



**PLANNING and ENVIRONMENT ACT  
MOYNE PLANNING SCHEME**

**PERMIT NO. 20060221-2  
Endorsed Native Vegetation Removal Report  
Condition 34  
ENDORSED PLAN  
Sheet 1 of 118**

Signed:  for  
**MINISTER FOR PLANNING**  
Date: 20 January 2023

## **Hawkesdale Wind Farm**

### **Native Vegetation Plan**

**Prepared for Hawkesdale Asset Pty  
Ltd as trustee for Hawkesdale Asset  
Trust (HAPL), (a wholly owned  
subsidiary of GPG Australia Pty Ltd)**

August 2022  
Report No. 14144 (16.8)



**Nature  
Advisory**

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# 1. Introduction

Hawkesdale Asset Pty Ltd as trustee for Hawkesdale Asset Trust (HAPL), (a wholly owned subsidiary of GPG Australia Pty Ltd) engaged Nature Advisory Pty Ltd (formerly Brett Lane & Associates) to prepare a Native Vegetation Plan (NVP) for the approved Hawkesdale Wind Farm (HDWF) located approximately 32 kilometres north-west of Warrnambool in south-western Victoria.

The HDWF layout consists of a network of 23 approved turbines, including 20 turbines to the north of Woolsthorpe-Heywood Road and 3 turbines to the south. Native vegetation in the study area is largely limited to road reserves, with native grassland vegetation being recorded either side of Woolsthorpe-Heywood Road and native woodland recorded either side of Penshurst-Warrnambool Road and Woolsthorpe-Heywood Road. A natural drainage line winds its way through the study area which supports some native swampy vegetation in the central part of the study area.

Moyne Permit No. 20060221-A issued by the Minister for Planning allows for a total of 0.872 hectares of remnant native vegetation removal associated with the Hawkesdale Wind Farm (Condition 33).

The actual footprint for Hawkesdale Wind Farm will impact 0.056 hectares of native vegetation (as documented in the Native Vegetation Assessment (dated August 2022, included in Attachment 1 of this plan) and Biodiversity Impact and Offset Requirements (BIOR) report).

The FFG-Act listed species, Curly Sedge was recorded on private land within the study area. As shown on the insert in Figure 2-a, all records have been avoided. Regardless, there are no implications for impacting FFG listed values where they occur on private land.

Eight individual Black Wattle plants, a common species protected under the FFG Act, will be impacted in Habitat Zone F (see Figure 2-d). A permit to remove protected flora under the FFG Act will be required prior to the removal of these plants.

0.017 hectares of the EPBC-Act listed community, Natural Temperate Grasslands of the Victorian Volcanic Plains (NTGVVP) is to be impacted by this proposal (refer Figure 2-c). This was not considered a significant impact to warrant a referral to the Commonwealth due to the small extent to be removed.

No other listed matters are to be impacted by this proposal.

The primary focus of this NVP is to detail strategies and approaches to meet the requirements of Condition 34 of the permit (no. 20060221-A), as well as the remaining Native Vegetation Removal Conditions (Conditions 33-41). These requirements and responses are detailed in Section 4, which also provide further detail to respond to additional comments from the Department of Environment, Land, Water and Planning (DELWP).

This plan provides the following:

- A description of the site;
- Maps outlining areas of native vegetation to be removed and retained, current mapped wetlands and locations of detected threatened flora and fauna species;
- Methods for the identification of potential threats to areas of retained native vegetation and methods for protection of these areas; and
- Risk management measures with management indicators for managing risks to retained native vegetation.



The aim of this NVP is to provide guidance on the management of the construction phase of the project to minimize impact on areas of native vegetation to be retained, as well as to minimise unnecessary impacts on the site as a whole.

An A3 map summarising the requirements of the NVP will be prepared upon endorsement of this document by the Minister for Planning. Upon completion, the map will be displayed on site to assist contractors and the proponent in understanding the obligations they have in relation to native vegetation protection, removal and management. The summary will communicate key messages for each management/mitigation component and reference relevant parts of the plan. Maps showing the location of all native vegetation detected on site will also be displayed. These maps will not replace this NVP, but rather will be a quick reference guide for personnel working on site. The maps will be updated as required to reflect any changes made to this document and approved by the Minister for Planning.

This plan was prepared by a team from Nature Advisory, comprising Verity Fyfe (Senior Ecologist), Elinor Ebsworth (Senior Ecologist), Jim Grant (Senior Ecologist and Project Manager) and Chris Armstrong (Senior Botanist and Project Manager).



## 2. Project Description

The Hawkesdale Wind Farm will constitute a network of 23 approved turbines, including 20 turbines to the north of Woolsthorpe-Heywood Road and three turbines to the south. It will also involve access tracks to all turbines, plus a concrete batching plant, site compound, on-site substation and underground cabling, as shown in Figure 2. Where underground cabling crosses Woolsthorpe-Heywood Road, it will be directionally drilled to avoid impacts to high-quality roadside vegetation. Impacts arising from the off-site transmission line are addressed in a separate report and planning permit and are therefore not considered in this plan.

To determine impacts to native vegetation, the footprint was overlaid with the native vegetation mapped as part of this investigation. A conservative approach was adopted, whereby the development footprint considers the greatest possible extent of construction works, this includes partial batters for ground works. All areas of native vegetation impacted are permanent for the installation of infrastructure (hardstands and access tracks). There are no temporary disturbance areas (i.e. temporary access points) requiring remediation post construction. The following buffers and impacts were assumed, except where further opportunities to avoid native vegetation were applied. The construction works considered in defining the extent of the development footprint comprise the following infrastructure:

- Roads and ground works:

A three-metre buffer was applied in areas of native vegetation and this was taken as extent of impact;

- Hardstand areas, including:
  - Crane Hardstand Platforms – ~60m x 40m in close proximity of the turbine foundation
  - Blade Laydown Fingers 70m x 20m adjacent to the hardstand on the opposite side of the access track;
  - Auxiliary Crane Pads – 12m x 7m
  - Meteorological Mast – access track and 75m radius;
  - On-site substation – 100m x 125m;
  - On-site concrete batching plant – 100m x 100m; and
  - Site compound – 55m x 190m.

A three-metre buffer was applied in areas of native vegetation and this was taken as extent of impact of hardstand areas;

- Cabling
  - The cable crossings of Woolsthorpe-Heywood Road will be directionally drilled. Therefore, impacts to roadside vegetation are restricted to the construction of an access track and crossover, avoiding impacts to Natural Temperate Grasslands of the Victorian Volcanic Plains (NTGVVP) at this location.

Where cabling was not associated with a road, cabling was designated an 8m corridor in areas of native vegetation.

This development footprint is indicated in Figure 2, which is detailed within the *Hawkesdale Wind Farm: Native Vegetation Assessment* provided as Attachment 1 of this plan. These figures provide a defined area in which contractors will be confined to for areas containing, or adjacent to, native vegetation, so as to eliminate unintentional impacts on retained native vegetation.

## 2.1. Native Vegetation Plan context

This Native Vegetation Plan has primarily been produced to respond to the Native Vegetation Removal Conditions of the permit (no. 20060221-A), namely conditions 33-41. This Plan details strategies and approaches to meet the requirements detailed within these conditions. Conditions 36-39 relate to offset requirements, which have been obtained by GPGA and not considered further in the context of this Plan.

### 2.1.1. Native Vegetation Plan objectives

The objectives of this NVP include, but are not limited to the following:

- Provide a final Biodiversity Assessment Report which identifies all losses being approved by the planning permit and the associated offset requirements, in accordance with the Permitted clearing of native vegetation – Biodiversity assessment guidelines (DEPI 2013);
- Clearly and accurately show the location and extent of native vegetation to be removed within the wind farm site as approved by Permit no. 20060221-A;
- Clearly and accurately show the location and extent of native vegetation to be retained, and define protection parameters for any areas of native vegetation that occur in the proximity of the construction impact zone ('No Go Zones');
- Provide methods to manage (i.e. avoid and minimise) impacts on native vegetation within these 'No Go Zones' that may be directly or indirectly affected by the development;
- Clearly and accurately show the location and extent of any current mapped wetlands as defined in the Permitted clearing of native vegetation – Biodiversity assessment handbook (DEPI 2015); and
- Clearly and accurately show the locations of any threatened flora or fauna that have been detected within the wind farm site.

### 3. Management Actions

#### 3.1. Responsibilities

The implementation of this plan will be the responsibility of the proponent, Hawkesdale Asset Pty Ltd as trustee for Hawkesdale Asset Trust (HAPL), a wholly owned subsidiary of Global Power Generation Australia Pty Ltd (GPGA), except where HAPL specifically delegate responsibilities in writing (e.g. to construction companies or sub-contractors).

#### 3.2. Management actions to be undertaken

This plan proposes a number of measures to be incorporated into the Construction Environmental Management Plan (CEMP) to ensure impacts to retained native vegetation are minimised. These include:

- Restriction of unauthorised access;
- Provision of signage to deter prohibited activities;
- Limiting of all machinery and vehicular traffic to the defined development footprint (including containing access/damage to the development footprint during wet boggy weather);
- Temporary fencing and signage along the development footprint where there is retained native vegetation within 30 metres of the defined development footprint see (Figure 4);
- Temporary clear perimeter flagging and signage along the development footprint where there is retained native vegetation beyond 30 metres and within 50 metres (approx.) of the defined development footprint;
- Induction of all contractors accessing the wind farm site into the prescriptions of this plan before accessing the wind farm site;
- Manage all rubbish and construction waste during the construction phase of the project; and
- Manage the threat of weed invasion throughout the construction phase of the project.
- No pruning or lopping of native vegetation will be required. No removal of native trees is required.

**Table 1 Management actions and monitoring and auditing requirements**

Timeframe	Action	Responsibility	Monitoring/auditing
All times	All vehicles are to remain within the defined 'development footprint'.	HAPL, Construction contractors and sub-contractors.	HAPL to inspect vehicle tracks monthly and photograph and report any impacts outside approved areas. Independent auditor to check six monthly during construction.
All times	All contractors to be trained in issues relating to protection of native vegetation and weed hygiene at a compulsory induction prior to commencing works.	HAPL, except where HAPL specifically delegate responsibilities in writing.	Audit six monthly on site during construction to check training and induction records. Independent auditor



Timeframe	Action	Responsibility	Monitoring/auditing
Pre-construction	All native vegetation to be removed and native vegetation to be retained is to be shown on construction drawings.	HAPL, except where HAPL specifically delegate responsibilities in writing.	Moyne Shire Council inspectors
Pre-construction	<p>“No Go Zones” are to be delineated as follows:</p> <ul style="list-style-type: none"> <li>▪ Temporary fencing will be erected along the edge of the defined ‘impact area’ where patches of native vegetation occur within 30m of the footprint.</li> <li>▪ Where there are patches of Native Vegetation that occur beyond 30m but within 50m (approx.) of the defined ‘impact area’, temporary flagging will be erected along the edge of the defined ‘impact area’.</li> <li>▪ Flagged and fenced areas will be appropriately signed “Significant Vegetation – No Go Zone”.</li> </ul>	HAPL, except where HAPL specifically delegate responsibilities in writing.	Moyne Shire Council inspectors
Pre-construction	Offsets must be obtained prior to removal of any native vegetation	HAPL	Moyne Shire
During construction	<p>The following activities are not to be undertaken within “No Go Zones”:</p> <ul style="list-style-type: none"> <li>▪ Vehicular or pedestrian access</li> <li>▪ Parking areas</li> <li>▪ Turning points</li> <li>▪ Trenching or soil excavation</li> <li>▪ Storage or dumping of any soils, materials, equipment, vehicles, machinery or waste products</li> <li>▪ Entry and exit pits for underground services</li> <li>▪ Any other actions or activities that may result in adverse impacts to retained native vegetation</li> </ul> <p>All stockpiles must be located in areas within the study area, where there is no identified native vegetation.</p>	HAPL, except where HAPL specifically delegate responsibilities in writing.	HAPL to inspect vehicle tracks monthly and photograph and report any impacts outside approved areas. Independent auditor to check six monthly during construction.
During construction	<p>The following ‘clearing protocol’ will be followed:</p> <ul style="list-style-type: none"> <li>▪ The day before any clearing of native vegetation approved to be removed is to be cleared, the site environment officer is to clearly delineate native vegetation that may be removed, and ensure “No Go Zones” are in place.</li> <li>▪ Personnel undertaking clearing of native vegetation approved to be removed are to be briefed prior to work on the exact extent of what may be impacted.</li> </ul>	HAPL, except where HAPL specifically delegate responsibilities in writing.	Independent oversight required by consultant

Timeframe	Action	Responsibility	Monitoring/auditing
During construction	<p>The following hygiene protocols will be implemented:</p> <ul style="list-style-type: none"> <li>▪ Any earth moving equipment that is delivered to site is to be clean.</li> <li>▪ Wheel washing facilities will be provided at the site compound at the entrance to the wind farm. Any vehicles not meeting the required standards of hygiene and cleanliness shall be sent to this location for cleaning before given access to site.</li> <li>▪ Any materials required for construction (eg. road making materials) must be free of weeds and weed seeds.</li> </ul>	HAPL, except where HAPL specifically delegate responsibilities in writing.	HAPL to inspect vehicle tracks monthly and photograph and report any impacts outside approved areas. Independent auditor to check six monthly during construction.
During construction	Regular monitoring of rubbish/construction waste adjacent to construction works areas must be carried out and any rubbish/construction waste found occurring within or adjacent to areas of native vegetation must be removed immediately.	HAPL, except where HAPL specifically delegate responsibilities in writing.	HAPL to inspect vehicle tracks monthly and photograph and report any impacts outside approved areas. Independent auditor to check six monthly during construction.
During construction and operation	A program of spot spraying of any noxious weeds will be implemented throughout construction and operational phases. Details of this are included in the Pest Plant Management Plan for Hawkesdale Wind Farm June 2022.	HAPL, except where HAPL specifically delegate responsibilities in writing.	HAPL to inspect vehicle tracks monthly and photograph and report any impacts outside approved areas. Independent auditor to check six monthly during construction.
During construction and operation	Monitoring and review of this NVP will be regularly undertaken by the site environment officer. Should the requirements of this plan be found to not be met, work is to stop until this plan can be complied with.	HAPL, except where HAPL specifically delegate responsibilities in writing.	Site Environment officer. Independent auditor to check six monthly during construction.
During construction and operation	Indirect impacts on wetlands. Drainage patterns are maintained and monitored during audits.	HAPL, except where HAPL specifically delegate responsibilities in writing.	Site Environment officer. Independent auditor to check six monthly during construction.

## 4. Permit Conditions and additional requirements

This Native Vegetation Plan has primarily been produced to respond to the Native Vegetation Removal Conditions of the permit (no. 20060221-A), namely conditions 33-41. This Plan details strategies and approaches to meet the requirements detailed within these conditions. Conditions 36-39 relate to offset requirements, which have been obtained by GPGA and not considered further in the context of this Plan.

### 4.1. Approved native vegetation removal – Condition 33

*No more than 0.872 hectares of native vegetation is permitted to be approved under this permit*

Condition 33 has been met because the Native Vegetation Assessment concludes that a total of 0.056 hectares of native vegetation will be removed, which is no more than 0.872 hectares as approved by the planning permit, see *Hawkesdale Wind Farm: Native Vegetation Assessment* (Attachment 1). Various design alterations and construction methods have significantly reduced the total extent of native vegetation required to be impacted by the Wind Farm, since the original permit condition was obtained. The reduced impacts to native vegetation are illustrated in Figure 2.

### 4.2. Finalised BIOR Report - Condition 34 A

*A final Biodiversity Assessment Report or similar which identifies all losses being approved by this permit and the associated offset requirements, in accordance with the permitted clearing of native vegetation – biodiversity assessment guidelines (DEPI 2013).*

The information required by this permit condition is provided in the report *Hawkesdale Wind Farm: Native Vegetation Assessment*, Report No. 14144 (11.5) prepared by Nature Advisory (dated August 2022) (herein referred to as the ‘Native Vegetation Assessment’). The BIOR report which details the extent of native vegetation removal and stipulates the associated offset requirements is incorporated in the Native Vegetation Assessment (refer Attachment 1). See Section 5 of the report for impacts to native vegetation and Section 6.1.3 and 6.1.4 for offset requirements.

### 4.3. Plans of the Proposal - Condition 34 B

*Plans drawn to scale with dimensions that identify:*

- (i) *native vegetation to be removed.*

An accurate representation of the native vegetation to be removed at Hawkesdale Wind Farm is included in Figure 2 of this plan.

- (ii) *any current mapped wetlands as defined in the permitted clearing of native vegetation – biodiversity assessment handbook (DEPI 2015), that are present on the site.*

No Current Mapped Wetlands as defined in the Permitted clearing of native vegetation – Biodiversity assessment handbook (DEPI 2015) are to be impacted by this proposal. The location of all DELWP mapped wetlands within the HDWF are illustrated in Figure 2 of this plan.

- (iii) *any native vegetation to be retained that is within the permissible micro siting envelope or ancillary infrastructure.*

An accurate representation of the native vegetation to be retained at Hawkesdale Wind Farm is included in Figure 2 of this plan.

Micro-siting is defined in Condition 2 of the planning permit as “*alteration to the siting of a turbine by not more than 100 metres. For the purposes of this condition, micro-siting of turbines includes any consequent changes to access tracks and electricity reticulation lines and the measurement of*



*any distance between a dwelling and a turbine must be from the centre of the tower of the turbine (at ground level) to the closest point of the dwelling”.*

Should micro-siting of the wind farm layout occur, an assessment of impacts to native vegetation must be undertaken to determine whether the amendments result in any increased impacts to native vegetation and/or whether they impact patches of native vegetation that have not been previously approved to be affected by the wind farm. This would occur in accordance with Condition 2 of the planning permit which requires that, *“the use and development as shown on the endorsed plans must not be altered or modified without the written consent of the Minister for Planning; except that the micro siting of wind turbines (as defined in this condition) is permitted provided that (a) the developer of the wind energy facility has written advice from the appropriately qualified experts that the alteration or modification will not result in a material adverse change in landscape, flora and fauna, cultural heritage, visual amenity, shadow flicker, noise fire risk or aviation impacts compared to the endorsed plans”.*

Figure 3 has been prepared to clearly communicate the micro-siting provisions of each wind turbine and the location of the surrounding native vegetation.

(iv) *the location of any detected threatened flora and fauna species.*

The locations of threatened flora and fauna species detected within a 10km radius of HDWF are provided in the following figure. Figure 1 was created by Nature Advisory based on the records from the Victorian Biodiversity Atlas as well as the results of ecological surveys conducted by Nature Advisory.

One threatened fauna species was recorded within HDWF, namely a Southern Bent-wing Bat detected by Nature Advisory (formerly Brett Lane and Associates). A Bat and Avifauna Management Plan will be submitted to DELWP for endorsement to form part of the planning permit to mitigate potential impacts to this species.







The FFG-Act listed flora species, Curly Sedge was also recorded on private land within the study area. As shown on the insert in Figure 2-a, all records have been avoided. Regardless, there are no implications for impacting FFG listed values where they occur on private land.

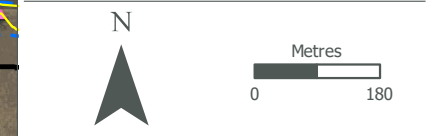
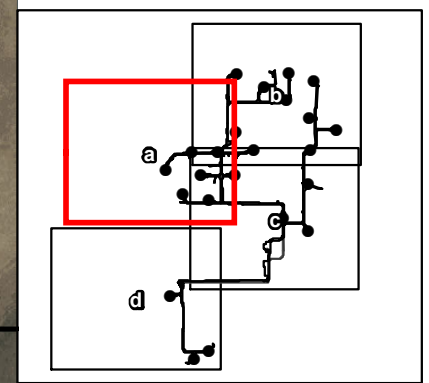
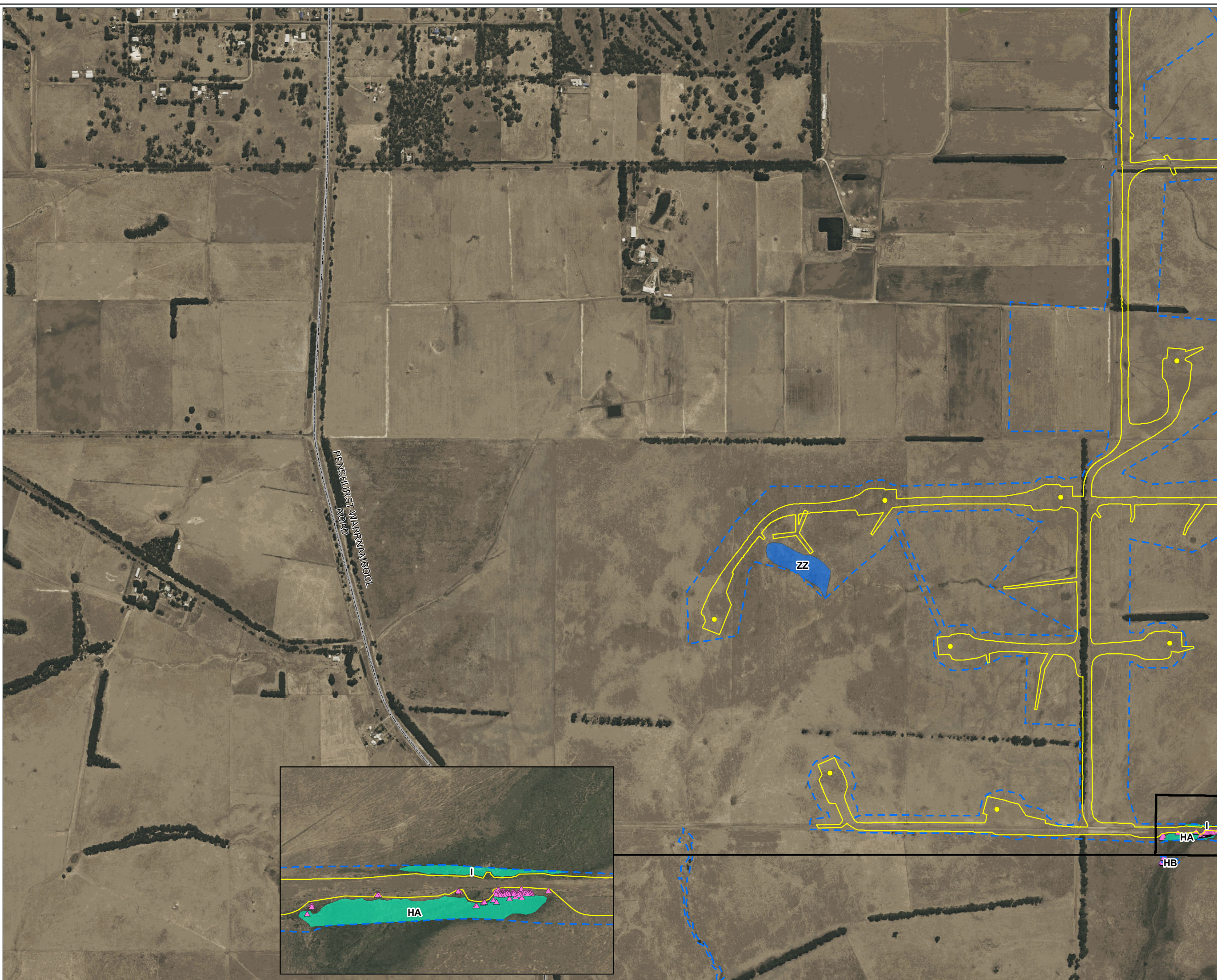




**Figure 2-a: Native vegetation to be removed**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 4/08/2022

-  Combined Study Area
-  Development footprint
-  Turbine location
- Native vegetation**
-  Plains Grassy Wetland (EVC 125)
-  Swamp Scrub (EVC 53)
-  Curly sedge







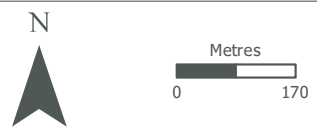
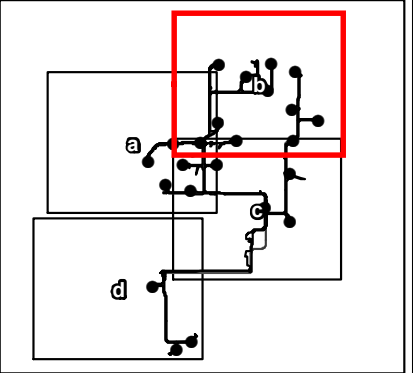
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**Figure 2-b:** Native vegetation to be removed

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 4/07/2022

-  Combined Study Area
-  Development footprint
-  Turbine location
-  DELWP wetland

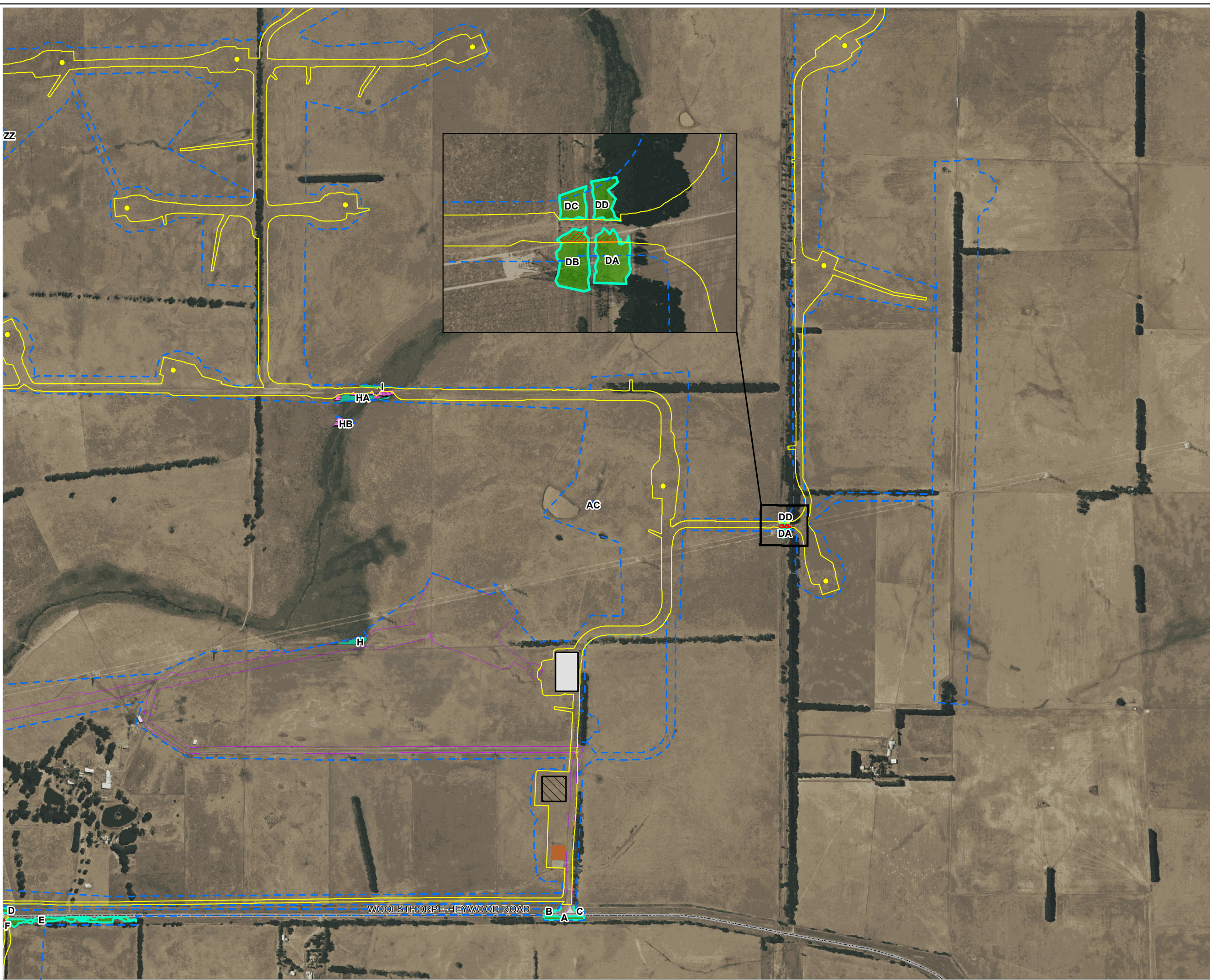


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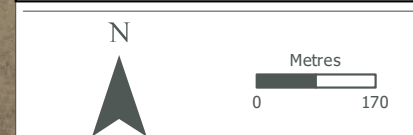
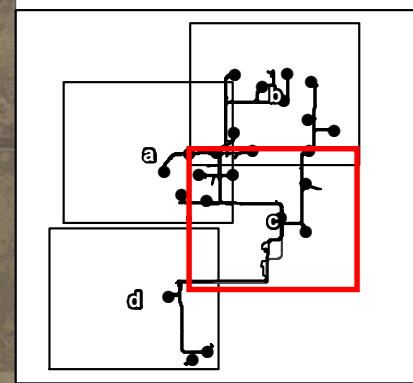


