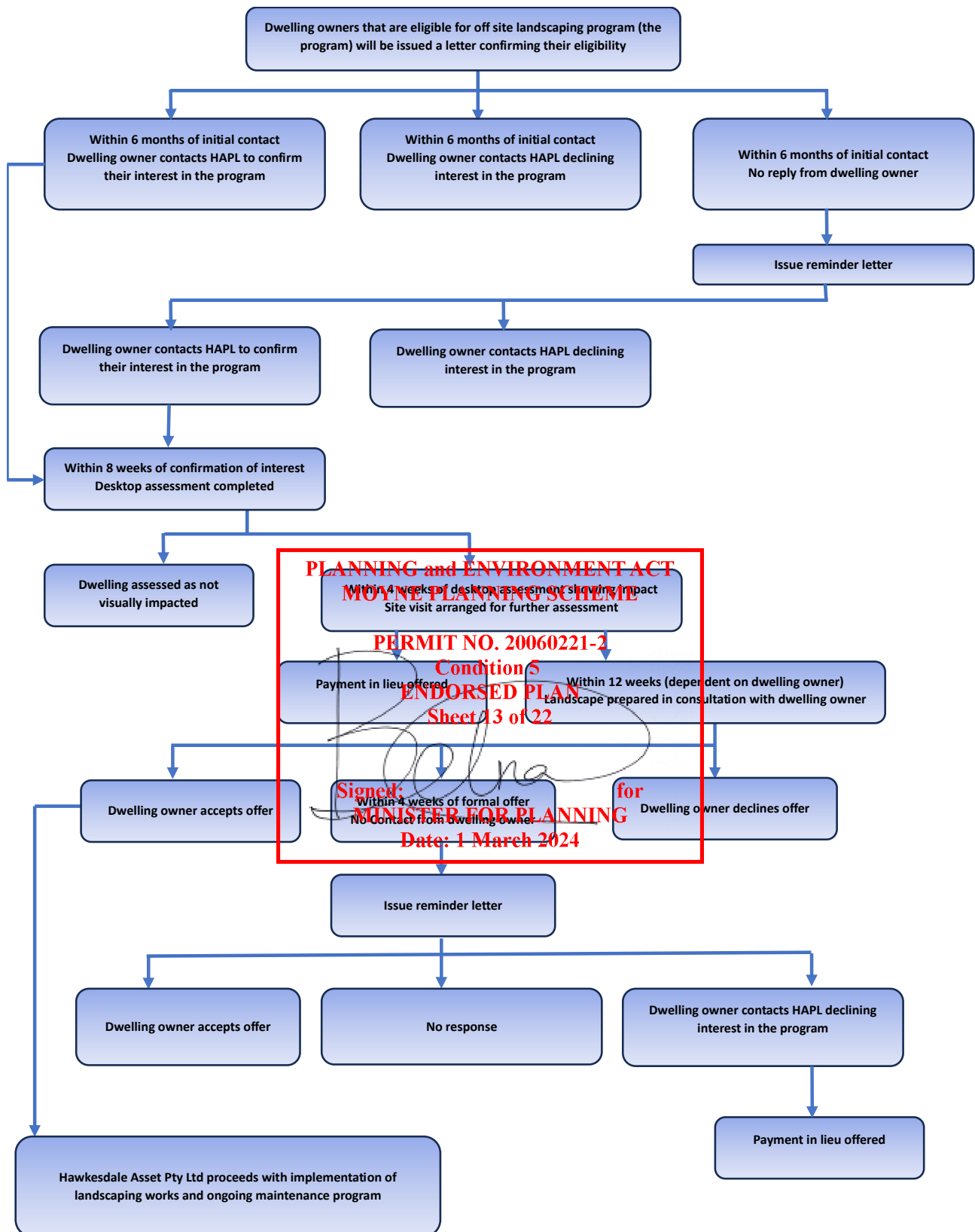


Figure 3.1 Process of Off-Site Landscaping Program Flow Chart

3.2 Desktop Review, Site Inspection and Assessment

3.2.1 Desktop study

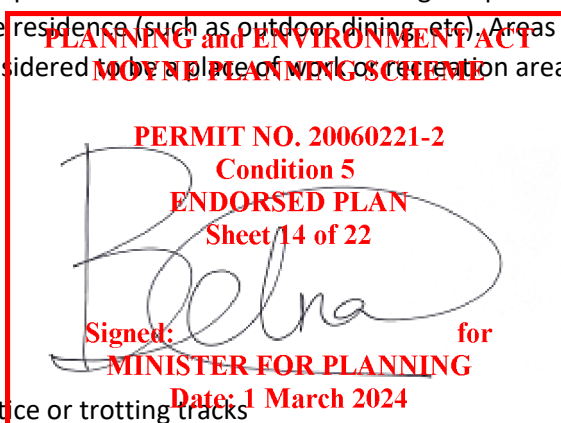
The following work is to be undertaken by a qualified landscape architect with working experience in landscape and visual impact assessment.

Prior to undertaking site inspections, the landscape architect is to undertake a desktop review to provide a base understanding of the visibility of the wind turbines from the dwelling owner's property and the extent of planting required. The desktop review is to include the following:

- Differentiation of dwellings from non-occupied sheds or other buildings.
- Confirmation of wind turbines visible to the dwelling (including GIS mapping of landform) in plan format, identification of the extent of views from the dwelling towards the wind turbines, providing an indication of the vegetation required to mitigate the visual impact.

For the purposes of the desktop study, a 'dwelling' is defined in accordance with the definition provided in **Section 2.1** and also includes up to a 50-metre radius surrounding the primary residence, to cover useable outdoor areas attached to the residence (such as outdoor dining, etc). Areas that are not eligible include views from areas that are considered to be a place of work or recreation area such as:

- Sheds
- Stables
- Stock yards
- Paddocks
- Horse arenas, jumps practice or trotting tracks
- Orchards.



Where the desktop review determines that there would be no visual impact from the proposal, the dwelling owner would be notified of this outcome.

3.2.2 Site Inspection and Assessment

On completion of the desktop review, where dwellings are identified as demonstrating potential to experience visual impacts, the landscape architect will arrange to meet the dwelling owner on their property to undertake a site inspection and discuss the required vegetation planting. The purpose of the inspection is to:

- Photograph and document the views towards the wind turbines from the dwelling;
- Confirm the extent of vegetation required and where it is to be located on the property;
- Discuss vegetation species, locations, and extents.

Refer to **Figure 3.2** for a typical approach to vegetation planting for visual impact mitigation, and **Figure 3.3** for an example of desktop review findings in section format.

The landscape architect will consult with, and where required, acknowledge that the suggested landscape planting may impact existing views that are valued by the dwelling owner. The dwelling owner is then able to make an informed decision as to the extent of planting that will be provided.

If the dwelling owner wishes to proceed, a Landscaping Plan will be prepared as per **Section 4.0**. The following considerations would be made in relation to siting of planting on the dwelling owners' property:

- The extent of the planting required across the view, whether there are spaces between the wind turbines that could result in breaks between planting, or whether it is preferable to provide a consistent planting band across the view.
- Whether the location of planting can complement existing vegetation on the property, such as species type.

