growth areas AUTHORITY

Biodiversity Assessment Report (Native Vegetation)
Melton - Wyndham Investigation Area: Section E

March 2010

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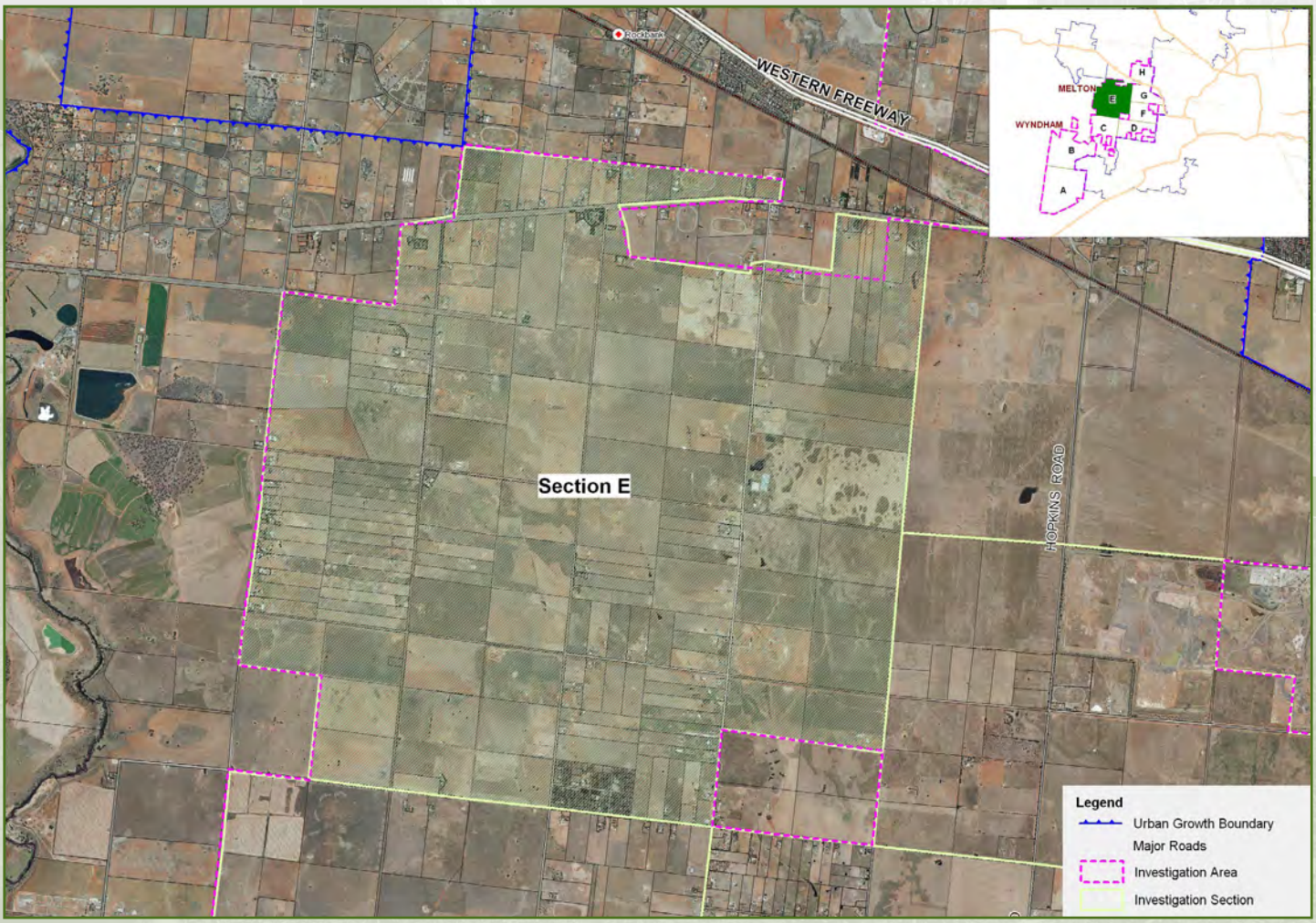
Melton - Wyndham Investigation Area: Section E

Growth Areas Authority

March 2010



MAP: Melton - Wyndham Investigation Area: Section E

Biodiversity Assessment Project (Native Vegetation)
Quality Assurance - Verification Sheet
Melton-Wyndham Investigation Area: Section E

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ABBREVIATIONS

AVW	Atlas of Victorian Wildlife – 2007 version
DSE	Department of Sustainability & Environment (formerly NRE)
DPI	Department of Primary Industry (formerly NRE)
EPBC	*Environment Protection and Biodiversity Conservation Act 1999*
EVC	Ecological Vegetation Class
FFG	*Flora and Fauna Guarantee Act 1988*
FIS	Flora Information System – 2007 version
IUCN	International Union for the Conservation of Nature
NRE	Department of Natural Resources & Environment (now DSE)

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BIODIVERSITY REPORT OVERVIEW

This Biodiversity Report provides native vegetation and fauna habitat information on the municipality of Wyndham and the Shire of Melton. The report was prepared by Biosis Research Pty. Ltd. and commissioned by the Growth Areas Authority. Information gathered and presented in this report is intended to inform the preparation of Precinct Structure Plans and Native Vegetation Precinct Plans for this area in the possible future.

The assessment surveys were conducted by Biosis Research between October 2008 and May 2009. The survey methodologies used in preparation of this report are in accordance with guidelines and training provided by the Department of Sustainability and Environment (Victoria). Any limitations to the report or to the application of its findings are outlined in Part 2 - Section 2.9 of this report.

PART 1

Synopsis by the Growth Area Authority

1.0 BACKGROUND AND PURPOSE

1.1 Project Scope

The Growth Area Authority (GAA) engaged contractors during 2008/2009 to map and assess native vegetation and fauna habitat in designated Precinct Structure Plan areas surrounding Melbourne (Figure 1). The scope and design of this project was developed jointly with the Department of Sustainability and Environment (DSE). The purpose of this mapping and assessing was to:

- Prepare biodiversity reports as essential background input into precinct structure planning at an early stage in the planning process;
- Inform the preparation of precinct structure plans in areas designated for future urban development (in most cases this will also include preparation of a Native Vegetation Precinct Plan)
- The identification of priorities for protection and enhancement of biodiversity including potential reserve areas, biodiversity corridors and areas with potential to provide offsets for vegetation lost as a result of urban development; and
- Long term planning related to infrastructure including liaison with relevant service authorities to ensure their requirements are met over the next 30 to 50 years.

This new approach focuses on achieving the objectives of the Victorian Native Vegetation Framework and planning development within the Urban Growth Zone at a regional level. This approach will improve the clarity and flexibility of native vegetation management, reduce the administrative burden on local government, provide greater certainty for urban development and improve biodiversity outcomes.

The mapping and assessment undertaken as part of this project has been undertaken in sufficient detail and of a sufficient standard to be used for the preparation of Native Vegetation Precinct Plans and Precinct Structure Plans.

The contractors assessed and mapped vegetation outside the existing precinct planning areas inside the Urban Growth Boundary (UGB). Contractors were required to submit a GIS data layer of all site assessments, together with other site information and observations on a monthly basis. The site assessments included:

- The extent of native and non-native vegetation;
- Mapped polygons of sites / zones;
- Confirmation of the native vegetation type (EVC);
- Native vegetation condition assessment (Habitat Hectares site and landscape context score) and other site attributes including land use, dominant weeds etc.;
- The species, size (small, medium, large) and location of all remnant indigenous trees (either as patches or individual trees when scattered in the landscape);
- The location of all observed rare or threatened plants or observed native flora; and
- The location of all observed rare or threatened native fauna or habitat and land use features for fauna.

The outputs of the Vegetation and Fauna Assessment and Mapping project will include 2 parts, Part A and Part B:

- PART A: Vegetation condition/Rare or Threatened Flora species/ Habitat and Land Use Features; and
- PART B: Fauna Surveys

After consideration of the maps, information and records collected in Part A above and existing fauna data and mapping provided by DSE, GAA in consultation with DSE proposed to identify Study Sites for a general assessment of fauna and habitats. This original approach to fauna surveys was amended through negotiation and agreement with DSE to a targeted approach to survey for significant species. The specifications for these surveys are outlined in Appendix 1.

The priority for fauna surveys during 2008 / 2009 was to assess areas associated with the next group of precinct structure plans; including PSP numbers 10, 13, 16, 23, 25, 26, 37, & 40 (total area 6796 hectares).

This report provides a more detailed analysis of the results obtained through the vegetation mapping undertaken by Biosis Research Pty. Ltd. in the Melton/Wyndham Investigation area. To assist in analysis and presentation of the data, the GAA have split the Melton/Wyndham Investigation area into eight key sections based on likely future precinct areas. As such, the results of the vegetation mapping assessment are documented in eight stand-alone reports, each covering a different section of this broader area (Figure 1). This report focuses on one of these sections: Section E (Figure 1).

1.2 Amended Project Scope

The GAA became aware that the State Government was preparing to commission other major transport infrastructure projects and to plan for the future growth of Melbourne. All these proposed projects were within or in close proximity to the GAA study areas and required assessment and mapping of vegetation and fauna. GAA staff negotiated with the Department's responsible for these projects for them to use the established GAA contract and project arrangements to obtain the vegetation and fauna information for their projects.

Additional PSP areas (PSP number 11 and 4) were contracted to be assessed in 2008 for the extent and quality of native vegetation. PSP 4 was later withdrawn (late Nov 2008) as the surveys had been commissioned by City of Cardinia.

The outputs of the vegetation, fauna assessment and mapping project will also provide some of the vegetation and fauna data for four key Government projects:

1. Investigation to plan for the future growth of Melbourne;
2. Regional Rail Link between West Werribee and Southern Cross via Tarneit and Sunshine;
3. Outer Metropolitan Ring Transport Corridor Reservation Project; and
4. Ensuring critical grasslands are protected as the State Government is committed to the creation of two large areas as grassland protected areas.

Only Project No. 2 (above) directly involved existing PSP areas. The results for these projects will be reported in separate reports being prepared for each Project.

2.0 SPECIFICATIONS AND MANAGEMENT

2.1 Tenders and Contractor Selection

The Request for Tender was prepared by Growth Areas Authority jointly with the Department of Sustainability and Environment to ensure that the survey methodologies and all data collected and recorded as part of the project complied with Departmental standards. The Request for Tender was advertised in the Herald – Sun and on the VicTender web site on the 23rd July 2008.

The Tenders were assessed against the Evaluation Criteria and four Contracts were awarded on the 26th August 2008 for Part A (Vegetation condition/Rare or

Threatened Flora species/Habitat attributes and Land Use Features). Two Contracts were also awarded for Part B (Fauna Surveys).

2.1.1 Vegetation Condition Assessment and Mapping

Each contractor used a GPS to map habitat zones (as described in Vegetation Quality Assessment Manual Version 1.3 DSE 2004) within the assigned study sites. Habitat zones were mapped across all vegetation, regardless of whether it was native vegetation.

Contractors also identified the Ecological Vegetation Class (EVC) of each mapped habitat zone and conducted a habitat hectare assessment using 'Habitat Hectares for Arc Pad'. Each contractor recorded land use, other habitat features and dominant weed species at each zone. DSE supplied each contractor with 'Habitat Hectares for Arc Pad' which was used when mapping and undertaking habitat hectare assessments.

Contractors undertook a 30 minute assessment to identify and (using a GPS) record (i) all Victorian rare or threatened species (VROTS) and; (ii) any habitat features for native fauna. A count or estimate of the number of individual VROTS was provided at each recorded point location. DSE provided an assessment sheet for recording habitat and land use features for fauna likely to be present in the study area including hollow logs, tree hollows, litter, rocks and rock walls. This assessment sheet was also made available to load onto PDAs and these land use and habitat attributes were recorded for all properties that have been assessed and mapped.

For scattered trees, contractors identified and recorded the location of all individual indigenous trees encountered within any habitat zone, including the species, diameter at breast height and assessment to determine ecological/ habitat significance.

2.1.2 Targeted Fauna Surveys

No targeted fauna surveys were undertaken by Biosis Research Pty. Ltd. for significant fauna species in these investigation areas.

2.2 Training of Contractors

The GAA and DSE provided a mandatory (3 day) training course in the assessment methods and tools. The dates for this training course were 27, 28 &, 29 August 2008. This included Habitat Hectares assessments and mapping (to ensure the method is being applied in a consistent manner), use of the Habitat Hectares for Arc Pad software, other data collection requirements, OH&S and

landholder engagement

Staff of contractors were trained in field situations using the habitat hectare assessment methodology by DSE and in the use of hand held GPS devices loaded with Arc View software provided by DSE.

2.3 Access and Landowner Communications

GAA developed procedures for access to properties and protocols for contact with landholders. Contractors were provided with GAA authorised identification documentation to be carried by all staff whilst undertaking field surveys. The GAA assisted in the engagement of landholders in the process and facilitated access to properties to undertake site assessments.

A letter explaining the mapping project and requesting access to properties was sent to each landholder and occupier. Fact sheets explaining precinct structure planning and the vegetation mapping project were also forwarded with the letter to landholders. Land owners were given the choice to make contact with the respective contractor to arrange access to their property. Contractors also spent considerable resources in making contact with land owners and arranging site visits. A small number of landholders refused to provide access to their properties and in some cases the land owner data base did not lead to any contact being made with the land owner or occupier. Contractors provided regular updates as to which landowners had denied the contractor access to their property to conduct a survey.

In cases where access to a property has not been possible, mapping in this report will show the DSE modelled data layer of information and the contractors confirmation of this by a 'drive by' assessment. While this is not ground survey results it provides an indication of likely vegetation and habitat. In some cases, finalisation of the precinct structure plan and /or native vegetation precinct plan will require additional on ground assessment surveys to be undertaken at these properties.

2.4 Access to Existing Reports/Databases

In some parts of the precinct planning areas flora and/or fauna surveys had been previously arranged by landholders, councils or property developers. The GAA, where possible, sought access to these reports and provided a copy to the relevant contractor. DSE staff also provided copies of reports that they knew existed for some of these areas.

Contractors were provided with a copy of or access to the DSE corporate flora and fauna databases e.g. Atlas of Victorian Wildlife / Flora Information System /

Aerial photography. Access to landholder and property information was arranged through the DSE and in some cases a contractor was engage to compile a telephone contact database to enable contractors to contact property owners.

2.5 DSE Quality Assurance Arrangements

Field surveys were undertaken by qualified and experienced botanists and ecologists who had participated in the training provided by the DSE as part of this project. DSE also undertook quality assurance site visits with the contractors to ensure that the assessment methodology was being applied in a consistent manner.

Contractors provided monthly reports to the GAA contract manager including an account of hectares assessed and the data collected. The GAA undertook a check of GIS integrity and then arranged for DSE to check the data for its biological integrity.

Audits of the data files were conducted by DSE to ensure that the records conformed to DSE standards and that all attributes had been recorded accurately. Any deficiencies were reported to each contractor for correction and improvement prior to acceptance of the results and finalisation of payments.

2.6 Project Governance

A Native Vegetation Project Control Group was established by the GAA and the Group initially included the GAA and DSE representatives. The Project Control Group has met regularly since the project commenced.

Representatives of VicRoads and Department of Transport were invited to join the Project Control Group when it was decide that the GAA contracts would be used to undertake the assessment and data gathering for their road and rail project. The Department of Transport also arranged for their project manager (Maunsell AECOM) to attend the meetings.

2.7 Monthly Reporting

Monthly updates and data files were provided on the progress of the assessments along with the contractor's updated project plan to ensure completion of the planned extent of assessment/mapping within the time period provided for the assessment. Initially the assessments were to be completed by the end of December 2008 but the GAA negotiated with contractors to extend the survey

deadline into early 2009 to maximise the areas assessed and mapped.

PART 2 -
Flora Assessment and Mapping
Completed by Bioisis Research Pty. Ltd

EXECUTIVE SUMMARY

Biosis Research was commissioned by the Growth Areas Authority (GAA) to map and assess native vegetation within the Melton/Wyndham Investigation Area west of Melbourne (Figure i). The field assessments were undertaken between October and March on all properties within the Melton/Wyndham Investigation Area where owner permission to access the lands was able to be obtained. Subsequent reconnaissance level surveys to provide additional information were undertaken from public access points (mainly roads) for the remaining properties within the Melton/Wyndham Investigation Area in May 2009.

With a view to analysing and presenting the data captured during these assessments, the GAA have split the Melton/Wyndham Investigation area into eight key sections based on likely future precinct areas. This report covers Section E, which is located in the Melton Shire and is roughly bounded to the north by private property fronting the northern side of Greigs Road, to the south by Boundary Road, to the west and by Mount Cottrell Road and to the east by Tarneit Road (or a northern extension of this road). It includes no major roads, but is dissected by Dry Creek and associated tributaries. (Figure i).

Provision of Access

Section E covers an area of 3518 ha, and of this roughly 1345 ha or 38% of land within Section E was inspected and subject to a habitat hectare assessment (referred to as the Melton/Wyndham Investigation). The remaining 62% of the area was subject to a reconnaissance level field survey only.

Ecological Vegetation Classes

Prior to European settlement most of Section E supported the Ecological Vegetation Class (EVC) Plains Grassland (EVC 132), which is listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as the critically endangered community *Natural Temperate Grassland of the Victorian Volcanic Plain*. Despite over two centuries of farming and urban development, remnants of native vegetation are present within Section E.

A total of four EVCs (one with two communities), *Low-rainfall* Plains Grassland (EVC 132-63), *Heavier-soils* Plains Grassland (EVC 132-61), Plains Grassy Wetland (EVC 125), Plains Grassy Woodland (EVC 55) and Stony Knoll

Shrubland (EVC 649), were recorded within Section E during the Melton/ Wyndham Investigation.

Significant Species

One nationally significant flora species, Spiny Rice-flower *Pimelea spinescens* subsp. *spinescens* (critically endangered) was recorded during the current assessment and had previously not been recorded in Section E on the Flora Information System (FIS). The FIS recods one additional species, Clover Glycine *Glycine latrobeana* within Section E.