**Figure 2-c: Native vegetation to be removed**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 6/07/2022



- Combined Study Area
- Combined TXL study area
- Development footprint
- Turbine location
- Concrete Batching Plant
- Site Compound
- Substation On-Site
- Native vegetation**
- Plains Grassy Wetland (EVC 125)
- Heavier-soils Plains Grassland (EVC 132\_61)
- Swamp Scrub (EVC 53)
- Basalt Shrubby Woodland (EVC 642)
- ▲ Curly sedge
- EPBC listed community**
- NTGVVP
- Native vegetation to be removed



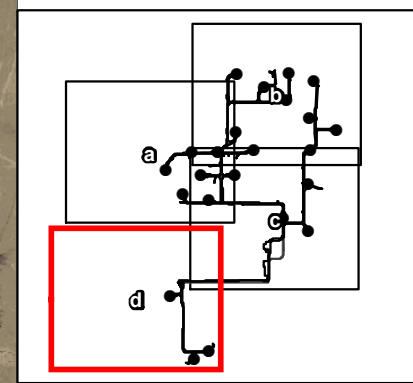
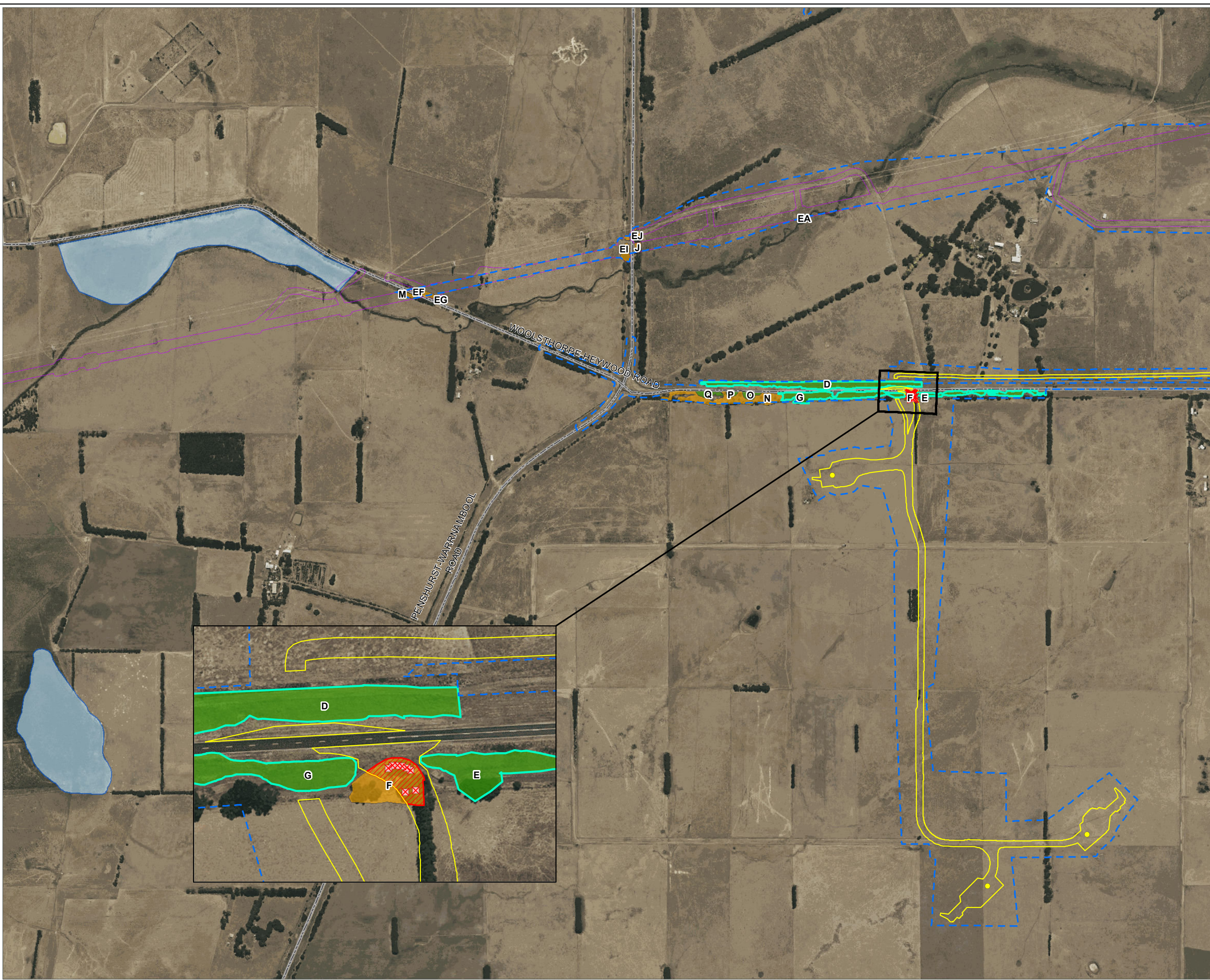
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**Figure 2-d: Native vegetation to be removed**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 19/08/2022

- Combined Study Area
- Combined TXL study area
- Development footprint
- Turbine location
- DELWP wetland
- Native vegetation**
- Heavier-soils Plains Grassland (EVC 132\_61)
- Swamp Scrub (EVC 53)
- Basalt Shrubby Woodland (EVC 642)
- Black Wattle
- EPBC listed community**
- NTGVVP
- ✕ Tree to be removed
- Native vegetation to be removed









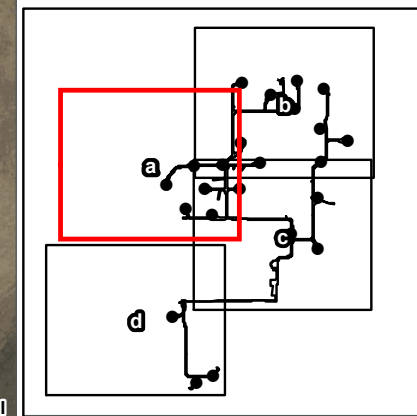
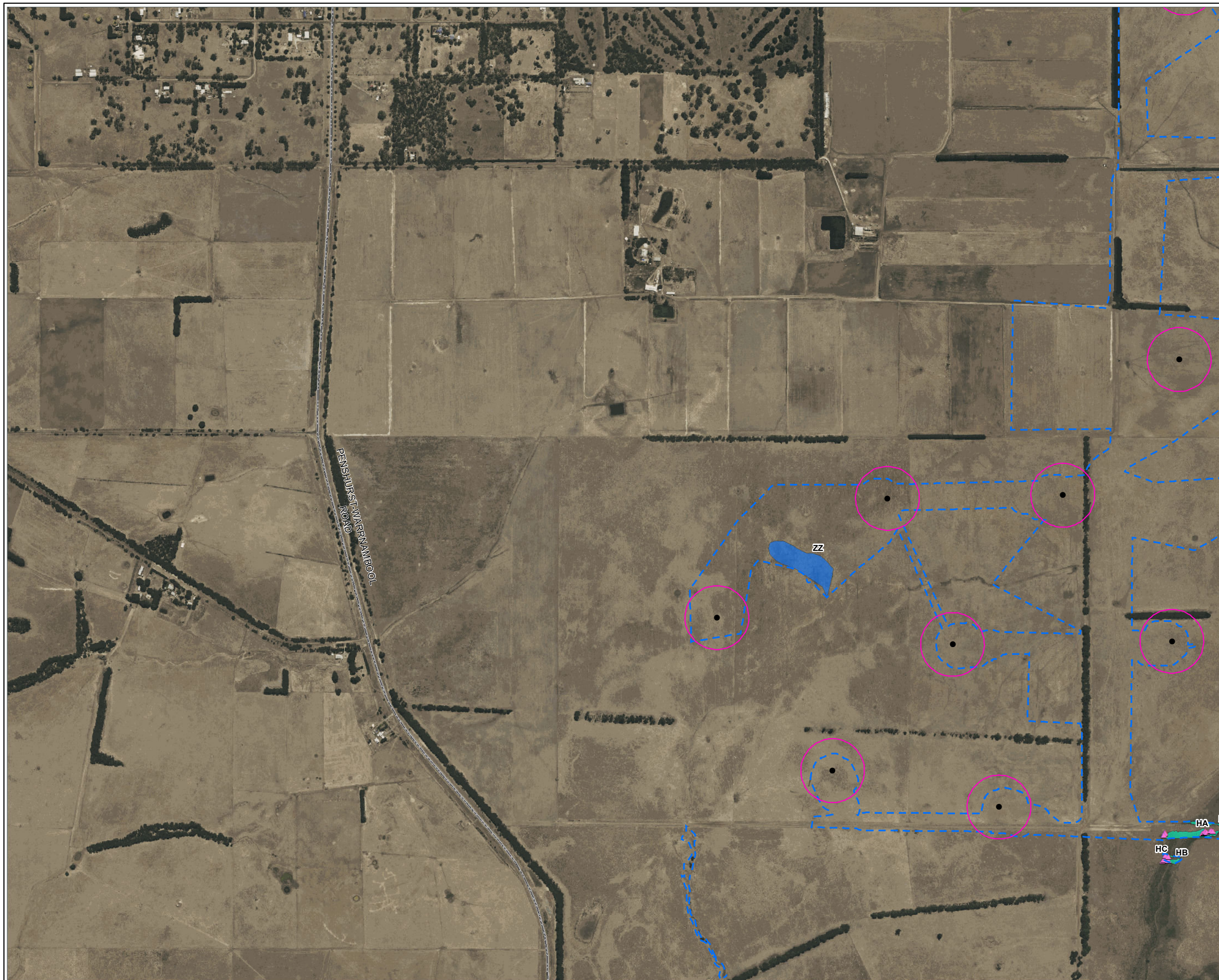
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**Figure 3 -a:** Micro-siting

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 9/05/2022




-  Combined Study Area
-  Turbine location
-  Turbine buffer (100m)
- Native vegetation**
  -  Plains Grassy Wetland (EVC 125)
  -  Swamp Scrub (EVC 53)
  -  Curly Sedge

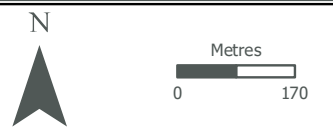
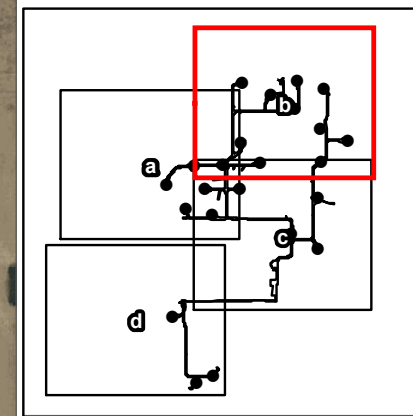
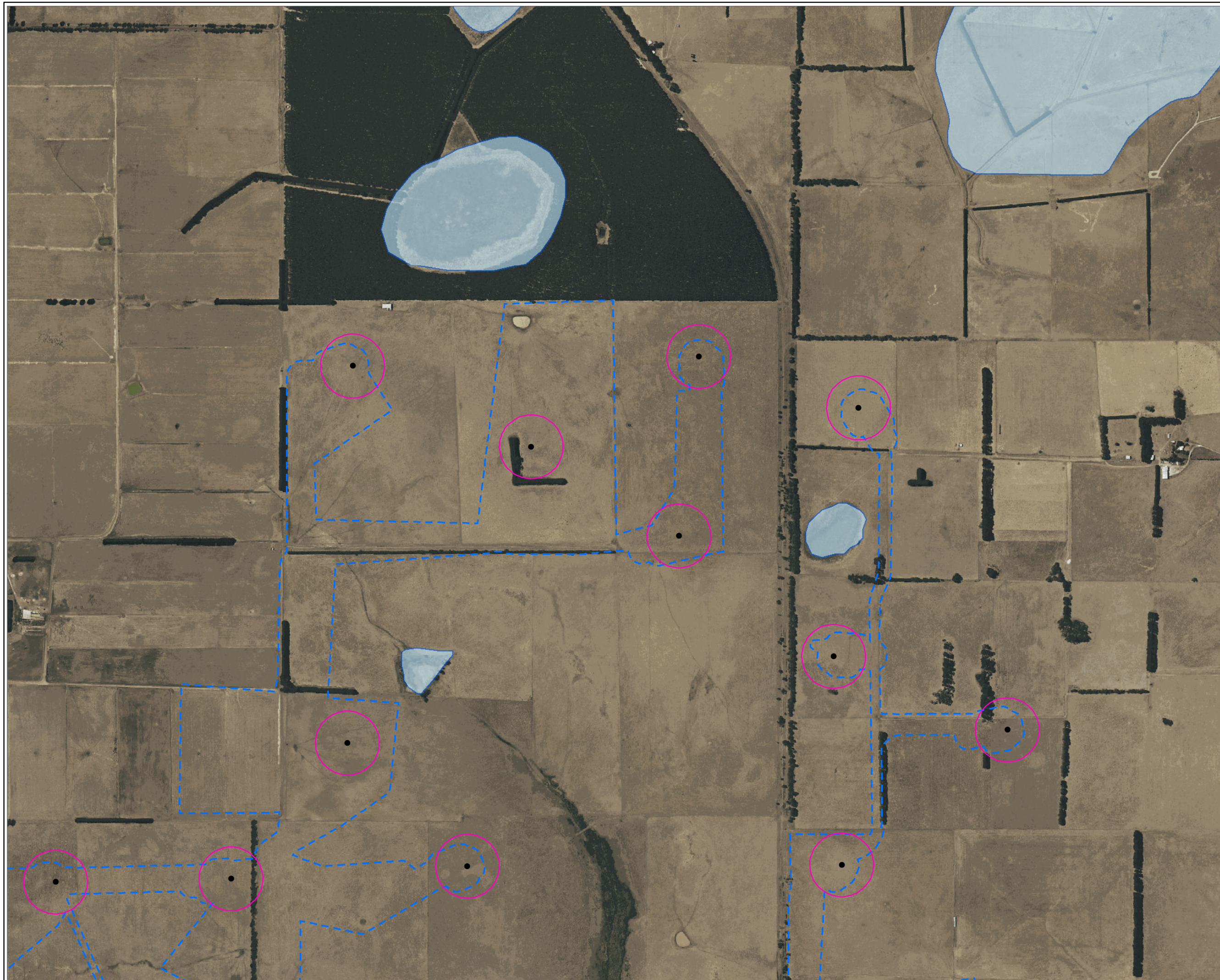




**Figure 3 -b:** Micro-siting

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 9/05/2022

-  Combined Study Area
-  Turbine location
-  Turbine buffer (100m)

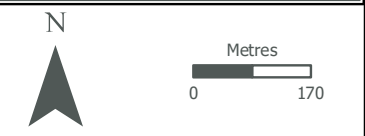
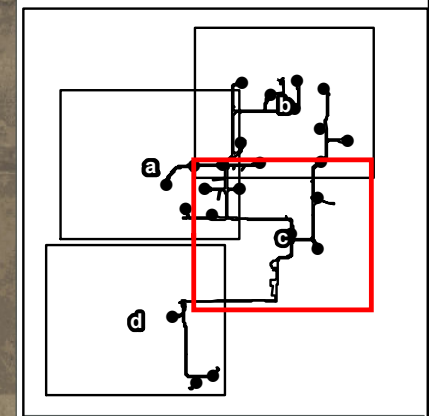
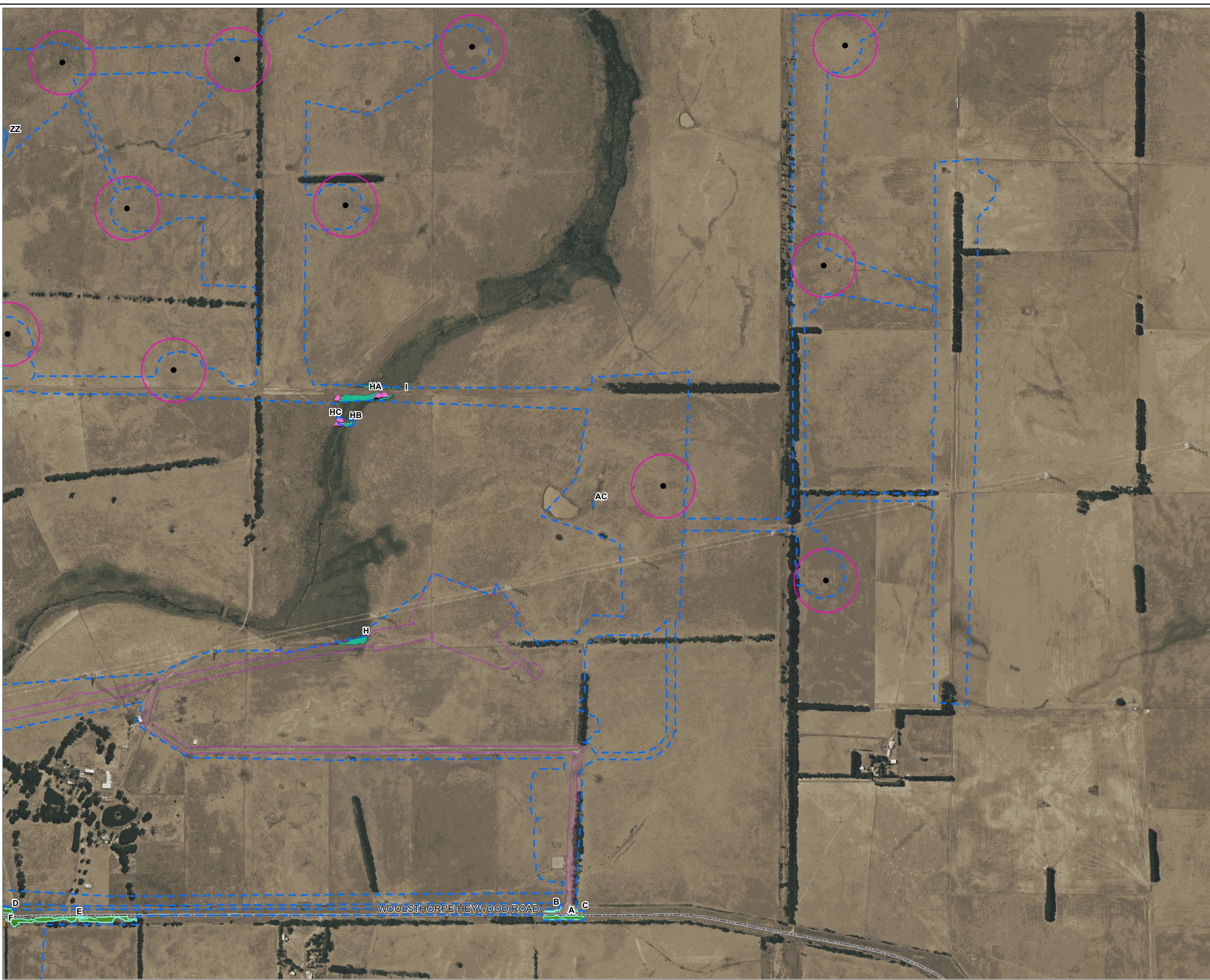




**Figure 3 -c: Micro-siting**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 9/05/2022

- Combined Study Area
- Combined TXL study area
- Turbine location
- Turbine buffer (100m)
- Native vegetation**
- Plains Grassy Wetland (EVC 125)
- Heavier-soils Plains Grassland (EVC 132\_61)
- Swamp Scrub (EVC 53)
- Basalt Shrubby Woodland (EVC 642)
- EPBC listed communities**
- NTGVVP
- ▲ Curly Sedge












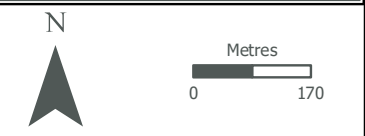
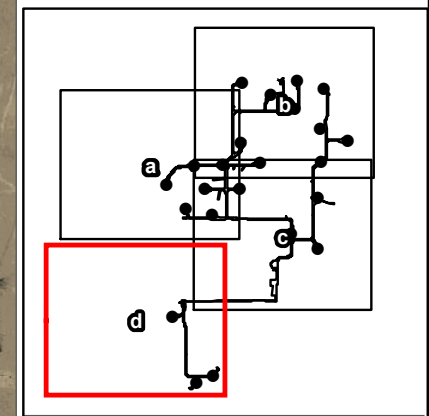
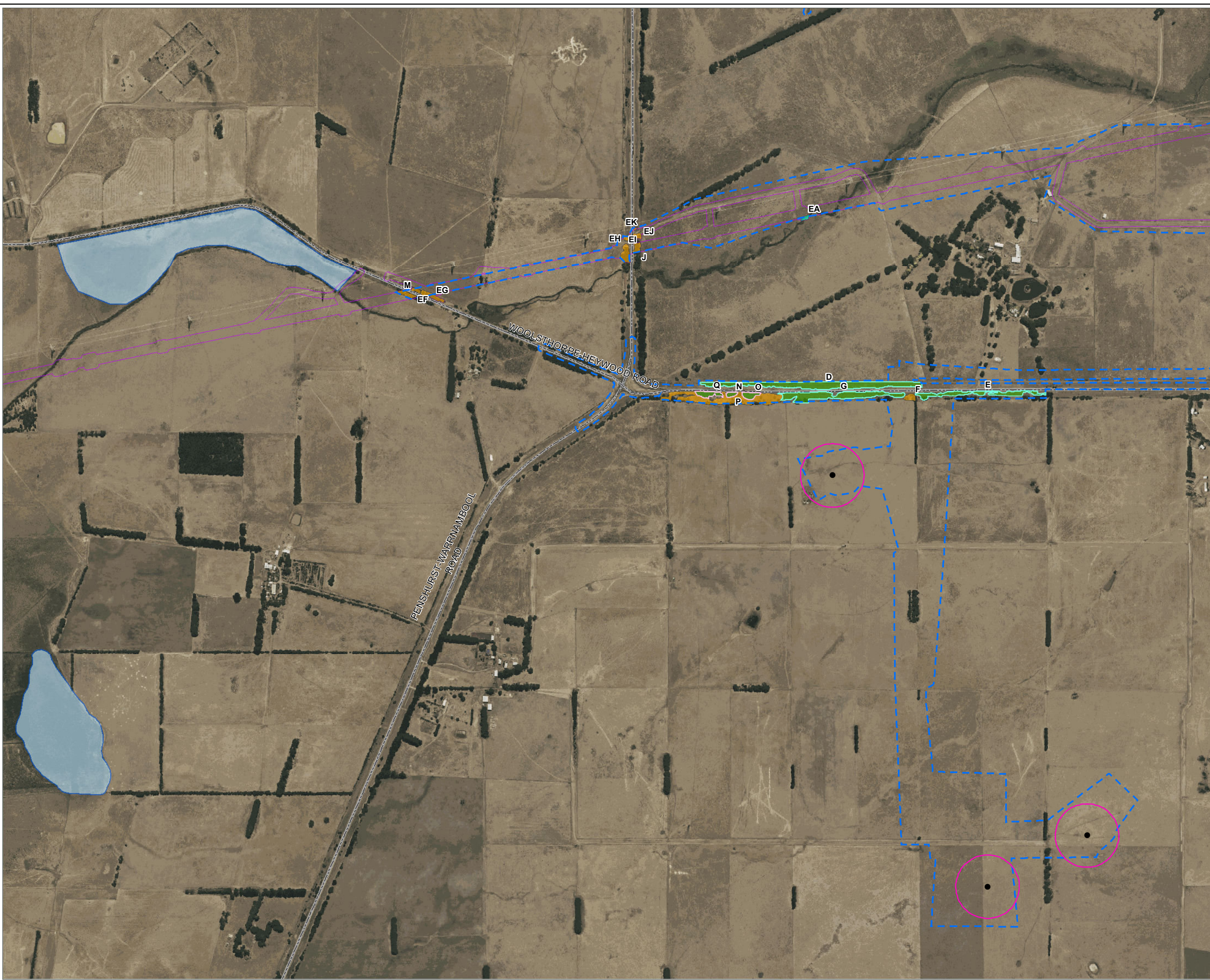
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**Figure 3 -d:** Micro-siting

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 9/05/2022

-  Combined Study Area
-  Combined TXL study area
-  Turbine location
-  Turbine buffer (100m)
- Native vegetation**
  -  Heavier-soils Plains Grassland (EVC 132\_61)
  -  Swamp Scrub (EVC 53)
  -  Basalt Shrubby Woodland (EVC 642)
- EPBC listed communities**
  -  NTGVVP
  -  Potential NTGVVP



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#### 4.4. Measures to be used during construction to protect native vegetation to be retained - Conditions 34C, 35 and 40.

34 (c) - Measures to be used during construction to protect native vegetation to be retained

35 - Except with the written consent of the Minister for Planning, within any area of native vegetation to be retained the following are prohibited:

- (a) Vehicular or pedestrian access
- (b) Trenching or soil excavation
- (c) Storage or dumping of any soils, materials, equipment, vehicles, machinery or waste products
- (d) Entry and exit pits for underground services
- (e) Any other actions or activities that may result in adverse impacts to retained native vegetation

40 - To prevent the spread of weeds and pathogens, all vehicles and machinery must be made free of soil, seed and plant material before being taken to the works site and again before being taken from the works site, during and on completion of the project

Management actions to address these requirements are detailed below. Native vegetation to be retained at HDWF is illustrated in Figure 2 and detailed within the Native Vegetation Assessment (Attachment 1). Native vegetation to be retained at HDWF occurs on private land and public roadside. No scattered trees have been recorded at the wind farm site. Any opportunities to avoid or minimize native vegetation approved for clearing during operations will be identified and implemented, where possible.

##### 4.4.1. Management Actions

The management actions required for the protection of native vegetation to be retained are as follows:

##### Temporary fencing requirements

- Prior to construction, temporary fencing will be erected along the edge of the defined 'impact area' where patches of native vegetation occur within 30m of the footprint.
- Prior to construction, temporary flagging will be erected along the edge of the defined 'impact area' where there are patches of Native Vegetation that occur beyond 30m but within 50m (approx.) of the footprint and.
- Flagged and fenced areas must be appropriately signed for protection - "Significant Vegetation - No Go Zone".

##### Vehicle access restrictions

- All vehicles are to remain within the defined 'development footprint' where native vegetation is present. In particular, vehicles are strictly prohibited from driving in the road reserve of Woolsthorpe-Heywood Road beyond the designated development footprint. Vehicles must use the formal road surface and designated turning sites.
- No turning points are to be created in the "No Go Zones". Turning points will take advantage of existing paddock access points, driveways or roads.
- No parking areas are to be created in the "No Go Zones". Parking areas will be established on adjacent private land or side roads.

- The following activities are not to be undertaken within “No Go Zones”:
  - Vehicular or pedestrian access
  - Trenching or soil excavation
  - Storage or dumping of any soils, materials, equipment, vehicles, machinery or waste products
  - Entry and exit pits for underground services
  - Any other actions or activities that may result in adverse impacts to retained native vegetation

#### *Rubbish control*

- Regular monitoring of rubbish/construction waste adjacent to construction works areas must be carried out and any rubbish/construction waste found occurring within or adjacent to areas of native vegetation must be removed immediately.

#### *Vehicle and personnel clothing hygiene*

- All contractors to be trained in issues relating to protection of native vegetation and weed hygiene at a compulsory induction prior to commencing works.
- To prevent the spread of weeds and pathogens, all vehicles and machinery must be made free of soil, seed and plant material before being taken to the works site and again before being taken from the works site, during and on completion of the project as required by Condition 40 of the planning permit. Additional weed hygiene procedures and associated roles and responsibilities are stipulated in the project’s Pest Plant Management Plan forming part of the planning permit and must be adhered to. The location of the wheel washing facility is shown in Figure 4-c.
- Wheel washing facilities will be provided at the site compound at the entrance to the wind farm. Any vehicles not meeting the required standards of hygiene and cleanliness shall be sent to this location for cleaning before given access to site.
- All construction personnel must have clothing and footwear that is clean and free of soil, seed and plant material before entering the works site.

#### *Emergent weed control*

- A program of spot spraying of any noxious weeds will be implemented throughout construction and operational phases as per the Pest Plant Management Plan prepared for this project and forming part of the Environmental Management Plan and the planning permit.
- Any materials required for construction (eg. road making materials) must be free of weeds and weed seeds.

#### *Clearing of native vegetation protocol*

- The following ‘clearing protocol’ will be followed:
  - The day before any clearing of native vegetation approved to be removed is to be cleared, the site environment officer is to clearly delineate native vegetation that may be removed and ensure “No Go Zones” are in place.
  - Personnel undertaking clearing of native vegetation approved to be removed are to be briefed prior to work on the exact extent of what may be impacted.
  - Both native vegetation to be removed and native vegetation to be retained is to be shown on construction drawings.

#### 4.5. Protection of Wetlands and Waterways

Design and drainage measures implemented to protect or minimise impacts to wetlands and waterways are as follows:

- No infrastructure directly impacts with wetlands, as there are no wetlands within the footprint of the wind farm. Where the footprint intersects with rural drainage channels, engineering has been designed to maintain the existing water flow to preserve the natural runoff and hydraulic continuity of water accumulation areas beyond the wind farm. Each floodway and culvert have been designed for the specific conditions at each location.
- To protect the access track and hardstand infrastructure, table drains will be installed on the side of the access tracks. Table drains have been designed as V drains with rock checks that will be reseeded and revegetated.
- The drainage philosophy is to retain the current hydrology across the site. Access tracks make use of existing farm tracks over a majority of the site, and swale drains have been placed to direct water from the longitudinal drains adjacent the access tracks into existing drainage lines to direct water along its natural course and not artificially increase or decrease flow or ponding. The windfarm infrastructure doesn't interface with any wetlands outside the riparian zone.