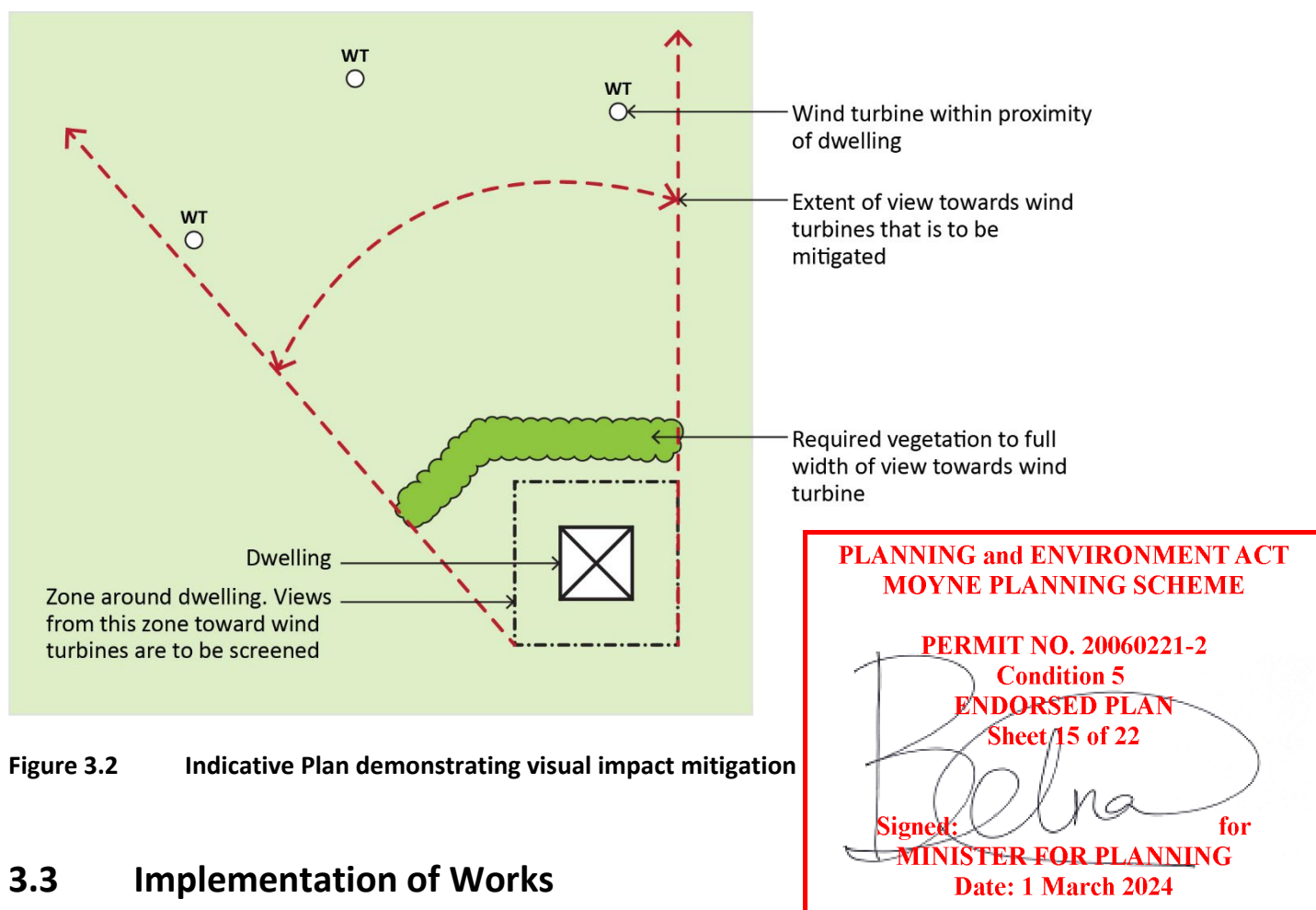


Figure 3.2 Indicative Plan demonstrating visual impact mitigation

3.3 Implementation of Works

Following completion of the site inspection and assessment, a proposal for a Landscaping Plan will be formally offered to the dwelling owner, who will have 4 weeks to accept. A follow-up letter will be issued to the dwelling owner after four weeks if no response is received.

Upon implementation and completion of visual impact mitigation works, conducted in accordance with the Landscaping Plan, HAPL will maintain the works (in accordance with requirements detailed within the plan) for a maximum of two (2) years.

Instructions will be left with the dwelling owner outlining watering and basic care requirements. Where landscaping works are not successfully established due to dwelling owner negligence or not following the basic instructions issued, or due to damage caused by the act or default of the dwelling owner or acts by a third party during the two-year maintenance period, then HAPL will have no further obligations to replace or replant dead or damaged plants.

Where a dwelling owner elects to undertake visual impact mitigation works themselves through an agreed payment in lieu, HAPL will have no further obligation or liability with respect to any matters arising from the works i.e., plant deaths, failure of the plants to thrive and any other problems or issues which may subsequently arise.