One fauna species listed under the EPBC Act, Golden Sun Moth *Synemon plana* (critically endangered), was recorded in Section E during the current assessment. This species was recorded in several Plains Grassland remnants and is probably widespread in Section E, both in areas of remnant native grassland and to some extent in Degraded Treeless Vegetation. The AVW has records of Plains-wanderer *Pedionomus torquatus* (vulnerable) and Striped Legless Lizard *Delma impar* (vulnerable) from Section E. Populations of Striped Legless Lizard are probably largely confined to areas of remnant Plains Grassland, however there presence in areas of Degraded Treeless Vegetation cannot be discounted without targeted survey. The status of Plains-wander in Section E is unclear.

Twelve fauna species of national significance have been recorded from the local area in the AVW and/or BA database or are predicted to occur on the DEWHA database. These species are considered to have a medium to negligible likelihood of occurrence based on the habitat present (Appendix 5).

Two flora species of state significance, Small Scurf-pea *Cullen parvum* and Wimmera Woodruff *Asperula wimmerana* were recorded within Section E during the current assessment. Four species, Heath Spear-grass *Austrostipa exilis*, Half-bearded Spear-grass *Austrostipa hemipogon*, Arching Flax-lily *Dianella* sp. aff. *longifolia* (Benambra) and Fragrent Saltbush *Atriplex parabolica*, have been previously recorded within Section E on the FIS.

No fauna species of state significance were recorded within Section E during the current assessment. One species, Red-chested Button Quail *Turnix pyrrhothorax*, has records from Section E in the AVW or BA databases and Plains Grassland within the study area provides good habitat for this species.

Twenty-two species of state conservation significance are recorded from the local area in the AVW and/or BA database or are predicted to occur on the DEWHA database. Of these species, Black Falcon *Falco subniger* has a high likelihood of occurrence in Section E based on habitat suitablility (Appendix 5). The habitat is considered poorly represented or not present for the remaining species.

There has been no systematic targeted survey for any listed species with Section E so the size and extent of populations of these species is not known.

Vegetation Quality Assessment (Melton/Wyndham Investigation)

Of the 1344.6 ha within Section E assessed during the Melton/Wyndham Investigation, a total of **504.81ha** indigenous vegetation (512 patches) were recorded.

The 504.81 ha of indigenous vegetation present equate to 363.61 habitat hectares of Low-rainfall Plains Grassland, 9.83 habitat hectares of Heavier-Soils Plains Grassland, 0.03 habitat hectares of Plains Grassy Wetland, 0.02 habitat hectares of Plains Grassy Woodland and 0.07 habitat hectares of Stony Knoll Shrubland. Therefore, a total of **363.73 habitat hectares** are present within the 1344.6 ha assessed during the Melton/Wyndham investigation.

Reconnaissance Survey

Numerous blocks (totalling approximately 1320 ha) were identified as *Highly Likely Native Vegetation - Grassy* during the reconnaissance survey (Figure 2). Most of these areas were observed to support broad areas of Plains Grassland dominated by Kangaroo Grass and are likely to be mainly primary grassland of Very High conservation significance. A large portion of this is former Defence land to the east of Mount Cottrell which appears to contain high quality remnants of Plains Grassland A further 76 hectares (approximately) were identified as *Possible Native Vegetation.* The remaining area (approximately 615 ha) was considered likely to support less than 25% indigenous vegetation projective foliage cover (excluding bare ground). These areas were mapped as *No Native Vegetation* and are likely to be areas of Degraded Treeless Vegetation (Figure ii).

Government legislation and policy

All sections of the Melton/Wyndham Investigation Area (including Section E) support matters of NES which would trigger the EPBC Act. In response to this the GAA has engaged with DEWHA to conduct a strategic assessment process in relation to the entire Melton/Wyndham Investigation Area. At the time of the field assessment and report preparation for the current assessment, the strategic assessment was in the process of being prepared, hence the outcome of the strategic assessment had not been agreed to by the Commonwealth Government.

A planning permit to remove native vegetation would typically be required under the Melton Shire Planning Scheme (Clause 52.17). However, it will be possible that some or all of Section E will be subject to a Native Vegetation Precinct Plan (NVPP) (Clause 52.16) which would negate the need for a permit under Clause 52.17 (or other relevant clause), if removal is in line with the NVPP.

A permit will be required from DSE under the Victorian *Flora and Fauna Guarantee Act 1988* to remove protected flora from public land within Section A.

Potential losses of native vegetation associated with any development of Section D will be subject to the guidelines provided by Victoria's Native Vegetation Management Framework (Net Gain policy).

Key Ecological Areas

Vegetation mapping undertaken during the Melton/Wyndham Investigation identified 13 Key Ecological Areas (Key Areas) within Section E, totalling approximately 606 ha. These are scattered throughout Section E and are largely linked by unassessed areas identified during the reconnaissance survey as areas highly likely to support native grassland (Figure ii).

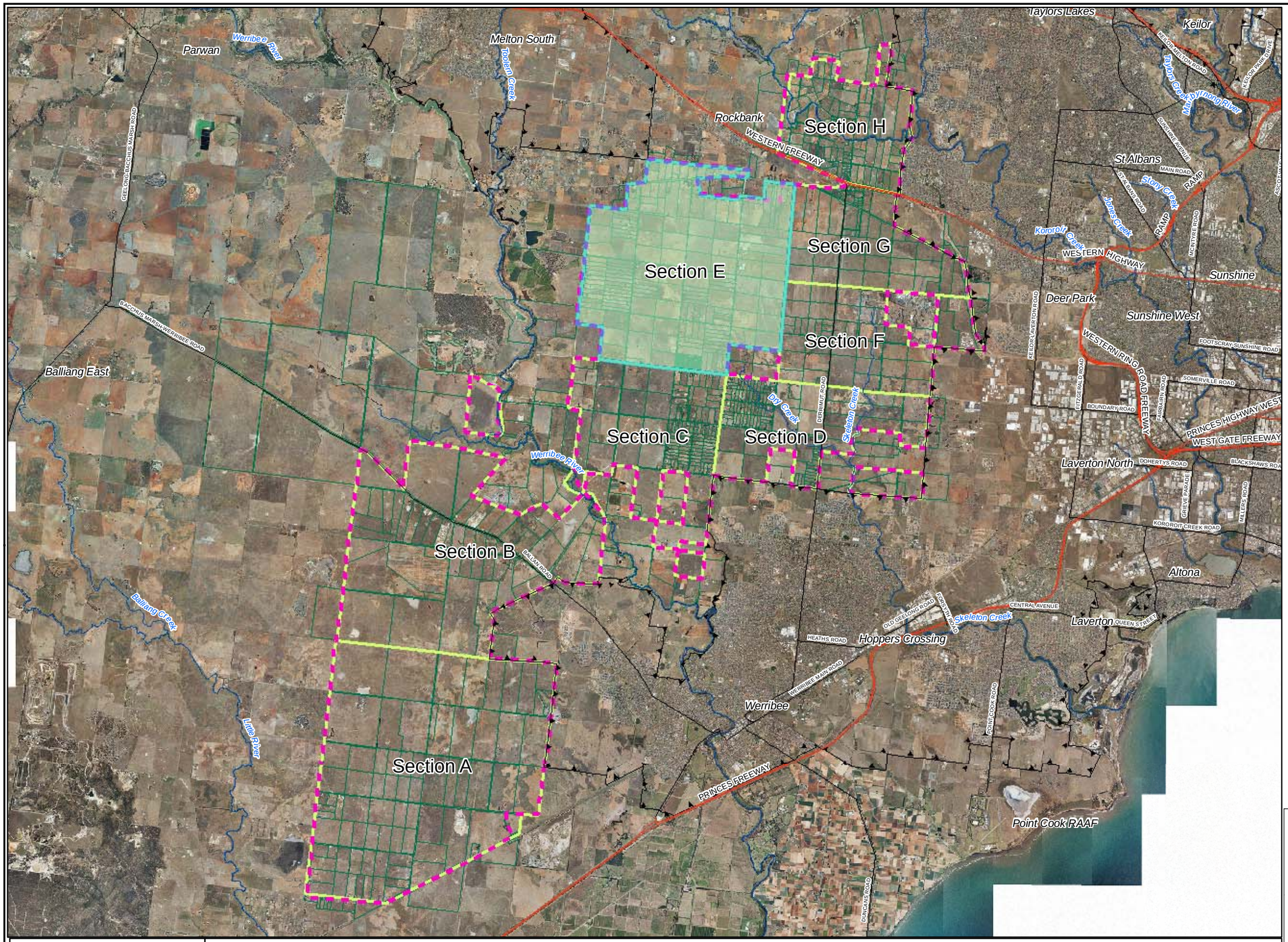
In addition to ecological values such as presence of significant species and listed communities, these Key Areas provide landscape stepping stones between other remnants of Plains Grassland. They contribute to landscape linkages between larger areas of unassessed vegetation in close proximity to assessed areas, which are also considered likely to support additional areas of these endangered EVCs.

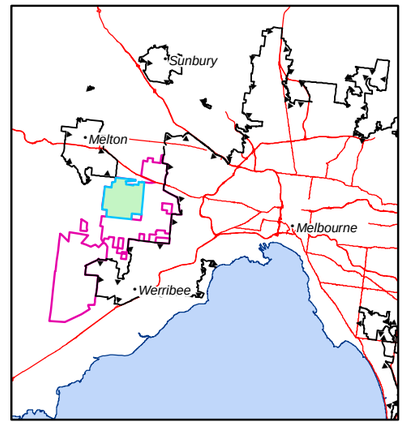
The Key Areas within Section E have been variously modified, however all consist of more than 10 ha of contiguous native vegetation of Very High conservation significance. Ecological Vegetation Classes present include *Low-rainfall* Plains Grassland and *Heavier-soils* Plains Grassland. In addition to ecological values such as presence of significant species and listed communities, these Key Areas provide some of the best examples of Heavier-soils Plains-grassland in the Melton/Wyndham Investigation Area. There are numerous listed threatened species present in these Key Areas and surrounding Management Zones (which are largely made up of Highly Likely Native Vegetation areas known to contain native vegetation values) and provide an excellent example of the critically endangered *Natural Temperate Grassland of the Victorian Volcanic Plain*.

Conclusions

The areas assessed within Section E as part of the Melton/Wyndham Investigation contain a significant area of native vegetation, comprising the endangered EVCs *Low-rainfall* Plains Grassland, *Heavier-soils* Plains Grassland, Escarpment Shrubland, Plains Grassy Woodland and Plains Grassy Wetland, as well as the EPBC Act listed ecological community *Natural Temperate Grassland of the Victorian Volcanic Plain*. Thirteen Key Ecological Areas of Very High conservation significance have been identified within Section E, based on their conservation significance, size, habitat for threatened species and habitat connectivity values. Some of these areas are considered to provide the

best quality examples of Heavier-soils Plains Grassland within the Melton/Wyndham Investigation Area. Identification of these Key Areas provides opportunities for the precinct planning process to consider and implement the 3-step process of avoid, minimise and offset.





Legend

- Section E
- Urban Growth Boundary
- Melton/Wyndham Investigation Area
- Section boundary
- Parcels

Figure i: Location of Section E within the Melton/Wyndham Investigation Area.

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Checked by: NHF
Drawn by: SKM
File number: 7813

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1.0 INTRODUCTION

1.1 Project Background

Biosis Research Pty. Ltd. was commissioned by the Growth Areas Authority (GAA) to map and assess native vegetation within the Melton/Wyndham Investigation Area west of Melbourne (Figure 1). The purpose of this mapping was to inform the preparation of precinct structure plans in areas designated for future urban development.

The biodiversity information collected as part of our investigations will be used to inform the Government's review of the Urban Growth Boundary (UGB) and Urban Growth Zone (UGZ) to the west of Melbourne.

In March 2009, Biosis Research produced the *Background Technical Report 2c: Biodiversity; Assessment of the Investigation Area in Melbourne's West*. This report covered two main areas known as the Melton Desktop Area (east of Melton, west of Sydenham, south of Mount Kororoit and north of Mount Atkinson) and the Vegetation Assessment Areas (incorporates the Melton/Wyndham Investigation Area shown in Figure 1 as well as an additional area to the west). Biosis Research (2009) referred to these areas collectively as the GAA Investigation Area. The report aimed to assess biodiversity constraints in the GAA Investigation Area and provide broad-scale recommendations for areas of retention priority.

The current report aims to provide a more detailed analysis of the results obtained through the vegetation mapping undertaken by Biosis Research in the Melton/Wyndham Investigation area. To assist in analysis and presentation of the data, the GAA have split the Melton/Wyndham Investigation area into eight key sections based on likely future precinct areas. As such, the results of the vegetation mapping assessment are documented in eight stand-alone reports, each covering a different section of this broader area (Figure 1). This report focuses on one of these sections: Section E (Figure 1).

1.2 Aims

The objectives of the study are to:

- Document the biodiversity values within each section of the Melton/ Wyndham Investigation Area identified by the vegetation mapping project;
- Analyse the data to determine key areas of vegetation/habitat; and
- Present the habitat hectare and large old tree data collected.

These objectives will be achieved by:

- Providing a consolidated species list of flora and fauna recorded during the mapping project and augment these with database records provided by database searches within 5 km of each section;
- Mapping Ecological Vegetation Classes (EVCs) using field data collected from the Melton/Wyndham Investigation Area;
- Assigning a conservation significance to all patches of native vegetation, as per Appendix 3 of the Native Vegetation Framework (NRE 2002 – the Framework);
- Determining the location of significant biodiversity values; and
- Identifying the limitations of the current assessment.

1.3 Section E

Section E is located at the north western end of the broader Melton/Wyndham Investigation Area on the western fringe of Melbourne (Figure 1). Section E covers an area of 3518 ha and is within the Victorian Volcanic Plain bioregion. It is roughly bounded to the north by private property fronting the northern side of Greigs Road, to the south by Boundary Road, to the west and by Mount Cottrell Road and to the east by Tarneit Road (or a northern extension of this road). It includes no major roads, but is dissected by Dry Creek and associated tributaries.

The topography is generally flat to gently undulating, resulting from lava flows of the late Tertiary–early Quaternary periods (Collie Margules 1990).

2.0 METHODS

2.1 Taxonomy

Common and scientific names for flora and fauna follow the Flora Information System (FIS 2007 version) and the Atlas of Victorian Wildlife (AVW 2007 version) with are curated by DSE.

Classification of native vegetation in Victoria follows a typology developed by DSE in which Ecological Vegetation Classes (EVCs) are the primary level of classification. An EVC contains one or more plant (floristic) communities, and represents a grouping of broadly similar environments (www.dse.vic.gov.au).

2.2 Literature and Database Review

Information in the FIS and AVW databases was reviewed and a search of the Birds Australia database (1998–2008) was undertaken. The Department of the Environment, Water, Heritage and the Arts (DEWHA) online database for the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act Protected Matters Search Tool, hereafter referred to as the DEWHA database) was searched. The current distribution (2005) and 1750 EVCs (DSE mapping of native vegetation present at these dates) present within each section of the Melton/Wyndham Investigation Area and their bioregional conservation status was reviewed (www.dse.vic.gov.au).

2.3 Vegetation Assessments

Field assessments were undertaken on 7, 9, 20, 23, 28, 29, 30, 31 October 2008; 3, 6, 7, 11, 13, 14, 17, 18, 19, 21, 24, 25, 28 November 2008; 4, 16, 22, 29 December; 22, 23, 27 January 2009 and 3, 18, 25 February 2009 (30 days). Some additional days between this period were spent undertaking reconnaissance of the study area and other field tasks required for planning and quality assuarance of data being collected in the field.

The presence of native vegetation within the Melton/Wyndham Investigation Area (including Section E) was determined by field inspection. Access details for private property within these areas were provided by the GAA. Where possible, land owners were contacted and permission obtained to inspect each property. Initially no inspections were conducted without land owner approval and roughly **1248 ha** of land were inspected in this manner. However, where access was denied, right to forced access was obtained in some instances and about **111 ha** were accessed in this manner. In total, therefore, roughly **1359 ha**

(39% of private land within Section E) were inspected and subject to a habitat hectare assessment.

The vegetation of each property within the Melton/Wyndham Investigation Area was inspected by vehicle and on foot by up to three teams of two botanists between October 2008 and February 2009. Where access was denied or contact was unable to be made with the listed owner of a parcel of land, incidental observations were made from all available access points including where permitted access was available. During reconnaissance level surveys undertaken in May 2009, these observations were recorded in four main categories: highly likely native vegetation, possible native vegetation, wetland habitat or no native vegetation (See Section 2.4 for more detail).

The inspection of each property where access was permitted focused on delineating the extent of areas definable as a patch of native vegetation. A patch is defined by DSE (2007a) as an area where at least 25% of the total understorey plant cover is native (excluding bare ground). For each patch identified, a habitat hectare assessment was conducted and habitat score calculated. A summary of this method is provided in Appendix 1.

All areas that did not meet the 25% threshold were mapped as Degraded Treeless Vegetation. Typically this included cropped sites, cultivated areas sown with exotic pasture species and other areas dominated by introduced species. Seasonal wetlands are an exception to this as they are not generally dominated by native species when dry. Seasonally inundated wetlands are allocated a default habitat score as outlined by DSE (2007a). Vegetation quality was assessed within each accessed property using a standard method contained in a manual published by the Department of Sustainability and Environment (DSE 2004).

Indigenous canopy trees were also assessed and mapped in accordance with the Framework (NRE 2002). For scattered trees, contractors identified and recorded the location of all individual indigenous trees encountered within any habitat zone, including the species, diameter at breast height and assessment to determine ecological/ habitat significance

2.4 Reconnaissance Field Survey

A number of properties within Section E were not accessed during the Melton/Wyndham Investigation because of lack of available access, namely due to denial of access by landholders that were able to be contacted or incorrect contact details for remaining landholders. The presence of native vegetation within areas that were not able to be accessed was subsequently assessed using limited on-ground (reconnaissance) field survey informed by DSE's Native

Vegetation Modelling (NVE 2005), mapping data from previous Biosis Research assessments and other available reports, together with an analysis of recent aerial photography (January 2008).

Reconnaissance field survey for the Melton/Wyndham Investigation Area (including Section E) was carried out over three days in May 2009, in order to fill in knowledge gaps. Access was limited to roadsides.

The likely occurrence of native vegetation within these unsurveyed areas was split into one of six categories:

- *Highly Likely Native Vegetation - Grassy*
- *Highly Likely Native Vegetation - Structurally Modified*
- *Highly Likely Native Vegetation - Woody*
- *Possible Native Vegetation*
- *Wetland Habitat*
- *No Native Vegetation*

2.5 Mapping

Mapping data collected are displayed at a scale of 1:10,000. While all areas of native vegetation were considered in line with the DSE requirements for this project, no minimum area of native vegetation to be mapped was defined. Patches of native vegetation were delineated at the discretion of field staff to define the location of any significant features.