#### 4.6. Training Requirements

All personnel, including HAPL employees, contractors and sub-contractors, will be required to attend a compulsory project induction before commencing any work on the Project as required by the project's Environmental Management Plan.

The environmental component of the induction will be delivered by HAPL or the contractor's Site Safety and Environment Officer (or delegate) and include:

- The NVP overview;
- The requirements of the planning permit as they relate to native vegetation removal and protection;
- Responsibilities under the NVP in relation to implementing mitigation measures, monitoring, and reporting;
- Key management and protection controls; and
- Consequences of departure from specified procedures or other controls

"Toolbox" training will also be undertaken to ensure that the workforce is regularly updated on relevant information, issues of interest or concern, and regularly reminded of their duties to protect and minimise impacts to native vegetation.

Figures showing the areas of native vegetation to be impacted and those to be retained will be displayed in the site offices to talk to during induction sessions and toolbox training.

The above-mentioned project induction, toolbox training, and figures are the key methods in which information will be communicated to personnel working on site.



#### 4.7. Avoidance of roadside vegetation

The protocol for identification of any areas of indigenous roadside vegetation that may require removal or pruning includes completion of a pre-transport route assessment to identify removal, destruction or lopping of any native vegetation that may cause an obstruction and is not able to be avoided.

Areas along the route that are identified to potentially require the removal or pruning of vegetation will be surveyed by a suitably qualified ecologist to determine if the vegetation is native (as defined in the Victoria Planning Provisions and Guidelines for the removal, destruction or lopping of native vegetation - DELWP, 2017). GPGA will liaise with the relevant Responsible Planning Authority regarding any removal of native vegetation and, if required, approvals will be obtained having regard to the provisions of the relevant Planning Scheme prior to vegetation being removed.

##### 4.7.1. Pruning Requirements – Condition 41

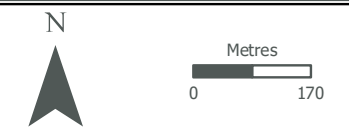
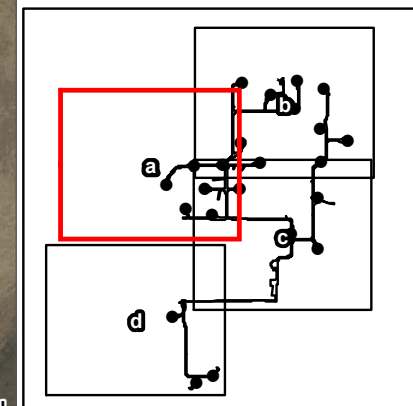
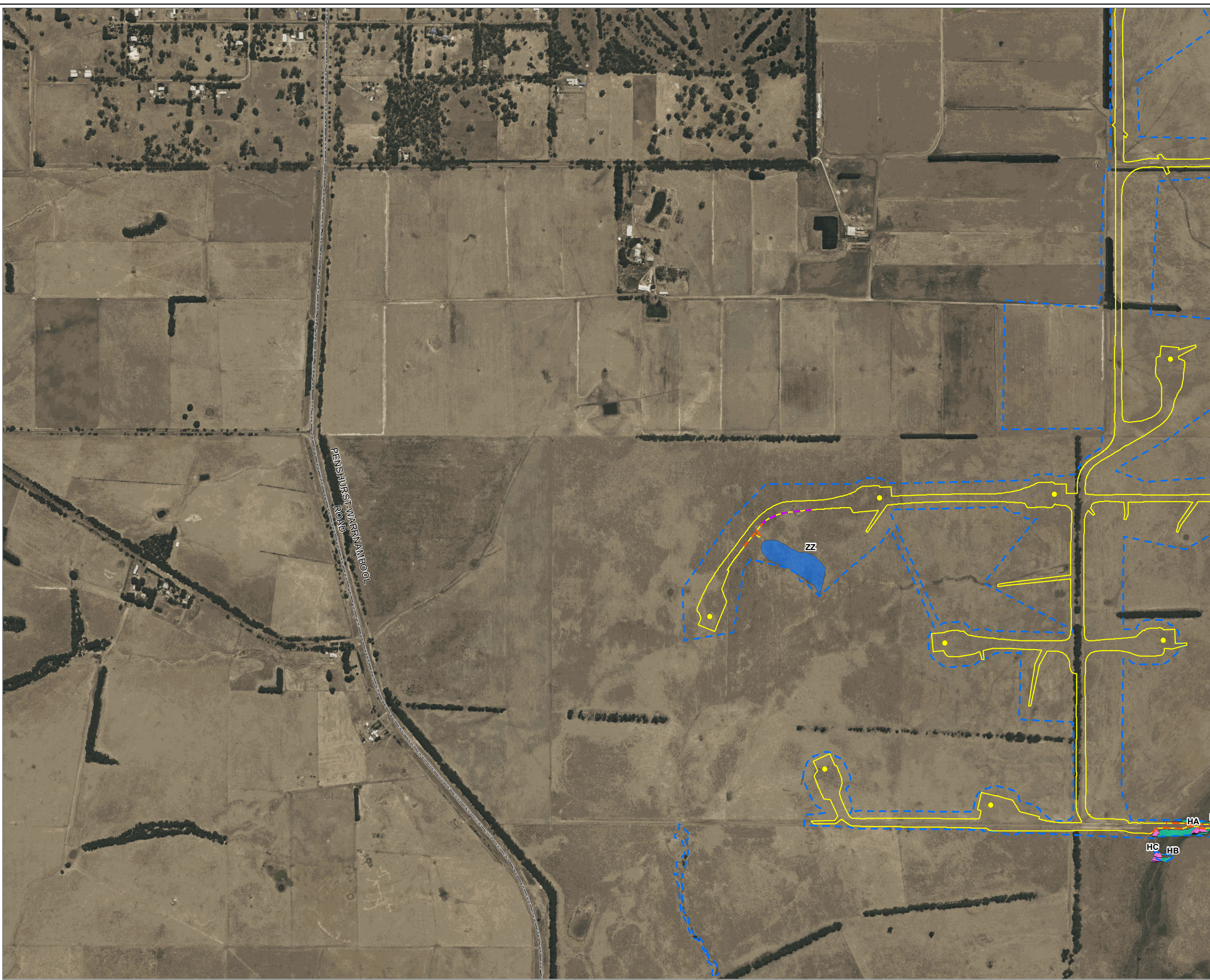
Any pruning to the canopy or major structural branches of any tree to be retained must be undertaken in accordance with *Australian Standard 4373-2007 – Pruning of Amenity Trees* (Standards Australia 2007).



**Figure 4 -a:** HDWF native vegetation and fencing plan

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 10/05/2022

- ▭ Combined Study Area
- Development footprint
- Turbine location
- - Temporary fence
- - Temporary perimeter flagging
- Native vegetation**
- ▭ Plains Grassy Wetland (EVC 125)
- ▭ Swamp Scrub (EVC 53)
- ▲ Curly Sedge



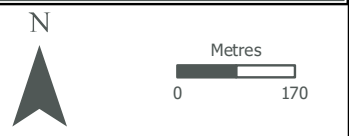
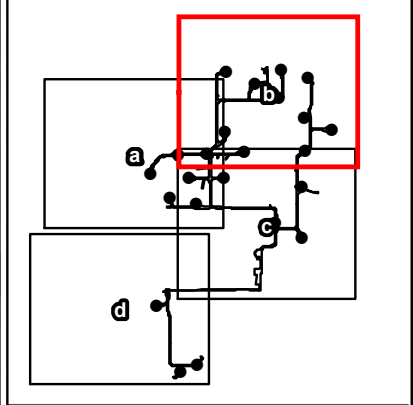
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**Figure 4 -b:** HDWF native vegetation and fencing plan

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 10/05/2022

- Combined Study Area
- Development footprint
- Turbine location

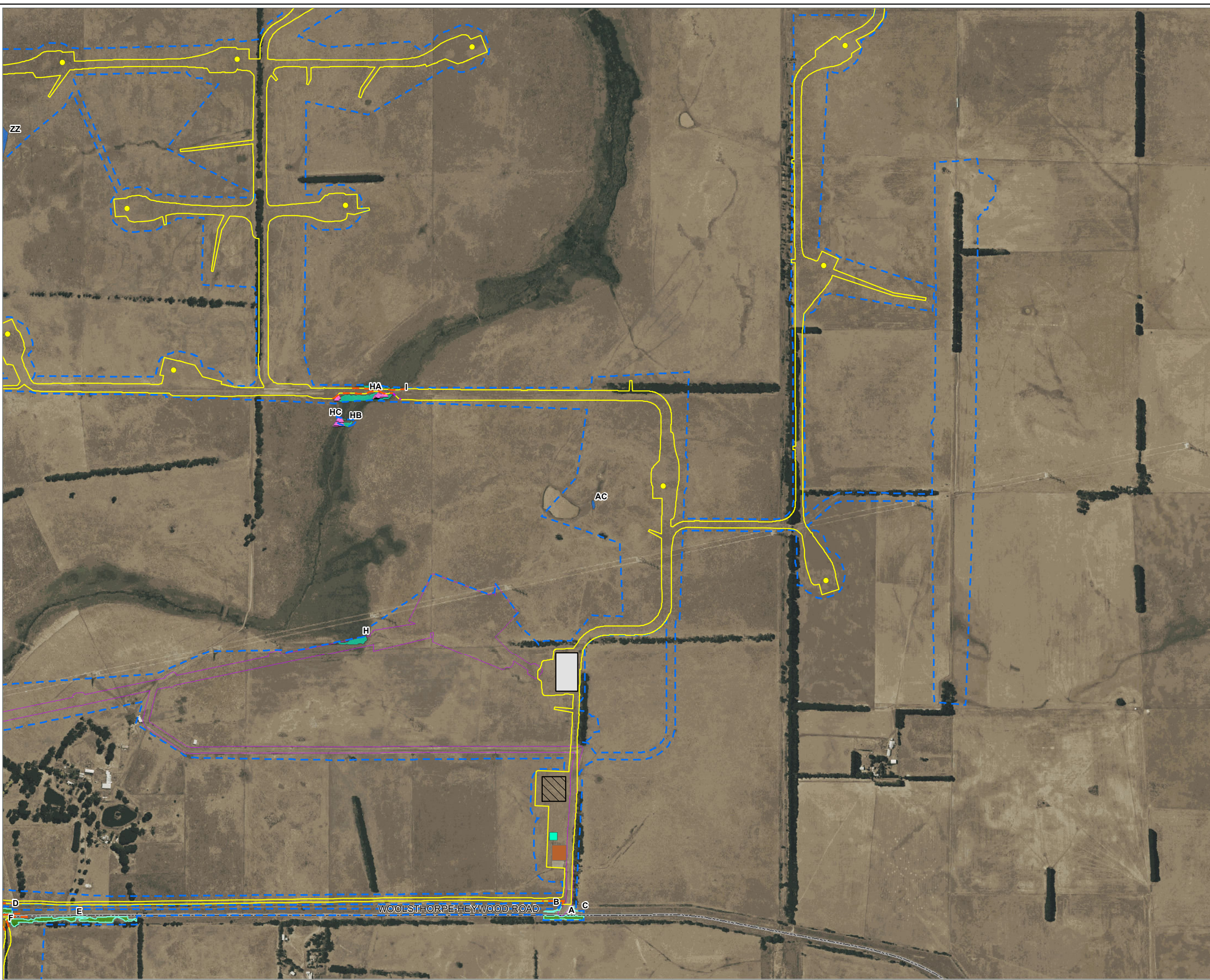


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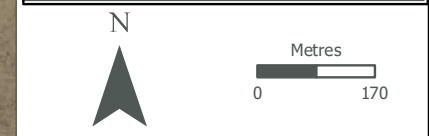
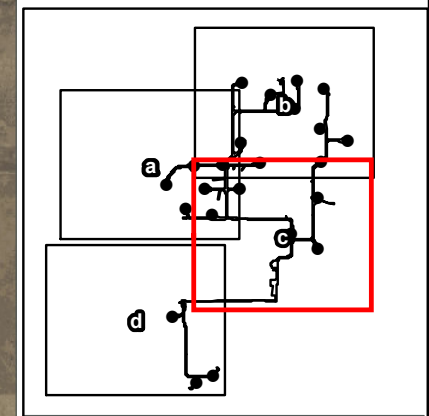
**Figure 4 -c:** HDWF native vegetation and fencing plan

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 10/05/2022



- Combined Study Area
- Combined TXL study area
- Development footprint
- Turbine location
- Wheel washing facility
- Concrete Batching Plant
- Site Compound
- Substation On-Site
- Temporary fence
- Temporary perimeter flagging

- Native vegetation**
- Plains Grassy Wetland (EVC 125)
  - Heavier-soils Plains Grassland (EVC 132\_61)
  - Swamp Scrub (EVC 53)
  - Basalt Shrubby Woodland (EVC 642)
- EPBC listed communities**
- NTGVVP
  - Curly Sedge



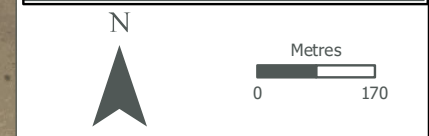
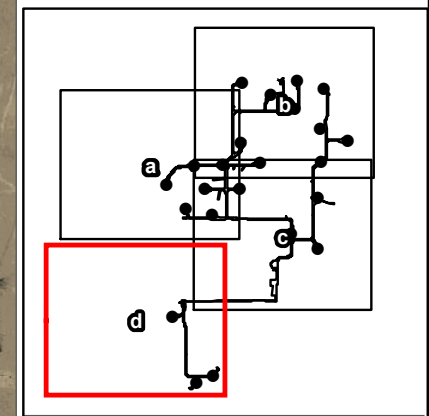
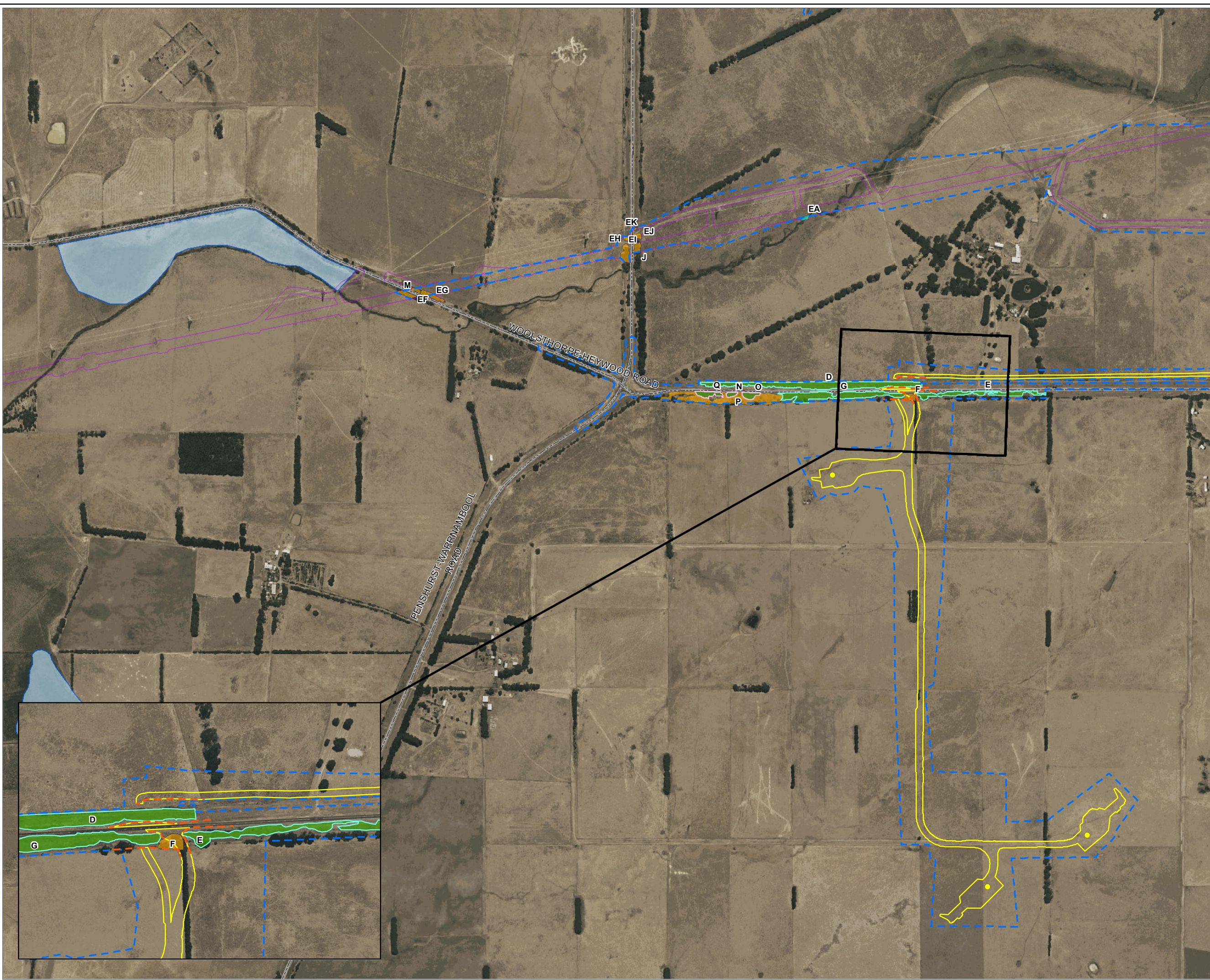
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**Figure 4 -d:** HDWF native vegetation and fencing plan

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 10/05/2022

- Combined Study Area
- Combined TXL study area
- Development footprint
- Turbine location
- Temporary fence
- Native vegetation**
- Heavier-soils Plains Grassland (EVC 132\_61)
- Swamp Scrub (EVC 53)
- Basalt Shrubby Woodland (EVC 642)
- EPBC listed communities**
- NTGVVP
- Potential NTGVVP





## 5. Monitor and Review

If changes to the wind farm layout are to be sought, native vegetation impact assessments must be undertaken to investigate whether there will be additional impacts on native vegetation. The assessments must include additional native vegetation surveys if the proposed changes to the layout are to occur in areas that have not been previously investigated. If impacts are concluded to increase as an outcome of the layout changes, an amendment to the planning permit and native vegetation plan must be sought and the new impacts must not occur until approval is achieved. If the assessment concludes that there are no additional impacts to native vegetation, the outcome of the investigations must be saved on record to provide to the relevant authorities upon request.

Additional approvals may also be required depending on the native vegetation being impacted upon and its location. As such, a review of the additional impacts against the FFG Act and the EPBC Act would also be required. This should be undertaken by a qualified ecologist and any necessary changes to this native vegetation plan and other documentation made accordingly.

Monitoring and review of this NVP must be continuously undertaken by the site environment officer during construction and operation. Should the requirements of this plan be found to not be met, work is to stop until this plan can be complied with.

An audit plan is provided as detailed within Table 1.

## 6. References

- Department of Sustainability and Environment (DSE) 2006, *Native Vegetation Revegetation planting standards – Guidelines for establishing native vegetation for net gain accounting*, Department of Environment, Land, Water and Planning, East Melbourne, Victoria.
- DEPI 2013, *Permitted clearing of native vegetation: Biodiversity assessment guidelines* (dated September 2013), Department of Environment, Land, Water and Planning, East Melbourne.
- DEPI 2015, *Permitted clearing of native vegetation: Biodiversity assessment handbook* (dated May 2015), Department of Environment, Land, Water and Planning, East Melbourne.
- Nature Advisory 2022, *Hawkesdale Wind Farm: Native Vegetation Assessment, Report No. 14144 (11.6)*, Report prepared for Global Power Generation Australia by Nature Advisory Pty Ltd, Hawthorn East, Victoria.
- EHP 2022, *Pest Plant Management Plan: Hawkesdale Windfarm June 2022*, Ecology & Heritage Partners Pty Ltd, Ascot Vale, Victoria.
- Standards Australia 2007, *Australian Standard 4373-2007 – Pruning of Amenity Trees*, Standards Australia.

**Attachment 1: Hawkesdale Wind Farm: Native Vegetation Assessment, Report No. 14144 (11.6) prepared by Nature Advisory Pty Ltd (2022).**





# Hawkesdale Wind Farm

## Native Vegetation Assessment

Prepared for Hawkesdale Asset Pty Ltd as trustee for Hawkesdale Asset Trust (HAPL), a wholly owned subsidiary of Global Power Generation Australia Pty Ltd (GPGA)

August 2022  
Report No. 14144 (11.6)



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# 1. Executive summary

Nature Advisory Pty Ltd undertook a flora and native vegetation assessment of the area to be developed as the approved Hawkesdale Wind Farm (Moyné Permit number 20060221-A).

This report presents the information relevant to native vegetation in accordance with Moyné planning permit 20060221-A under Clause 52.17 of the Moyné Planning Scheme, and as defined in the *Biodiversity Assessment Guidelines* (DEPI 2013). Potential impacts on flora and communities listed under the state *Flora and Fauna Guarantee Act 1988* (FFG Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) have also been considered.

This report is commissioned to support a planning permit amendment application being prepared for the Hawkesdale Wind Farm which includes changes to the wind farm layout. The report is also intended to accompany a Native Vegetation Plan which is to be submitted for endorsement and form part of the planning permit. The scope of the report is to assess the total impact to native vegetation from the construction of Hawkesdale Wind Farm and to ensure that the total amount of impact is within the permitted amount, as per Condition 33 of the planning permit. This report has been updated to account for changes in impacts as an outcome of the proposed amendments to the wind farm, including the removal of three turbines from the wind farm layout (as per the planning permit amendment 2021) and the consideration of a more detailed construction footprint. This report supplements previous biodiversity impact assessments<sup>1</sup> undertaken for the wind farm, particularly those undertaken as part of the 2017 planning permit amendment application which sought to increase wind turbine heights and were the subject of a planning panel hearing<sup>2</sup>.

Although the layout configuration has been slightly altered and the number of turbines has been reduced since then, the likely impacts of Hawkesdale Wind Farm are anticipated to be consistent with the assessment outcomes for fauna as presented in *Hawkesdale Wind Farm Biodiversity Impact Assessment of Proposed Modification* (Brett Lane and Associates, April 2017).

Moyné Planning Permit 20060221-A allows for construction and operation of the Hawkesdale Wind Farm. Clause 33 of the planning permit allows for:

- The removal of no more than 0.872 hectares of native vegetation.

The following native vegetation was recorded in the study area:

- 31 patches of native vegetation, totalling 6.504 hectares (including no large trees in patches); and
- No scattered trees.

The proponent proposes to remove 0.056 hectares of native vegetation in patches (including no large trees in patches and no DELWP mapped wetlands) and no scattered trees. As the quantum of native vegetation removal is less than that allowed for in Moyné Planning Permit 20060221-A, the proposed removal complies with the permit condition to remove no more than 0.872 hectares of native vegetation. The original calculation was on the basis of removal of all native vegetation that occurred within the study

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<sup>1</sup> Hawkesdale Wind Farm Biodiversity Impact Assessment of Proposed Modification (Brett Lane and Associates, April 2017)

<sup>2</sup> Moyné Planning Scheme Applications to amend Planning Permit 2006/0221 and 2006/0222 Hawkesdale and Ryan Corner Wind Energy Farms.



area. The actual impact to native vegetation is considerably lower as impacts on native vegetation have been avoided and minimised.

The updated offset requirements are detailed in Section 6.1.3. In summary, this comprises:

- 0.002 general biodiversity equivalence units with a minimum strategic biodiversity score of 0.100 within the Glenelg Hopkins CMA area or the Moyne Shire Council.

The previous offset requirements were 0.056 GBEU’s.

One EPBC Act-listed ecological community – *Natural Temperate Grasslands of the Victorian Volcanic Plain* (NTGVVP) was recorded in the study area.

Based on the relevant guidelines, the proposed development is unlikely to result in a significant impact on NTGVVP due to the small area of impact (0.017 ha), which does not contribute to the fragmentation of this community. No other EPBC Act listed values are anticipated to be impacted, as all areas in the study area which support, or potentially support listed values, will be avoided during construction and operation of the wind farm.

Therefore, there are no implications under the EPBC Act.

The table below summarises the compliance of the information in this report with the application requirements of the *Biodiversity Assessment Guidelines* (DEPI 2013).

Application requirement		Response
<b>Applications requirements for all risk pathway applications</b>		
1.	The location of the site native vegetation is to be removed. This includes the address of the property.	A description of the location of the HDWF site is provided in Section 4.1. Areas of native vegetation to be removed are shown in Figure 1a 1d.
2.	A description of the native vegetation to be removed including: whether the native vegetation is a remnant patch, or scattered trees, in accordance with the definitions in section 2.2 of the <i>Biodiversity assessment guidelines</i> ; the area of any remnant patches of native vegetation; and the number of any scattered trees.	Description of the native vegetation to be removed is provided in Sections 4.2 and 5.2.1.  The project will result in the ‘extent loss’ of 0.056 hectares of native vegetation including: <ul style="list-style-type: none"> <li>▪ The loss of 0.056 hectares of native vegetation from remnant patches, none of which is DELWP mapped wetlands; and</li> <li>▪ The loss of no scattered trees.</li> </ul>



Application requirement		Response
3.	Maps or plans containing the following information: north point and property boundaries; all areas of native vegetation, clearly showing the native vegetation to be removed (including any area that the Country Fire Authority has recommended for removal or management for fire protection purposes); and all scattered trees to be removed.	See  Figure 1a – 1d.
4.	Recent dated photograph of native vegetation to be removed.	Representative photos of the native vegetation to be removed in the study area are provided in Appendix 4.
5.	The risk-based pathway of the application to remove native vegetation	The project will be assessed under the Low risk pathway. Further details are provided in Section 6.1.2.
6.	Where the purpose of removal, destruction or lopping of native vegetation is to create defensible space, a statement is required that explains why removal, destruction or lopping of native vegetation is necessary. The statement must have regard to other available bushfire risk mitigation measures. This requirement does not apply to the creation of defensible space in conjunction with an application under the Bushfire Management Overlay.	N/A
7.	A copy of any property vegetation plan that applies to the site.	N/A
8.	Details of any other native vegetation that was permitted to be removed on the same property with the same ownership as the native vegetation to be removed, where the removal occurred in the five year period before the application to remove native vegetation is lodged.	It is understood that no native vegetation has been approved for removal associated with the project within the last five years other than the existing permit.
9.	The strategic biodiversity score of the native vegetation to be removed.	The SBS of all native vegetation to be removed is 0.125. See Appendix 6 for more details.
10.	The offset requirements should a permit be granted to remove native vegetation.	The offset requirements are detailed in Section 6.1.3. In summary, this comprises:  0.002 <i>general</i> biodiversity equivalence units with a minimum strategic biodiversity score of 0.100 within the Glenelg Hopkins CMA area or the Moyne Shire Council.

## 2. Introduction

Hawkesdale Asset Pty Ltd as trustee for Hawkesdale Asset Trust (HAPL), a wholly owned subsidiary of Global Power Generation Australia Pty Ltd (GPGA) engaged Nature Advisory Pty Ltd (formerly Brett Lane & Associates) to conduct a flora and native vegetation assessment of the area to be developed for Hawkesdale Wind Farm. This investigation was commissioned to provide information on the extent and condition of native vegetation in the study area according to Victoria's *Biodiversity assessment guidelines* (DEPI 2013). Potential impacts on flora and communities listed under the state *Flora and Fauna Guarantee Act 1988* (FFG Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) have also been considered.

Moyne Planning Permit 20060221-A allows for construction and operation of the Hawkesdale Wind Farm. Clause 33 of the planning permit allows for:

- The removal of no more than 0.872 hectares of native vegetation.

Specifically, the scope of this investigation included:

- An updated review of existing information on flora and native vegetation in the area, including review of:
  - DELWPs Native Vegetation Information Management system (NVIM);
  - NatureKit;
  - The Victorian Biodiversity Atlas (VBA), a database administered by DELWP (2021a); and
  - The online EPBC Act Protected Matters Search Tool (DAWE 2021).
- A site survey involving:
  - Characterisation and mapping of native vegetation on the site, as defined in Victoria's *Biodiversity assessment guidelines* (the 'Guidelines'); and
  - Assessment of native vegetation in accordance with the Guidelines, including habitat hectare assessment and scattered tree assessment.

Sections 5.1, 6.2 and 6.3 of this native vegetation assessment include the results of the above-mentioned assessment methods and confirmation on whether listed species and communities will be impacted. Section 4.3 details the species recorded on site and listed flora species likely to occur on site. Section 4.4 summarises EPBC Act listed communities and likelihood of occurrence. Section 5.2.1 summarises potential impacts on native vegetation.

Seasonal surveys for threatened species and communities were carried out as required by relevant government guidelines.