3.4 Payment in Lieu of Landscaping

Should a dwelling owner select payment in lieu over the landscaping being conducted by HAPL, the offer for payment will be per linear metre, based on a standard quote and in accordance with the typical planting layout described in Section 4.0. The payment will take into consideration:

- The rural location of the properties and the initial landscaping works and maintenance works for a two year period.
- The rural location of the dwelling.
- The planting expected to be required, including plant stock, species (including suitable height and spread at maturity) and installation size for the extent of planting required to adequately mitigate visual impacts.
- The extent of any existing infrastructure (i.e. fencing or gates) or vegetation present within the landscape planting/mitigation area.
- Costs associated with initial landscaping works and maintenance works for the two-year period.

Once the plans have been reviewed and approved by the owner, the screening plans will be finalised, and a schedule of costs would be prepared for the purposes of determining appropriate compensation to be made payable to the owner for the implementation and maintenance of plan.

This offer will be confirmed in writing by HAPL and the dwelling owner prior to payment.



4.0 Landscaping Plan

The Landscaping Plan is to be drawn to a suitable scale (1:200 or similar) and identify:

- The location of the dwelling, general external features on the property including existing planting, structures, etc. and the location of proposed planting.
- Identification of the view extent from the dwelling towards the wind turbines, including identification of the individual turbines.
- Identification of the extent of view (partial or entirety etc,) to be mitigated with planting.

Additionally to be provided:

- A plant schedule of proposed plants. Refer to Section 4.1 for further information on proposed planting.
- Landscape specification to direct how the landscape works are to be undertaken.
- Photographic record of the views towards the wind turbines from the dwellings.
- Maintenance schedule for the planting for two years following installation.

4.1 Planting

Table 4.1 provides an initial selection of plants that can be selected for use in the Landscaping Plan. The table is not exhaustive and is to be used as an initial list. When selecting plants for the Landscaping Plan the landscape architect is to take the following into consideration:

- The extent of visual mitigation required.
- The existing planting character of the dwelling owner's property, which may include native plants, exotic plants or a combination of both, as well as the location of these existing plants on the property.
- Microclimatic conditions (soils, wind, sun and rain exposure) experienced at the dwelling.
- The dwelling owner's preferences for plant species and visual impact mitigation.



Table 4.1 Potential plants for selection, species informed by 'Indigenous Plants and Environmental Weeds of Moyne Shire' from Moyne Shire Council 2012

Scientific name	Common name	Mature height and spread	Installation size
<i>Acacia mearnsii</i>	Black Wattle	8-20m x 6-10m	Tubestock
<i>Acacia melanoxylon</i>	Australian Blackwood	4-15m x	
<i>Acacia pendula</i>	Weeping Myall	5-10m x 4-6m	
<i>Allocasuarina luehmannii</i>	Buloak	10-15m x 6-10m	
<i>Allocasuarina verticillata</i>	Drooping She-oak	4-10m x 3-6m	
<i>Banksia marginata</i>	Silver Banksia	2m	
<i>Eucalyptus camaldulensis</i>	River Red Gum	15m x 15m	
<i>Eucalyptus leucoxylon</i>	Yellow Gum	12m x 10m	
<i>Eucalyptus microcarpa</i>	Grey Box	15-25m x 6-10m	
<i>Eucalyptus viminalis</i>	Manna Gum	10-40m	
<i>Leptospermum continentale</i>	Prickly Tea Tree	2m	
<i>Melaleuca gibbosa</i>	Slender Honey-myrtle	2m x 1m	



The garden bed in which tubestock will be planted will be wide enough to include larger shrubs and trees to adequately mitigate views to wind turbines and allow for staggered spacing of required species.

Dimensions (length and width) of the garden bed will be determined by a qualified landscape architect through consideration of:

- The extent of vegetation required.
- Vegetation species to be used.
- Where planting will be located.
- Any existing infrastructure or vegetation on the property.

Garden beds will typically be wide enough to accommodate the mature height and spread of the planting. This would result in tubestock typically spaced 2 metres apart in two rows with the rows offset and half (0.5) a metre from the edge of the garden beds (subject to detail design and species selection). Each plant is to be protected with a plant guard.