2.6 Rare or Threatened species

Information on any populations of rare or threatened species (FIS 2007, DSE 2007b) observed during property site inspections were also recorded during the Melton/Wyndham Investigation field assessments. Data collected included a GPS waypoint, estimated distribution and estimated population size. However, no systematic survey was conducted for any threatened species.

2.7 Conservation Significance

The Framework (NRE 2002) defines conservation significance (Very High, High, Medium and Low) that relates to the bioregional level only. The primary measure used for determining the conservation significance of a patch of native vegetation as defined by the Framework is the Habitat Score. As all EVCs within the broader Melton/Wyndham Investigation Area (including Section E) are rated as endangered (except for Cane Grass Wetland EVC 291 which is rated

as vulnerable) all patches of native vegetation within the Melton/Wyndham Investigation Area are rated to be at least of High conservation significance. Any patches with a Habitat Score of 40/100 or more have Very High conservation significance.

DSE have stipulated that consultants should utilise the Landscape Context Modelling Data layer (NV2005_QUAL_CSDL DSE 2003) provided in the Biodiversity Interactive Map 2.0 (http://nremap-sc.nre.vic.gov.au/MapShare.v2/imf.jsp?site= bim external) to assign landscape scores for each patch of native vegetation within the Melton/Wyndham Investigation Area. The legend in the Biodiversity Interactive Map qualifies the dataset by stating that "*datasets must be used with care, given their modelled nature. They are designed for use at a large scale (1:25,000 to 1:100,000) and are not intended to be used at a site or property scale*". To ensure that the Habitat Score for each patch could accurately be applied to determine conservation significance landscape scores were reviewed on a patch scale and revised where appropriate based on ground-truthed knowledge.

The second measure used for determining the conservation significance of a patch of native vegetation as defined by the Framework is the presence of the best 50% of habitat for a threatened species (NRE 2002: Appendix 3). Criteria for determining the presence of such habitat are described by DSE (2007a: Table 2). Where a patch of native vegetation was not determined to be of Very High conservation significance based on its condition, all available data on the presence of threatened species were used to determine if that patch represented the best 50% of habitat for a threatened species.

A third measure used for determining the conservation significance of a patch of native vegetation as defined by the Framework is the presence of other attributes as defined by NRE (2002: Appendix 3). Where a patch of native vegetation was not already determined as Very High conservation significance because of its condition or the presence of the best 50% of threatened species habitat, the site was assessed for the presence of these other attributes.

2.8 Defining Key Areas

The future proposed land use within Section A may result in significant impacts to existing biodiversity values by (amongst other factors):

- the permanent removal of some native species and their habitats;
- the division of native species popoulations into genetically and geographically isolated smaller populations;

- changes to wildlife behaviour;
- disturbance to soil; and
- landscape level changes to water supply, movement and quality.

A number of aspects were considered when considering how Key Areas within the Melton/Wyndham Investigation Area should be defined. It is important that biodiversity values within Key Areas should be viable in the long term and that more mobile species, particularly rare or threatened species should have access to a network of suitable environments connected through a series of habitat corridors. Designation of Key Areas based on these concepts will minimise the risks of extinction during extreme environmental conditions such as fire and drought, or in association with future climate change.

The Victorian Volcanic Plain supports nationally significant values such as *Natural Temperate Grassland of the Victorian Volcanic Plain*, Spiny Rice-flower *Pimelea spinescens* subsp. *spinescens* and Golden Sun Moth *Synemon plana* (listed as critically endangered), Grassland Earless Dragon *Tympanocryptis pinguicolla* and Swift Parrot *Lathamus discolor* (listed as endangered), Striped Legless Lizard *Delma impar*, Plains-wanderer *Pedionomus torquatus*, Australian Painted Snipe *Rostratula australis*, Large-fruit Fireweed *Senecio macrocarpus*, River Swamp Wallaby-grass *Amphibromus fluitans* and Growling Grass Frog *Litoria raniformis*. All of these are matters of national environmental significance protected under the EPBC Act. These values should remain a conservation focus of ecological reserves within the region.

With the above concepts in mind, Key Areas within the Melton/Wyndham Investigation Area were defined using the following criteria:

- Large areas (more than 10 ha of contiguous native vegetation of Very High conservation significance);
- Areas providing habitat connectivity as either corridors or stepping stones; and
- Smaller areas (less than 10 ha) with a Site Condition score of >50 or areas that support significant populations of threatened species.

This assessment of Key Areas applies only to areas that have been subject to on-ground mapping and habitat hectare assessments as part of the original Melton/Wyndham Investigation. Areas within Section E where on-ground access was unable to be obtained have been subject to reconnaissance level surveys only, and have been excluded from the assessment of Key Areas as outlined above. It must be noted that patches of native vegetation that would meet the Key Area criteria are almost certainly present within these areas. In considering these areas decision makers should refer to the results of the reconnaissance level surveys (Figure 6) and Biosis Research (2009)

which will provide some indication of likely Key Areas within the reconnaissance survey sites.

2.9 Limitations

The following limitations apply to the current assessment:

1. Section E covers an area of approximately 3518 ha. Access was obtained for about 1359 ha and this area was subject to site inspection and a habitat hectare assessment where relevant. The remaining 2140 ha (61% of Section E) was primarily subject to a reconnaissance level assessment using existing information, aerial photo interpretation and limited ground truthing. Ground truthing was restricted to viewing areas from public access points (primarily roads). A full assessment of the ecological values of these areas was not conducted. However, this assessment can be used to identify sites that require further field assessment to satisfy environmental legislation and policy requirements.
2. The classification of native vegetation within sections of the Melton/ Wyndham Investigation Area as *highly likely*, *possible* or *no native vegetation* is in relation to 'native vegetation' as per the definition of a remnant patch or scattered trees by DSE (2007a). It does not imply that sites mapped as having no native vegetation contain no scattered indigenous species, rather, that any native vegetation present is likely to be below the thresholds for assessment as a patch of native vegetation as prescribed under the Framework (NRE 2002).
3. The Melton/Wyndham Investigation Area was assessed using current DSE standards (DSE 2004). However, defining remnants (patches) of the EVC Plains Grassland using the Native Vegetation Framework (DSE 2007) does not necessarily correlate with the definition of the EPBC Act listed community *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP). While the two definitions for this community generally correspond well, there are instances where grassy vegetation does not qualify as a patch of Plains Grassland, but does meet the condition thresholds for NTGVVP. While the listing of NTGVVP indicates its intent to protect the better quality examples of this community, the definition provided by EPBC Act Policy Statement 3.8 is very broad. Therefore, some areas of Degraded Treeless Vegetation within the Melton/Wyndham Investigation Area may qualify as the EPBC Act listed community. These unmapped areas of grassland were generally of lower quality examples of this community resulting from the recolonisation of cultivated sites.
4. It is important to note that significant species, both flora and fauna, can occur in areas that are not considered to support patches of native vegetation. Examples of such species include the nationally significant Golden

Sun Moth, Striped Legless Lizard, Growling Grass Frog and Spiny Rice-flower. In some circumstances, areas not definable as a patch of native vegetation can support substantial populations of these species. It is therefore important to recognise that areas of non-native vegetation may still contain biodiversity values.

5. Additional limitations are as follows:

    - The assessment includes only vascular flora (ferns, conifers, flowering plants) and terrestrial vertebrate fauna (birds, mammals, reptiles, frogs), with the exception of Golden Sun Moth, which was recorded when observed. Non-vascular flora (e.g. mosses, liverworts) were not sampled although their presence is noted as part of the cover of native species in the definition of a patch.
    - Note that this assessment did not include any formal fauna survey and the significance assessments provided rely on incidental observations of significant fauna and existing database records. Subsequent fauna assessments could increase the conservation significance of areas not already rated to be of Very High conservation significance.
    - The presence of threatened flora and fauna were noted where they were encountered. However, such observations are likely to underestimate the distribution of these species, many of which are cryptic or only seasonally visible. Seasonal targeted surveys for threatened flora and fauna species should be conducted within relatively intact areas of native vegetation before any decisions are made as to their presence, absence or population size.
    - Comprehensive flora species lists were not compiled for each property visited. While plants observed in patches of native vegetation were recorded, the objective of the assessments was to complete habitat hectare assessments, which are based on presence and cover of plant lifeforms, rather than species information. As such, some species have been recorded to genus level only.
    - The assessment was conducted over a range of seasonal conditions which included both optimal and sub-optimal times for survey. As such the majority of seasonally visible species are likely to have been overlooked with a single site visit.
    - Field mapping is conducted using hand-held (uncorrected) GPS units and aerial photo interpretation. The accuracy of this mapping is therefore subject to the accuracy of the GPS units (manufacturer states +/- 15m but generally +/-2 to 5 metres) and dependent on the limitations of aerial photo resolution, rectification and registration. As such, these points should not be relied on for survey grade design purposes.

- Agricultural areas are often heavily grazed making detection and/or identification of certain species, and estimation of life form cover difficult.
- Data from other assessments are generally available from the species records (including threatened species) and defined area species lists submitted by Biosis Research and other consultants to the FIS and AVW on a regular basis. Data collected post 2007 by other consultants will not be in the database currently available to consultants which subscribe to this database.
- The presence or absence of significant native vegetation described in other reports is generally relatively old and/or is otherwise superseded by the site inspections associated with this assessment. In that context a review of the more broadly available literature covering areas of land within Section E is not seen as critical to this assessment. However, a review of literature relating to the GAA investigation areas (including Section E) can be found in Biosis Research (2009).

3.0 RESULTS

3.1 Flora Species

3.1.1 Records within Section E

A total of 183 (103 indigenous and 80 introduced) plant species have been recorded from Section E (Appendix 2, Table A2.1) during the Melton/Wyndham Investigation (current assessment). The FIS contains 148 existing records supporting 262 (138 indigenous species and 124 introduced) plant species within Section E. Some, but not all of these existing species were recorded during the current assessment. Sixty-six existing indigenous records were not observed during the current assessment; however an additional 28 indigenous species were recorded. One of these additional species Spiny Rice-flower *Pimelea spinescens* ssp. *spinescens* is of national significance while another, Small Scurf-pea *Cullen parvum*, is of State significance. Planted species have not been recorded unless they are spreading (naturalised).

3.1.2 Database records

The FIS contains records of a total of 595 plant species (341 indigenous and 254 introduced) from within 5 km of Section E (Appendix 2, Table A2.2). The DEWHA database also predicts the occurrence of, or suitable habitat for an additional two listed flora species (Curly Sedge *Carex tasmanica* and Maroon Leek-orchid *Prasophyllum frenchii*) within 5 km of the study area. There is no suitable habitat, or habitat is poorly represented for these species within Section E (Appendix 2, Table A2.3).

3.2 Ecological Vegetation Classes

Thirteen EVCs (one with two communities) were recorded within the Melton/Wyndham Investigation Area:

- Plains Grassy Woodland (EVC 55)
- Floodplain Riparian Woodland (EVC 56)
- Creekline Grassy Woodland (EVC 68)
- Lignum Swamp (EVC 104)
- Plains Grassy Wetland (EVC 125)
- Heavier-soils Plains Grassland (EVC 132_61)
- Low-rainfall Plains Grassland (EVC 132_63)
- Cane Grass Wetland (EVC 291)
- Plains Sedgy Wetland(EVC 647)

- Stony Knoll Shrubland (EVC 649)
- Creekline Tussock Grassland (EVC 654)
- Brackish Wetland (EVC 656)
- Plains Woodland (EVC 803)
- Escarpment Shrubland (EVC 895)

DSE mapping of 1750 vegetation (a 1:100,000 scale map of vegetation as at this date) models the entirety of Section E as previously supporting Plains Grassland (EVC 132). The DSE 2005 EVC vegetation mapping indicates that substantial sections of the study area support areas of Plains Grassland in particular the area between Mount Cottrell and the Troups Road South.

Section E is largely influenced by the topographic point of Mount Cottrell and the majority of the region is contained within the slopes of this peak. Section E contains large areas (up to 2000 ha) of native vegetation and is capable of creating a landscape linkage between the grassland areas to the North of the Werribee River and the extensive remnant grasslands of the Werribee Plains. The section potentially contains the largest extent of the federally listed *Natural Temperate Grasslands of the Victorian Volcanic Plains* to the north of the Werribee River. The rocky nature of this region and previous ownership by the crown has resulted in relatively low intensity land use and as such a range of federally and state listed species are highly likely to be found throughout Section E including the federally listed species Matted Flax-lily *Dianella amoen* and Button Wrinklewort *Rutidosis leptorhynchoides* in addition to the recorded Spiny Rice-flower.

Four EVCs (one with two communities) were recorded within Section E during the Melton/Wyndham Investigation:

- Low-rainfall Plains Grassland (EVC 132-63);
- Heavier soils Plains Grassland (EVC 132-61);
- Plains Grassy Wetland (EVC 125);
- Plains Grassy Woodland (EVC 55); and
- Stony Knoll Shrubland (EVC 649)

The following general descriptions are based on data collected during this assessment.

3.2.1 *Low-rainfall* Plains Grassland

In total, 619.39 ha (499 patches) of Low-rainfall Plains Grassland was mapped in Section E. This EVC is present on cracking basalt soils in areas that receive less than 500 mm annual rainfall. The vegetation present commonly includes grass species such as Kangaroo-grass, *Themedea triandra*, Kneed Spear-grass *Austrostipa bigeniculata*, Rough Spear-grass *Austrostipa scabra* and a range of

wallaby-grasses *Austrodanthonia* sp. Other common species present include Grassland Wood-sorrel *Oxalis perennans*, Lemon Beauty-heads *Calocephalus citreus*, Blue Devils *Eryngium ovinum* Wingless Blue-bush *Maireana enchylaenoides* and Berry Saltbush *Atriplex semibaccata.*
Introduced weed species commonly found in this EVC include Wimmera Rye-grass *Lolium rigidum*, Onion Grass *Romulea rosea*, Cat's Ear *Hypochoeris radicata*, and scattered Chilean Needle-grass *Nassella neesiana* and Serrated Tussock *Nassella trichotoma*.

3.2.2 *Heavier-soils* Plains Grassland

A total of 18.34 ha (9 patches) of Heavier-soils Plains Grassland was mapped in Section E. This EVC occurs on deeper more fertile soils which are less subject to summer drought stress. As a result they are commonly dominated by the summer growing grass species such as Kangaroo Grass. Examples of this EVC in Section E are relatively species rich and contain species often associated with better quality example of Plains Grassland including Scaly Buttons *Leptorynchos squamatus*, Common everlasting *Chrysocephalum apiculatum* s.l, Spiny Rice-flower, Lemon Beauty-heads, Blue Devil and Cut-leaf Goodenia *Goodenia pinnatifida*.

Introduced weed species commonly found in this EVC include Wimmera Rye-grass, Onion Grass, Cat's Ear, Buck's Horn Plantain and scattered Chilean Needle-grass, Serrated Tussock and Cocksfoot *Dactylis glomerata*.

3.2.3 Plains Grassy Wetland

Section E contains a total of 0.05 ha (1 patch) of Plains Grassy Wetland. This patch occurs within the Mount Cottrell Recreation reserve. It contains a range of species specific to this EVC and occurs in a blockage in a swampy drainage line surrounded by Plains Grassland. It is treelessand also lacks a shrub component.

The vegetation is relatively species poor although there is a good population of Pale Spike-sedge *Eleocharis pallens* present.

Weed species commonly occurring within Plains Grassy Wetland include Spear Thistle *Cirsium vulgare*, Toowoomba Canary-grass *Phalaris aquatica*, Yorkshire Fog *Holcus lanatus* and Cat's ear.

3.2.4 Plains Grassy Woodland

Section E contains a total of 0.44 ha (2 patches) of Plains Grassy Woodland. The remnant patch of Plains Grassy Woodland within Property PFI 2088086 has been heavily modified and contains an overstory of River Red-gum *Eucalyptus*

camaldulensis with the only understorey species observed to be Weeping Grass *Microlaena stipoides* var *stipoides*. The other patch of Plains Grassy Woodland occurs with Property PFI 150902961 and consists of a single eucalypt with an understorey composed of species typical of the surrounding Plains Grassland including Rough Spear-grass, and a range of Wallaby-grasses, Grassland Wood-sorrel, Wingless Blue-bush and Berry Saltbush.

Weeds species occurring in Plains Grassy Woodland include African Box-thorn *Lycium ferocissimum*, Spear Thistle, Ribwort *Plantago lanceolata*, Squirrel-tail Fescue *Vulpia bromoides* and Onion Grass.

3.2.5 Stony Knoll Shrubland

Section E contains a total of 0.24 ha (1 patch) of Stony Knoll Shrubland. The patch of Stony Knoll Shrubland that occurs within Section E is devoid of shrubs but contains a range of ground flora consistent with this EVC. The ground layer includes indigenous grasses and herbaceous species such as Weeping Grass, Wallaby-grass, Spear Grass, Kidney-weed *Dichondra repens* and Bronze Bluebell *Wahlenbergia luteola*.

Typical weeds include African Box-thorn, Horehound *Marrubium vulgare* and Galenia *Galenia pubescens* var *pubescens*.

3.3 Scattered Trees

No scattered indigenous Large Old Trees (LOTs) were recorded within Section E and therefore this component of the vegetation assessment protocol is not considered further by this report.

Further survey of areas not accessed as part of the Melton/Wyndham investigation may reveal the presence of scattered LOTs. If present, they should be considered in line with the requirements of the Native Vegetation Framework (NRE 2002).

3.4 Degraded Treeless Vegetation

Degraded Treeless Vegetation is primarily composed of highly disturbed agricultural land consisting of predominantly introduced vegetation. It mainly consists of areas used for cereal crop production and as such is dominated by typical crop weed species.

Section E supports 706.14 ha of Degraded Treeless Vegetation in areas mapped during the Melton/Wyndham Investigation. These areas generally contain large amounts of bare ground with the vegetation dominated by a mix of

introduced annual grasses and other herbs. Common species include Spear Thistle, Artichoke Thistle *Cynara cardunculus*, Wimmera Rye-grass, Squirrel-tail Fescue *Vulpia bromoides* and Buck's-horn Plantain.