Condition 34 of the planning permit requires a Native Vegetation Plan to be written to the satisfaction of DELWP Environment Portfolio and the Minister for Planning. When endorsed, the Native Vegetation Plan will form part of the planning permit. Condition 34(a) of the planning permit requires the Native Vegetation Plan to include "a final Biodiversity Assessment Report or similar which identifies all losses being approved by this permit and the associated offset requirements, in accordance with the Permitted clearing of native vegetation – Biodiversity assessment guidelines (DEPI 2013)". This report is commissioned to accompany Hawkesdale Wind Farm's Native Vegetation Plan, as required by the planning permit. The scope of the report is to assess the final impacts of Hawkesdale Wind Farm on



native vegetation. This report supplements previous biodiversity impact assessments<sup>3</sup> undertaken for the wind farm, particularly those undertaken as part of the 2017 planning permit amendment application which sought to increase wind turbine heights and were the subject of a planning panel hearing<sup>4</sup>.

Although the layout configuration has been slightly altered and the number of turbines has been reduced since then, the likely impacts of Hawkesdale Wind Farm are anticipated to be consistent with the assessment outcomes for fauna as presented in *Hawkesdale Wind Farm Biodiversity Impact Assessment of Proposed Modification (Brett Lane and Associates, April 2017)*.

The final impacts of Hawkesdale Wind Farm on native vegetation are less than what is permitted by Condition 33 of the planning permit.

This investigation was undertaken by a team from Nature Advisory, comprising Elinor Ebsworth (Senior Ecologist), Annette Cavanagh (Botanist) and Jim Grant (Senior Ecologist & Project Manager).

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<sup>3</sup> Hawkesdale Wind Farm Biodiversity Impact Assessment of Proposed Modification (Brett Lane and Associates, April 2017)

<sup>4</sup> Moyne Planning Scheme Applications to amend Planning Permit 2006/0221 and 2006/0222 Hawkesdale and Ryan Corner Wind Energy Farms.

## 3. Definitions, methods and assessment process

### 3.1. Definitions

#### 3.1.1. Study area

The study area for this investigation is defined as the current and previous iterations of the development footprint as shown in Figure 1. The study area covers 398.07 hectares.

The footprint takes into account the width of the access tracks, the cable trenches, all drainage, and the furthestmost toe of any batters. Access tracks are designed to be 5m wide with a 0.5m wide shoulder each side and width widening for turns. The design has been developed in collaboration with the civil construction contractor and their design engineers using Computer Aided Design.

All works will take place within the footprint as shown in Figure 2.

#### 3.1.2. Native vegetation

Native vegetation is currently defined in Clause 73.01 of all Victorian planning schemes as 'plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses'. The *Biodiversity assessment guidelines* define native vegetation as belonging to two categories (DEPI 2013):

- Remnant patch; or
- Scattered trees.

The definitions of these categories are provided below, along with the prescribed DELWP methods to assess them.

#### *Remnant patch*

A remnant patch of native vegetation is either:

- An area of native vegetation where at least 25 per cent of the total perennial understorey plant cover is native; and/or
- Any area with three or more native canopy trees where the canopy foliage cover is at least 20 per cent of the area.

Remnant patch condition is assessed using the habitat hectare method (Parkes et al. 2003; DSE 2004b) whereby components of native vegetation (e.g. tree canopy, understorey and ground cover) are assessed against an EVC benchmark. The score effectively measures the percentage resemblance of the vegetation to its original condition.

The NVIM system (DELWP 2020c) provides modelled condition scores for native vegetation to be used in certain circumstances (see Appendix 1). All wetlands mapped on DELWP's native vegetation layer are treated as a remnant patch (DEPI 2013).

The condition score assists in defining the biodiversity equivalence score of the native vegetation and the offset targets if removal of native vegetation is approved (see Appendix 1 for details of how scoring works).



### Scattered trees

The *Biodiversity assessment guidelines* define scattered trees as a native canopy tree<sup>5</sup> that does not form part of a remnant patch of native vegetation.

Scattered trees are counted, the species identified and their DBH (diameter at breast height or 1.3 metres above ground) measured or estimated.

### 3.2. Field methods

The field assessment was conducted on the 12<sup>th</sup> and 13<sup>th</sup> July 2017, 10<sup>th</sup> April 2018, and 4<sup>th</sup> and 5<sup>th</sup> February 2021, during which the study area was initially accessed by vehicle. Areas noted as supporting native vegetation were surveyed in detail on foot. Native vegetation recorded in the study area was mapped through a combination of aerial photograph interpretation and ground-truthing using a hand-held GPS. Some areas of native vegetation within the study area but well away from the proposed footprint have been mapped but not scored (e.g. Habitat Zones O, P and Q). No removal is proposed for these zones. Further small detailed studies were carried out on 2<sup>nd</sup> March 2021, 22<sup>nd</sup> June 2021, 13<sup>th</sup> October 2021, 9<sup>th</sup> November 2021 and 9<sup>th</sup> June 2022 to inform minor layout changes.

A targeted survey for spring-flowering listed species was undertaken on the 18<sup>th</sup> November 2020. During these surveys, transects located five metres apart were walked in areas of suitable habitat proposed to be impacted at the time (Plains Grassland in Habitat Zone G).

### 3.3. Planning permit requirements

Moyne Planning Permit 20060221-A allows for construction and operation of the Hawkesdale Wind Farm. Clause 33 of the planning permit allows for the removal of no more than 0.872 hectares of native vegetation.

### 3.4. EPBC Act

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) protects a number of threatened species and ecological communities that are considered to be of national conservation significance. Any significant impacts on these species require the approval of the Australian Minister for the Environment.

If there is a possibility of a significant impact on nationally threatened species or communities or listed migratory species, a Referral under the EPBC Act should be considered. The Minister will decide after 20 business days whether the project will be a 'controlled action' under the EPBC Act, in which case it cannot be undertaken without the approval of the Minister. This approval depends on a further assessment and approval process (lasting between three and nine months, depending on the level of assessment).

Implications under the EPBC Act for the current proposal are discussed in Section 6.2.

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<sup>5</sup> A canopy tree is a reproductively mature tree that is greater than 3 metres in height and is normally found in the upper layer of the relevant vegetation type.



### 3.5. FFG Act

The Victorian *Flora and Fauna Guarantee Act 1988* (FFG Act) lists threatened and protected species and ecological communities (DELWP 2019, DELWP 2021b). Any removal of protected flora, which includes threatened flora species and the plants that make up threatened communities, listed under the FFG Act from public land requires a Protected Flora Licence or Permit under the Act, obtained from DELWP.

The FFG Act only applies to private land where a license is required to remove grass trees, tree ferns and sphagnum moss for sale, or where an Interim Conservation Order has been made to protect critical habitat for a threatened species or community. As no such habitat has ever been declared, this mechanism under the FFG Act has never been implemented.

Implications under the FFG Act for the current proposal are discussed in Section 6.3.

### 3.6. CaLP Act

The *Catchment and Land Protection Act 1994* (CaLP Act) requires that landowners (or a third party to whom responsibilities have been legally transferred) must eradicate regionally prohibited weeds and prevent the growth and spread of regionally controlled weeds.

Weed species listed on the CaLP Act that have been recorded in the study area are discussed in Section 6.4.



## 4. Existing information and results

### 4.1. Site description, zoning and overlays

The Hawkesdale Wind Farm layout consists of a grid comprising a total of 23 turbines. The main access point (on the north side of Woolsthorpe-Heywood Road) was constructed in 2012. The study area spans four farm properties and is largely accessible by an existing network of laneways that occurs through the main property that makes up the site.

The study area predominantly comprised farming land, namely large paddocks of introduced pasture which were used for grazing by sheep and cattle. The dominant pasture species observed throughout the site was Rye Grass. Linear rows of planted trees used as windbreaks were common throughout the site. While Cypress was the most common windbreak species, other non-indigenous planted trees including Blue Gum, Yellow Gum and Cedar Wattle were observed in mixed species tree lines.

Native vegetation in the study area was largely limited to road reserves, with native grassland vegetation being recorded either side of Woolsthorpe-Heywood Road and native woodland recorded either side of Peshurst-Warrnambool Road and Woolsthorpe-Heywood Road. No native vegetation was recorded within the island in the middle of the intersection of Woolsthorpe-Heywood Road and Peshurst-Warrnambool Road. Rather, this area comprised introduced flora, namely Rat-tail Grass, Paspalum, Ribwort, Vetch and Capeweed.

A natural drainage line, Austins Creek, winds its way through the study area, crossing both roads. The drain comprises remnant swampy vegetation in the central part of the study area, however native vegetation was reduced to a very narrow band of Cumbungi where it intersected with the western section of the study area.

The study area lies within the Victorian Volcanic Plain (VVP) bioregion and falls within the Glenelg Hopkins CMA. Photos of vegetation observed in the study area are provided in Appendix 4.

### 4.2. Native vegetation

#### 4.2.1. Patches of native vegetation

Pre-European EVC mapping (DELWP 2017) indicated that the study area and surrounds would have supported Swamp Scrub (EVC 53), Plains Grassy Wetland (EVC 125), Plains Grassland (EVC 132) and Basalt Shrubby Woodland (EVC 642) prior to European settlement based on modelling of factors including rainfall, aspect, soils and remaining vegetation.

Evidence on site, including floristic composition and soil characteristics, suggested that the following EVCs were present in the study area:

- Swamp Scrub (EVC 53);
- Plains Grassy Wetland (EVC 125)
- *Heavier soils* Plains Grassland (EVC 132\_61); and
- Basalt Shrubby Woodland (EVC 642).

A description of these EVCs is provided within the EVC benchmarks in Appendix 5.

31 remnant patches (referred to herein as habitat zones) comprising the abovementioned EVCs were identified in the study area. A description of each habitat zone is provided in Table 1. All native vegetation recorded in the study area is shown in Figures 1a to 1d.



**Table 1: Description of habitat zones in the study area**

Habitat Zone	EVC	Description
A, B, C, D, E, G	Heavier soils Plains Grassland (EVC 132_61)	Areas of roadside dominated by dense cover of Kangaroo Grass. Observed herb diversity low, on account of high native grass biomass. Weed cover low (up to 10%).  Given such high perennial cover of native grasses (>75%), these areas are all considered to meet the classification of NTGVVP (See Section 5.4).
F, K,	Basalt Shrubby Woodland (EVC 642)	Woodland roadside remnants. Dominant woody cover comprised Blackwood and Black Wattle. Understorey largely comprised introduced grasses, namely Toowoomba Canary-grass, but also comprised native Kangaroo Grass.
J, L, M, N	Basalt Shrubby Woodland (EVC 642)	Highly altered woodland roadside remnants. Dominant woody cover comprised Blackwood and Black Wattle. Understorey largely comprised introduced grasses, namely Toowoomba Canary-grass, however some native flora species were recorded.
H, I	Swamp Scrub (EVC 53)	Highly altered occurrence of Swamp Scrub along naturally occurring drainage line. Patch comprises a mixture of native (Common Reed, rush, Poong'ort, Common Spike Sedge) and introduced graminoids. Nearby areas comprised Woolly Tea-tree (beyond the study area).
O, P, Q	Heavier soils Plains Grassland (EVC 132_61)	Not described, these Habitat Zones were mapped only as potential constraints, not as impact areas. They are not impacted.
AC	Plains Grassy Wetland (EVC 125)	A small area of highly modified Plains Grassy Wetland. Dominated by Common Spike-sedge and Australian Sweet-grass with a low cover of Small Loosestrife. Low cover of introduced grasses included Rye and Barley-grass. Heavily pugged with a high cover of bare ground.
EA	Swamp Scrub (EVC 53)	Patch of swamp scrub along Austin's Creek within the Hawkesdale Wind Farm site. Dominated by Narrowleaf Cumbungj and Water Ribbons with the FFG Act listed species Curly Sedge on the margin. Moderate weed cover including the high-threat weed Spear Thistle. Good cover of litter derived from native species, and good recruitment potential.
EF, EG, EI, EJ, EL	Basalt Shrubby Woodland (EVC 642)	Small patches of Basalt Shrubby Woodland on the roadsides of the Penshurst-Warnambool Road and the Woolsthorpe-Heywood Road. Dominated by Blackwood and Black Wattle understorey trees with scattered Kangaroo Grass and Bracken in the ground layer. Very high weed cover, including the high-threat weed Sweet Briar. Habitat Zone EJ also has Radiata Pine. Very high organic litter cover dominated by non-native material.



Habitat Zone	EVC	Description
EH, EK	Basalt Shrubby Woodland (EVC 642)	Patches of Basalt Shrubby Woodland on the roadside of the Penshurst-Warrnambool Road. Habitat Zone EH has many recruiting Blackwoods, while Habitat Zone EK lacks a tree and shrub layer. Ground layer dominated Kangaroo Grass with scattered native herbs. Moderate weed cover, including the high-threat weed Toowomba Canary Grass. Very high organic litter cover dominated by native material.
HA, HB, HC	Swamp Scrub (EVC 53)	Remnant Swamp Scrub along Austin's Creek with a canopy of Woolly Tea-tree and an understorey of Common Reed, rush, Poong'ort and Common Spike Sedge.  The FFG Act listed species Curly Sedge was recorded in these patches.
DA, DB, DC, DD	Heavier soils Plains Grassland (EVC 132_61)	Grasslands occurring in the disused rail reserve which bisects the study area from north to south. Separated by existing access tracks.  Vegetation was dominated by Kangaroo Grass and Spear Grasses, and included a diversity of grasses and herbs such as Common Love-grass, Common Tussock-grass, Yellow Rush-lily, Varied Raspwort, Austral Rush and several small patches of Austral Bracken.  Blackwood was observed to be recruiting in all three habitat zones beyond the study area.  Bryophytes were present at low cover (3%), and soil crusts were absent. Organic litter cover had moderate cover (30%) and was predominantly native.  Weed cover was low (5-8%) and largely low-threat, comprising Rough Dog's-tail, Sheep Sorrel, Brown-top Bent and a few individuals of Spear Thistle, with a higher cover of weeds observed at the interface between the access track and the patch of vegetation.  Habitat Zones DC and DD, were of higher quality in terms of herb diversity and weed cover. However, they did not present at a condition which warranted a higher habitat hectare score.  These habitat zone extended along the rail reserve, beyond the study area, in both directions.

The habitat hectare assessment results for these habitat zones are provided in Table 2. More detailed habitat scoring results are presented in Appendix 2.



**Table 2: Summary of habitat hectare assessment results**

Habitat Zone	EVC no.	Area (ha)	Condition score (out of 100)	Listed ecological communities (EPBC Act)
A	132_61	0.138	39	NTGVVP
B	132_61	0.017	39	NTGVVP
C	132_61	0.006	39	NTGVVP
D	132_61	1.146	38	NTGVVP
E	132_61	0.422	38	NTGVVP
F	642	0.069	15	-
G	132_61	0.755	38	NTGVVP
H	53	0.129	25	-
I	53	0.087	25	-
J	642	0.065	18	-
M	642	0.069	15	-
N	642	0.929	Not assessed	-
O	132_61	0.096	Not assessed	Potential - Not assessed
P	132_61	0.046	Not assessed	Potential - Not assessed
Q	132_61	0.124	Not assessed	Potential - Not assessed
AC	125	0.023	Not assessed	-
HA	53	0.335	26	-
HB	53	0.049	Not assessed	-
HC	53	0.012	Not assessed	-
EA	53	0.028	25	-
EF	642	0.032	11	-
EG	642	0.11	11	-
EH	642	0.022	18	-
EI	642	0.126	11	-
EJ	642	0.04	11	-
EK	642	0.004	13	-
ZZ	125	1.47	Not assessed	Not assessed
DA	132_61	0.051	45	NTGVVP
DB	132_61	0.055	45	NTGVVP
DC	132_61	0.023	45	NTGVVP
DD	132_61	0.026	45	NTGVVP
<b>Total</b>		<b>6.504</b>		

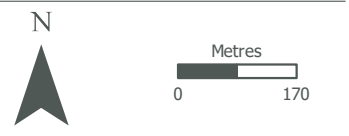
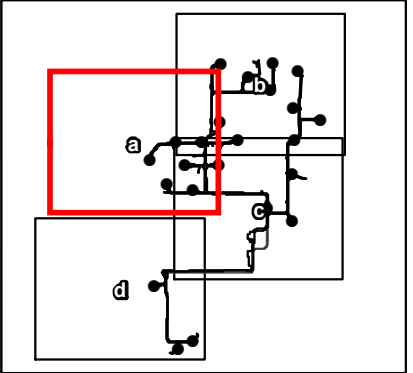
Note: Habitat zones that have not been assessed will not be directly or indirectly impacted by the wind farm.



**Figure 1-a:** Study area and native vegetation

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 19/08/2022

- ▭ Combined Study Area
- Native vegetation**
  - ▭ Plains Grassy Wetland (EVC 125)
  - ▭ Swamp Scrub (EVC 53)
  - ▲ Curly sedge





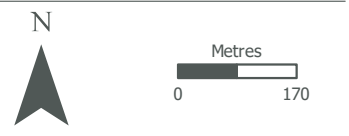
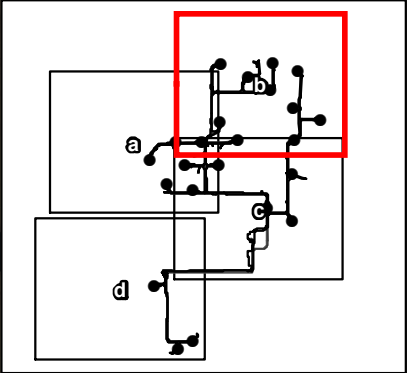
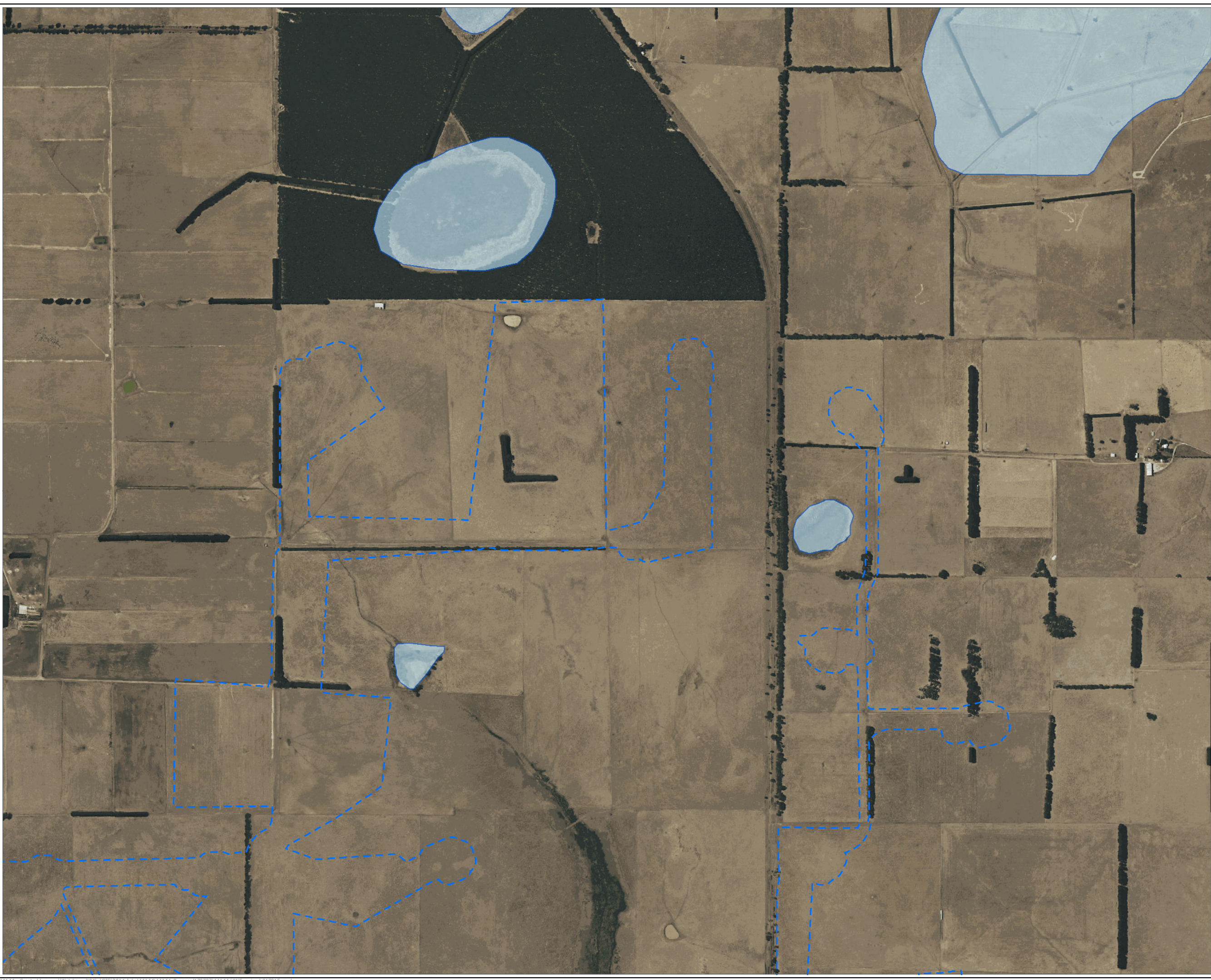
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**Figure 1-b:** Study area and native vegetation

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 19/08/2022

-  Combined Study Area
-  DELWP wetland

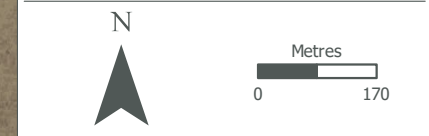
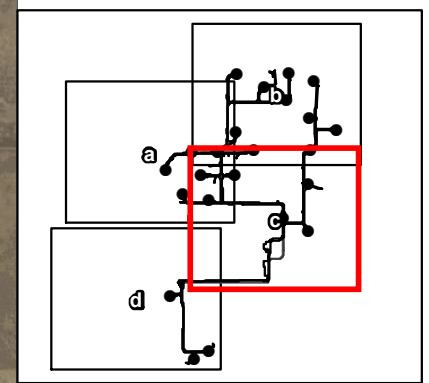
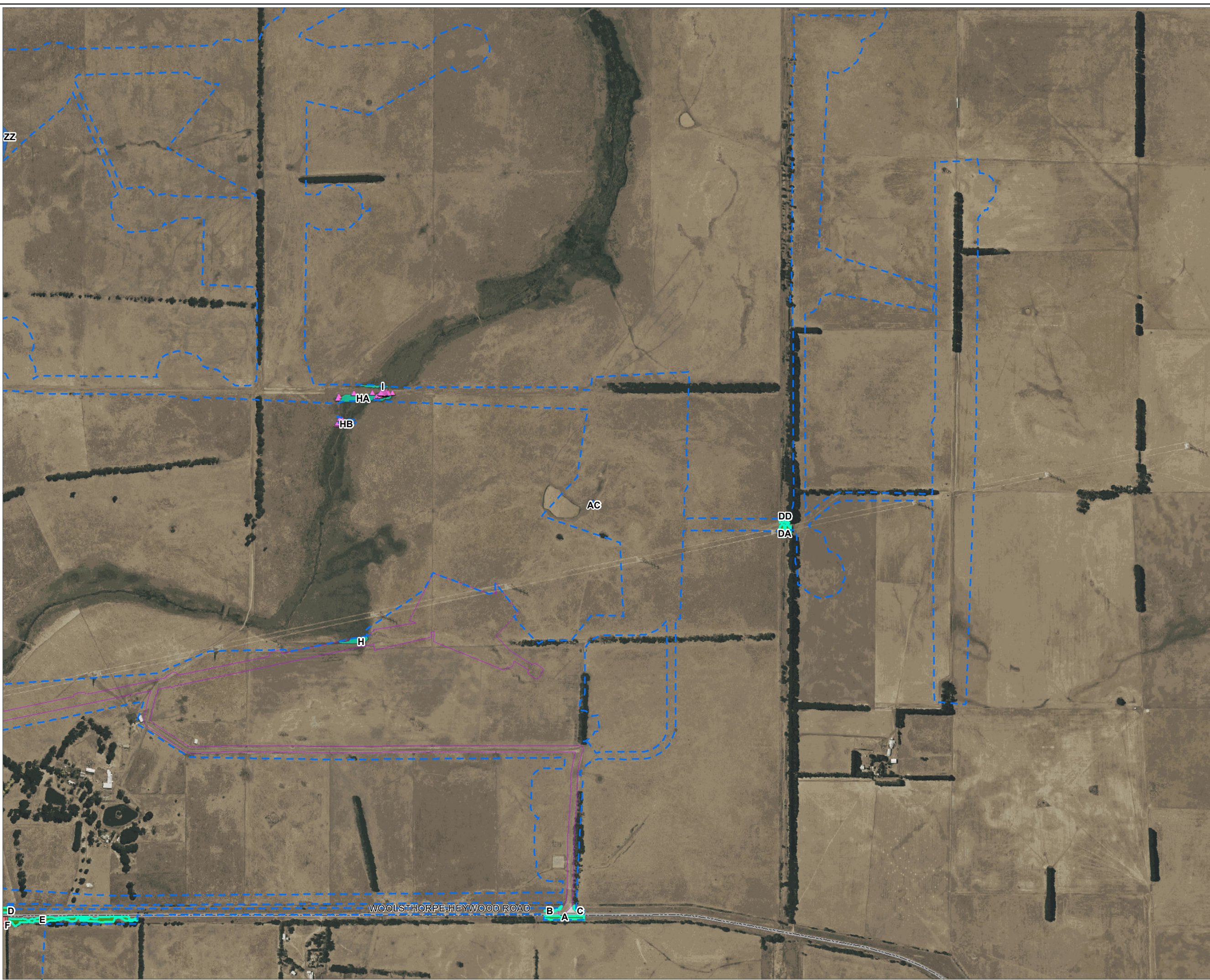




**Figure 1-c: Study area and native vegetation**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 19/08/2022

- Combined Study Area
- Combined TXL study area
- Native vegetation**
- Plains Grassy Wetland (EVC 125)
- Heavier-soils Plains Grassland (EVC 132\_61)
- Swamp Scrub (EVC 53)
- Basalt Shrubby Woodland (EVC 642)
- Black Wattle
- ▲ Curly sedge
- EPBC listed community**
- NTGVVP



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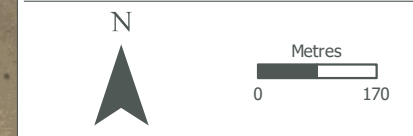
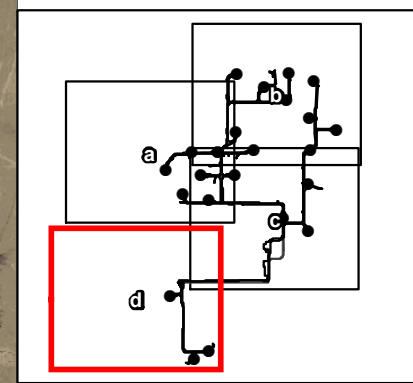
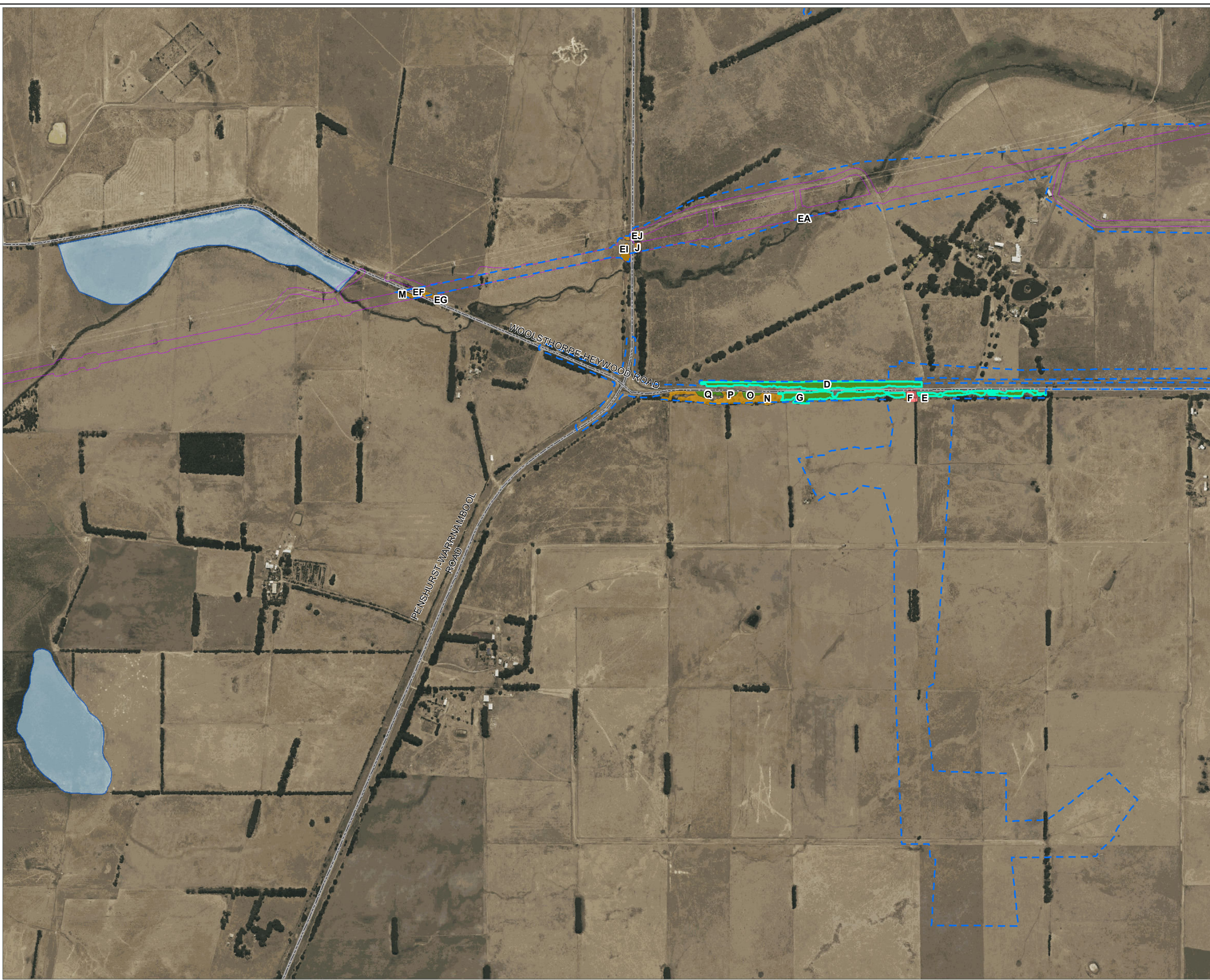
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**Figure 1-d: Study area and native vegetation**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 19/08/2022

- Combined Study Area
- Combined TXL study area
- DELWP wetland
- Native vegetation**
- Heavier-soils Plains Grassland (EVC 132\_61)
- Swamp Scrub (EVC 53)
- Basalt Shrubby Woodland (EVC 642)
- Black Wattle
- EPBC listed community**
- NTGVVP



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#### 4.2.2. Scattered trees

No scattered trees were recorded in the study area.