The planting will include a mix of species with different heights and spreads to form an effective visual buffer. Plant stock will be sourced from local nurseries, propagated from locally sourced seed for suitability to the local environment and climate.

An example diagram of proposed planting within the garden bed is detailed in **Figure 4.1**.

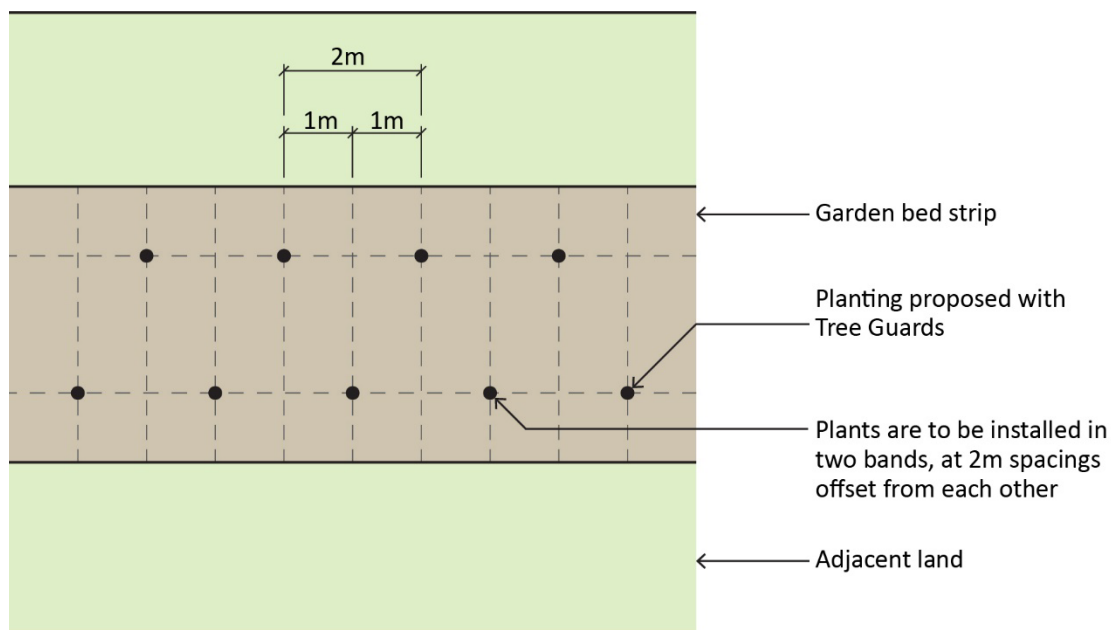


Figure 4.1 Diagram of proposed planting for landscape screening

4.2 Maintenance

Maintenance of landscape works will be undertaken for a period of two years and is detailed in **Table 4.2**.

Table 4.2 Landscaping maintenance requirements

Task	Frequency	Timeframe	Responsibility
Watering (weekly, weather dependant)	Weekly (weather permitting)	Over 12 months	Dwelling owner
Weeding	Quarterly (or as needed)	Over 12 months	Dwelling owner
Establishment check	Once	After 13 weeks	HAPL
Replacement planting	Annually (every 12 months)	Over 24 months	HAPL

4.3 Reporting

In accordance with Condition 5(d) of Planning Permit No.: 20060221-2, records of the outcomes of offers made to dwellings identified in **Section 2.0** as outlined in this off-site landscaping program, will be kept by HAPL in a register similar to that shown in **Appendix A**.

HAPL will prepare and submit a report on the anniversary of the endorsement of this Off-Site Landscaping Program and at the completion of the program to the Minister in accordance with Condition 7 of the permit.




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MINISTER FOR PLANNING
Date: 1 March 2024

APPENDIX A

Example Consultation Outcomes Register

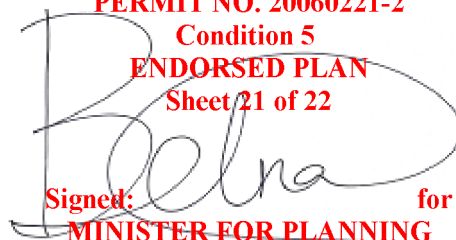
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MINISTER FOR PLANNING**

Date: 1 March 2024