Low quantities and cover of indigenous grasses and other herbs including Common Wallaby-grass *Austrodanthonia caespitosa*, Bristly Wallaby-grass *A. setacea*, Brown-back Wallaby-grass, Grassland Wood-sorrel, Slender Dock *Rumex brownii* and Berry Saltbush are present within this vegetation, however the cover does not meet the thresholds to be defined as a patch of native vegetation under the Native Vegetation Framework (NRE 2002).

3.5 Reconnaissance Level Survey

Numerous blocks (totalling approximately 1320 ha) were identified as *Highly Likely Native Vegetation - Grassy* during the reconnaissance survey (Figure 2). Most of these areas were observed to support broad areas of Plains Grassland dominated by Kangaroo Grass and are likely to be mainly primary grassland of Very High conservation significance. A further 76 hectares (approximately) were identified as *Possible Native Vegetation*. The remaining area (approximately 615 ha) was considered likely to support less than 25% indigenous vegetation projective foliage cover (excluding bare ground). These areas were mapped as *No Native Vegetation* and are likely to be areas of Degraded Treeless Vegetation.

3.6 Vegetation Quality Assessment

The benchmark for each EVC recorded within Section E is provided in Appendix 3.

3.6.1 Vegetation in Patches

A total of 512 habitat zones (or indigenous vegetation polygons) were identified within Section E (Figure 2). Assessment criteria, scores and the overall habitat score for properties assessed, are presented in Appendix 4. Site condition scores, giving an overview of vegetation quality, are mapped in Figure 3.

Because Plains Grassland, Plains Grassy Wetland and Escarpment Shrubland are or can be treeless, the site condition scores of these EVCs are standardised (as appropriate) to maintain the relative weighting of site condition and landscape scores (DSE 2004).

Section E contains a total of 638.46 ha of indigenous habitat zones within properties subject to assessment, which comprises **363.73 habitat hectares (hha).** This is comprised of **353.61 hha** of Low-rainfall Plains Grassland,

9.83 hha of Heavier-Soils Plains Grassland, **0.07 hha** of Escarpment Shrubland and **0.03** habitat hectares of Plains Grassy Wetland.

No Large Old Trees were recorded in patches of native vegetation within Section E.

Conservation significance

The conservation significance of each polygon of native vegetation within Section E is shown in Appendix 4. Within the areas assessed Section E supports 566.68 ha (336.56 hha) of Very High conservation significance and 71.78 ha (27.18 hha) of High conservation significance vegetation (Figure 4).

3.6.2 Scattered Trees

The areas assessed within Section E do not support any scattered indigenous LOTs and therefore this component of the vegetation assessment protocol is not considered further by this report.

3.7 Significant Flora Species

The locations of all significant flora species records (including database records) within Section E are shown on Figure 5.

3.7.1 Nationally Significant Species

One flora species listed under the EPBC Act - Spiny Rice-flower - was recorded in Section E during the current assessment. This species had also been previously recorded in Section E on the FIS database. One additional species, Clover Glycine *Glycine latrobeana*, has been recorded within Section E on the FIS.

The FIS database contains records of five additional species of national conservation significance from within 5 km of Section E (Appendix 2). None of these species were recorded during the current assessment or in the study area on the FIS. All of these species (River Swamp Wallaby-grass *Amphibromus fluitans*, Matted Flax-lily, Small Golden Moths *Diuris basaltica*, Button Wrinklewort and Large-headed Fireweed) are considered to have a High likelihood of occurrence in the study area based on the habitat present (Appendix 2).

The DEWHA database predicts the occurrence of, or suitable habitat for two additional species listed under the EPBC Act, Curly Sedge and Maroon Leek-orchid. There is no suitable habitat, or habitat is poorly represented for Curly

Sedge and Maroon Leek-orchid within Section E (Appendix 2).

3.7.2 State Significant Species

One flora species of state significance listed under the FFG Act – Small Scurf-pea - was recorded within Section E during the current assessment. No existing records of FFG listed species are present in Section E on the FIS. One additional flora species of State Significance (DSE Advisory List), Wimmera Woodruff was also identified during the current assessment and four species, Heath Spear-grass *Austrostipa exilis*, Half-bearded Spear-grass *Austrostipa hemipogon*, Arching Flax-lily *Dianella* sp. aff. *longifolia* (Benambra) and Fragrent Saltbush *Atriplex parabolica*, have been previously recorded within Section E on the FIS (Appendix 2).

The FIS database contains records of 9 additional species of State conservation significance from the local area (within 5 km). Due to the presence of a range of EVCs, all of these species are considered to have a high likelihood of occurrence based on habitat present within Section E (Appendix 2).

While some of these species have no recent or very few records (in total) in the vicinity of the study area on the FIS they typically require specific conditions to emerge, are visible for only short periods of time, and are sometimes cryptic. Given this the likelihood of occurrence within Section E is considered to be high.

3.8 Significant Fauna Species

The locations of all significant fauna species records (including database records) within Section E are shown on Figure 4.

3.8.1 Nationally Significant Species

One fauna species listed under the EPBC Act, Golden Sun Moth *Synemon plana* (critically endangered), was recorded in Section E during the current assessment. This species was recorded in several Plains Grassland remnants and is probably widespread in Section E, both in areas of remnant native grassland and to some extent in Degraded Treeless Vegetation

The AVW has records of Plains-wanderer *Pedionomus torquatus* (vulnerable) and Striped Legless Lizard *Delma impar* (vulnerable) from Section E. Populations of Striped Legless Lizard are probably largely confined to areas of remnant Plains Grassland, however hteir presence in areas of Degraded Treeless Vegetation cannot be discounted without targeted survey. The status of Plains-wander Section E is unclear.

Twelve fauna species of national significance have been recorded from the local area in the AVW and/or BA database or are predicted to occur on the DEWHA database. These species are considered to have a medium to negligible likelihood of occurrence based on the habitat present (Appendix 5).

3.8.2 State Significant Species

No fauna species of state significance were recorded within Section E during the current assessment (Appendix 5).

One species, Red-chested Button Quail *Turnix pyrrhothorax*, has records from Section E in the AVW or BA databases and Plains Grassland within the study area provides good habitat for this species.

Twenty-two species of state conservation significance are recorded from the local area in the AVW and/or BA database or are predicted to occur on the DEWHA database. Of these species, Black Falcon *Falco subniger* has a high likelihood of occurrence in Section E based on habitat suitablility (Appendix 5). The habitat is considered poorly represented or not present for the remaining species.

3.9 Significant Vegetation Communities

Section E contains the EPBC listed ecological community *Natural Temperate Grassland of the Victorian Volcanic Plain* (critically endangered). The Australian Government Policy Statement 3.8 indicates that the community is present within the western suburbs of Melbourne and extends to Hamilton in western rural Victoria, and follows most closely the floristics of Plains Grassland (EVC 132) and Creekline Tussock Grassland (EVC 654). Creekline Tussock Grassland has not been mapped during the current assessment within Section E, however Plains Grassland (likely to be the EPBC ecological community in most instances) is widely distributed within Section E (Figure 2).

The Western (Basalt) Plains Grassland Community is listed under the FFG Act 1988. The description contained within the relevant FFG Action Statement equates the community to Plains Grassland (EVC 132) present within the area bounded by the Plenty River (Melbourne) to the east, Hamilton to the west, Beaufort to the north and Colac to the south. Therefore, all Plains Grassland mapped within Section E (Figure 2) is also considered to be the Western (Basalt) Plains Grassland Community.

All EVCs recorded in Section E are endangered in the Victorian Volcanic Plain bioregion.

4.0 BIODIVERSITY LEGISLATION AND GOVERNMENT POLICY

Biodiversity legislation and government policy that is relevant to the Melton/Wyndham Investigation Area, including Section E, is discussed below.

4.1 Commonwealth

4.1.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) applies to developments and associated activities that have the potential to significantly impact on matters protected under the Act.

Under the Act, unless exempt, actions require approval from the Australian Government Minister for Environment, Heritage and the Arts (the Minister) if they are likely to significantly impact on a 'matter of national environmental significance'. There are currently seven matters of national environmental significance (NES):

- World Heritage properties;
- National Heritage places;
- nationally listed threatened species and ecological communities;
- listed migratory species;
- Ramsar wetlands of international importance;
- Commonwealth marine areas; and
- nuclear actions (including uranium mining).

The EPBC Act also applies to the environment in general if actions are taken on Commonwealth land, or if actions that are taken outside Commonwealth land will impact on the environment on Commonwealth land.

Any person proposing to take an action that may, or will, have a significant impact on a matter of national environmental significance must refer the action to the Minister for determination as to whether the action is a 'controlled action' or is not approved. 'Significant impacts' are defined in *EPBC Act Policy Statement 1.1 Significant Impact Guidelines: Matters of National Environmental Significance* (DEH 2006).

NES matters relevant to Section E

There are three matters of national significance that are of relevance to the proposed development:

- listed threatened species and ecological communities;
- listed migratory species; and
- wetlands of international importance (Ramsar sites).

These are summarised below.

Listed threatened species and/or ecological communities

Ecological communities: One listed ecological community, Natural *Temperate Grassland of the Victorian Volcanic Plain,* occurs within the study area.

Listed flora species: Flora species listed under the Act are discussed in Section 3.6 and listed in Appendix 2. In summary, one listed species, Spiny Rice-flower was recorded in Section E during the current assessment, and an additional listed species Clover Glycine has been previously recorded within Section E on the FIS (Figure 5). Habitat is also moderately well represented or well represented within Section E for five additional species: Matted Flax-lily, Small Golden Moths, River Swamp Wallaby-grass, Button Wrinklewort and Large-headed Fireweed. There is one existing record of Clover Glycine on the FIS and two records of Spiny Rice-flower were identified during the Melton/Wyndham Investigation within Section E. However, the presence and extent of any population(s) of these species, including Spiny Rice-flower, is uncertain as no areas within Section E have been systematically searched for listed species.

Listed fauna species: Fauna species listed under the Act are discussed in Section 4.8 and listed in Appendix 5. In summary three listed species, Golden Sun Moth, Striped Legless Lizard and Plains-wanderer have been recorded within Section E. Golden Sun Moth is likely to be widespread in this Section (Figure 4). There has been no systematic targeted survey for any listed species with Section E so the size and extent of populations of these species is not known.

Other nationally significant fauna species listed on various databases are considered to have a medium–negligible likelihood of occurrence in Section E based on available habitat.

Listed migratory species

The list of migratory species under the EPBC Act is a compilation of species listed under four international conventions: China-Australia Migratory Bird

Agreement (CAMBA), Japan-Australia Migratory Bird Agreement (JAMBA), Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA) and the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention).

Species listed under the 'migratory' provisions of the EPBC Act are summarised below:

- One species has been recorded within Section E by the AVW and/or BA database.
- Fifteen species are recorded from the local area (AVW and/or BA database).
- Six additional species are predicted to occur, or their habitat is predicted to occur, within 5 km of the study area (DEWHA database).

While some of these species would be expected to use the study area on occasions, and some of them may do so regularly or may be resident, it does not provide important habitat for an ecologically significant proportion of any of these species.

Wetlands of International Importance (Ramsar sites)

The study area is identified by the DEWHA database as being within the catchment of a Wetland of International Significance (Ramsar site): Port Phillip Bay (western shoreline) and Bellarine Peninsula. However, the study area does not drain directly into this wetland and development in this region is not likely to result in a significant impact to a Ramsar wetland.

Implications Section E

All sections of the Melton/Wyndham Investigation Area (including Section E) support matters of NES which would trigger the EPBC Act. In response to this the GAA has engaged with DEWHA to conduct a strategic assessment process to address changes to the Melbourne Urban Growth Boundary.

4.2 State

4.2.1 Flora and Fauna Guarantee Act 1988

The FFG Act is the key piece of Victorian legislation for the conservation of threatened species and communities and for the management of potentially threatening processes.

A permit is required from DSE to 'take' protected flora species from public land. Taking protected flora from private land requires the permission of the landowner and not DSE unless the land is declared 'critical habitat'. Most native vegetation contains some protected flora species.

Protected flora are native plants or communities of native plants that have legal protection under the FFG Act. The protected flora list has three sources:

- plant taxa (species, subspecies or varieties) listed as threatened;
- plant taxa belonging to communities listed as threatened; and
- plant taxa which are not threatened but require protection for other reasons.

Some species which are attractive or highly sought after, such as orchids and grass-trees, are protected so that removal of these species from the wild can be controlled. Not all of these species are rare in the wild or highly significant. Protection includes living (e.g. flowers, seeds, shoots, roots) and non-living (e.g. bark, leaves, other litter) plant material (DSE website).

A permit is also required for the taking, trading or keeping of fish that are members of taxa or communities of flora and fauna on the Threatened List. The controls mean that authorisation under the FFG Act is required to catch, possess, keep or sell listed fish (DSE website).

Implications for Section E

Much of land in Section E is privately owned and is not declared 'critical habitat'. Therefore a permit to 'take' listed flora and fauna species is not required under the FFG Act on these lands.

One threatened community, Western (Basalt) Plains Grassland Community, is present within Section E. This community is mapped as Plains Grassland (EVC 132) on Figure 2.

Areas of Section E that are public land require a permit from DSE under the FFG Act to remove listed species. Listed threatened and protected species recorded in Section E during the current assessment are identified in Appendix 2, Table A2.1. All species part of the Western (Basalt) Plains Grassland Community are also protected under the Act.

Precinct planning for the Melton/Wyndham Investigation Area should have regard to the Action Statements prepared under the FFG Act for:

- Plains-wanderer
- Striped Legless Lizard
- Golden Sun Moth
- Grassland Earless Dragon
- Sunshine Diuris
- Large-fruit Groundsel
- Button Wrinklewort
- Small Milkwort
- Small Scurf-pea
- Narrow Goodenia
- Pale Plover-daisy
- Western (Basalt) Plains Grassland

4.2.2 Victorian Planning Provisions

A planning permit may be required to remove, destroy or lop native vegetation under the relevant local government planning scheme (e.g. Clause 52.17) unless exemptions in a clause apply or if the removal, destruction or lopping of vegetation is in accordance with a Native Vegetaton Precinct Plan (Clause 52.16) that has been incorporated into the planning scheme. A Native Vegetation Precinct Plan may form part of a Precinct Structure Plan and may also determine whether exemptions to the requirement of a permit under Clause 52.16-4 apply.

Implications for Section E

It is possible that some or all of Section E will be the subject of a Native Vegetation Precinct Plan, drawing on information collected by this and other ecological surveys. Such a plan would identify which areas of native vegetation are to be retained and which are permitted to be cleared and offset.

4.2.3 Native Vegetation Management Framework

The Native Vegetation Management Framework (the Framework) is State Government policy for the protection, enhancement and revegetation of native vegetation in Victoria (NRE 2002). Native vegetation provisions were introduced to all planning schemes in 1989 and the Framework was incorporated into the Victoria Planning Provisions in 2003. The primary goal of the Framework is:

> *a reversal, across the whole landscape, of the long-term decline in the extent and quality of native vegetation, leading to a Net Gain* (NRE 2002).

In association with the regional Native Vegetation Plans, the Framework provides decision-making tools for native vegetation management.

Where an application is made to remove native vegetation, a proponent for a development must explain the steps that have been taken to:

- Avoid the removal of native vegetation, where possible.
- Minimise the removal of native vegetation.
- Appropriately offset the loss of native vegetation, if required.

A proponent for a development must demonstrate that the option to avoid and minimise vegetation clearance has been fully explored before considering offsets.

An offset may be achieved by improvements in the quality or extent of native vegetation in a selected 'offset area', either within a project area or off-site. An area that is revegetated and protected or set aside for natural regeneration may

provide some, or all, of the required offset. The conservation significance of vegetation to be removed is also taken into account when offsets are determined.

This assessment identifies what level of offset would be prescribed if all the native vegetation within the Section was cleared and what offsets would be prescribed if the Key Areas identified were retained but all other native vegetation was permitted to be cleared.

Offsets are typically generated by managing an area of remnant vegetation on private land. Active ecological management of such areas will generally yield a gain in habitat score of 20 % (approximately) over the nominated 10 years.

Implications for Section E

An assessment of the net gain implications of the above development scenarios is discussed in Appendix 6.

4.2.4 Wildlife Act 1975 and associated Regulations

The *Wildlife Act 1975* is the primary legislation in Victoria providing for protection and management of wildlife. For the purposes of the Act, wildlife means indigenous vertebrate species (except those declared as pest animals), invertebrate species listed under the FFG Act, and some introduced game species.

The Wildlife Regulations 2002 of the Act prescribe penalties for the purposes of the Wildlife Act. These include penalties for persons who wilfully damage, disturb or destroy any wildlife habitat without appropriate authorisation (Section 9 of the Wildlife Regulations 2002). Authorisation for habitat removal may be obtained under the Wildlife Act; through a licence granted under the *Forests Act* 1958; or under any other Act.

Authorisation to destroy or possess wildlife may be required under Sections 41– 47 of the *Wildlife Act 1975*. Permits under the Act may be needed where it is expected that wildlife will need to be destroyed or moved.

Implications for Section E

A permit will be required for removal of habitat at the site. It may be that removal of habitat will be covered by a permit to remove native vegetation, therefore a separate permit under the Wildlife Act would not be required.

If construction activities are likely to result in the death of wildlife or the need to move wildlife short distances, permits will be required.

4.2.5 Port Phillip and Westernport Native Vegetation Plan

This document (PPWCMA 2006) has been prepared to develop a strategic and co-ordinated approach to the management of native vegetation within the region. The plan is designed to complement the Native Vegetation Management Framework and contains specific information and objectives relating to the region. The information in the plan is centred on four strategic directions:

- Retain the quantity of native vegetation by minimising clearing;
- Protect native vegetation with reservation and management agreements;
- Maintain and improve the quality of native vegetation; and
- Increase the quantity of native vegetation.

Responses and offset requirements for clearing native vegetation are outlined in Appendix 3.4 of the document (PPWCMA 2006: pg 52).

Implications for Section E

The objectives of the Native Vegetation Plan are similar to those of the Native Vegetation Management Framework and should be met if the three step approach to achieving a Net Gain outcome is followed.

Offsets for unavoidable tree losses that are not covered by the Framework replacement ratios are calculated using the Port Phillip and Westernport Native Vegetation Plan.