### 4.3. Flora species

#### 4.3.1. Species recorded

During the native vegetation assessment, 45 plant species were recorded. Of these, 23 (51%) were indigenous and 22 (49%) were introduced, non-indigenous or planted in origin (Appendix 3).

Black Wattle, a common species protected under the FFG Act, occurs in Habitat Zones F, J, K, L and M.

#### 4.3.1. Listed flora species

VBA records (DELWP 2021a) and the EPBC Protected Matters Search Tool (DAWE 2021) indicated that within the search region there were records of, or there occurred potential suitable habitat for, 19 species listed under the Commonwealth EPBC Act and 22 listed under the state FFG Act, including 15 listed under both Acts.

The likelihood of occurrence in the study area of species listed under the EPBC Act and FFG Act is addressed in Table 3. Species considered 'likely to occur' are those that have a very high chance of being in the study area based on numerous records in the search region and suitable habitat in the study area. Species considered to have the 'potential to occur' are those for which suitable habitat exists, but recent records are scarce.

This analysis indicates that the following ten listed flora species are likely to occur or have the potential to occur:

- River Swamp Wallaby-grass
- Matted Flax-lily
- Swamp Flax-lily
- Clover Glycine
- Purple Blown-grass
- Pretty Leek-orchid
- Goraee Leek-orchid
- Maroon Leek-orchid
- Button Wrinklewort
- Curly Sedge

One species listed as endangered under the FFG Act, Curly Sedge, was recorded within Habitat Zones EA, HA, HB and HC along Austins Creek. The location of this species is shown in Figure 1.

A targeted survey for spring-flowering listed species was undertaken on the 18<sup>th</sup> November 2020. During these surveys, transects located five metres apart were walked in areas of suitable habitat proposed to be impacted at the time (Plains Grassland in Habitat Zone G). No EPBC Act or FFG Act listed species were found during this survey. Subsequent to this survey being undertaken, the proposed footprint had been amended such that only Habitat Zone F will be impacted. Habitat Zone F is not considered to provide suitable habitat for any listed species, being Basalt Shrubby Woodland (EVC 642) with an understorey dominated by exotic grasses.



An additional area of the alignment was surveyed on 9/05/2022, where four patches of Plains Grassland (Habitat Zones DA-DD) were recorded. Although these habitat zones are considered to be suitable habitat for threatened species and were not surveyed at a suitable time of year, the proposal is not anticipated to impact on threatened species for the following reasons:

- The small amount of impact to Habitat Zones DA and DB (0.017 ha) is lineal removal adjacent to an existing access track where there is a high biomass cover of grassy weeds. This is not considered suitable habitat for threatened species;
- The avoidance of Habitat Zones DC and DD which have a higher potential to be suitable habitat for threatened species, due to less weed competition and higher herb diversity; and
- Given the small additional survey area, the botanist undertook extensive survey effort within these habitat zones whereby they would have likely identified conspicuous threatened species which were not easily identifiable at the time due to lack of flowers.

As such, it is considered that no potential habitat for listed species will be impacted.



**Table 3: Listed flora species and the likelihood of their occurrence in the study area**

Common Name	Scientific name	EPBC	FFG	Habitat	No. of records	Date of last record	Likelihood of occurrence
River Swamp Wallaby-grass	<i>Amphibromus fluitans</i>	VU		River Swamp Wallaby-grass grows mostly in permanent swamps and also lagoons, billabongs, dams and roadside ditches. The species requires moderately fertile soils with some bare ground; conditions that are caused by seasonally-fluctuating water levels (DAWE 2020).	None	N/A	Suitable habitat in Plains Grassy Wetland. Potential to occur in Habitat Zone AC.
Fine-hairy Spear-grass	<i>Austrostipa puberula</i>		en	Sandy areas (RBGV 2021).	1	18/11/2011	No suitable habitat. Unlikely to occur.
Curly Sedge	<i>Carex tasmanica</i>		en	Occurs in seasonally wet, fertile, heavy basalt clay soils, usually around the margins of slightly saline drainage lines or freshwater swamps. The dominant vegetation type varies, but is often grassy/sedgy and generally lacks trees (Carter 2010).	None	N/A	Suitable habitat in Swamp scrub and Plains Grassy Wetland. Recorded in Habitat Zone HA.
Matted Flax-lily	<i>Dianella amoena</i>	EN	cr	Lowland grassland and grassy woodlands on well-drained to seasonally waterlogged fertile sandy loams to heavy cracking soils derived from sedimentary or volcanic Geology. It is widely distributed from eastern to south-western Victoria (DAWE 2020).	1	29/10/2007	Suitable habitat in areas of roadside Plains Grassland. One record in the search region from 2007. Potential to occur in Habitat Zones A, B, C, D, E, G, O, P, Q and DA-DD.
Swamp Flax-lily	<i>Dianella callicarpa</i>		en	Seasonally inundated, permanently moist or waterlogged basalt, in remnant <i>Leptospermum lanigerum</i> scrub (RBGV 2021).	6	1/02/2012	Suitable habitat in areas of Swamp Scrub along Austins Creek. Potential to occur in Habitat Zones HA, HB and HC
Bell-flower Hyacinth-orchid	<i>Dipodium campanulatum</i>	EN	en	Typically found on deep grey sands or limestone in woodland (DAWE 2020).	None	N/A	No suitable habitat. Unlikely to occur.
Pale-flower Crane's-bill	<i>Geranium sp. 3</i>		en	Open, grassy areas of dry woodlands and forests (Smith 1999).	2	25/09/2019	No suitable habitat. Unlikely to occur.



Common Name	Scientific name	EPBC	FFG	Habitat	No. of records	Date of last record	Likelihood of occurrence
Clover Glycine	<i>Glycine latrobeana</i>	VU	vu	Found across south-eastern Australia in native grasslands, dry sclerophyll forests, woodlands and low open woodlands with a grassy ground layer. In Victoria, populations occur in lowland grasslands, grassy woodlands and sometimes in grassy heath (DAWE 2020).	5	13/11/2019	Suitable habitat exists in areas of roadside Plains Grassland. Several records in search region, including recent (2019). Potential to occur in Habitat Zones A, B, C, D, E, G, O, P, Q and DA-DD.
Coast Ixodia	<i>Ixodia achillaeoides</i> subsp. <i>arenicola</i>	VU		Confined to coastal vegetation in the Cape Bridgewater-Portland area (Short 1999).	None	N/A	No suitable habitat. Unlikely to occur.
Adamson's Blown-grass	<i>Lachnagrostis adamsonii</i> subsp. <i>adamsonii</i>	VU	en	Confined to slow moving creeks, swamps, flats, depressions or drainage lines that are seasonally inundated or waterlogged and usually moderately to highly saline. Appear to favour sites that have some shelter from the wind (DAWE 2020).	None	N/A	Suitable habitat in Swamp Scrub and Plains Grassy Wetland, but marginal due to lack of salinity. No records nearby. Unlikely to occur.
Purple Blown-grass	<i>Lachnagrostis punicea</i> subsp. <i>filifolia</i>		en	Seasonally wet, heavy clay soils (Walsh 1994).	2	21/11/2011	Suitable habitat in Plains Grassy Wetland. Potential to occur in Habitat Zone AC.
Basalt Peppercross	<i>Lepidium hyssopifolium</i> s.s.	EN	en	Known to establish on open, bare ground with limited competition from other plants. Previously recorded from Eucalypt woodland with a grassy ground cover, low open Casuarina woodland with a grassy ground cover and tussock grassland. Now generally found amongst exotic pasture grasses and beneath exotic trees (DAWE 2020).	None	N/A	No suitable habitat. Unlikely to occur.
Giant myrtle	<i>Melaleuca armillaris</i> subsp. <i>armillaris</i>		en	Near coastal sandy heaths. Widely planted	3	26/02/2011	No suitable habitat. Unlikely to occur.



Common Name		Scientific name	EPBC	FFG	Habitat	No. of records	Date of last record	Likelihood of occurrence
Pretty orchid	Leek-	<i>Prasophyllum anticum</i>		cr	Grassland on moist to wet black basaltic loam (RBGV 2021).	1	30/06/2002	Suitable habitat exists in areas of roadside Plains Grassland. One record in the search region from 2002. Potential to occur in Habitat Zones A, B, C, D, E, G, O, P, Q and DA-DD.
Gorae orchid	Leek-	<i>Prasophyllum diversiflorum</i>	EN	cr	Wet grasslands or inundated swamps among tussocks (Jones 2006).	None	N/A	Suitable habitat in Plains Grassy Wetland. Potential to occur in Habitat Zone AC.
Maroon orchid	Leek-	<i>Prasophyllum frenchii</i>	EN	en	Grows mainly in open sedge swampland or in wet grassland and wet heathland generally bordering swampy regions. Sites are generally low altitude, flat and moist. Soils are generally moderately rich damp sandy or black clay loams. Climate is mild, with an annual rainfall of 600–1100 mm, occurring predominantly in winter and spring (DAWE 2020).	3	13/11/2005	Suitable habitat in Plains Grassy Wetland. Potential to occur in Habitat Zone AC.
Dense orchid	Leek-	<i>Prasophyllum spicatum</i>	VU	cr	Occurs in coastal and near-coastal heathland and heathy woodland. Soils are generally sandy, with some sites seasonally waterlogged (Duncan 2010).	None	N/A	No suitable habitat. Unlikely to occur.
Green-striped Greenhood		<i>Pterostylis chlorogramma</i>	VU	en	Occurs in mixed Box-Stringybark forest with a shrubby understorey, often with <i>Pteridium esculentum</i> as a major component on sandy or clay loam soils (Duncan et al. 2009).	None	N/A	No suitable habitat. Unlikely to occur.
Leafy Greenhood		<i>Pterostylis cucullata</i>	VU		Tea-tree scrubs on tall sandy and calcareous dunes, in moist, open or even deep shaded locations (Jones 1994).	None	N/A	No suitable habitat. Unlikely to occur.
Button Wrinklewort		<i>Rutidosia leptorhynchoides</i>	EN	en	In Victoria restricted to open stands of plains grassland and grassy woodlands, on fertile clays	None	N/A	Suitable habitat exists in areas of roadside Plains



Common Name	Scientific name	EPBC	FFG	Habitat	No. of records	Date of last record	Likelihood of occurrence
				to clay loams, usually in areas where the grass cover is more open, either as a result of recurrent fires or grazing by native macropods or stock. It also occurs on low rises with shallow, stony soils at less than 100 m above sea level.			Grassland. Potential to occur in Habitat Zones A, B, C, D, E, G, O, P, Q and DA-DD.
Large-headed Fireweed	<i>Senecio macrocarpus</i>	VU	cr	In Victoria, Large-fruit Fireweed occurs most commonly in grasslands on red-brown earth soils. It may also occur in grassy woodlands and open woodlands predominantly in the Western (Basalt) Plains grassland on red brown earth soils found on recent Quaternary (basalt) deposits (DAWE 2020).	None	N/A	No suitable habitat. Unlikely to occur.
Swamp Fireweed	<i>Senecio psilocarpus</i>	VU		Herb-rich winter-wet swamps on volcanic clays or peaty soils (Walsh 1999). Known from approximately 10 sites between Wallan, about 45 km north of Melbourne, and Honans Scrub in south-eastern South Australia (TSSC 2008).	1	3/09/1995	No suitable habitat. Unlikely to occur.
Coast Dandelion	<i>Taraxacum cygnorum</i>	VU	cr	Woodland and scrub on limestone (Scarlett 1999).	None	N/A	No suitable habitat. Unlikely to occur.
Metallic Sun-orchid	<i>Thelymitra epipactoides</i>	EN	en	Grows primarily in mesic coastal heathlands, grasslands and woodlands, but is also found in drier inland heathlands, open forests and woodlands. Substrates may be moist or dry sandy loams or loamy sands. Critical habitat has not been determined but the species is likely to require open conditions, which may be created by soil disturbance or fire, for recruitment (DAWE 2020).	None	N/A	No suitable habitat. Unlikely to occur.
Spiral Sun-orchid	<i>Thelymitra matthewsii</i>	VU	en	Slightly elevated sites to 300m in well-drained soils (sandy loams to gravelly limestone soils) in light to dense forest; sometimes in coastal sandy flats (Weber & Entwisle 1994).	None	N/A	No suitable habitat. Unlikely to occur.



Common Name	Scientific name	EPBC	FFG	Habitat	No. of records	Date of last record	Likelihood of occurrence
One-flower Early Nancy	<i>Wurmbea uniflora</i>		vu	Moist, heathy lowland sites (RBGV 2021)	1	2/11/2007	No suitable habitat. Unlikely to occur.
Swamp Everlasting	<i>Xerochrysum palustre</i>	VU	cr	Grows in wetlands including sedge-swamps and shallow freshwater marshes, often on heavy black clay soils. Commonly associated genera include <i>Amphibromus</i> , <i>Baumea</i> , <i>Carex</i> , <i>Chorizandra</i> , <i>Craspedia</i> , <i>Eleocharis</i> , <i>Isolepis</i> , <i>Lachnagrostis</i> , <i>Lepidosperma</i> , <i>Myriophyllum</i> , <i>Phragmites australis</i> , <i>Themeda triandra</i> and <i>Villarsia</i> (DAWE 2020).	None	N/A	No suitable habitat. Unlikely to occur.

**Notes:** EPBC = threatened species status under EPBC Act (CR = critically endangered; EN = endangered; VU = vulnerable); FFG = threatened species status under the FFG Act (cr = critically endangered; en = endangered; vu = vulnerable)



#### 4.4. Listed Ecological Communities

The EPBC Protected Matters Search Tool (DAWE 2021) indicated that four ecological communities listed under the EPBC Act had the potential to occur in the study area (Table 4). Of these, one EPBC Act listed ecological community, *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP), was recorded in the study area. These zones would also qualify as the FFG Act listed *Western (Basalt) Plains Grassland Community* (W(B)PGC).

**Table 4: EPBC Act listed ecological communities and likelihood of occurrence in the study area**

Ecological Community	EPBC	Occurrence in the study area
Grassy Eucalypt Woodland of the Victorian Volcanic Plain	CR	Roadside remnants of woodland recorded in the study area lacked a canopy and large tree component, and had a high cover of introduced flora in the understorey, therefore was not considered to support the listed community.  Does not occur in the study area.
Natural Temperate Grassland of the Victorian Volcanic Plain	CR	Recorded within six habitat zones either side of Woolsthorpe – Heywood Road. Each of these habitat zones were dominated by Kangaroo Grass and supported a high proportionate cover of native grasses (>50%).  Occurs in Habitat Zones A, B, C, D, E, G and DA-DD in the study area.  Note: Habitat zones O, P and Q have not been assessed against the criteria for NTGVVP. No removal is proposed from these zones.
Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains	CR	No wetland vegetation that meets the criteria was recorded in the study area.  Does not occur in the study area.
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	CR	No relevant woodland was recorded in the study area.  Does not occur in the study area.

**Notes:** EPBC = status under EPBC Act: CR = critically endangered.



## 5. Assessment of impacts

### 5.1. Approved development

The Hawkesdale Wind Farm will be constructed to the east of Hawkesdale. The portion of the site that will be directly impacted by construction activities (impact area) will comprise the following infrastructure:

- 23 wind turbines;
- Cabling between turbines and the on-site substation;
- Crane Hardstand Platforms;
- Access Track layout;
- Access Road Entrances – two entrances off Woolsthorpe-Heywood Road;
- The island in the middle of the intersection of Woolsthorpe-Heywood Road and Peshurst-Warrnambool Road;
- On-site substation;
- On-site concrete batching plant; and
- Site compound.

To determine impacts to native vegetation, the approved development plan was overlaid with the native vegetation mapped as part of this investigation, as shown in Figure 2. It is understood that micro-siting of infrastructure may be required, but that HAPL have committed to only micro siting within the surveyed study area (as shown in Figure 2) where this does not impact on mapped native vegetation.

The external transmission line connecting Hawkesdale Wind Farm to the Tarrone terminal station will be addressed in a separate report and planning permit and are therefore not considered here. Cumulative impacts of the wind farm and the external transmission line will be addressed in the transmission line's native vegetation impact assessment and planning permit application for the removal of native vegetation.

### 5.2. Impacts of approved development

#### 5.2.1. Native vegetation

The current proposal footprint will result in the loss of a total 'extent' of 0.056 hectares of native vegetation as represented in Figure 1 and documented in the BIOR report provided by DELWP (Appendix 6). This comprised:

- The loss of 0.056 hectares of native vegetation from remnant patches;
- No loss of native vegetation from DELWP mapped wetlands; and
- No scattered trees.

It is understood that no native vegetation has been approved for removal associated with the project within the last five years other than the existing permit (20060221-A), the subject of this assessment.

Therefore the total extent of removal for determining 'extent risk' is 0.056 hectares. Representative photographs of native vegetation proposed for removal are provided in Appendix 4.



### 5.2.2. Modelled species important habitat

The current proposal footprint will not have a proportional impact on modelled habitat above the specific offset threshold for any rare or threatened species listed on DELWP's advisory lists as determined by DELWP and presented in Appendix 6.

### 5.2.3. Listed flora species

One flora species listed under the FFG Act, Curly Sedge, was recorded in habitat zones EA, HA, HB and HC along Austin's Creek. Potential habitat for other listed species occurs in areas of Swamp Scrub, Plains Grassy Wetland and *Heavier-soils* Plains Grassland. The approved development will not impact any of these areas. Therefore, the approved development will not impact any EPBC or FFG Act listed flora species.

Eight individual Black Wattle plants, a common species protected under the FFG Act, will be impacted in Habitat Zone F. A permit to remove protected flora under the FFG Act will be required prior to the removal of these plants.

### 5.2.1. Threatened ecological communities

One EPBC Act listed community occurs within the study area, *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP), which also qualifies as the FFG Act listed community *Western (Basalt) Plains Grassland Community* (W(B)PGC).

The approved development footprint impacts on this community within Habitat Zones DA and DB. The vast majority of this community has been avoided during detailed design of the transmission line, including narrowing and micro siting the access track in this locality. However, this residual impact is considered unavoidable without undermining the key objectives of the proposal. This was deemed not to be a significant impact and therefore not require a referral to the commonwealth for the following reasons:

- The small extent of proposed removal (0.017 ha),
- The area of removal will not lead to fragmentation as it is adjacent to an existing track which is an existing barrier to the connectivity of this community; and
- The area to be impacted consists of small fragments of much larger patches extending throughout the rail reserve corridor. The small area of removal would not detrimentally affect the viability of the larger areas of community.

The layout has been designed to avoid all other instances of this listed communities (confirmed and potential), as shown in Figure 1. As such, the approved development will not result in a significant impact to any EPBC or FFG Act listed communities.







### 5.2.2. Waterways

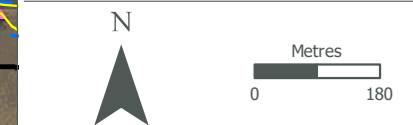
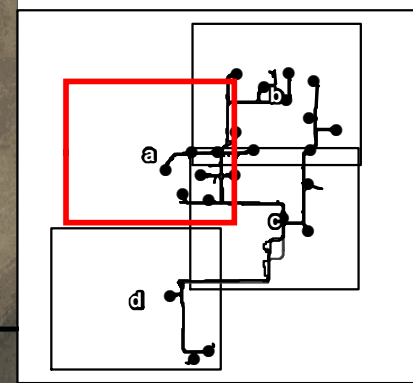
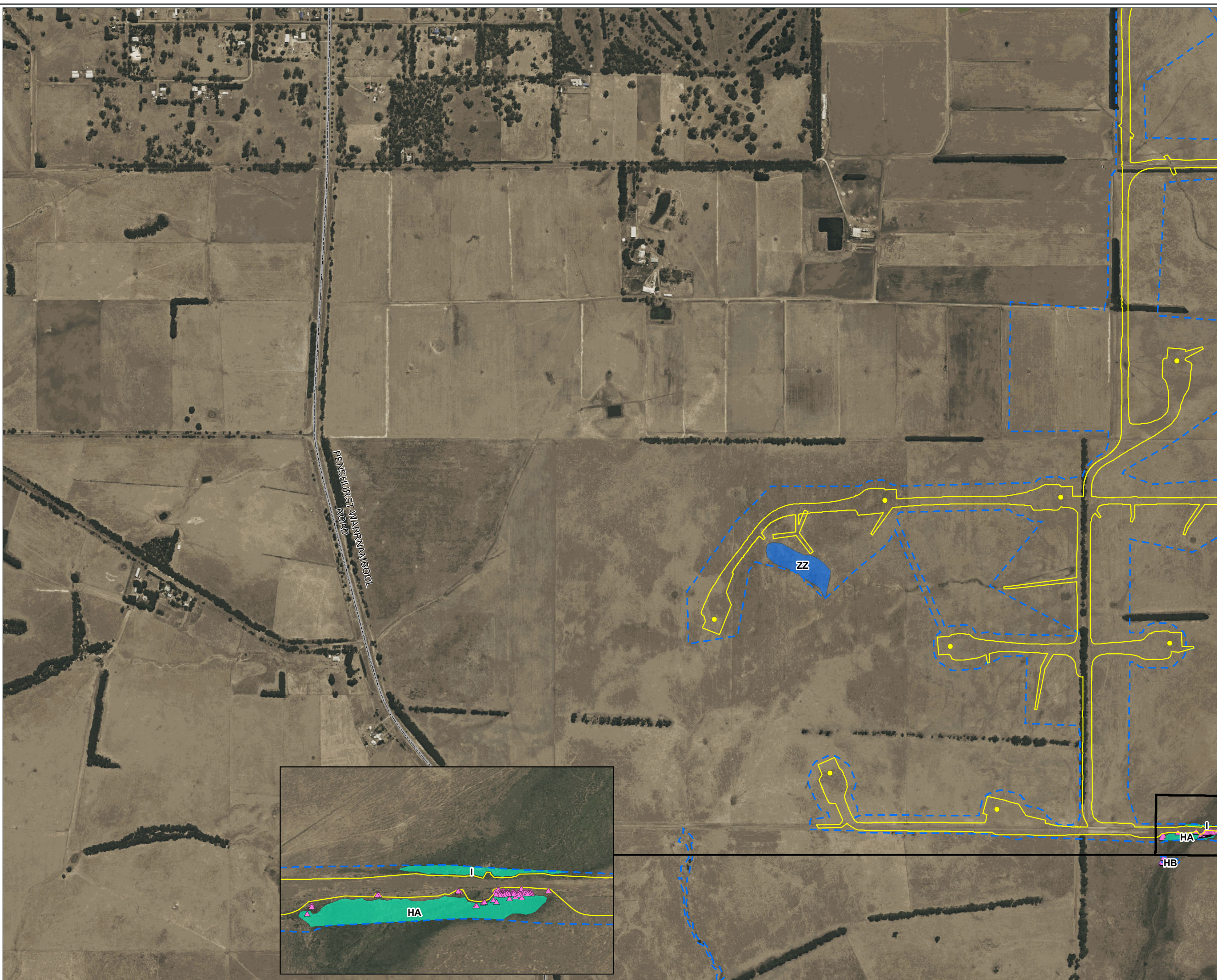
There are no direct impacts on DELWP mapped wetlands or waterways. With respect to indirect impacts, most waterway crossings will use existing tracks, including the one crossing of Austins Creek. Any new crossings at small channelised ephemeral waterways and other minor ephemeral waterways will involve adequate drains to address flows after heavy rains.



**Figure 2-a: Native vegetation to be removed**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 4/08/2022

-  Combined Study Area
-  Development footprint
-  Turbine location
- Native vegetation**
  -  Plains Grassy Wetland (EVC 125)
  -  Swamp Scrub (EVC 53)
  -  Curly sedge



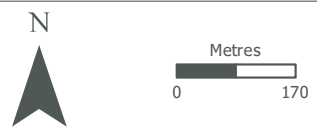
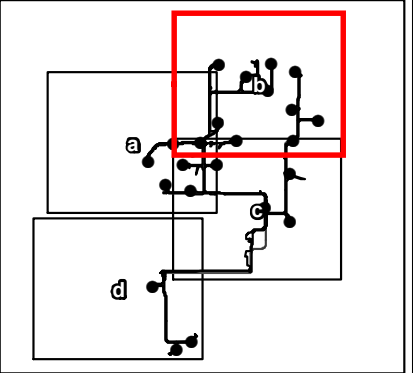
PO Box 337, Camberwell, VIC 3124, Australia  
www.natureadvisory.com.au  
03 9815 2111 - info@natureadvisory.com.au



**Figure 2-b:** Native vegetation to be removed

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 4/07/2022

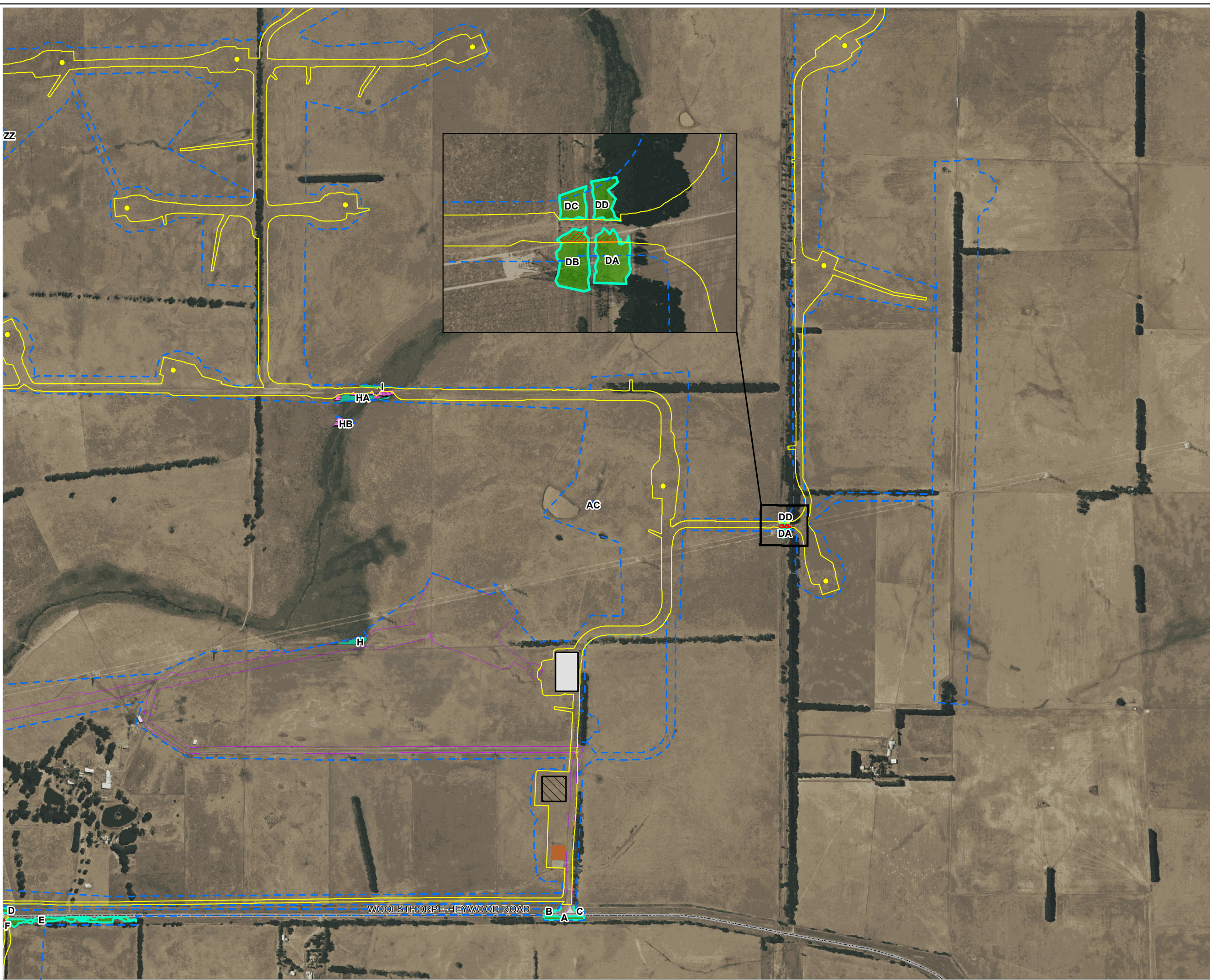
- Combined Study Area
- Development footprint
- Turbine location
- DELWP wetland



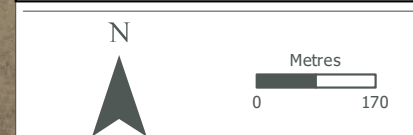
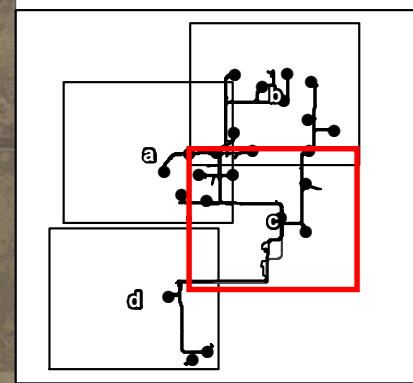


**Figure 2-c: Native vegetation to be removed**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 6/07/2022



- Combined Study Area
- Combined TXL study area
- Development footprint
- Turbine location
- Concrete Batching Plant
- Site Compound
- Substation On-Site
- Native vegetation**
- Plains Grassy Wetland (EVC 125)
- Heavier-soils Plains Grassland (EVC 132\_61)
- Swamp Scrub (EVC 53)
- Basalt Shrubby Woodland (EVC 642)
- ▲ Curly sedge
- EPBC listed community**
- NTGVVP
- Native vegetation to be removed



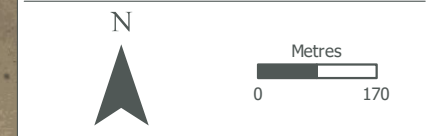
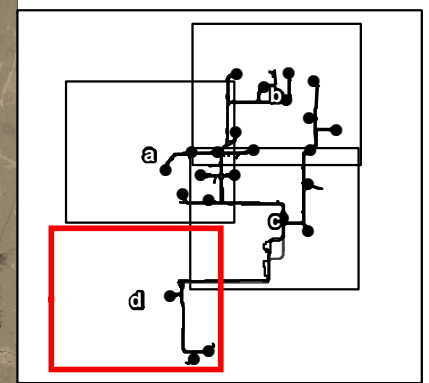
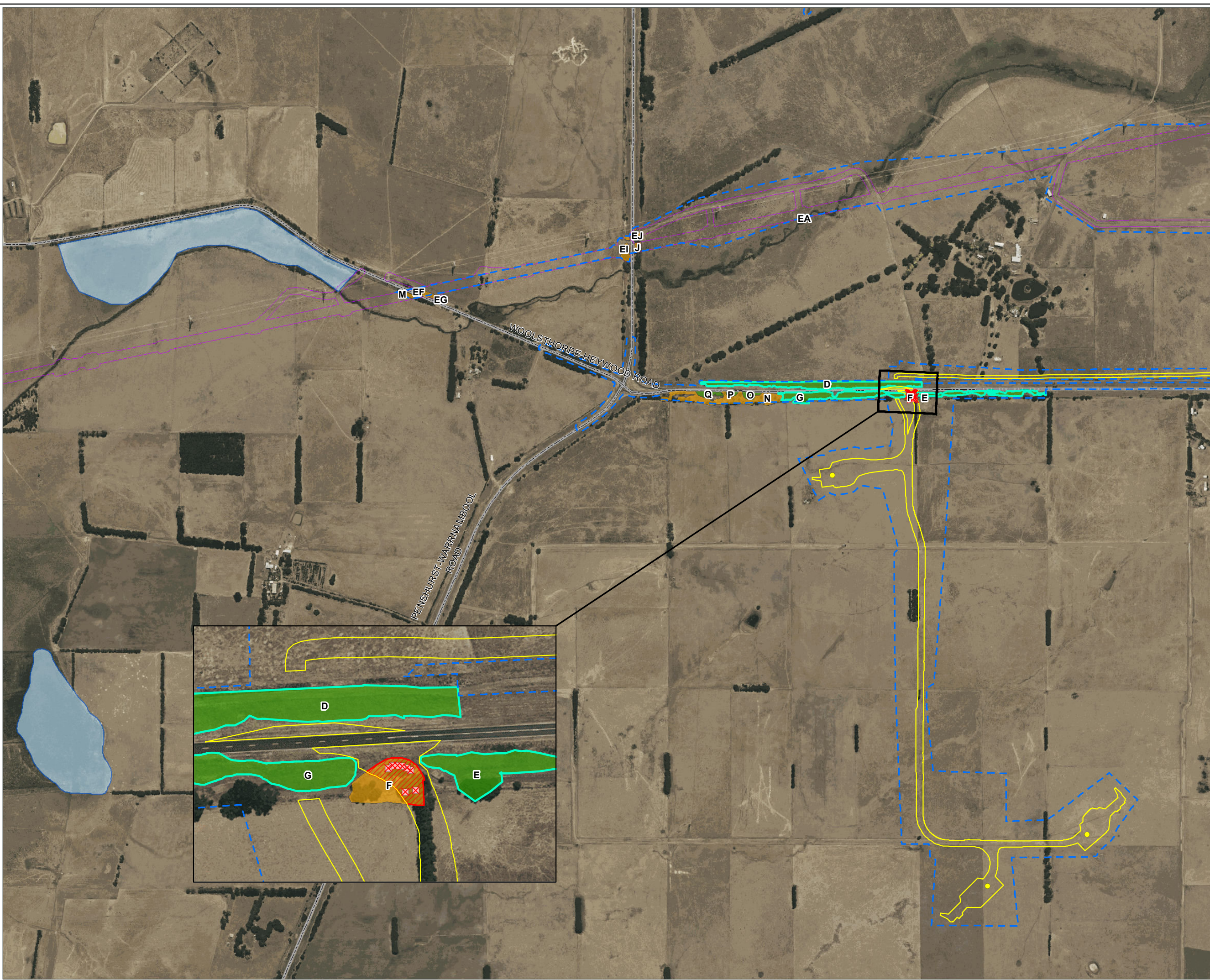
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**Figure 2-d: Native vegetation to be removed**

**Project:** Hawkesdale Wind Farm  
**Client:** Hawkesdale Wind Farm Pty Ltd  
**Date:** 19/08/2022

- Combined Study Area
- Combined TXL study area
- Development footprint
- Turbine location
- DELWP wetland
- Native vegetation**
- Heavier-soils Plains
- Grassland (EVC 132\_61)
- Swamp Scrub (EVC 53)
- Basalt Shrubby Woodland (EVC 642)
- Black Wattle
- EPBC listed community**
- NTGVVP
- ✕ Black Wattle to be removed
- Native vegetation to be removed



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## 6. Implications under legislation and policy

### 6.1. Implications under the Biodiversity Assessment Guidelines

#### 6.1.1. Avoid and minimise statement

In accordance with the Biodiversity Assessment Guidelines, the following avoid and minimise statement details any efforts undertaken to avoid the removal of, and minimise the impacts on biodiversity and other values of native vegetation, and how these efforts focussed on areas of native vegetation that have the most value:

- Wherever possible, the wind farm layout has been designed to avoid and minimise impacts on native vegetation;
- The footprint is precautionary and represents outmost requirement for construction activities.

All EPBC and FFG Act listed species and communities except for a small area of NTGVVP have been avoided (see Figure 1);

- The site entrance on the southern side of the Woolsthorpe-Heywood Road has been re-designed such that higher-quality Plains Grassland vegetation, which also qualifies as the EPBC Act listed community NTGVVP and constitutes potential habitat for listed species, has been avoided entirely. Impacts will be restricted to Habitat Zone F (see 1d), which has a lower condition score than adjacent vegetation, and is not considered potential habitat for listed species;
- The access track has been redesigned and narrowed where it crosses the rail reserve to avoid impacts to Habitat Zone DC and DD and minimise impacts to DA and DA, reducing the impact to the EPBC listed community NTGVVP to 0.017 hectares.
- Cabling will be directionally drilled under the Woolsthorpe-Heywood Road to avoid impacts to roadside vegetation (see 1d); and
- The crossing of Austins Creek will be restricted to an existing crossing to avoid impacts to native vegetation and the FFG Act listed Curly Sedge (see 1c). The existing farm track will be upgraded at the crossing and the three cables run under the track to avoid impacts to the native riparian vegetation either side (swamp scrub).

Moyne Planning Permit 20060221-A assumed full removal of all native vegetation mapped in the initial (2017) assessment (0.872 hectares). Subsequently, access tracks and turbines have been designed and sited to avoid/minimise impacts on native vegetation such that the current approved footprint will result in the loss of a total extent of 0.056 hectares of native vegetation.

As the quantum of native vegetation removal is less than that allowed for in Moyne Planning Permit 20060221-A, it is considered that the proposed removal will comply with the permit conditions.



### 6.1.2. Risk-based assessment pathway for the site

#### Location risk

The area of proposed native vegetation removal contained mapped areas of the following *location risk* categories:

- Location Risk A – covering all of this area.

#### Extent risk

The *Biodiversity Impact and Offset Requirement* ('BIOR) report provided by DELWP (Appendix 6) has determined that the extent of loss proposed is 0.056 hectares. It is understood that no native vegetation has been approved for removal associated with the project within the last five years other than the existing permit.

#### Risk-based assessment pathway

Based on the criteria outlined in the Guidelines the proposal will be assessed under the **low** risk assessment pathway.

### 6.1.3. Offset requirements

Offsets required to compensate for the proposed removal of native vegetation zones have been determined using site-based habitat hectare scores and additional modelled data provided in the BIOR report (Appendix 6). These are presented below.

- 0.002 *general* biodiversity equivalence units

Offsets must be located within the Glenelg Hopkins Catchment Management Authority area or the Moyné local government area and must have a minimum strategic biodiversity score of 0.100<sup>1</sup>. Under the Biodiversity Assessment Guidelines *all* offsets must be secured prior to the removal of native vegetation.

### 6.1.4. Offset statement

Offsets associated with the original 0.872 hectares of native vegetation removal is 0.056 *general* biodiversity equivalence units with a minimum strategic biodiversity score of 0.146 have previously been secured. This is in excess of what is required for the proposed removal (see above). Offsets for the proposed removal are therefore considered secured.

Evidence that the required offset has been secured is provided in Appendix 7.

## 6.2. EPBC Act

The EPBC Act protects a number of threatened species and ecological communities that are considered to be of national conservation significance. Any significant impacts on these species require the approval of the Australian Minister for the Environment.

Based on the relevant guidelines, the proposed development is unlikely to result in a significant impact on EPBC Act-listed values presented below.

- *Natural Temperate Grasslands of the Victorian Volcanic Plains* (NTGVVP); or
- Any potential habitat for EPBC Act listed flora species.

Therefore, there are no implications under the EPBC Act.



### 6.3. FFG Act

The Victorian FFG Act lists threatened and protected species and ecological communities (DELWP 2019, DELWP 2021b). Any removal of threatened flora species or communities (or protected flora) listed under the FFG Act from public land requires a Protected Flora Permit under the Act, obtained from DELWP.

The FFG Act only applies to private land in relation to the commercial collection of grasstrees, tree-ferns and sphagnum moss.

Eight individual Black Wattle plants, a common species protected under the FFG Act, will be impacted in Habitat Zone F as shown in Figure 2-d. A permit to remove protected flora under the FFG Act will be sought for the project prior to impact to these plants.

### 6.4. CaLP Act

The *Catchment and Land Protection Act 1994* (CaLP Act) requires that landowners (or a third party to whom responsibilities have been legally transferred) must eradicate regionally prohibited weeds and prevent the growth and spread of regionally controlled weeds.

Property owners who do not eradicate Regionally prohibited weeds or prevent the growth and spread of Regionally controlled weeds for which they are responsible, may be issued with a Land Management Notice or Directions Notice that requires specific control work to be undertaken.

In accordance with the *Catchment and Land Protection Act 1994*, the noxious weed species listed below, which were recorded in the study area, must be controlled.

- Spear Thistle
- Sweet Briar

Precision control methods that minimise off-target kills (e.g. spot spraying) should be used in environmentally sensitive areas (e.g. within or near native vegetation, waterways, etc.).



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## Appendix 1: Details of the assessment process in accordance with the *Permitted clearing of native vegetation: Biodiversity assessment guidelines (DEPI 2013)*

### Native Vegetation Information Management system (NVIM)

The online Native Vegetation Information Management system (NVIM) is an interactive mapping tool, which provides some of the information required to accompany a permit to remove native vegetation. It does not replace the application process.

The information provided by NVIM can include the following (described in more detail below):

- The *location risk* of the native vegetation;
- The *condition* of the native vegetation – used for the low-risk assessment pathway only;
- The *strategic biodiversity score* of the native vegetation proposed to be removed; and
- The *native vegetation offset* requirement – used for the low risk assessment pathway only.

### Biodiversity assessment guidelines

#### Guidelines objective

As set out in *Permitted clearing of native vegetation – Biodiversity assessment guidelines* ('the Guidelines') the objective for permitted clearing of native vegetation in Victoria is 'No net loss in the contribution made by native vegetation to Victoria's biodiversity'. The key strategies for ensuring this outcome when considering an application to remove native vegetation are:

- Avoiding the removal of native vegetation that makes a significant contribution to Victoria's biodiversity;
- Minimising impacts on Victoria's biodiversity from the removal of native vegetation; and
- Where native vegetation is permitted to be removed, ensuring it is offset in a manner that makes an equivalent contribution to Victoria's biodiversity made by the native vegetation to be removed.

**Note:** if native vegetation does not meet the definition of either a remnant patch or scattered trees, the Guidelines are not required to be applied.

#### Risk-based assessment pathways

The first step in determining the type of assessment required for any site in Victoria is to determine the risk to biodiversity associated with the proposed native vegetation removal and therefore the risk-based assessment pathway for the proposed native vegetation removal. There are three risk-based pathways for assessing an application to remove native vegetation, below.

- Low risk
- Moderate risk
- High risk

This risk-based assessment pathway is determined by two factors, outlined below.

**Extent risk** – the area in hectares proposed to be removed or the number of scattered trees. *Note:* extent risk also includes any native vegetation clearing for which permission has been granted in the last five years.

**Location risk** – the likelihood that removing native vegetation in a location will have an impact on the persistence of a rare or threatened species classified into three categories: Location A, Location B and Location C.



The risk-based pathway for assessing an application to remove native vegetation is determined by the following matrices for remnant patches and scattered trees:

Extent (remnant patches)	Location A	Location B	Location C
< 0.5 hectares	Low	Low	High
≥ 0.5 hectares and < 1 hectare	Low	Moderate	High
≥ 1 hectare	Moderate	High	High
Extent (scattered trees)	Location A	Location B	Location C
< 15 scattered trees	Low	Moderate	High
≥ 15 scattered trees	Moderate	High	High

All native vegetation within any subdivision plot of less than 0.4 hectares is deemed to be lost; For applications with combined removal of both remnant patch and scattered trees, the extent of the scattered trees is converted to an area by assigning a standard area of 0.070 hectares per tree – the total extent is then used to determine the risk-based pathway.

The presence of any Location B or Location C risk categories within an area of proposed native vegetation removal means this whole area of removal is considered to belong to that category for the purpose of determining the risk-based assessment pathway.

#### Strategic biodiversity score

The strategic biodiversity score generated by NVIM acts as a measure of the site's importance for Victoria's biodiversity relative to other locations across the landscape. It is calculated based on a weighted average of scores across an area of native vegetation proposed for removal on a site.

#### Habitat importance

Habitat importance mapping produced by DELWP is based on one or a combination of habitat importance models, habitat distribution models or site record data. It identifies the following:

- *Habitat importance for dispersed species* – based on habitat distribution models and assigned a habitat importance score ranging from 0 to 1; and
- *Highly localised habitats* – considered to be equally important for a particular species and assigned a habitat importance score of 1.

Habitat importance mapping is used to determine the type of offset required under the moderate and high risk assessment pathways.

#### Biodiversity equivalence

Biodiversity equivalence scores are used to quantify losses in the contribution to Victoria's biodiversity from removing native vegetation and gains in this contribution from a native vegetation offset.

There are two types of biodiversity equivalence scores depending on whether or not the site makes a contribution to the habitat of a Victorian rare or threatened species.

- A *general* biodiversity equivalence score is a measure of the contribution native vegetation on a site makes to Victoria's biodiversity overall and applies when no habitat importance scores are applicable according to the equation:

$$\text{General biodiversity equivalence score} = \text{habitat hectares} \times \text{strategic biodiversity score}$$



- A *specific* biodiversity equivalence score is a measure of the contribution that native vegetation on a site makes to the habitat of a particular rare or threatened species – calculated for each such species for which the site provides important habitat (using habitat importance scores provided by DELWP) according to the equation:

$$\text{Specific biodiversity equivalence score} = \text{habitat hectares} \times \text{habitat importance score}$$

#### Offset requirements

A native vegetation offset is required for the approved removal of native vegetation. Offsets conform to one of two types and each type incorporates a risk factor to address the risk of offset failing:

- A *general* offset applies if the removal of native vegetation impacts Victoria's overall biodiversity and has an offset risk factor of 1.5 applied according to the equation:

$$\text{General risk-adjusted offset requirement} = \text{general biodiversity equivalence score (clearing site)} \times 1.5$$

- A *specific* offset applies if the native vegetation makes a significant impact to habitat for a rare or threatened species determined by a *specific-general offset test*. It applies to each species impacted and has an offset risk factor of 2 applied according to the equation:

$$\text{Specific risk-adjusted offset requirement} = \text{specific biodiversity equivalence score (clearing site)} \times 2$$

**Note:** if native vegetation does not meet the definition of either a remnant patch or scattered trees an offset is not required.



*Summary of the Guidelines assessment process*

Decision guidelines	Offset requirements
Low-risk assessment pathway	
<p>An application for removal cannot be refused on biodiversity grounds (unless it is not in accordance with any property vegetation plan that applies to the site).</p> <p><i>Note: this guideline also applies to native vegetation that does not meet the definition of either a remnant patch or scattered trees.</i></p>	<p>General offset applies:</p> <ul style="list-style-type: none"> <li>▪ General offset = general biodiversity equivalence score (clearing site) x 1.5</li> <li>▪ Offset must be located in the same CMA<sup>^</sup> or Local Government Area as the removal</li> <li>▪ Offset must have a strategic biodiversity score at least 80% of the native vegetation removed</li> </ul> <p>Offsets must be secured before the removal of native vegetation.</p>
Moderate-risk assessment pathway	
<p>The responsible authority will consider:</p> <ul style="list-style-type: none"> <li>▪ The strategic biodiversity score and habitat importance score of the native vegetation proposed to be removed</li> <li>▪ Any property vegetation plan that applies to the site</li> <li>▪ Whether reasonable steps have been taken to ensure that impacts of the proposed removal of native vegetation on biodiversity have been minimised with regard to the contribution to biodiversity made by the native vegetation to be removed and the native vegetation to be retained</li> <li>▪ Whether an offset has been identified that meets the requirements</li> <li>▪ The need to remove native vegetation to create defensible space to reduce the risk of bushfire</li> </ul>	<p>If the proportional impact on modelled habitat for a rare or threatened species is above a predetermined threshold, a specific offset applies for that species:</p> <ul style="list-style-type: none"> <li>▪ Specific offset = specific biodiversity equivalence score (clearing site) x 2</li> <li>▪ Offset must be located in the same species habitat anywhere in Victoria as determined by DELWP habitat importance mapping</li> </ul> <p>General offsets apply where the specific offset threshold is not exceeded.</p> <p>Offsets must be secured before the removal of native vegetation.</p>
High-risk assessment pathway	
<p>In addition to the considerations for the moderate pathway the responsible authority will determine whether the native vegetation to be removed makes a significant contribution to Victoria's biodiversity. This includes considering:</p> <ul style="list-style-type: none"> <li>▪ Impacts on important habitat for rare or threatened species, particularly highly localised habitat</li> <li>▪ Proportional impacts on remaining habitat for rare or threatened species</li> <li>▪ If the removal of the native vegetation will contribute to a cumulative impact that is a significant threat to the persistence of a rare or threatened species</li> <li>▪ The availability of, and potential for, gain from offsets</li> </ul>	<p>As for the moderate pathway</p>

\* **Habitat hectares = condition score (out of 1) x extent (hectares)**

<sup>^</sup> **Catchment Management Authority**

**Note: All applications must provide information about the vegetation to be removed such as location and address of the property, description of the vegetation, maps and recent dated photographs.**



## Appendix 2: Detailed habitat hectare assessment results of native vegetation proposed for removal

Habitat Zone		F	DA	DB
Bioregion		VVP	VVP	VVP
EVC Number		642	132_61	132_61
Total area of Habitat Zone impacted (ha)		0.039	0.009	0.007
Site Condition	Large Old Trees	/10	0	N/A
	Tree Canopy Cover	/5	0	N/A
	Lack of Weeds	/15	4	9
	Understorey	/25	5	15
	Recruitment	/10	0	3
	Organic Matter	/5	5	3
	Logs	/5	0	N/A
	Site condition standardising multiplier*	1.00	1.36	1.36
	<i>Site Condition subtotal</i>	<i>14</i>	<i>41</i>	<i>41</i>
Landscape Context	Patch Size	/10	1	4
	Neighbourhood	/10	0	0
	Distance to Core	/5	0	0
Total Condition Score		/100	15	45
Condition score out of 1		0.15	0.45	0.45
EPBC Act listed ecological communities		-	NTGVVP	NTGVVP

\* Modified approach to habitat scoring - refer to Table 14 of DELWP's Vegetation Quality Assessment Manual (DSE, 2004).



## Appendix 3: Flora species recorded in the study area

Status	Common name	Species name
	Austral Bracken	<i>Pteridium esculentum</i>
	Australian Carrot	<i>Daucus glochidiatus</i>
	Black Wattle	<i>Acacia mearnsii</i>
	Black-anther Flax-lily	<i>Dianella admixta</i>
	Blackwood	<i>Acacia melanoxylon</i>
*	Brown-top Bent	<i>Agrostis capillaris</i>
	Bulrush	<i>Typha spp.</i>
*	Cape weed	<i>Arctotheca calendula</i>
*	Cedar Wattle	<i>Acacia elata</i>
(p)	Coast Manna-gum	<i>Eucalyptus viminalis subsp. pryoriana</i>
#	Coast Wattle	<i>Acacia longifolia subsp. sophorae</i>
	Common Raspwort	<i>Gonocarpus tetragynus</i>
	Common Reed	<i>Phragmites australis</i>
	Common Spike-sedge	<i>Eleocharis acuta</i>
*	Common Vetch	<i>Vicia sativa subsp. sativa</i>
	Common Wheat-grass	<i>Anthosachne scabra s.l.</i>
	Crane's Bill	<i>Geranium spp.</i>
en	Curly Sedge	<i>Carex tasmanica</i>
* (p)	Cypress-pine	<i>Callitris spp.</i>
*	Fleabane	<i>Conyza spp.</i>
	Kangaroo Grass	<i>Themeda triandra</i>
(p)	Manna Gum	<i>Eucalyptus viminalis</i>
*	Oat	<i>Avena spp.</i>
	Pale Sundew	<i>Drosera peltata s.l.</i>
*	Paspalum	<i>Paspalum dilatatum</i>
*	Perennial Rye-grass	<i>Lolium perenne</i>
	Poong'ort	<i>Carex tereticaulis</i>
*	Prairie Grass	<i>Bromus catharticus</i>
	Prickly Tea-tree	<i>Leptospermum continentale</i>
* (p)	Radiata Pine	<i>Pinus radiata</i>
*	Rat-tail Grass	<i>Sporobolus africanus</i>
*	Ribwort	<i>Plantago lanceolata</i>
	Rush	<i>Juncus spp.</i>
	Silver Banksia	<i>Banksia marginata</i>
# (p)	Southern Blue-gum	<i>Eucalyptus globulus</i>
	Spear Grass	<i>Austrostipa spp.</i>
*	Spear Thistle	<i>Cirsium vulgare</i>
*	Sweet Briar	<i>Rosa rubiginosa</i>
	Tall Rush	<i>Juncus procerus</i>
*	Toowoomba Canary-grass	<i>Phalaris aquatica</i>
*	Twiggy Turnip	<i>Brassica fruticulosa</i>
	Wallaby Grass	<i>Rytidosperma spp.</i>
	Water Ribbons	<i>Triglochin procera s.l.</i>



Status	Common name	Species name
	Woolly Tea-tree	<i>Leptospermum lanigerum</i>
# (p)	Yellow Gum	<i>Eucalyptus leucoxylon</i>

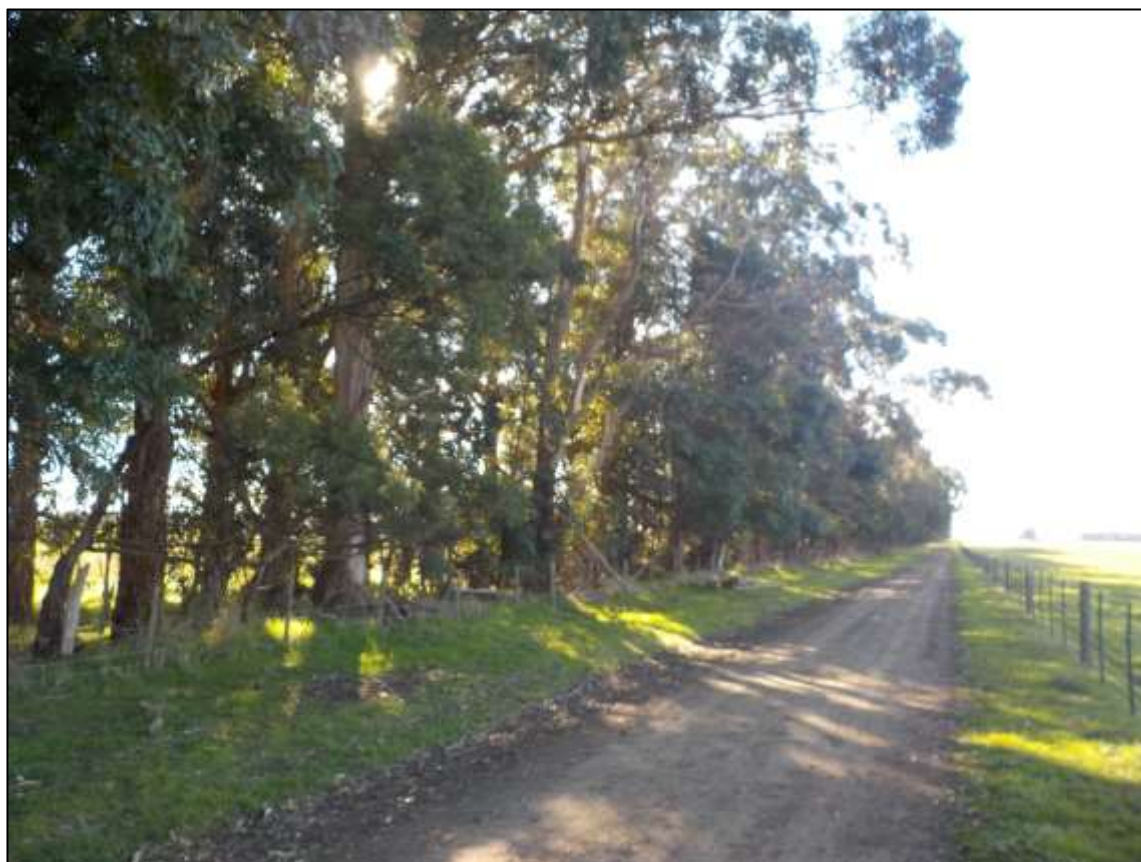
**Notes:** \* = introduced to Victoria; (p) = planted; # occurring beyond natural range; en = listed as endangered under the FFG Act.



**Appendix 4: Photographs of vegetation recorded within the study area**



Extensive areas of introduced pasture (which makes up the majority of the study area)



Row of non-native planted trees along existing laneway in the study area





Kangaroo Grass dominated Heavier soils Plains Grassland (EVC 132\_61) along Woolsthorpe – Heywood Road.