4.2.6 Environment Protection Act 1970: State Environmental Protection Policy (Waters of Victoria) 2003

This policy provides a legal framework for state and local government agencies, businesses and communities to work together to protect and rehabilitate Victoria's surface water environments.

Beneficial uses of this channel need to be protected. Uses to be protected include:

- Maintenance of natural aquatic ecosystems and aquatic wildlife.
- Passage of indigenous fish.
- Maintenance of indigenous riparian vegetation.
- Water based recreation.
- Commercial and recreational use of edible fish and crustacea.

- Agricultural water supply.
- Other commercial purposes.

Impacts to surface water quality must not exceed water quality objectives specified to protect beneficial uses. Relevant clauses must be adhered to. Of particular relevance are:

- 43 - surface water management and works.
- 53 - vegetation protection and rehabilitation.
- 56 - construction activities.

Implications for Section E

Construction managers need to monitor affected surface waters to assess if beneficial uses are being protected. The GAA may need to consult with EPA and the relevant catchment management authority with regard to establishing appropriate water quality objectives and monitoring requirements.

4.3 Local

4.3.1 Local Government Planning Scheme (City of Melton)

There is an Environmental Significance Overlay Schedule 2 (ESO2) covering the land below the break of slope leading down to Dry Creek (http://www.dse.vic.gov.au/planningschemes/) and a Significant Landscape Overlay (SLO1) covering the steeper slopes of Mount Cottrell.

Implications for Section E

Any impacts on these areas will need to consider the objectives of the overlays and a permit will be required to impact on any native vegetation.

5.0 KEY AREAS

The Key Areas within Section E are presented in Figure 6. The Key Areas have been identified based on the methodology outlined in Section 2.8.

Vegetation mapping undertaken during the Melton/Wyndham Investigation identified 13 Key Areas within Section E. These Key Areas area located throughout Section E and are located in areas where access was able to be obtained. There is a large extent of Section E which is *Highly Likely Native Vegetation* (1319.74 ha) and this, when combined with the 13 initially defined Key Areas (471 ha), is likely to be capable of being defined as a single large Key Area (approximately 1800 ha). Key Areas within Section E (Figure 6) are identified in Table 1.

In addition to ecological values such as presence of significant species and listed communities, these Key Areas together provide an excellent example of the extent and nature of the pre-European landscape of the Melton/Wyndham Investigation Area. There are numerous listed threatened species present in these Key Areas and surrounding management zones (which are made up of Degraded Treeless Vegetation and Highly Likely Native Vegetation) and they provide an excellent example of not only the critically endangered ecosystem covered by the federal listing of *Natural Temperate Grassland of the Victorian Volcanic Plain* but the landscape to which this community belongs.

Key Area 1 is a large area (minimum 138 ha) containing primary grassland and a small patch of Plains Grassy Wetland. This Key Area is contiguous with surrounding areas of known high value Plains Grassland, including the remainder of an area of prior Defence land, which were not assessed as part of the Melton/Wyndham Investigation. These areas would certainly meet the Key Area criteria if detailed assessment had been undertaken. They have not been included as Management Zones due to there large size and a lack of on ground mapping. These adjacent areas however will make this Key Area contiguous with Key Areas 7, 8, 10, 11 and 13. The grassland throughout this area is dominated by Kangaroo Grass with a high diversity of other indigenous herbs including Lemon Beauty-heads Cotton Fireweed *Senecio quadridentatus*, Narrow Plantain *Plantago gaudichaudii*, Plains Stackhousia *Stackhousia subterranean*, Woodland Swamp-daisy *Brachyscome basaltica* var. *gracilis*, Scaly Buttons and the nationally listed Spiny Rice-flower. Key Area 1 and the adjacent Management Zones form part of the best examples of Low rainfall Plains Grassland to the north of the Werribee River in the Melton/Wyndham Investigation Area.

Table 1: Key Areas within Section E.

Key Area #	Habitas ID #	Habitat Zone #	EVC
1	2088844	1A	Low-rainfall PG
	50268269	1A	Low-rainfall PG
	50268275	1A	Low-rainfall PG
	50268289	1A	Low-rainfall PG
	50268289	1B	Low-rainfall PG
	50268292	1A	Low-rainfall PG
	52553284	4A	Low-rainfall PG
	52553284	5A	Plains Grassy Wetland
2	50268140	1A	Low-rainfall PG
3	2088221	1A	Low-rainfall PG
	50268120	1A	Low-rainfall PG
4	2088214	2A	Low-rainfall PG
	2088215	1A	Low-rainfall PG
	151251331	1A	Heavier-soils PG
	151251331	1B	Heavier-soils PG
5	50268116	1A	Low-rainfall PG
	50268116	1A	Low-rainfall PG
	50268282	1A	Low-rainfall PG
6	50268302	1A	Low-rainfall PG
7	50268903	1A	Low-rainfall PG
	50268903	1B	Low-rainfall PG
	50268904	1A	Low-rainfall PG
	50268979	1A	Low-rainfall PG
	50268998	1A	Low-rainfall PG
8	50268897	1A	Low-rainfall PG
	50268897	1B	Low-rainfall PG
	50268897	1C	Low-rainfall PG
9	1406880	1A	Low-rainfall PG
	1406881	1A	Low-rainfall PG
	1406882	1A	Low-rainfall PG
	1406883	1A	Low-rainfall PG
	1406884	1A	Low-rainfall PG
	1406885	1A	Low-rainfall PG
	1406886	1A	Low-rainfall PG
	1406887	1A	Low-rainfall PG
	1406893	1A	Low-rainfall PG
	1406894	1A	Low-rainfall PG
	1406895	1A	Low-rainfall PG
	1406896	1A	Low-rainfall PG
9	1406897	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
	1406898	1A	Low-rainfall PG
	1406899	1A	Low-rainfall PG
	1406900	1A	Low-rainfall PG
	1406901	1A	Low-rainfall PG
	1406902	1A	Low-rainfall PG
	1406903	1A	Low-rainfall PG
	1406904	1A	Low-rainfall PG
	1406905	1A	Low-rainfall PG
	1406906	1A	Low-rainfall PG
	1406907	1A	Low-rainfall PG
	1406908	1A	Low-rainfall PG
	1406926	1A	Low-rainfall PG
	1407995	1A	Low-rainfall PG
	1407996	1A	Low-rainfall PG
	1407997	1A	Low-rainfall PG
	1407998	1A	Low-rainfall PG
	1407999	1A	Low-rainfall PG
	1408000	1A	Low-rainfall PG
	1408001	1A	Low-rainfall PG
	1408002	1A	Low-rainfall PG
	1408003	1A	Low-rainfall PG
	1408004	1A	Low-rainfall PG
	1408005	1A	Low-rainfall PG
	1408006	1A	Low-rainfall PG
	1408007	1A	Low-rainfall PG
	1408008	1A	Low-rainfall PG
	1408009	1A	Low-rainfall PG
	1408010	1A	Low-rainfall PG
	1408011	1A	Low-rainfall PG
	1408012	1A	Low-rainfall PG
	1408013	1A	Low-rainfall PG
	1408014	1A	Low-rainfall PG
	1408015	1A	Low-rainfall PG
	1408016	1A	Low-rainfall PG
	1408017	1A	Low-rainfall PG
	1408018	1A	Low-rainfall PG
	1408019	1A	Low-rainfall PG
	1408020	1A	Low-rainfall PG
	1408021	1A	Low-rainfall PG
	1408022	1A	Low-rainfall PG
9	1408023	1A	Low-rainfall PG
	1408024	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
	1408025	1A	Low-rainfall PG
	1408026	1A	Low-rainfall PG
	1408027	1A	Low-rainfall PG
	1408028	1A	Low-rainfall PG
	1408029	1A	Low-rainfall PG
	1408030	1A	Low-rainfall PG
	1408031	1A	Low-rainfall PG
	1408032	1A	Low-rainfall PG
	1408033	1A	Low-rainfall PG
	1408034	1A	Low-rainfall PG
	1408035	1A	Low-rainfall PG
	1408036	1A	Low-rainfall PG
	1408037	1A	Low-rainfall PG
	1408038	1A	Low-rainfall PG
	1408039	1A	Low-rainfall PG
	1408040	1A	Low-rainfall PG
	1408041	1A	Low-rainfall PG
	1410474	1A	Low-rainfall PG
	1410476	1A	Low-rainfall PG
	1410477	1A	Low-rainfall PG
	1410478	1A	Low-rainfall PG
	1410479	1A	Low-rainfall PG
	1410480	1A	Low-rainfall PG
	1410481	1A	Low-rainfall PG
	1410482	1A	Low-rainfall PG
	1410483	1A	Low-rainfall PG
	1410484	1A	Low-rainfall PG
	1410485	1A	Low-rainfall PG
	1410486	1A	Low-rainfall PG
9	1410490	1A	Low-rainfall PG
	1410491	1A	Low-rainfall PG
	1410492	1A	Low-rainfall PG
	1410493	1A	Low-rainfall PG
	1410494	1A	Low-rainfall PG
	1410499	1A	Low-rainfall PG
	1410500	1A	Low-rainfall PG
	1410501	1A	Low-rainfall PG
	1410502	1A	Low-rainfall PG
	1410689	1A	Low-rainfall PG
9	1410693	1A	Low-rainfall PG
	1410697	1A	Low-rainfall PG
	1410701	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
	1410705	1A	Low-rainfall PG
	1410709	1A	Low-rainfall PG
	1410713	1A	Low-rainfall PG
	1410717	1A	Low-rainfall PG
	1410721	1A	Low-rainfall PG
	1410725	1A	Low-rainfall PG
	1410729	1A	Low-rainfall PG
	1410733	1A	Low-rainfall PG
	1410735	1A	Low-rainfall PG
	1410737	1A	Low-rainfall PG
	1410739	1A	Low-rainfall PG
	1410741	1A	Low-rainfall PG
	1410743	1A	Low-rainfall PG
	1410745	1A	Low-rainfall PG
	1410747	1A	Low-rainfall PG
	1411409	1A	Low-rainfall PG
	1411410	1A	Low-rainfall PG
	1411411	1A	Low-rainfall PG
	1411412	1A	Low-rainfall PG
	1411413	1A	Low-rainfall PG
	1411414	1A	Low-rainfall PG
	1411415	1A	Low-rainfall PG
	1411417	1A	Low-rainfall PG
	1411418	1A	Low-rainfall PG
	1411419	1A	Low-rainfall PG
	1412262	1A	Low-rainfall PG
	1412263	1A	Low-rainfall PG
	1412264	1A	Low-rainfall PG
	1412265	1A	Low-rainfall PG
	1412266	1A	Low-rainfall PG
	1412267	1A	Low-rainfall PG
	1412268	1A	Low-rainfall PG
	1412269	1A	Low-rainfall PG
	1412270	1A	Low-rainfall PG
	1412271	1A	Low-rainfall PG
	1412272	1A	Low-rainfall PG
	1412273	1A	Low-rainfall PG
	1412274	1A	Low-rainfall PG
9	1412275	1A	Low-rainfall PG
	1416530	1A	Low-rainfall PG
	1416531	1A	Low-rainfall PG
	1416532	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
	1416533	1A	Low-rainfall PG
	1416534	1A	Low-rainfall PG
	1416535	1A	Low-rainfall PG
	1416536	1A	Low-rainfall PG
	1416537	1A	Low-rainfall PG
	1416538	1A	Low-rainfall PG
	1416539	1A	Low-rainfall PG
	1416540	1A	Low-rainfall PG
	1416541	1A	Low-rainfall PG
	1416542	1A	Low-rainfall PG
	1416544	1A	Low-rainfall PG
	1416546	1A	Low-rainfall PG
	1416548	1A	Low-rainfall PG
	1416551	1A	Low-rainfall PG
	1416553	1A	Low-rainfall PG
	1416570	1A	Low-rainfall PG
	1416572	1A	Low-rainfall PG
	1416574	1A	Low-rainfall PG
	1416575	1A	Low-rainfall PG
	1416576	1A	Low-rainfall PG
	1416578	1A	Low-rainfall PG
	1416579	1A	Low-rainfall PG
	1416580	1A	Low-rainfall PG
	1416581	1A	Low-rainfall PG
	1416582	1A	Low-rainfall PG
	1416583	1A	Low-rainfall PG
	1416584	1A	Low-rainfall PG
	1416585	1A	Low-rainfall PG
	1416586	1A	Low-rainfall PG
9	1416587	1A	Low-rainfall PG
	1416588	1A	Low-rainfall PG
	1416589	1A	Low-rainfall PG
	1416590	1A	Low-rainfall PG
	1416591	1A	Low-rainfall PG
	1416592	1A	Low-rainfall PG
	1416593	1A	Low-rainfall PG
	1416602	1A	Low-rainfall PG
9	1416603	1A	Low-rainfall PG
	1416604	1A	Low-rainfall PG
	1416605	1A	Low-rainfall PG
	1416734	1A	Low-rainfall PG
	1416735	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
	1416736	1A	Low-rainfall PG
	1416737	1A	Low-rainfall PG
	1416738	1A	Low-rainfall PG
	1416739	1A	Low-rainfall PG
	1416740	1A	Low-rainfall PG
	1416741	1A	Low-rainfall PG
	1416742	1A	Low-rainfall PG
	1416743	1A	Low-rainfall PG
	1416744	1A	Low-rainfall PG
	1416745	1A	Low-rainfall PG
	1416746	1A	Low-rainfall PG
	1416747	1A	Low-rainfall PG
	1416748	1A	Low-rainfall PG
	1416749	1A	Low-rainfall PG
	1416750	1A	Low-rainfall PG
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	1416752	1A	Low-rainfall PG
	1416753	1A	Low-rainfall PG
	1416754	1A	Low-rainfall PG
	1416755	1A	Low-rainfall PG
	1416760	1A	Low-rainfall PG
	1416762	1A	Low-rainfall PG
	1416764	1A	Low-rainfall PG
	1416766	1A	Low-rainfall PG
	1416766	3A	Low-rainfall PG
	1416767	1A	Low-rainfall PG
	1416768	1A	Low-rainfall PG
	1416768	3A	Low-rainfall PG
	1416769	1A	Low-rainfall PG
	1416770	1A	Low-rainfall PG
	1416770	3A	Low-rainfall PG
	1416771	1A	Low-rainfall PG
	1416772	1A	Low-rainfall PG
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	1416774	1A	Low-rainfall PG
	1416775	1A	Low-rainfall PG
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	1416778	1A	Low-rainfall PG
	1416779	1A	Low-rainfall PG
	1418370	1A	Low-rainfall PG
	1418371	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
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	1418374	1A	Low-rainfall PG
	1418375	1A	Low-rainfall PG
	1418376	1A	Low-rainfall PG
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	1418379	1A	Low-rainfall PG
	1418380	1A	Low-rainfall PG
	1418381	1A	Low-rainfall PG
	1418382	1A	Low-rainfall PG
	1418383	1A	Low-rainfall PG
	1418384	1A	Low-rainfall PG
	1418385	1A	Low-rainfall PG
	1418386	1A	Low-rainfall PG
	1418387	1A	Low-rainfall PG
	1418388	1A	Low-rainfall PG
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	1418390	1A	Low-rainfall PG
	1418391	1A	Low-rainfall PG
	1418392	1A	Low-rainfall PG
	1418393	1A	Low-rainfall PG
	1418394	1A	Low-rainfall PG
	1418395	1A	Low-rainfall PG
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	1418409	1A	Low-rainfall PG
	1418410	1A	Low-rainfall PG
	1418411	1A	Low-rainfall PG
	1418412	1A	Low-rainfall PG
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Key Area #	Habitas ID #	Habitat Zone #	EVC
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	1418416	1A	Low-rainfall PG
	1418417	1A	Low-rainfall PG
	1418418	1A	Low-rainfall PG
	1418419	1A	Low-rainfall PG
	1418420	1A	Low-rainfall PG
	1418421	1A	Low-rainfall PG
	1420862	1A	Low-rainfall PG
	1420863	1A	Low-rainfall PG
	1420864	1A	Low-rainfall PG
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	1420866	1A	Low-rainfall PG
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	1420903	1A	Low-rainfall PG
	1420904	1A	Low-rainfall PG
	1421733	1A	Low-rainfall PG
	1421735	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
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	1421741	1A	Low-rainfall PG
	1421743	1A	Low-rainfall PG
	1421744	1A	Low-rainfall PG
	1421745	1A	Low-rainfall PG
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	1422106	1A	Low-rainfall PG
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	1422108	1A	Low-rainfall PG
	1422109	1A	Low-rainfall PG
	1422111	1A	Low-rainfall PG
	1422113	1A	Low-rainfall PG
	1422115	1A	Low-rainfall PG
	1422118	1A	Low-rainfall PG
	1422120	1A	Low-rainfall PG
	1422122	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
	1422124	1A	Low-rainfall PG
	1422126	1A	Low-rainfall PG
	1422128	1A	Low-rainfall PG
	1422129	1A	Low-rainfall PG
	1422130	1A	Low-rainfall PG
	1422131	1A	Low-rainfall PG
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	1422133	1A	Low-rainfall PG
	1422134	1A	Low-rainfall PG
	1422135	1A	Low-rainfall PG
	1422136	1A	Low-rainfall PG
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	1422138	1A	Low-rainfall PG
	1422139	1A	Low-rainfall PG
	1422897	1A	Low-rainfall PG
	1422899	1A	Low-rainfall PG
	1422901	1A	Low-rainfall PG
	1422903	1A	Low-rainfall PG
	1422905	1A	Low-rainfall PG
	1422907	1A	Low-rainfall PG
	1422909	1A	Low-rainfall PG
	1422910	1A	Low-rainfall PG
	1422911	1A	Low-rainfall PG
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	1422918	1A	Low-rainfall PG
	1422919	1A	Low-rainfall PG
	1422920	1A	Low-rainfall PG
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	1423800	1A	Low-rainfall PG
	1423801	1A	Low-rainfall PG
	1423802	1A	Low-rainfall PG
	1423803	1A	Low-rainfall PG
	1423804	1A	Low-rainfall PG
	1423805	1A	Low-rainfall PG
	1423806	1A	Low-rainfall PG
	1423807	1A	Low-rainfall PG
	1423808	1A	Low-rainfall PG

Key Area #	Habitas ID #	Habitat Zone #	EVC
	1423809	1A	Low-rainfall PG
	1423810	1A	Low-rainfall PG
	1423811	1A	Low-rainfall PG
	1423811	1A	Low-rainfall PG
	1423812	1A	Low-rainfall PG
	1423813	1A	Low-rainfall PG
	1423814	1A	Low-rainfall PG
	1423815	1A	Low-rainfall PG
	1423816	1A	Low-rainfall PG
	1423817	1A	Low-rainfall PG
	1423818	1A	Low-rainfall PG
	1423819	1A	Low-rainfall PG
	52626167	1A	Low-rainfall PG
	52626173	1A	Low-rainfall PG
	52626174	1A	Low-rainfall PG
	52626175	1A	Low-rainfall PG
	52626176	1A	Low-rainfall PG
	52626177	1A	Low-rainfall PG
	52626182	1A	Low-rainfall PG
	52626183	1A	Low-rainfall PG
	52626185	1A	Low-rainfall PG
	52801700	1A	Low-rainfall PG
	52973411	1A	Low-rainfall PG
	52973412	1A	Low-rainfall PG
	52973415	1A	Low-rainfall PG
	52975666	1A	Low-rainfall PG
	52975675	1A	Low-rainfall PG
	52975676	1A	Low-rainfall PG
	52976943	1A	Low-rainfall PG
	52976964	1A	Low-rainfall PG
	52976965	1A	Low-rainfall PG
9	202352285	1A	Low-rainfall PG
	202352303	1A	Low-rainfall PG
	202516946	1A	Low-rainfall PG
	202531768	1A	Low-rainfall PG
10	50268996	1A	Low-rainfall PG
11	52553269	4A	Low-rainfall PG
	210240645	1A	Low-rainfall PG
	210240683	1A	Low-rainfall PG
12	50268987	1A	Low-rainfall PG
13	50268201	1A	Low-rainfall PG

Key Area 2 contains single small habitat zone (approximately 11 ha) of Low

Rainfall Plains Grassland vegetation. This area is contiguous with surrounding areas mapped as *Highly Likely Native Vegetation* and a brief inspection found a range of wallaby-grasses and spear-grasses

Key Area 3 supports primary grassland (approximately 14 ha) which is still dominated by Kangaroo Grass. Although few herbaceous species were identified during the assessment, this area is likely to contain habitat for a range of threatened species. It has relatively low weed cover with few high threat weeds. It is contiguous with extensive areas of *Highly Likely Native Vegetation* and Key Areas 2, 4 and 5.