Altered occurrence of Swamp Scrub (EVC 53) along Austin's Creek





Basalt Shrubby Woodland (EVC 642) on roadside in study area



## Appendix 5: EVC benchmarks

Victorian Volcanic Plain:

- Swamp Scrub (EVC 53);
- Plains Grassy Wetland (EVC125);
- Heavier soils Plains Grassland (EVC 132\_61); and
- Basalt Shrubby Woodland (EVC 642).



# EVC/Bioregion Benchmark for Vegetation Quality Assessment

## Victorian Volcanic Plain bioregion

### EVC 53: Swamp Scrub

#### Description:

Closed scrub to 8 m tall at low elevations on alluvial deposits along streams or on poorly drained sites with high nutrient and water availability. Soils vary from organic loams to fine silts and peats which are inundated during the wetter months of the year and is dominated by either Woolly Tea-tree *Leptospermum lanigerum* or Swamp Paperbark *Melaleuca ericifolia* which often form a dense impenetrable thicket, out-competing other species. Emergent trees (eg. Swamp Gum *Eucalyptus ovata*) may some times be present. Where light penetrates to ground level, a moss/lichen/liverwort herbaceous ground cover is often present.

#### Canopy Cover:

%cover	Character Species	Common Name
60%	<i>Leptospermum lanigerum</i>	Woolly Tea-tree
	<i>Melaleuca squarrosa</i>	Scented Paperbark
	<i>Acacia melanoxylon</i>	Blackwood

#### Understorey:

Life form	#Spp	%Cover	LF code
Large Herb	5	10%	LH
Medium Herb	13	30%	MH
Small or Prostrate Herb	2	5%	SH
Large Tufted Graminoid	9	15%	LTG
Large Non-tufted Graminoid	1	1%	LNG
Medium to Small Tufted Graminoid	7	15%	MTG
Bryophytes/Lichens	na	20%	BL

LF Code	Species typical of at least part of EVC range	Common Name
LH	<i>Persicaria decipiens</i>	Slender Knotweed
LH	<i>Villarsia reniformis</i>	Running Marsh-flower
LH	<i>Epilobium pallidiflorum</i>	Showy Willow-herb
MH	<i>Hydrocotyle pterocarpa</i>	Wing Pennywort
MH	<i>Lilaeopsis polyantha</i>	Australian Lilaeopsis
MH	<i>Hydrocotyle muscosa</i>	Mossy Pennywort
SH	<i>Lobelia pedunculata s.l.</i>	Matted Pratia
SH	<i>Crassula helmsii</i>	Swamp Crassula
LTG	<i>Juncus procerus</i>	Tall Rush
LTG	<i>Gahnia clarkei</i>	Tall Saw-sedge
LTG	<i>Deyeuxia quadriseta</i>	Reed Bent-grass
LTG	<i>Amphibromus recurvatus</i>	Dark Swamp Wallaby-grass
MTG	<i>Schoenus maschalinus</i>	Leafy Bog-sedge
MTG	k <i>Lachnagrostis filiformis (perennial variety)</i>	Wetland Blown-grass
MTG	<i>Juncus planifolius</i>	Broad-leaf Rush

#### Recruitment:

Continuous

#### Organic Litter:

20% Cover



# EVC 53: Swamp Scrub - Victorian Volcanic Plain bioregion

## Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	<i>Rumex crispus</i>	Curled Dock	high	low
MH	<i>Lotus suaveolens</i>	Hairy Bird's-foot Trefoil	high	high
MH	<i>Leontodon taraxacoides ssp. taraxacoides</i>	Hairy Hawkbit	high	low
MH	<i>Hypochoeris radicata</i>	Cat's Ear	high	low
LNG	<i>Holcus lanatus</i>	Yorkshire Fog	high	high
MTG	<i>Juncus bulbosus</i>	Bulbous Rush	high	high

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# EVC/Bioregion Benchmark for Vegetation Quality Assessment

## Victorian Volcanic Plain bioregion

### EVC 125: Plains Grassy Wetland

#### Description:

This EVC is usually treeless, but in some instances can include sparse River Red Gum *Eucalyptus camaldulensis* or Swamp Gum *Eucalyptus ovata*. A sparse shrub component may also be present. The characteristic ground cover is dominated by grasses and small sedges and herbs. The vegetation is typically species-rich on the outer verges but is usually species-poor in the wetter central areas.

#### Life Forms:

Life form	#Spp	%Cover	LF code
Large Herb	5	5%	LH
Medium Herb	6	10%	MH
Small or Prostrate Herb	3	10%	SH
Large Tufted Graminoid	3	15%	LTG
Large Non-tufted Graminoid	1	5%	LNG
Medium to Small Tufted Graminoid	8	30%	MTG
Medium to Tiny Non-tufted Graminoid	2	10%	MNG
Bryophytes/Lichens	na	10%	BL

#### LF Code

#### Species typical of at least part of EVC range

#### Common Name

LH	<i>Epilobium billardierianum</i>	Variable Willow-herb
LH	<i>Villarsia reniformis</i>	Running Marsh-flower
LH	<i>Epilobium billardierianum ssp. cinereum</i>	Grey Willow-herb
MH	<i>Potamogeton tricarinatus s.l.</i>	Floating Pondweed
MH	<i>Lilaeopsis polyantha</i>	Australian Lilaeopsis
MH	<i>Utricularia dichotoma s.l.</i>	Fairies' Aprons
SH	<i>Eryngium vesiculosum</i>	Prickfoot
SH	<i>Neopaxia australasica</i>	White Purslane
SH	<i>Lobelia pratioides</i>	Poison Lobelia
LTG	<i>Juncus flavidus</i>	Gold Rush
LTG	<i>Deyeuxia quadriseta</i>	Reed Bent-grass
LTG	<i>Amphibromus nervosus</i>	Common Swamp Wallaby-grass
LTG	<i>Poa labillardierei</i>	Common Tussock-grass
MTG	<i>Triglochin procerum s.l.</i>	Water Ribbons
MTG	<i>Glyceria australls</i>	Australian Sweet-grass
MTG	<i>Juncus holoschoenus</i>	Joint-leaf Rush
MTG	<i>Austrodanthonia duttoniana</i>	Brown-back Wallaby-grass
MNG	<i>Eleocharis acuta</i>	Common Spike-sedge
MNG	<i>Eleocharis pusilla</i>	Small Spike-sedge

#### Recruitment:

Episodic/Flood. Desirable period between disturbances is 5 years.

#### Organic Litter:

20% cover

#### Logs:

5 m/0.1 ha.(where trees are overhanging the wetland)



# EVC 125: Plains Grassy Wetland - Victorian Volcanic Plain bioregion

## Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	<i>Cirsium vulgare</i>	Spear Thistle	high	high
MH	<i>Leontodon taraxacoides</i> ssp. <i>taraxacoides</i>	Hairy Hawkbit	high	low
MH	<i>Hypochoeris radicata</i>	Cat's Ear	high	low
LTG	<i>Phalaris aquatica</i>	Toowoomba Canary-grass	high	high
LNG	<i>Holcus lanatus</i>	Yorkshire Fog	high	high
MTG	<i>Briza minor</i>	Lesser Quaking-grass	high	low
MTG	<i>Romulea rosea</i>	Onion Grass	high	low
TTG	<i>Cyperus tenellus</i>	Tiny Flat-sedge	high	low

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# EVC/Bioregion Benchmark for Vegetation Quality Assessment

## Victorian Volcanic Plain bioregion

### EVC 132\_61: *Heavier-soils* Plains Grassland

#### Description:

Treeless vegetation mostly less than 1 m tall dominated by largely graminoid and herb life forms. Occupies fertile cracking basalt soils prone to seasonal waterlogging in areas receiving at least 500 mm annual rainfall.

#### Life Forms:

Life form	#Spp	%Cover	LF code
Large Herb	2	5%	LH
Medium Herb	12	20%	MH
Small or Prostrate Herb	4	5%	SH
Large Tufted Graminoid	1	5%	LTG
Medium to Small Tufted Graminoid	13	40%	MTG
Medium to Tiny Non-tufted Graminoid	4	5%	MNG
Bryophytes/Lichens and Soil Crust*	na	20%	BL

\* Note: treat as one life form in this EVC

LF Code	Species typical of at least part of EVC range	Common Name
SS	<i>Pimelea humilis</i>	Common Rice-flower
LH	<i>Rumex dumosus</i>	Wiry Dock
MH	<i>Calocephalus citreus</i>	Lemon Beauty-heads
MH	<i>Acaena echinata</i>	Sheep's Burr
MH	<i>Leptorhynchus squamatus</i>	Scaly Buttons
MH	<i>Eryngium ovinum</i>	Blue Devil
SH	<i>Solenogyne dominii</i>	Smooth Solenogyne
SH	<i>Lobelia pratioides</i>	Poison Lobelia
LTG	<i>Austrostipa bigeniculata</i>	Kneed Spear-grass
LTG	<i>Dichelachne crinita</i>	Long-hair Plume-grass
MTG	<i>Themeda triandra</i>	Kangaroo Grass
MTG	<i>Austrodanthonia caespitosa</i>	Common Wallaby-grass
MTG	<i>Elymus scaber</i> var. <i>scaber</i>	Common Wheat-grass
MTG	<i>Schoenus apogon</i>	Common Bog-sedge
MNG	<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass
MNG	<i>Thelymitra pauciflora</i> s.l.	Slender Sun-orchid
MNG	<i>Microtis unifolia</i>	Common Onion-orchid
SC	<i>Convolvulus erubescens</i>	Pink Bindweed

#### Recruitment:

Episodic/Fire or Grazing. Desirable period between disturbances is 5 years.

#### Organic Litter:

10% cover



# EVC 132\_61: *Heavier-soils* Plains Grassland - Victorian Volcanic Plain bioregion

## Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	<i>Plantago lanceolata</i>	Ribwort	high	low
LH	<i>Cirsium vulgare</i>	Spear Thistle	high	high
LH	<i>Sonchus oleraceus</i>	Common Sow-thistle	high	low
MH	<i>Hypochoeris radicata</i>	Cat's Ear	high	low
MH	<i>Leontodon taraxacoides</i> ssp. <i>taraxacoides</i>	Hairy Hawkbit	high	low
MH	<i>Trifolium subterraneum</i>	Subterranean Clover	high	low
MH	<i>Plantago coronopus</i>	Buck's-horn Plantain	high	low
MH	<i>Trifolium striatum</i>	Knotted Clover	high	low
MH	<i>Trifolium dubium</i>	Suckling Clover	high	low
LTG	<i>Phalaris aquatica</i>	Toowoomba Canary-grass	high	high
LNG	<i>Holcus lanatus</i>	Yorkshire Fog	high	high
MTG	<i>Romulea rosea</i>	Onion Grass	high	low
MTG	<i>Vulpia bromoides</i>	Squirrel-tail Fescue	high	low
MTG	<i>Briza minor</i>	Lesser Quaking-grass	high	low
MTG	<i>Bromus hordeaceus</i> ssp. <i>hordeaceus</i>	Soft Brome	high	low
MTG	<i>Briza maxima</i>	Large Quaking-grass	high	low
MTG	<i>Lolium rigidum</i>	Wimmera Rye-grass	high	low
MTG	<i>Lolium perenne</i>	Perennial Rye-grass	high	low
MTG	<i>Nassella neesiana</i>	Chilean Needle-grass	high	high
MNG	<i>Cynosurus echinatus</i>	Rough Dog's-tail	high	low
MNG	<i>Juncus capitatus</i>	Capitate Rush	high	low

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# EVC/Bioregion Benchmark for Vegetation Quality Assessment

## Victorian Volcanic Plain bioregion

### EVC 642: Basalt Shrubby Woodland

#### Description:

Eucalypt-dominated woodland to 15 m tall with an understorey of shrubs and grasses, presumed originally quite species-rich. Occurs on well-drained to seasonally damp fertile soils in higher rainfall areas of volcanic plain.

#### Large trees:

Species	DBH(cm)	#/ha
<i>Eucalyptus</i> spp.	70 cm	15 / ha

#### Tree Canopy Cover:

%cover	Character Species	Common Name
15%	<i>Eucalyptus ovata</i>	Swamp Gum
	<i>Eucalyptus viminalis</i>	Manna Gum

#### Understorey:

Life form	#Spp	%Cover	LF code
Immature Canopy Tree		5%	IT
Understorey Tree or Large Shrub	2	10%	T
Medium Shrub	2	5%	MS
Prostrate Shrub	2	1%	PS
Large Herb	2	1%	LH
Medium Herb	10	15%	MH
Small or Prostrate Herb	5	10%	SH
Large Tufted Graminoid	3	5%	LTG
Large Non-tufted Graminoid	1	5%	LNG
Medium to Small Tufted Graminoid	10	25%	MTG
Medium to Tiny Non-tufted Graminoid	3	10%	MNG
Ground Fern	1	15%	GF
Bryophytes/Lichens	na	10%	BL
Soil Crust	na	10%	S/C

#### LF Code

#### Species typical of at least part of EVC range

#### Common Name

T	<i>Acacia melanoxylon</i>	Blackwood
T	<i>Acacia mearnsii</i>	Black Wattle
MS	<i>Leptospermum continentale</i>	Prickly Tea-tree
MS	<i>Acacia verticillata</i>	Prickly Moses
PS	<i>Bossiaea prostrata</i>	Creeping Bossiaea
PS	<i>Astroloma humifusum</i>	Cranberry Heath
LH	<i>Senecio glomeratus</i>	Annual Fireweed
MH	<i>Drosera peltata ssp. auriculata</i>	Tall Sundew
MH	<i>Lagenophora stipitata</i>	Common Bottle-daisy
SH	<i>Oxalis exilis</i>	Shady Wood-sorrel
SH	<i>Kennedia prostrata</i>	Running Postman
SH	<i>Lobelia pedunculata s.l.</i>	Matted Pratia
SH	<i>Leptostigma reptans</i>	Dwarf Nertera
LTG	<i>Austrostipa pubinodis</i>	Tall Spear-grass
LTG	<i>Lepidosperma elatius</i>	Tall Sword-sedge
LTG	<i>Deyeuxia quadriseta</i>	Reed Bent-grass
MTG	<i>Dichelachne rara</i>	Common Plume-grass
MTG	<i>Lomandra filiformis ssp. filiformis</i>	Wattle Mat-rush
MTG	<i>Dichelachne crinita</i>	Long-hair Plume-grass
MTG	<i>Austrodanthonia pilosa</i>	Velvet Wallaby-grass
MNG	<i>Poa tenera</i>	Slender Tussock-grass
MNG	<i>Microlaena stipoides var. stipoides</i>	Weeping Grass
GF	<i>Pteridium esculentum</i>	Austral Bracken



# EVC 642: Basalt Shrubby Woodland - Victorian Volcanic Plain bioregion

**Recruitment:**

Continuous

**Organic Litter:**

20 % cover

**Logs:**

15 m/0.1 ha.

**Weediness:**

LF Code	Typical Weed Species	Common Name	Invasive	Impact
T	<i>Pinus radiata</i>	Radiata Pine	high	high
LH	<i>Centaurium tenuiflorum</i>	Slender Centaury	high	low
LH	<i>Plantago lanceolata</i>	Ribwort	high	low
LH	<i>Sonchus oleraceus</i>	Common Sow-thistle	high	low
LH	<i>Cirsium vulgare</i>	Spear Thistle	high	high
MH	<i>Hypochoeris radicata</i>	Cat's Ear	high	low
MH	<i>Centaurium erythraea</i>	Common Centaury	high	low
MH	<i>Gamochaeta purpurea s.s.</i>	Spiked Cudweed	high	low
MH	<i>Leontodon taraxacoides ssp. taraxacoides</i>	Hairy Hawkbit	high	low
LNG	<i>Holcus lanatus</i>	Yorkshire Fog	high	high
MTG	<i>Vulpia bromoides</i>	Squirrel-tail Fescue	high	low
MTG	<i>Briza minor</i>	Lesser Quaking-grass	high	low
MTG	<i>Briza maxima</i>	Large Quaking-grass	high	low
MTG	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	high	high
MNG	<i>Aira elegantissima</i>	Delicate Hair-grass	high	low
MNG	<i>Cynosurus echinatus</i>	Rough Dog's-tail	high	low
SNG	<i>Sisyrinchium iridifolium</i>	Blue Pigroot	high	low

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**Appendix 6: BIOR report**



# Biodiversity impact and offset requirements report

This report **does not represent an assessment by DELWP** of the proposed native vegetation removal. It provides biodiversity information for low risk-based pathway applications for permits to remove native vegetation under clause 52.16 or 52.17 of the planning schemes in Victoria.

Date of issue: 07/07/2022

DELWP ref: NAA\_2022\_093

Time of issue: 4:46 pm

Project ID	14144_HDWF_BIOR_220704
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## Summary of marked native vegetation

<b>Risk-based pathway</b>	<b>Low</b>
<b>Total extent</b>	0.056 ha
Remnant patches	0.056 ha
Scattered trees	0 trees
<b>Location risk</b>	A
<b>Strategic biodiversity score of all marked native vegetation</b>	0.125

## Offset requirements if a permit is granted

If a permit is granted to remove the marked native vegetation, a requirement to obtain a native vegetation offset will be included in the permit conditions. The offset must meet the following requirements:

<b>Offset type</b>	<b>General offset</b>
<b>General offset amount (general biodiversity equivalence units)</b>	0.002 general units
<b>General offset attributes</b>	
Vicinity	Glenelg Hopkins Catchment Management Authority (CMA) or Moyne Shire Council
Minimum strategic biodiversity score	0.100 <sup>1</sup>

See Appendices 1 and 2 for details in how offset requirements were determined.

NB: values presented in tables throughout this document may not add to totals due to rounding

<sup>1</sup> Minimum strategic biodiversity score is 80 per cent of the weighted average score across habitat zones where a general offset is required

# Biodiversity impact and offset requirements report

## Next steps

This proposal to remove native vegetation must meet the application requirements of the low risk-based pathway and it will be assessed under the low risk-based pathway.

If you wish to remove the marked native vegetation you are required to apply for a permit from your local council. Council will then refer your application to DELWP for assessment, as required. **This report is not a referral assessment by DELWP.**

The biodiversity assessment report from NVIM and this biodiversity impact and offset report should be submitted with your application for a permit to remove native vegetation you plan to remove, lop or destroy.

This report provides the following information to meet application requirements for a permit to remove native vegetation:

- Confirmation of the risk-based pathway of the application for a permit to remove native vegetation
- The area of the patch of native vegetation and/or the number of any scattered trees to be removed
- The strategic biodiversity score of the native vegetation to be removed
- The offset requirements should a permit be granted to remove native vegetation.

Refer to the *Permitted clearing of native vegetation – Biodiversity assessment guidelines* and for a full list and details of application requirements.

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Obtaining this publication does not guarantee that an application will meet the requirements of clauses 52.16 or 52.17 of the Victoria Planning Provisions or that a permit to remove native vegetation will be granted.

Notwithstanding anything else contained in this publication, you must ensure that you comply with all relevant laws, legislation, awards or orders and that you obtain and comply with all permits, approvals and the like that affect, are applicable or are necessary to undertake any action to remove, lop or destroy or otherwise deal with any native vegetation or that apply to matters within the scope of clauses 52.16 or 52.17 of the Victoria Planning Provisions



# Biodiversity impact and offset requirements report

## Appendix 1 – Biodiversity impact of removal of native vegetation

### Habitat hectares

Habitat hectares are calculated for each habitat zone within your proposal using the extent and condition scores in the GIS data you provided.

Habitat zone	Site assessed condition score	Extent (ha)	Habitat hectares
1-1-F2	0.150	0.039	0.006
2-1-DB	0.450	0.009	0.004
3-1-DA3	0.450	0.007	0.003
4-1-DA1	0.450	0.000	0.000
5-1-DA2	0.450	0.000	0.000
<b>TOTAL</b>			<b>0.013</b>

### Clearing site biodiversity equivalence score(s)

The general biodiversity equivalence score for the habitat zone(s) is calculated by multiplying the habitat hectares by the strategic biodiversity score.

Habitat zone	Habitat hectares	Strategic biodiversity score	General biodiversity equivalence score (GBES)
1-1-F2	0.006	0.128	0.001
2-1-DB	0.004	0.116	0.000
3-1-DA3	0.003	0.116	0.000
4-1-DA1	0.000	0.116	0.000
5-1-DA2	0.000	0.116	0.000

# Biodiversity impact and offset requirements report

## Appendix 2 – Offset requirements detail

If a permit is granted to remove the marked native vegetation the permit condition will include the requirement to obtain a native vegetation offset.

To calculate the required offset amount required the biodiversity equivalence scores are aggregated to the proposal level and multiplied by the relevant risk multiplier.

Offsets also have required attributes:

- General offsets must be located in the same Catchment Management Authority (CMA) boundary or Local Municipal District (local council) as the clearing and must have a minimum strategic biodiversity score of 80 per cent of the clearing.<sup>2</sup>

The offset requirements for your proposal are as follows:

Offset type	Clearing site biodiversity equivalence score	Risk multiplier	Offset requirements	
			Offset amount (biodiversity equivalence units)	Offset attributes
General	0.002 GBES	1.5	0.002 general units	Offset must be within Glenelg Hopkins CMA or Moyne Shire Council Offset must have a minimum strategic biodiversity score of 0.100

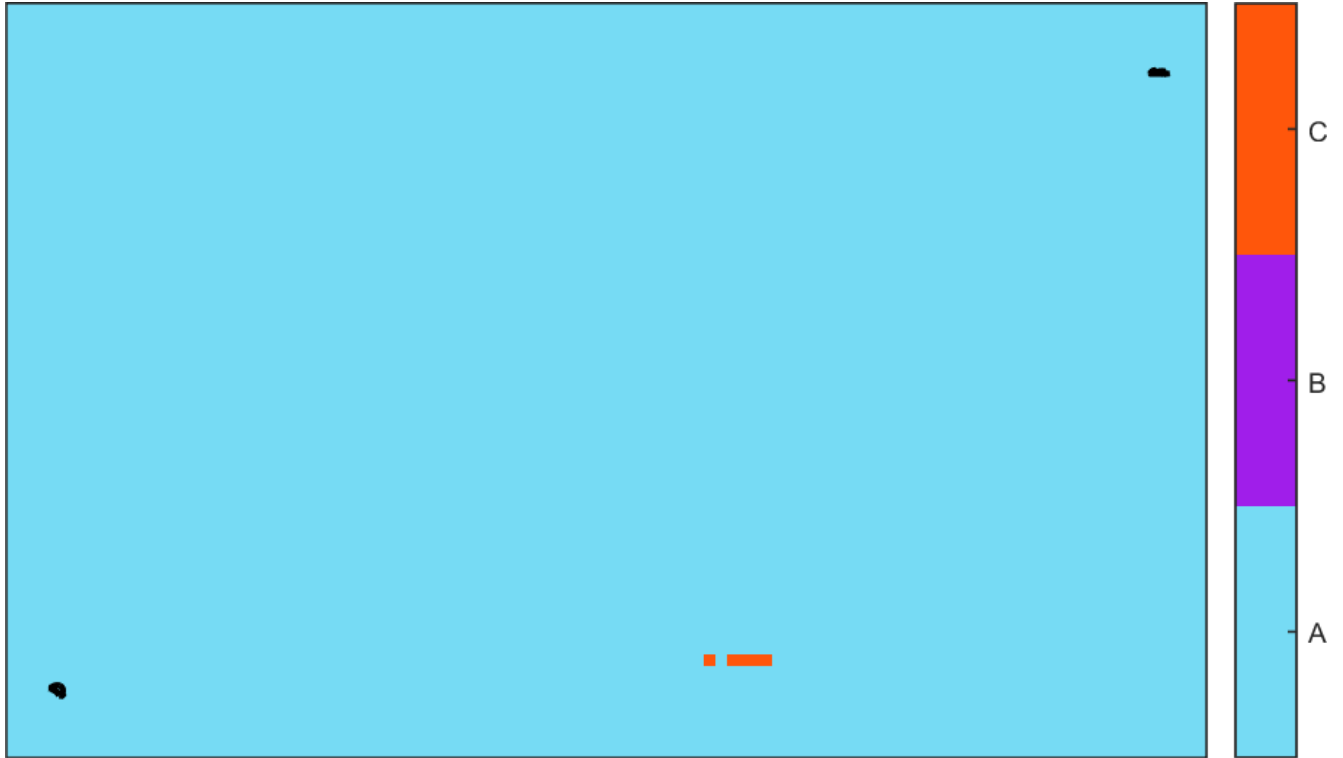
<sup>2</sup> Strategic biodiversity score is a weighted average across habitat zones where a general offset is required



# Biodiversity impact and offset requirements report

## Appendix 3 – Images of marked native vegetation

### 1. Native vegetation location risk map



### 2. Strategic biodiversity score map



# Biodiversity impact and offset requirements report

## 3. Aerial photograph showing marked native vegetation





# Biodiversity impact and offset requirements report

## Glossary

**Condition score** This is the site-assessed condition score for the native vegetation. Each habitat zone in the clearing proposal is assigned a condition score according to the habitat hectare assessment method. This information has been provided by or on behalf of the applicant in the GIS file.

**Dispersed habitat** A dispersed species habitat is a habitat for a rare or threatened species whose habitat is spread over a relatively broad geographic area greater than 2,000 hectares.

**General biodiversity equivalence score** The general biodiversity equivalence score quantifies the relative overall contribution that the native vegetation to be removed makes to Victoria's biodiversity. The general biodiversity equivalence score is calculated as follows:

$$\text{General biodiversity equivalence score} \\ = \text{habitat hectares} \times \text{strategic biodiversity score}$$

**General offset amount** This is calculated by multiplying the general biodiversity equivalence score of the native vegetation to be removed by the risk factor for general offsets. This number is expressed in general biodiversity equivalence units and is the amount of offset that is required to be provided should the application be approved. This offset requirement will be a condition to the permit for the removal of native vegetation.

$$\text{Risk adjusted general biodiversity equivalence score} \\ = \text{general biodiversity equivalence score clearing} \times 1.5$$

**General offset attributes** General offset must be located in the same Catchment Management Authority boundary or Municipal District (local council) as the clearing site. They must also have a strategic biodiversity score that is at least 80 per cent of the score of the clearing site.

**Habitat hectares** Habitat hectares is a site-based measure that combines extent and condition of native vegetation. The habitat hectares of native vegetation is equal to the current condition of the vegetation (condition score) multiplied by the extent of native vegetation. Habitat hectares can be calculated for a remnant patch or for scattered trees or a combination of these two vegetation types. This value is calculated for each habitat zone using the following formula:

$$\text{Habitat hectares} = \text{total extent (hectares)} \times \text{condition score}$$

**Habitat importance score** The habitat importance score is a measure of the importance of the habitat located on a site for a particular rare or threatened species. The habitat importance score for a species is a weighted average value calculated from the habitat importance map for that species. The habitat importance score is calculated for each habitat zone where the habitat importance map indicates that species habitat occurs.

**Habitat zone** Habitat zone is a discrete contiguous area of native vegetation that:

- is of a single Ecological Vegetation Class
- has the same measured condition.

# Biodiversity impact and offset requirements report

<b>Highly localised habitat</b>	<p>A highly localised habitat is habitat for a rare or threatened species that is spread across a very restricted area (less than 2,000 hectares). This can also be applied to a similarly limited sub-habitat that is disproportionately important for a wide-ranging rare or threatened species. Highly localised habitats have the highest habitat importance score (1) for all locations where they are present.</p>
<b>Minimum strategic biodiversity score</b>	<p>The minimum strategic biodiversity score is an attribute for a general offset.</p> <p>The strategic biodiversity score of the offset site must be at least 80 per cent of the strategic biodiversity score of the native vegetation to be removed. This is to ensure offsets are located in areas with a strategic value that is comparable to, or better than, the native vegetation to be removed. Where a specific and general offset is required, the minimum strategic biodiversity score relates only to the habitat zones that require the general offset.</p>
<b>Offset risk factor</b>	<p>There is a risk that the gain from undertaking the offset will not adequately compensate for the loss from the removal of native vegetation. If this were to occur, despite obtaining an offset, the overall impact from removing native vegetation would result in a loss in the contribution that native vegetation makes to Victoria's biodiversity.</p> <p>To address the risk of offsets failing, an offset risk factor is applied to the calculated loss to biodiversity value from removing native vegetation.</p> <p style="text-align: center;"><b><i>Risk factor for general offsets = 1.5</i></b></p> <p style="text-align: center;"><b><i>Risk factor for specific offset = 2</i></b></p>
<b>Offset type</b>	<p>The specific-general offset test determines the offset type required.</p> <p>When the specific-general offset test determines that the native vegetation removal will have an impact on one or more rare or threatened species habitat above the set threshold of 0.005 per cent, a specific offset is required. This test is done at the permit application level.</p> <p>A general offset is required when a proposal to remove native vegetation is not deemed, by application of the specific-general offset test, to have an impact on any habitat for any rare or threatened species above the set threshold of 0.005 per cent. All habitat zones that do not require a specific offset will require a general offset.</p>
<b>Proportional impact on species</b>	<p>This is the outcome of the specific-general offset test. The specific-general offset test is calculated across the entire proposal for each species on the native vegetation permitted clearing species list. If the proportional impact on a species is above the set threshold of 0.005 per cent then a specific offset is required for that species.</p>
<b>Specific offset amount</b>	<p>The specific offset amount is calculated by multiplying the specific biodiversity equivalence score of the native vegetation to be removed by the risk factor for specific offsets. This number is expressed in specific biodiversity equivalence units and is the amount of offset that is required to be provided should the application be approved. This offset requirement will be a condition to the permit for the removal of native vegetation.</p> <p style="text-align: center;"><b><i>Risk adjusted specific biodiversity equivalence score</i></b> <b><i>= specific biodiversity equivalence score clearing × 2</i></b></p>



# Biodiversity impact and offset requirements report

**Specific offset attributes** Specific offsets must be located in the modelled habitat for the species that has triggered the specific offset requirement.

**Specific biodiversity equivalence score** The specific biodiversity equivalence score quantifies the relative overall contribution that the native vegetation to be removed makes to the habitat of the relevant rare or threatened species. It is calculated for each habitat zone where one or more species habitats require a specific offset as a result of the specific-general offset test as follows:

$$\begin{aligned} & \textit{Specific biodiversity equivalence score} \\ & = \textit{habitat hectares} \times \textit{habitat importance score} \end{aligned}$$

**Strategic biodiversity score** This is the weighted average strategic biodiversity score of the marked native vegetation. The strategic biodiversity score has been calculated from the *Strategic biodiversity map* for each habitat zone.

The strategic biodiversity score of native vegetation is a measure of the native vegetation's importance for Victoria's biodiversity, relative to other locations across the landscape. The *Strategic biodiversity map* is a modelled layer that prioritises locations on the basis of rarity and level of depletion of the types of vegetation, species habitats, and condition and connectivity of native vegetation.

**Total extent (hectares) for calculating habitat hectares** This is the total area of the marked native vegetation in hectares. The total extent of native vegetation is an input to calculating the habitat hectares of a site and in calculating the general biodiversity equivalence score. Where the marked native vegetation includes scattered trees, each tree is converted to hectares using a standard area calculation of 0.071 hectares per tree. This information has been provided by or on behalf of the applicant in the GIS file.

**Vicinity** The vicinity is an attribute for a general offset. The offset site must be located within the same Catchment Management Authority boundary or Local Municipal District as the native vegetation to be removed.

**Appendix 7: Evidence that native vegetation offset requirement has been obtained**



Date 2 / 2 / 2021

## **Three Party Credit Trade Agreement**

**Subject Land:** Site ID BB-3041 LA01 BCA 11  
McInnes Road, Macarthur VIC 3286

**Credit Trade Agreement ID:** BB-3041 LA01 CA23

**Broker Reference:** VLQ-6439

**Hawkesdale Asset Pty Ltd**  
**ACN: 643 793 711**

and

**Tierra Land Holdings Pty Ltd**  
**ACN: 619 007 162**

and

**Vegetation Link Pty Ltd**  
**ABN: 92 169 702 032**

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# Credit Trade Agreement

---

This Agreement is made on: 2 / 2 /2021

## PARTIES

**Tierra Land Holdings Pty Ltd ACN: 619 007 162**  
of Level 1, 24 Glenferrie Road, Malvern VIC 3144

(Credit Owner)

AND

**Hawkesdale Asset Pty Ltd ACN: 643 793 711**  
of Suite 4, Level 3, 24 Marcus Clarke Street, Canberra ACT 2601

(Purchaser)

AND

**Vegetation Link Pty Ltd ABN: 92 169 702 032**  
of Office 19/233 Barker Street, Castlemaine VIC 3450

(Broker)

## INTRODUCTION

- A. Native vegetation is described in Clause 73 of the Victoria Planning Provisions as *plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses*.
- B. Offsets for native vegetation removal may be required in order to comply with regulatory requirements, permits or approvals in Victoria, including requirements under Victorian planning schemes and the *Planning & Environment Act 1987* (Vic). Permits issued under Clause 52.16 or 52.17 of a planning scheme may require Offsets of the appropriate quantity (amount of gain) and attributes to be provided for native vegetation removal.
- C. The Register, maintained by the Department, records the ownership, trading and use of Native Vegetation Credits in Victoria. The Register sets minimum standards for the establishment of credit sites and undertakes quality assurance to provide certainty that all Native Vegetation Credits meet minimum requirements for site eligibility, permanency and additionality and are suitable as Offsets.
- D. The Register has developed a series of standard agreements to provide a consistent contractual framework for parties to establish and trade Native Vegetation Credits. These agreements include a Security Agreement between the Secretary and a Landowner who undertakes ongoing management of land to generate Native Vegetation Credits; this Agreement; an Over the Counter Credit Owner Agreement between a Credit Owner and a Broker; and a Native Vegetation Credit Register Broker Agreement between the Secretary and a Broker.
- E. The Credit Owner has engaged a Broker to assist with the sale of the Subject Native Vegetation Credits to the Purchaser.

- F. The Credit Owner and the Purchaser enter into this Agreement to facilitate the sale and purchase of the Subject Native Vegetation Credits which when allocated may be relied upon by the Purchaser to demonstrate compliance with a regulatory requirement for the provision of an Offset.

## THE PARTIES AGREE

### 1. DEFINITIONS

---

In this Agreement the words and expressions set out in this clause have the following meanings unless the context admits otherwise:

**Agreed Price** means the total price per Unit of the Subject Native Vegetation Credits set out in Schedule 1.

**Agreement** means this agreement and includes the schedules and any annexure to it or documents incorporated by reference.

**Business Day** means a day which is not a Saturday, Sunday or a public holiday (being a public holiday appointed as such under the *Public Holidays Act 1993* (Vic)) in Victoria.

**Commencement Date** means the date on which this Agreement is executed by all parties or, if executed in counterparts, the day on which the last party executes this Agreement.

**Commonwealth Privacy Act** means the *Privacy Act 1998* (Cth), including the Australian Privacy Principles under that Act.

**Corporations Act** means the *Corporations Act 2001* (Cth) as amended from time to time.

**Credit Owner** means the legal entity recorded as owner of the specified Native Vegetation Credit or Credits on the Register.

**Credit Owner Bank Account** means the bank account specified by the Credit Owner in Schedule 2, into which any payments to the Credit Owner may be made in accordance with clause 4.2.3.

**Credit Owner and Purchaser Collection Statement** means the statement at Schedule 4.

**Department** means the Department of Environment, Land, Water and Planning or its successor.

**Department Trust Account** means the bank account in which the Secretary holds funds from the sale of Native Vegetation Credits for payment to Landowners who are also Credit Owners, as set out in Item 2 of Schedule 2. The funds are held in trust for payments to Landowners in accordance with their Security Agreement.

**Department Website** means the Native Vegetation offset section of the website of the Department.

**EVC** means an Ecological Vegetation Class has the same meaning as set out in the Guidelines 2017.

**General Biodiversity Equivalence Unit** has the same meaning as set out in the Guidelines 2013.

**General Habitat Unit** has the same meaning as set out in the Guidelines 2017.



**Guidelines 2017** means the *Guidelines for the removal, destruction or lopping of native vegetation* dated December 2017, as varied from time to time, a copy of which is available from the website administered on behalf of the Secretary, which at Commencement is [www.delwp.vic.gov.au](http://www.delwp.vic.gov.au).

**Guidelines 2013** means the *Permitted clearing of native vegetation - Biodiversity Assessment Guidelines* dated September 2013, as varied from time to time, a copy of which is available from the website administered on behalf of the Secretary, which at Commencement is [www.delwp.vic.gov.au](http://www.delwp.vic.gov.au).

**Habitat Hectare** has the same meaning as in the NV Framework or the Guidelines 2017, as appropriate.

**Information** means information, including Personal Information, relating to Purchasers (or their directors and employees) which the Broker receives or has access to under this Agreement.

**Landowner** means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as proprietor or proprietors of an estate in fee simple of the Subject Land or any part of it and includes a mortgagee-in-possession.

**Large Old Tree** has the same meaning as in the NV Framework.

**Large Tree** has the same meaning as set out in the Guidelines 2017.

**Medium Old Tree** means a tree with a diameter at breast height equal to or greater than 75% of the large tree diameter in the relevant EVC benchmark but less than the diameter at breast height for a large old tree.

**Native Vegetation** has the same meaning as in Clause 73 of the Victoria Planning Provisions as *plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses*.

**Native Vegetation Credit** means a Unit listed on the Register which may be unallocated and therefore available for sale, or allocated as an Offset, subject to the Rules.

**Native Vegetation Credit Register Broker Agreement** means the agreement between the Broker and the Secretary with the unique agreement number: **BA-09\_2020**.

**New Recruit** has the same meaning as in the NV Framework.

**NV Framework** means the *Native Vegetation Management – A Framework for Action* dated August 2002.

**Offset** has the same meaning as in the Guidelines 2017, Guidelines 2013 or the NV Framework, as appropriate.

**Personal Information** means any information which is 'personal information' under the Victorian Privacy Act or the Commonwealth Privacy Act.

**Register** means the Native Vegetation Credit Register as per the Guidelines 2017, administered by the Registrar under the direction of the Secretary and any successor to it, which is a register of Native Vegetation Credits, which are either allocated or unallocated.

**Registrar** means the person who, under the direction of the Secretary, is responsible for administering the Register and records the creation, trade and allocation of Native Vegetation Credits.

**Responsible Authority** has the same meaning as in the *Planning & Environment Act 1987* (Vic).

**Rules** means the Register Rules, as amended from time to time and available from [nativevegetation.offsetregister@delwp.vic.gov.au](mailto:nativevegetation.offsetregister@delwp.vic.gov.au).

**Secretary** has the same meaning as in the *Conservation, Forests and Lands Act 1987 (Vic)*.

**Security Agreement** means either an agreement made under section 69 of the *Conservation, Forests and Lands Act 1987 (Vic)* or a deed of covenant agreed with Trust for Nature made under section 3A of the *Victorian Conservation Trusts Act 1972 (Vic)* which is registered on the title of the Subject Land for purposes including securing the Subject Native Vegetation Credits.

**Strategic Biodiversity Value Score** has the same meaning as set out in the Guidelines 2017.

**Strategic Biodiversity Score** has the same meaning as set out in the Guidelines 2013.

**Species Habitat Unit** has the same meaning as set out in the Guidelines 2017.

**Specific Biodiversity Equivalence Unit** has the same meaning as set out in the Guidelines 2013.

**Subject Native Vegetation Credits** means the Native Vegetation Credits specified in Schedule 1 to this Agreement.

**Subject Land** means *Certificate of Title Volume 07399 Folio 603, being Section 14A on Title Plan 760071W, Parish of Macarthur*, and the land on which the Subject Native Vegetation Credits are situated, and any reference to the Subject Land in this Agreement includes any lot created by the subdivision of the Subject Land or any part of it.

**Term** means the period from the Commencement Date until all of the Subject Native Vegetation Credits have been transferred to the Purchaser or transferred and allocated to an approval on the Register, unless terminated in accordance with this Agreement at an earlier date.

**Unit** means:

- General Habitat Units (also GHU) or Species Habitat Unit (also SHU) as defined in the Guidelines 2017; or
- General Biodiversity Equivalence Unit (also GBEU) or Specific Biodiversity Equivalence Unit (also SBEU) as defined in the Guidelines 2013; or
- Habitat Hectare, Medium Old Tree, Large Old Tree, Very Large Old Tree or New Recruit as defined in the NV Framework, as appropriate.

**Very Large Old Tree** means a tree with a diameter at breast height equal to or greater than 150% of the large tree diameter in the relevant EVC benchmark.

**Victorian Privacy Act** means the *Privacy and Data Protection Act 2014 (Vic)*, including the Information Privacy Principles under that Act.



## 2. INTERPRETATION

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In this Agreement unless the context admits otherwise:

- 2.1 the singular includes the plural and vice versa.
- 2.2 a reference to a gender includes a reference to each other gender.
- 2.3 a reference to a person includes a reference to a firm, corporation or other corporate body and that person's successors in law.
- 2.4 if a party consists of more than one person this Agreement binds them jointly and each of them severally.
- 2.5 a term used in this Agreement has its ordinary meaning unless that term is defined in this Agreement. If a term is not defined in this Agreement and it is defined in the NV Framework, the Guidelines 2017 or the Guidelines 2013 it has the meaning as defined in the NV Framework, the Guidelines 2017 or the Guidelines 2013, as appropriate.
- 2.6 a reference to an Act, Regulation or a Planning Scheme includes any Acts, Regulations or amendments amending, consolidating or replacing the Act, Regulation or Planning Scheme.
- 2.7 the introductory clauses to this Agreement are and will be deemed to form part of this Agreement.
- 2.8 in this clause words that are defined in *A New Tax System (Goods and Services Tax) Act 1999* have the same meaning as their definition in that Act. Except as otherwise provided in this Agreement, all consideration payable under this Agreement in relation to any supply is exclusive of GST.
- 2.9 a reference to writing includes any method of representing or reproducing words, figures, drawings or symbols in a visible and tangible form but excludes a communication by electronic mail.
- 2.10 a reference to an *agreement* includes any undertaking, deed, agreement and legally enforceable arrangement, whether or not in writing, and a reference to a *document* includes an agreement (as so defined) in writing and any certificate, notice, instrument and document of any kind.
- 2.11 a *month* means a calendar month.
- 2.12 a reference to *dollars* or \$ is to Australian currency.

### **3. SPECIFIC COVENANTS, WARRANTIES AND OBLIGATIONS OF THE PURCHASER**

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- 3.1 The Purchaser warrants that within a period of no more than 28 Business Days before executing this Agreement it made reasonable enquiries of the Register to confirm that the Subject Native Vegetation Credits are listed on the Register and available for purchase.
- 3.2 The Purchaser covenants and agrees:
- 3.2.1 to purchase the Subject Native Vegetation Credits from the Credit Owner at the Agreed Price;
  - 3.2.2 to pay the Agreed Price into the Department Trust Account
  - 3.2.3 that if the Subject Native Vegetation Credits are to be allocated on the Register as part of the sale, it must specify any relevant regulatory requirement, approval or planning permit to which to allocate the required number of Native Vegetation Credits in Schedule 3 so that the Registrar can allocate those Native Vegetation Credits and provide it with an extract of the Register showing the allocated Native Vegetation Credits;
  - 3.2.4 that if the Subject Native Vegetation Credits are not to be allocated on the Register as part of the sale, but are subsequently relied upon by the Purchaser to satisfy a regulatory requirement, approval or planning permit, the Purchaser must notify the Registrar using a Notification to Allocate Native Vegetation Credits form (which can be obtained from [Nativevegetation.offsetregister@delwp.vic.gov.au](mailto:Nativevegetation.offsetregister@delwp.vic.gov.au)) so that the Registrar can allocate the Native Vegetation Credits accordingly and provide the Purchaser with an extract of the Register showing the allocated Native Vegetation Credits;
  - 3.2.5 that it must not rely on any allocated Native Vegetation Credits in relation to any Native Vegetation Offset obligations other than the one to which it is already allocated;
  - 3.2.6 it must not attempt to trade the value of any allocated Native Vegetation Credits.
- 3.3 The Purchaser consents to and agrees that without disclosing the Purchaser's identity or the street address or title particulars of the Subject Land, the Secretary and the Department may disclose to any person the Agreed Price and/or the characteristics of the Subject Native Vegetation Credits, for any purpose including (without limitation) advertising or marketing other Native Vegetation Credits for sale or any program for the sale of Native Vegetation Credits.



#### **4. SPECIFIC COVENANTS, WARRANTIES AND OBLIGATIONS OF THE CREDIT OWNER**

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- 4.1 The Credit Owner warrants:
- 4.1.1 that it is lawfully entitled to deal with the Subject Native Vegetation Credits;
  - 4.1.2 without limiting the operation or effect which this Agreement has, that apart from the Credit Owner and any other person who has consented in writing to this Agreement, no other person has any interest, either legal or equitable, in the Subject Land, the Units or Subject Native Vegetation Credits which may be affected by this Agreement;
  - 4.1.3 if the Credit Owner is also the Landowner, that it has entered into a Security Agreement; and
  - 4.1.4 that all details of the Subject Native Vegetation Credits and the Security Agreement are accurately recorded in Schedule 1 of this Agreement.
- 4.2 The Credit Owner covenants and agrees that:
- 4.2.1 if the Credit Owner is also the Landowner and the Security Agreement was made under section 69 of the *Conservation, Forests and Lands Act 1987 (Vic)*, the Agreed Price will be paid by the Purchaser into the Department Trust Account; or
  - 4.2.2 if the Credit Owner is also the Landowner and the Security Agreement is a deed of covenant agreed with Trust for Nature made under section 3A of the *Victorian Conservation Trusts Act 1972 (Vic)*, the Agreed Price will be paid by the Purchaser into the Credit Owner Bank Account specified in Schedule 2; or
  - 4.2.3 if the Credit Owner is not the Landowner, the Agreed Price will be paid by the Purchaser into the Credit Owner Bank Account specified in Schedule 2.
- 4.3 The Credit Owner consents to and agrees that the Secretary or the Department may, in its absolute discretion, publish data in relation to the sale of any Subject Native Vegetation Credits (including, without limitation, the price or value of the Units) provided that such publication does not identify the Credit Owner or the street address or title particulars of the Subject Land.

#### **5. SPECIFIC COVENANTS, WARRANTIES AND OBLIGATIONS OF THE BROKER**

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- 5.1 The Broker warrants that:
- 5.1.1 the Broker has entered into the Native Vegetation Credit Broker Agreement; and
  - 5.1.2 the Broker has been lawfully appointed by the Purchaser to facilitate the purchase of Native Vegetation Credits.
- 5.2 The Broker covenants and agrees:
- 5.2.1 to facilitate the preparation and any execution of the notices contained in the Schedules or any other relevant documents by the Credit Owner and the Purchaser required to effect the transfer or transfer and allocation of the Subject Native Vegetation Credits in the Register; and

- 5.2.2 to arrange for the lodging of this Agreement and the notices contained in the Schedules with the Register in accordance with the processes set out in clause 6.

## **6. SALE OF NATIVE VEGETATION CREDIT IS FINAL**

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- 6.1 The parties agree that the record of ownership of the Units and Subject Native Vegetation Credits on the Register is final and conclusive.
- 6.2 The parties agree that before the transfer or transfer and allocation of Subject Native Vegetation Credits can be recorded on the Register, the following steps must be completed:
- 6.2.1 If the Credit Owner is also the Landowner and the Security Agreement was made under section 69 of the *Conservation, Forests and Lands Act 1987* (Vic):
- (a) The Broker must within 28 Business Days after the Commencement Date provide an executed copy of this Agreement to the Department on behalf of the parties; and
  - (b) the Purchaser must:
    - (i) receive an invoice from the Department for the Agreed Price; and
    - (ii) within 28 Business Days of the date on which the invoice under clause 6.2.1(b)(i) was issued by the Department make payment of the Agreed Price into the Department Trust Fund, unless otherwise agreed to by the Department.

## **7. COLLECTION, USE AND DISCLOSURE OF INFORMATION**

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- 7.1 The Credit Owner and Purchaser agree that the Broker, Department and Secretary may collect, use and disclose information concerning the Credit Owner or Purchaser and (where relevant) its employees and directors in accordance with the Purchaser Collection Statement in Schedule 4.
- 7.2 The Credit Owner and Purchaser must provide copies of the Credit Owner and Purchaser Collection Statement to any of its employees or directors who disclose any Personal information to the Broker in Schedule 4.

## **8. FURTHER OBLIGATIONS OF THE PARTIES**

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The Purchaser, the Credit Owner and the Broker further covenant and agree that they will do promptly all things necessary to give effect to this Agreement.



## **9. GENERAL MATTERS**

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### **9.1 Notices**

A notice or other communication required or permitted to be served by a party on another party must be in writing and may be served:

- 9.1.1 by delivering it personally to that party;
- 9.1.2 by sending it by prepaid post addressed to that party at the address set out in Schedule 2 or subsequently notified in writing to each party from time to time; or
- 9.1.3 by sending it by email or facsimile to the email or facsimile number set out in Schedule 2 provided that a communication sent by email or facsimile shall be confirmed immediately in writing by the sending party by hand delivery or prepaid post.

### **9.2 Service of Notice**

A notice or other communication is deemed served:

- 9.2.1 if delivered personally, on the next following Business Day;
- 9.2.2 if posted, on the expiration of 5 Business Days after the date of posting; or
- 9.2.3 if sent by email or facsimile, on the next following Business Day unless the receiving party has requested retransmission before the end of that Business Day, or the sender receives a transmission control report from the despatching machine showing the relevant number of pages and the correct destination fax number or name of recipient and indicating that the transmission was unsuccessful.

9.3 **No Waiver**

A failure to exercise or a delay in exercising any right, power or remedy under this Agreement does not operate as a waiver. A single or partial exercise or waiver of the exercise of any right, power or remedy does not preclude any other or further exercise of that or any other right, power or remedy. A waiver is not valid or binding on the party granting that waiver unless made in writing.

9.4 **Severability**

If a court, arbitrator, tribunal or other competent authority determines that a word, phrase, sentence, paragraph or clause of this Agreement is unenforceable, illegal or void then it must be severed and the other provisions of this Agreement will remain operative.

9.5 **Counterparts**

This Agreement may be executed in any number of counterparts. All counterparts together will be taken to constitute one instrument.

9.6 **Jurisdiction**

With respect to any legal action or proceedings arising out of or in any way related to this Agreement or its subject matter, the parties irrevocably and unconditionally:

9.6.1 submit to the non-exclusive jurisdiction of the courts with jurisdiction in Victoria; and

9.6.2 waive any right to object to the venue on any ground.



## 10. GST

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### 10.1 Recovery of GST

If GST is payable, or notionally payable, on a supply made under or in connection with this Agreement, the party providing the consideration for that supply must pay as additional consideration an amount equal to the amount of GST payable, or notionally payable, on that supply (the **GST Amount**). Subject to the prior receipt of a tax invoice, the GST Amount is payable at the same time that the other consideration for the supply is provided. If a tax invoice is not received prior to the provision of that other consideration, the GST Amount is payable within 10 days of the receipt of a tax invoice. This clause does not apply to the extent that the consideration for the supply is expressly stated to be GST inclusive or the supply is subject to reverse charge.

### 10.2 Liability net of GST

Where any indemnity, reimbursement or similar payment under this Agreement is based on any cost, expense or other liability, it shall be reduced by any input tax credit entitlement, or notional input tax credit entitlement, in relation to the relevant cost, expense or other liability.

### 10.3 Adjustment events

If an adjustment event occurs in relation to a supply made under or in connection with this Agreement, the GST Amount will be recalculated to reflect that adjustment and an appropriate payment will be made between the parties.

### 10.4 Survival

This clause will not merge upon completion and will continue to apply after expiration or termination of this Agreement.

### 10.5 Definitions

Unless the context requires otherwise, words and phrases used in this clause that have a specific meaning in the GST law (as defined in the *A New Tax System (Goods and Services Tax) Act 1999* (Cth)) shall have the same meaning in this clause.

## 11. TERMINATION

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11.1 Either party may terminate this Agreement immediately by notice to the other party in accordance with clause 9.1 if the other party commits a material breach of this Agreement unless the breach is capable of remedy, in which case if the other party fails to remedy the **breach within 28 Business Days** after being required in writing to do so.

11.2 Termination of this Agreement does not affect any accrued rights or remedies of either party.

SCHEDULE 1

<b>Subject Native Vegetation Credits – Guidelines 2013</b>	
<b>Credit Owner</b>	Tierra Land Holdings Pty Ltd
<b>Security Agreement Type</b>	Agreement under Section 69 of the <i>Conservation, Forests and Lands Act 1987 (Vic)</i>
<b>Subject Land description</b>	Certificate of Title Volume 07399 Folio 603, being Section 14A on Title Plan 760071W, Parish of Macarthur
<b>Catchment Management Authority</b>	Glenelg Hopkins
<b>Local Government Area</b>	Moyne Shire
<b>Property identifier and Security Agreement number</b>	BBA-3041

<b>General biodiversity equivalence units</b>		
	<b>General biodiversity equivalence units*</b>	<b>Strategic biodiversity score*</b>
<b>BCA: 11</b>	0.022	0.241
<b>BCA:</b>		

<b>Agreed Price per GBEU</b>	\$ 109,000.00	per GBEU (excluding GST)
SUBTOTAL Agreed Price (excluding GST)	\$ 2,398.00	
GST applicable	\$ 239.80	
<b>TOTAL Agreed Price (including GST)^</b>	<b>\$ 2,637.80</b>	

Broker fee (including GST)	\$ 1,122.00
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\* To three decimal places

^ All trades must include GST





### SCHEDULE 3

#### NOTICE TO THE REGISTRAR – NATIVE VEGETATION CREDIT TRADING REGISTER

Request Transfer and Allocate Benefit of Credit

NOTE: if this is not filled in then the Registrar will transfer the credits as per Schedule 1.

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#### Credit Allocation

<i>If Credit is being allocated as part of this transaction</i>	
Planning approval type:	Planning Permit
Planning approval reference number:	2006/0221
Project name:	
Address of clearing site:	Road reserve adjacent to 940 Woolsthorpe-Heywood Road, Hawkesdale
Development consent reference and description of the subject land <small>(if there is no planning approval reference)</small>	
Responsible authority:	Moyne Shire Council

#### Transaction approval

<b>Signature of PURCHASER</b>		Date: 27/01/2021
<b>Signature of Broker</b>		Date: 2 February 2021



## SCHEDULE 4

### CREDIT OWNER AND PURCHASER COLLECTION STATEMENT

The Broker (*we*) collects your Personal Information (including your name and contact details) when you or a company of which you are an employee or director seeks to sell or purchase Native Vegetation Credits including the sale or purchase of the Subject Native Vegetation Credits. The Broker collects the information you provide and may also collect information about you from searches of public registers, the Department and other departments and authorities of the State of Victoria.

We use your information:

- (a) to negotiate and facilitate the sale, transfer and allocation of the Subject Native Vegetation Credits;
- (b) to facilitate the payment of any money by the Purchaser to the Department for the purchase of the Subject Native Vegetation Credits;
- (c) to comply with any auditing or information disclosure requirements under any agreements between the Broker and the Department (including in relation to recording the sale of the Subject Native Vegetation Credits on the Register); and
- (d) as otherwise required or authorised by or under law.

We may disclose your personal information to:

- (a) the Purchasers or Credit Owners in relation to the Native Vegetation Credits for which you, or a company of which you are an employee or director, is seeking to negotiate and execute an agreement to buy and sell Native Vegetation Credits, including this Agreement;
- (b) the Department, for the purposes of:
  - (i) recording a completed Native Vegetation Credit transaction on the Register;
  - (ii) administering the Register and associated quality assurance process;
  - (iii) undertaking investigations into the probity of any agreement to buy and sell Native Vegetation Credits, including this Agreement;
  - (iv) publishing, whether on the internet or otherwise, all such information as is necessary to comply with the requirements of the contracts publishing system;
  - (v) making available to the Victorian Auditor-General all information that is requested by the Victorian Auditor-General;
  - (vi) making available all information as may be required to comply with its obligations under the *Freedom of Information Act 1982 (Vic)* or as otherwise required or authorised by or under law.

The Broker, the Department or the Secretary may disclose to any person (including by publishing such information in a manner publicly available) the characteristics of the Subject Native Vegetation Credits sold or the price at which the

Subject Native Vegetation Credits were sold, for any purpose including (without limitation) advertising or marketing other Native Vegetation Credits for sale or any program for the sale of Native Vegetation Credits. Any such disclosure will not include your name or contact details or the street address or title details of the land to which any relevant Native Vegetation Credit relates.

Your Personal Information may be disclosed and stored outside Victoria and Australia, including storage on cloud storage platforms and systems maintained by email service providers.

If you do not provide any of the information requested of you then you or the company of which you are an employee or director may not be able to participate in transactions relating to the sale of the Subject Native Vegetation Credits.

You have a right to access most Personal Information that the Broker or the Department holds about you. Sometimes there may be a reason why access will not be possible. If that is the case, you will be told why.

In relation to any record of your information held by the Department, you can contact the Department's manager privacy at the details available here: <http://delwp.vic.gov.au/privacy>.



**Executed and delivered as a Agreement.**

**Executed by Hawkesdale Asset Pty Ltd** (ACN: 643 793 711) by being signed by the persons who are authorised to sign for the Company:

GUILLERMO ALONSO

Print Name

Signature



Director

Title

27/01/2021

Date

**Executed by Tierra Land Holdings Pty Ltd** (ACN: 619 007 162) by being signed by the persons who are authorised to sign for the Company:

Joanne Wittig

Print Name

Signature



Director

Title

2 / 02 / 2021


Date

**Executed by Vegetation Link Pty Ltd** (ABN: 92 169 702 032) by being signed by the persons who are authorised to sign for the Company:

Tesha Mahoney

Print Name

Signature



Biodiversity Offset Broker

Title

2 February 2021

Date