Key Area 4 contains four habitat zones (approximately 13 ha) of Heavier soils and Low rainfall Plains Grassland vegetation. These habitat zones contain good examples of these EVCs, including a diverse range of native herbs. This Key Area contains a range of native herbs including the FFG-listed Small Scurf-pea. This Key Area is contiguous with extensive areas of *Highly Likely Native Vegetation* and Key Areas 3 and 5 and Section C Key Area 1.

Key Area 5 contains three habitat zones (approximately 50 ha) of spear-grass dominated Low Rainfall Plains Grassland vegetation. This Key Area potentially contains a wide range of significant flora and fauna. This Key Area is contiguous with extensive areas of *Highly Likely Native Vegetation* and Key Areas 3 and 8.

Key Area 6 contains a single habitat zone (approximately 6 ha) of Low Rainfall Plains Grassland vegetation. This habitat zone was assessed as having a site condition score of 55.8. It is likely that this site will contain a wide range of listed species and as it was assessed in late February. This Key Area is isolated and is not contiguous with any known of areas of likely native vegetation.

Key Area 7 contains a 4 habitat zones (approximately 99 ha) of Low Rainfall Plains Grassland vegetation. This Key Area is excellent example of this EVC and a diverse range of native herbs and geophytes were observed during the investigation. This Key Area contains a range of native herbs Lemon Beauty-heads, Cut-leaf Goodenia, Small Vanilla Lily *Arthropodium minus*, Blue Devil and Scaly Buttons. This Key Area also supports Golden Sun Moth which was recorded during the current survey. This Key Area is contiguous with extensive areas of *Highly Likely Native Vegetation* and Key Areas 1, 8, 10 and 11.

Key Area 8 contains three habitat zones of Low Rainfall Plains Grassland (approximately 5 ha) within a single property. The Key Area is an excellent example of this EVC and a diverse range of native herbs and geophytes were observed. This habitat zone was assessed as having a site condition score of 53.0 which is high for this Section. . This Key Area contains a wide range of native herbs including Lemon Beauty-heads, Blue Devils, Kidney Weed, Pussy Tails

Ptilotus spathulatus f. *spathulatus*, Narrow Plantain and Plains Stackhousia. More detailed targeted survey of this site is likely to lead to identification of a wide range of listed species. This Key Area is contiguous with extensive areas of *Highly Likely Native Vegetation* and Key Areas 5, 7, 9 and 11.

Key Area 9 covers approximately 27 ha of Low Rainfall Plains Grassland vegetation. This Key Area has been previously subdivided, although development of the site has never occurred and it is now owned by council. This Key Area is in effect a single habitat zone. A diverse range of native herbs are present including Pussy Tails, Plains Everlasting and Bronze Bluebell. This is one of the few areas where the high threat weed Gazania *Gazania linearis* dominates patches of Degraded Treeless Vegetation. This Key Area is contiguous with extensive areas of *Highly Likely Native Vegetation*, Key Area 8 and Section C Key Area 3.

Key Area 10 contains a single habitat zone (approximately 44 ha) of Low Rainfall Plains Grassland vegetation with a diverse range of native herbs including Milky Beauty-heads, Common Everlasting, Cut-leaf Goodenia, Pussy Tails, Blue Devil and Lobe-seed Daisy *Brachyscome dentata*. Golden Sun Moth was observed on the adjacent property. This Key Area is contiguous with extensive areas of *Highly Likely Native Vegetation* and Key Areas 1 and 7.

Key Area 11 contains a single habitat zone (approximately 43 ha) of Low Rainfall Plains Grassland vegetation and two Management Zones containing Low rainfall Plains Grassland and Heavier-soils Plains Grassland. This Key Area contains a range of native species including Kangaroo Grass, Lemon Beauty-heads, Blue Devils, Small Vanilla Lily, spear-grasses and Weeping Grass. This Key Area is contiguous with extensive areas of *Highly Likely Native Vegetation* and Key Areas 7 and 8 and Section F Key Area 5.

Key Area 12 contains a single habitat zone (approximately 17 hectares) of *Low Rainfall* Plains Grassland vegetation. This habitat zone contains a species poor example of this EVC with few native herbs and geophytes observed during the investigation. This Key Area is dominated by a range of native grasses including Kangaroo Grass, wallaby -grasses and spear-grasses. This Key Area is contiguous with areas of *Highly Likely Native Vegetation* and Section G Key Area 1.

Key Area 13 contains a single habitat zone (approximately 12 hectares) of *Low Rainfall* Plains Grassland vegetation. This habitat zone contains a species poor example of this EVC with few native herbs and geophytes observed during the investigation. This Key Area is dominated by native grass species including Wallaby-grasses and Spear-grasses. This Key Area is contiguous with areas of *Highly Likely Native Vegetation* and Key Area 1.

5.1 Reconnaissance Survey of Key Areas

The assessment of Key Areas above applies only to properties that have been subject to on-ground mapping and habitat hectare assessments as part of the original Melton/Wyndham Investigation. The reconnaissance surveys undertaken on areas where on-ground access was not available provide an indication of the broader amount of native vegetation present. It must be noted that some of these patches would also meet the criteria for delineation as a Key Area. Decision makers should refer to Biosis Research (2009) which will provide some indication of likely Key Areas within the reconnaissance survey sites.

6.0 CONCLUSIONS

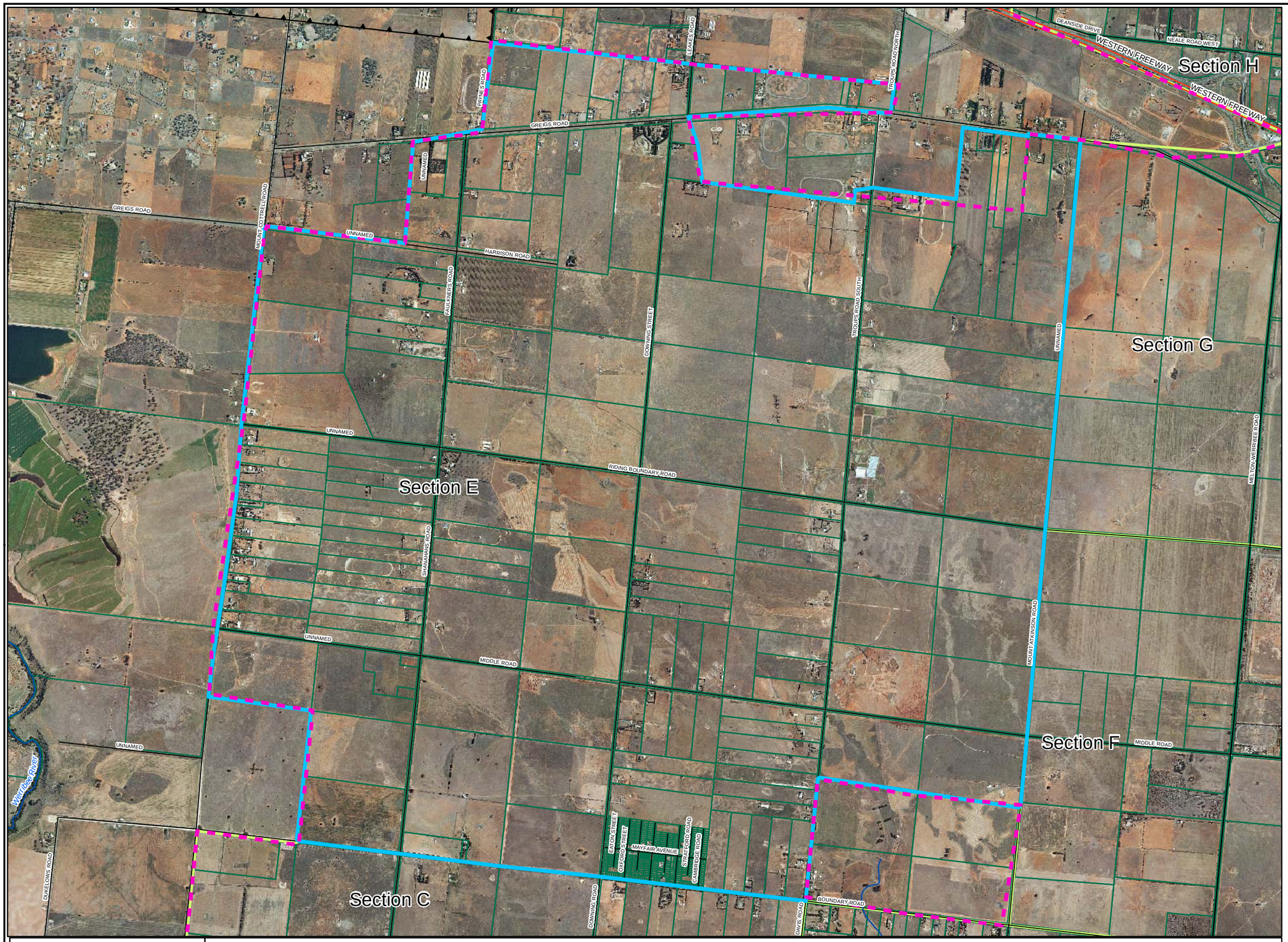
The areas assessed within Section E as part of the Melton/Wyndham Investigation contain a significant area of native vegetation, comprised of the endangered EVCs *Low-rainfall* Plains Grassland (619.39 ha), *Heavier-soils* Plains Grassland (18.34 ha), Plains Grassy Wetland (0.05 ha), Plains Grassy Woodland (0.44 ha) and Stony Knoll Shrubland (0.24 ha). The majority of Plains Grassland within this area is also likely to meet the criteria for the EPBC Act listed ecological community *Natural Temperate Grassland of the Victorian Volcanic Plain* (critically endangered) and the Western (Basalt) Plains Grassland Community listed under the FFG Act. In addition, the area provides valuable habitat for nationally significant species Spiny Rice-flower, Clover Glycine, Matted Flax-lily, Small Golden Moths, Button Wrinklewort, Large-headed Fireweed, River Swamp Wallaby-grass, Growling Grass Frog, Striped Legless Lizard, Plains-wanderer and Golden Sun Moth (most of which have been previously recorded in Section E). A number of state significant species have also been recorded within the section, or have potential to occur. Within areas not subject to assessment during the Melton/Wyndham Investigation, a further 1320 ha (approx.) within Section E were identified as *highly likely native vegetation – grassy* during the reconnaissance surveys. Some of these areas are known to have high value native vegetation present, such as the area to the East of Mount Cottrell.

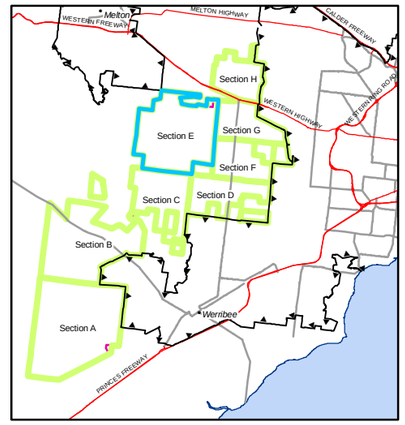
Of the 504.81 ha of native vegetation mapped in Section E during the Melton/Wyndham Investigation, approximately 472 ha have been identified as part of Key Ecological Areas. A total of 13 Key Ecological Areas have been identified based on their conservation significance, size, habitat for threatened species and habitat connectivity values. It must be noted that other areas not assessed during the Melton/Wyndham Investigation would also meet the criteria for delineation as a Key Area. Decision makers should refer to Biosis Research (2009) which defines areas of High/Medium and Low Retention priority throughout the Melton/Wyndham Investigation Area and will provide some indication of additional likely Key Areas within the reconnaissance survey sites.

Identification of these Key Areas within Section E provides opportunities for the precinct planning process to consider and implement the Net Gain 3-step process of avoid, minimise and offset.

FIGURES

Figure 1: Melton/Wyndham Investigation Area and Section E Context Map
Figure 2: The distribution of native vegetation within Section E
Figure 3:Site condition scores of Habitat Zones within Section E
Figure 4: The conservation significance of Habitat Zones within Section E
Figure 5: National and state significant flora and fauna records in Section E





Legend

- Melton/Wyndham Investigation Area
- Section E
- Urban Growth Boundary
- Section boundary
- Parcels

Figure 1: Location of Section E within the Melton/Wyndham Investigation Area.

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Ballarat, Sydney,
Wollongong, Queanbeyan, Wangaratta

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 1.mxd

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Kilometers

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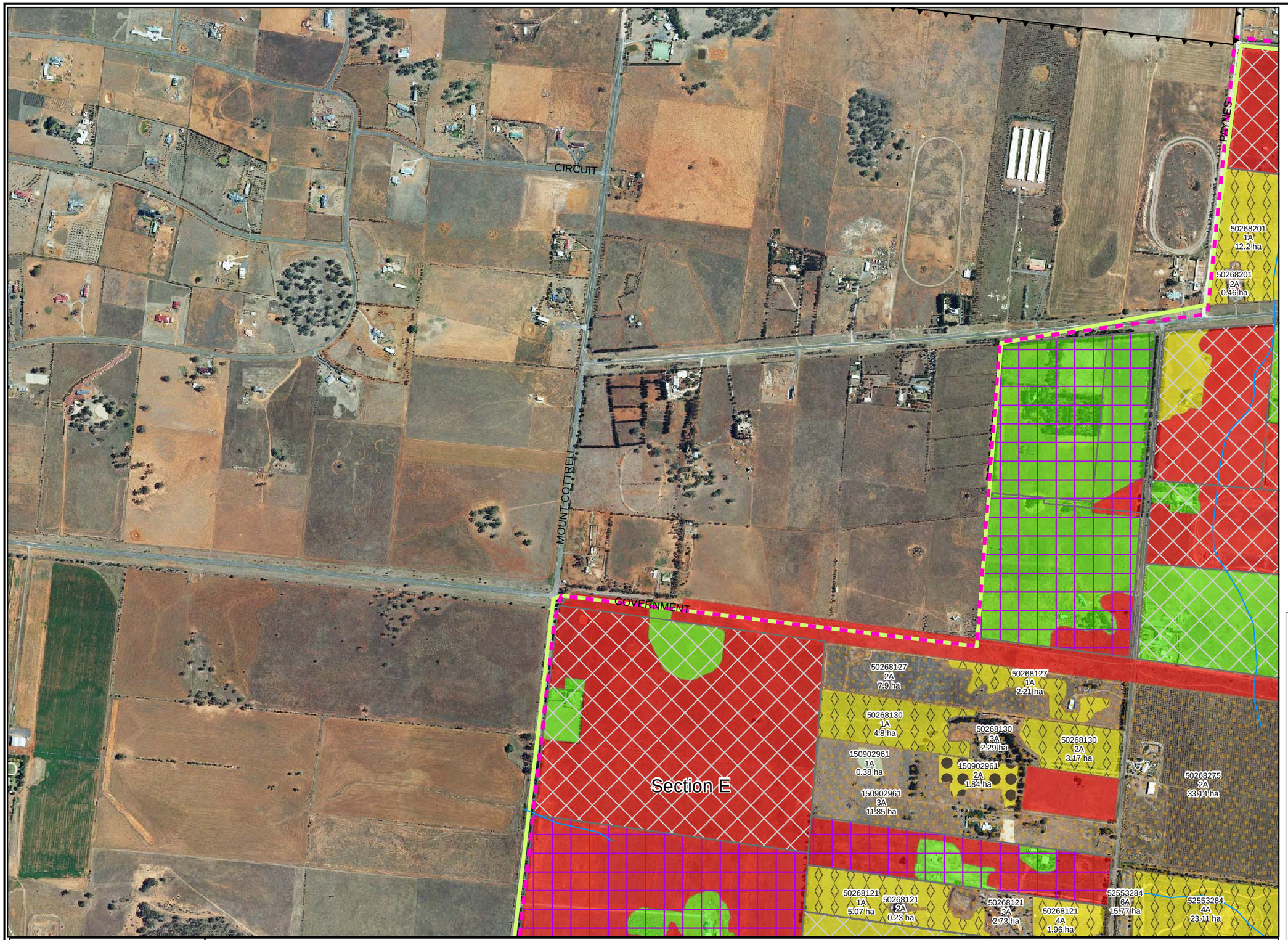
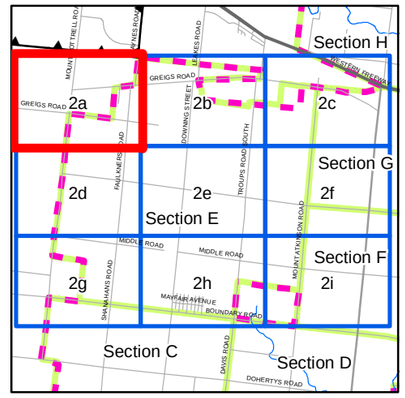
S





Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 2a: Native Vegetation, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

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Meters

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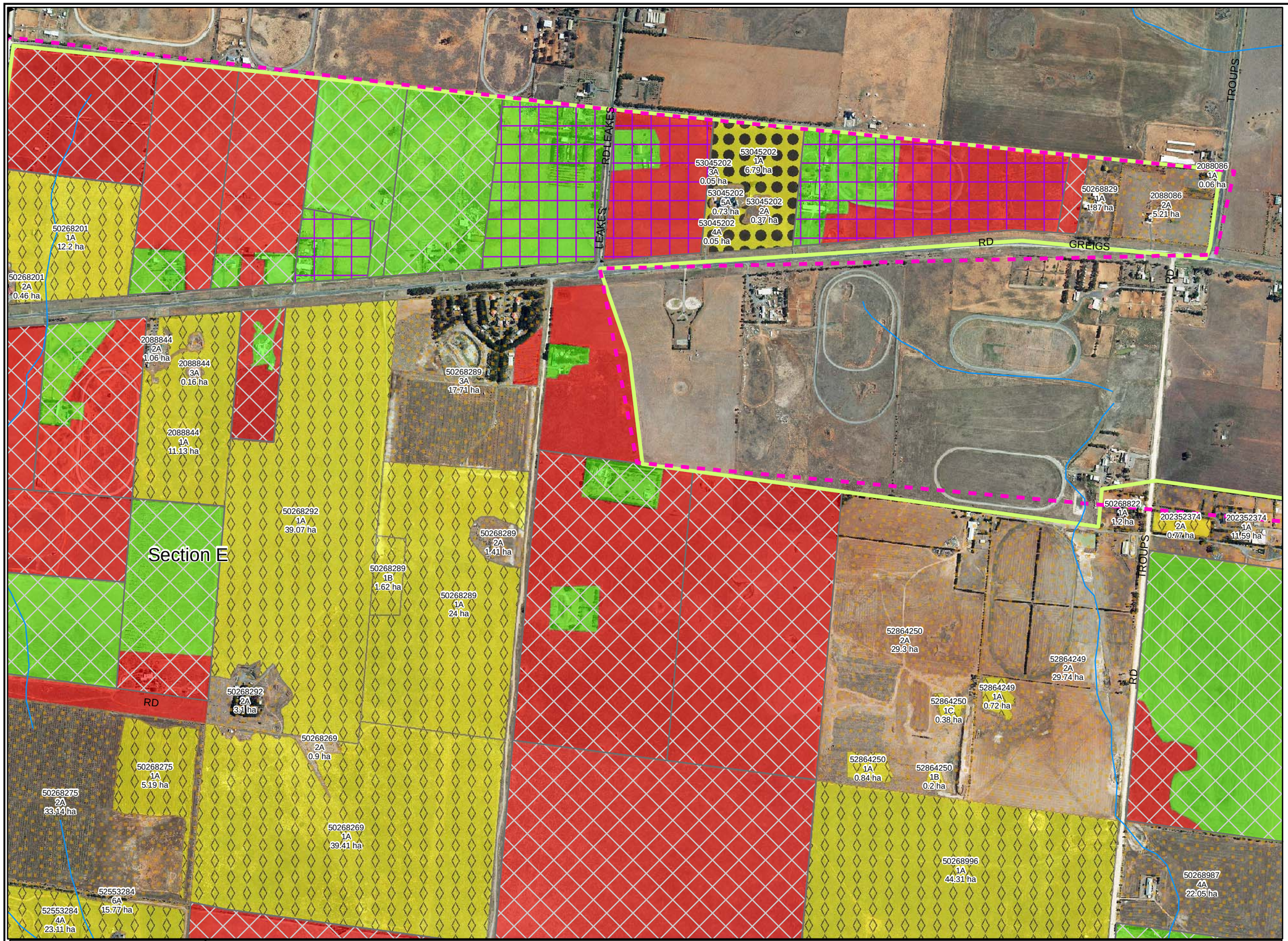

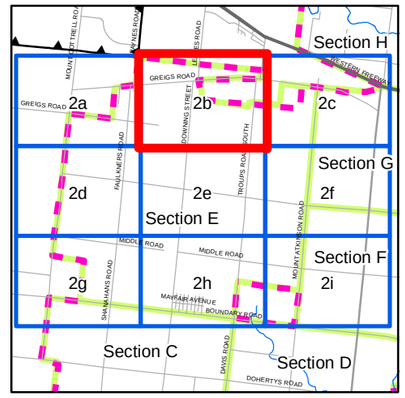

Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 2b: Native Vegetation, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

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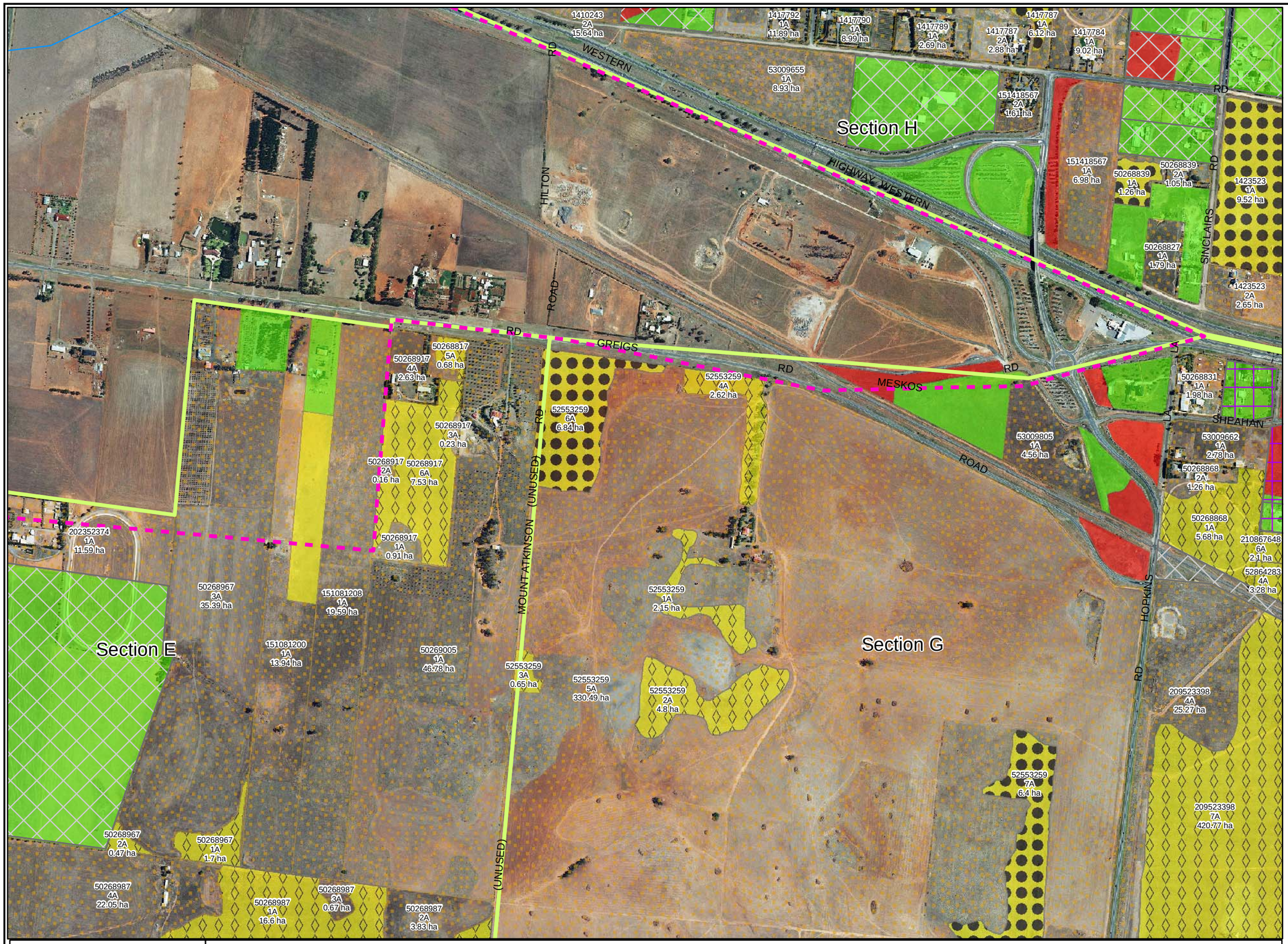
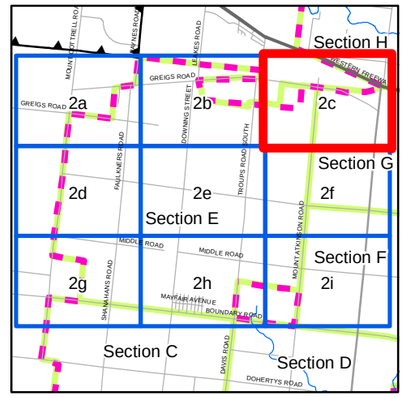
Meters

N W E S





Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 2c: Native Vegetation, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

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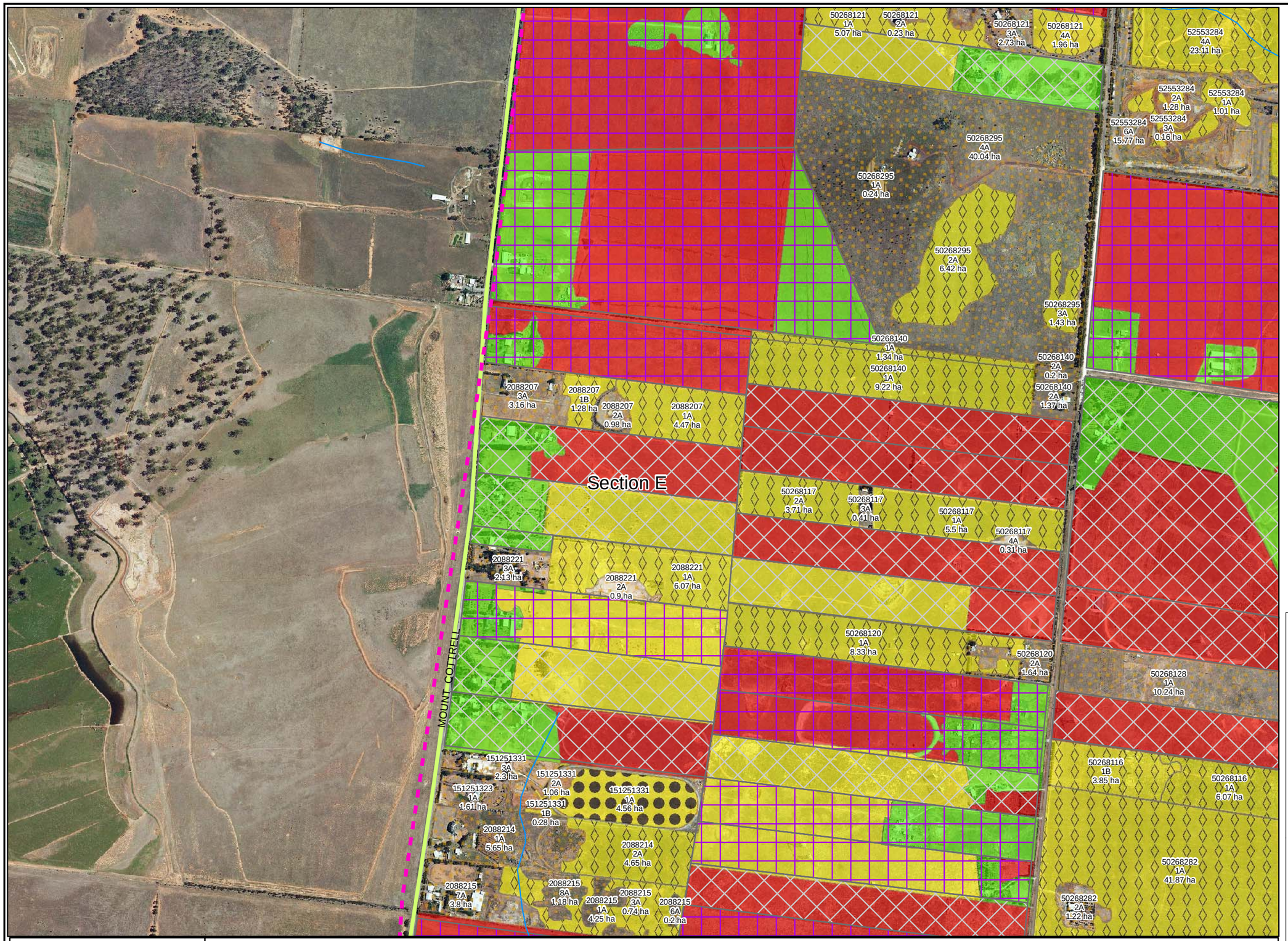
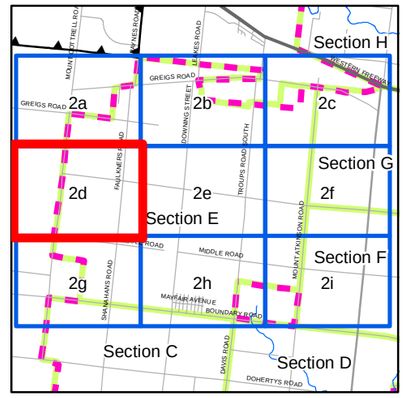
Meters

N W E S





Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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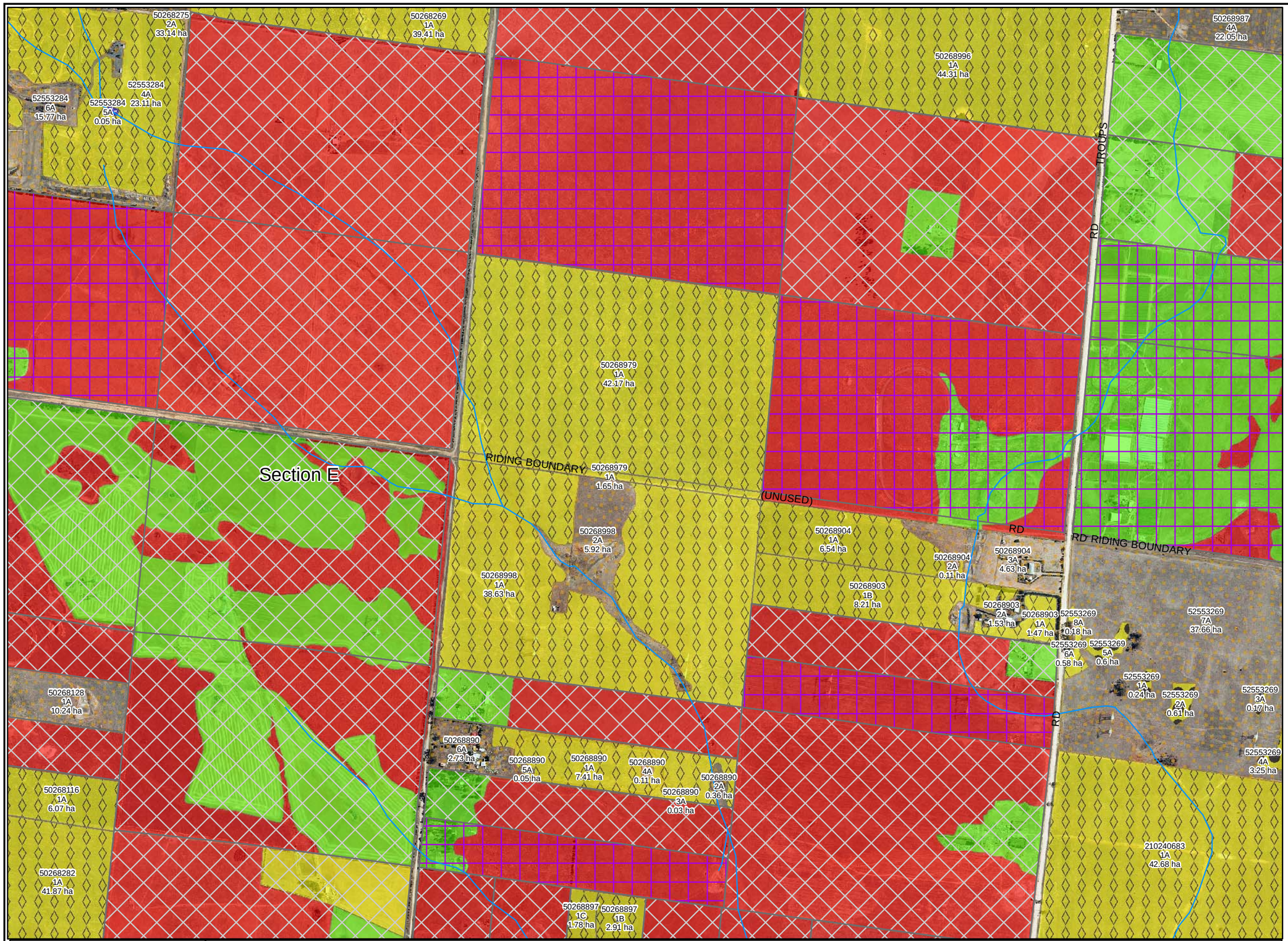
Figure 2d: Native Vegetation, Section E.

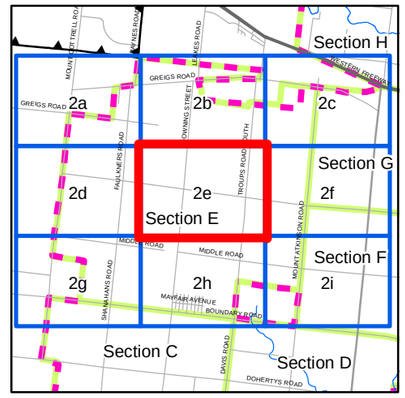
Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

0 50100 200 300 400 500
Meters

N W E S





Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 2e: Native Vegetation, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

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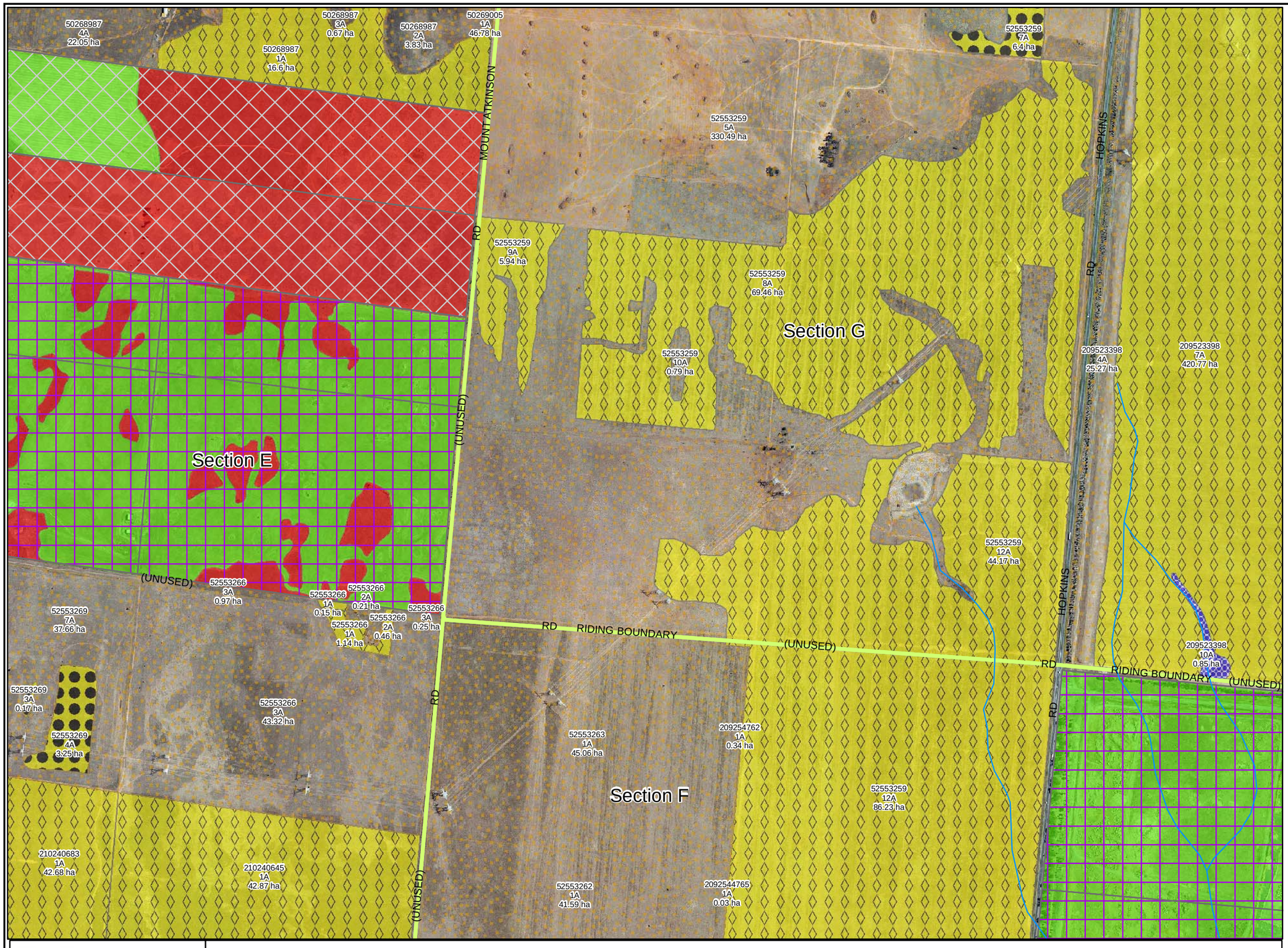
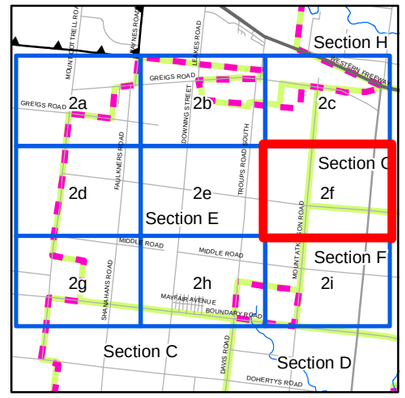
Meters

N W E S





Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 2f : Native Vegetation, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

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Meters

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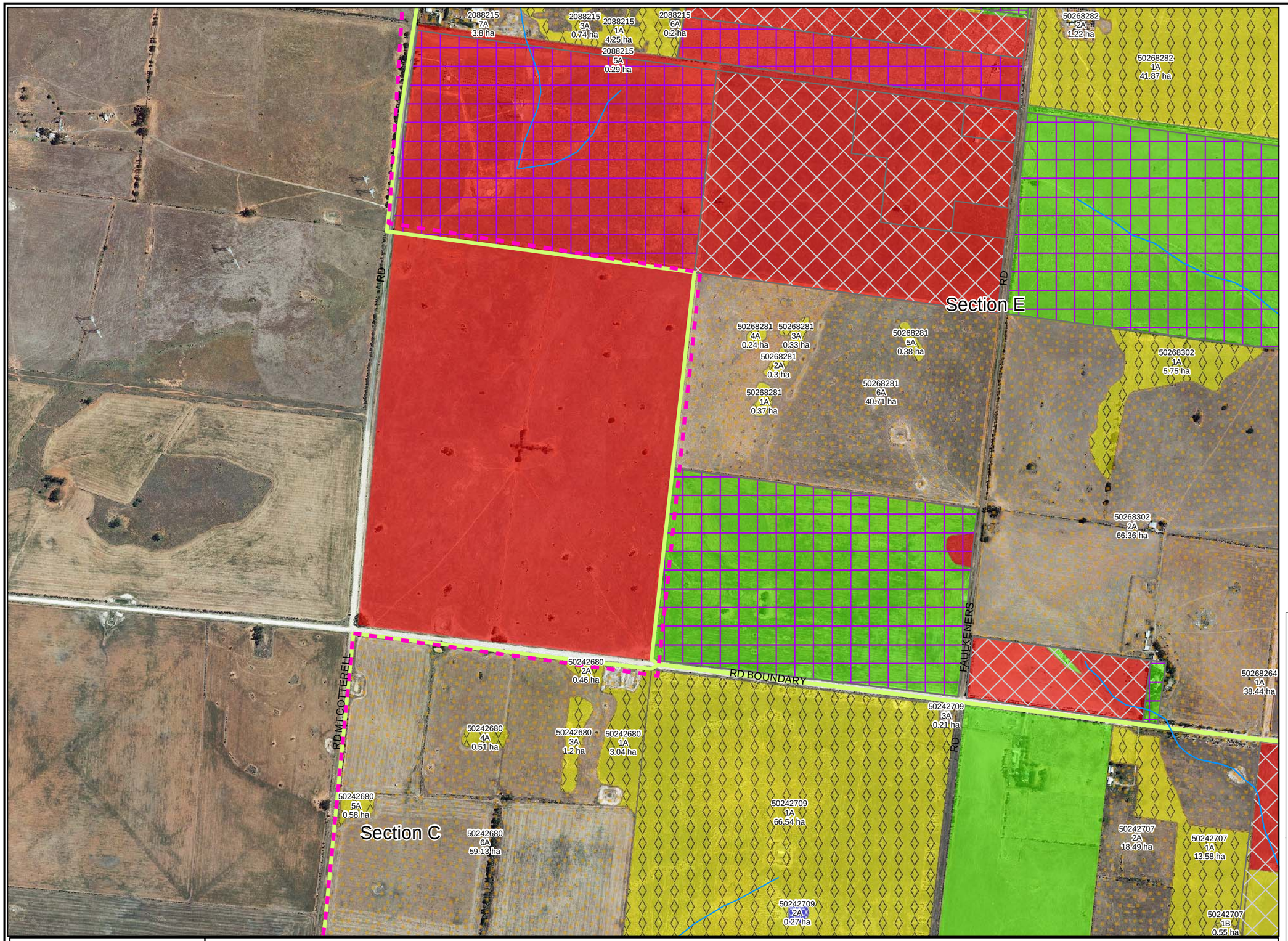

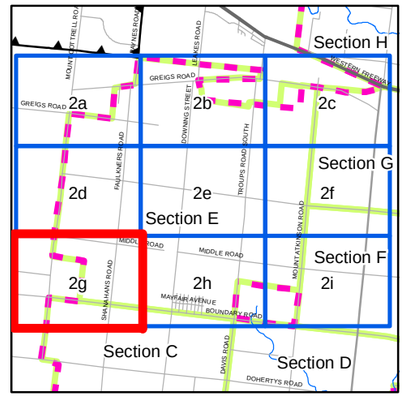

Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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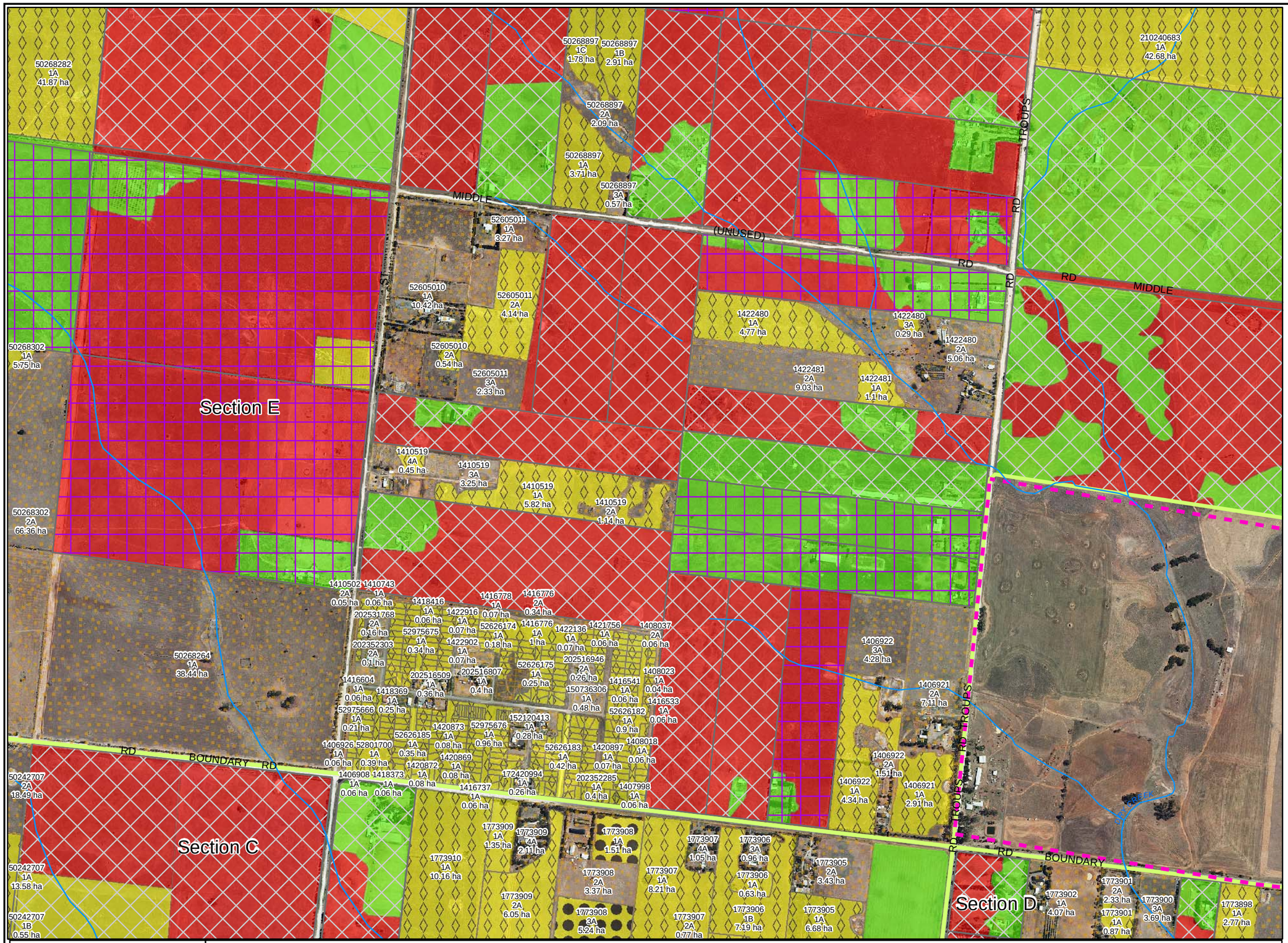
Figure 2g: Native Vegetation, Section E.

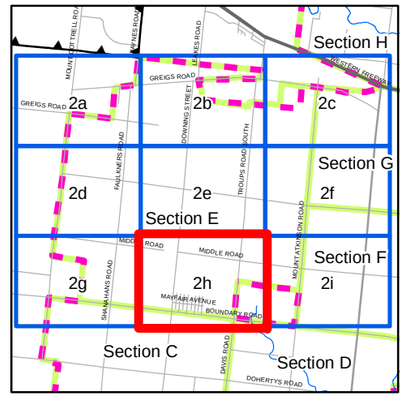
Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

0 50100 200 300 400 500
Meters

N W E S





Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 2h: Native Vegetation, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

0 50100 200 300 400 500
Meters

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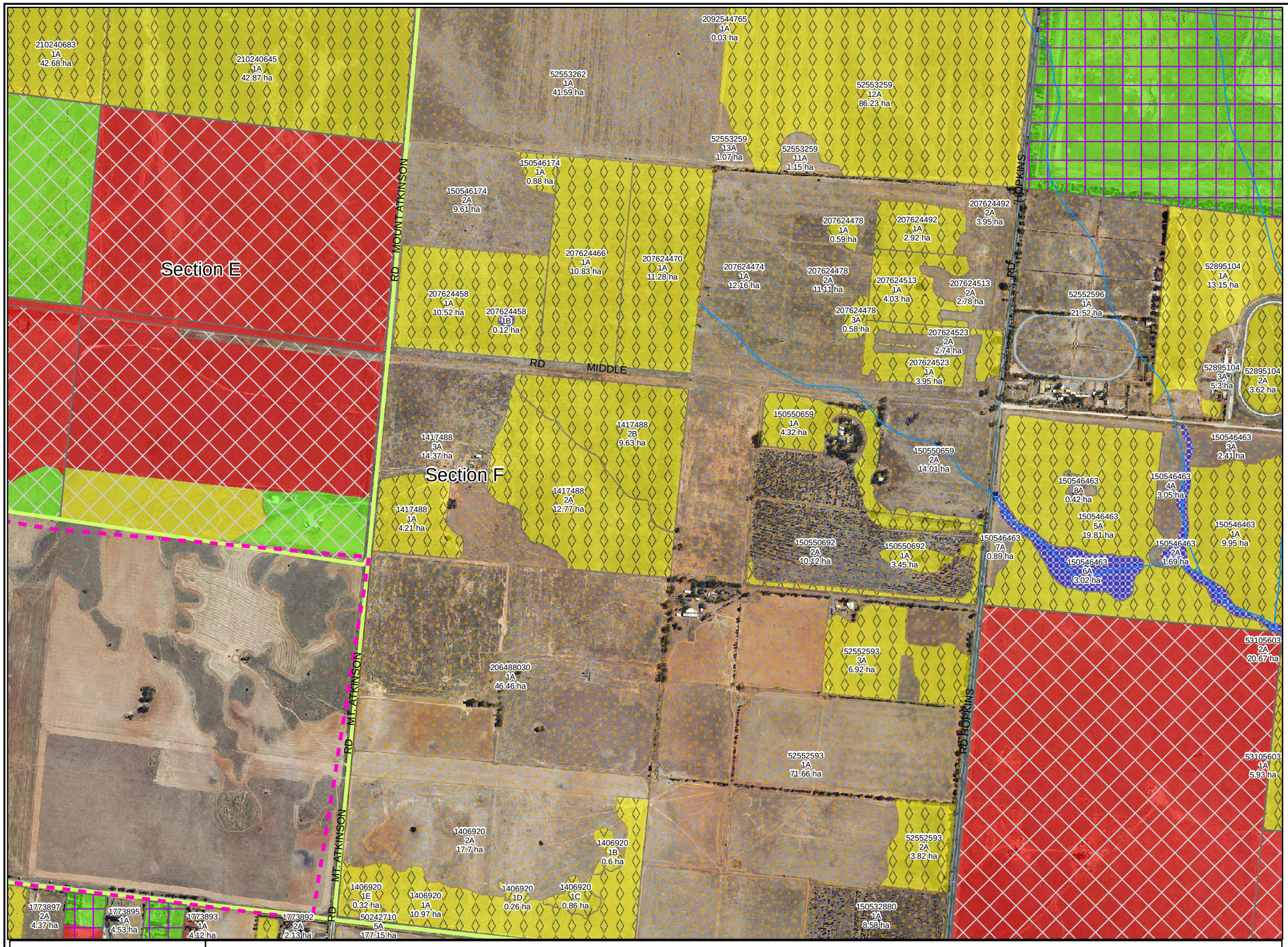

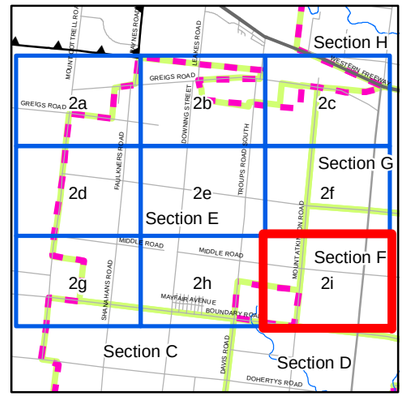

Legend

EVC

- 125 Plains Grassy Wetland
- 132_61 Heavier-soils Plains Grassland
- 132_63 Low-rainfall Plains Grassland
- 55_61 Plains Grassy Woodland
- 649 Stony Knoll Shrubland
- Degraded Treeless Vegetation

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 2i : Native Vegetation, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 2.mxd

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Meters

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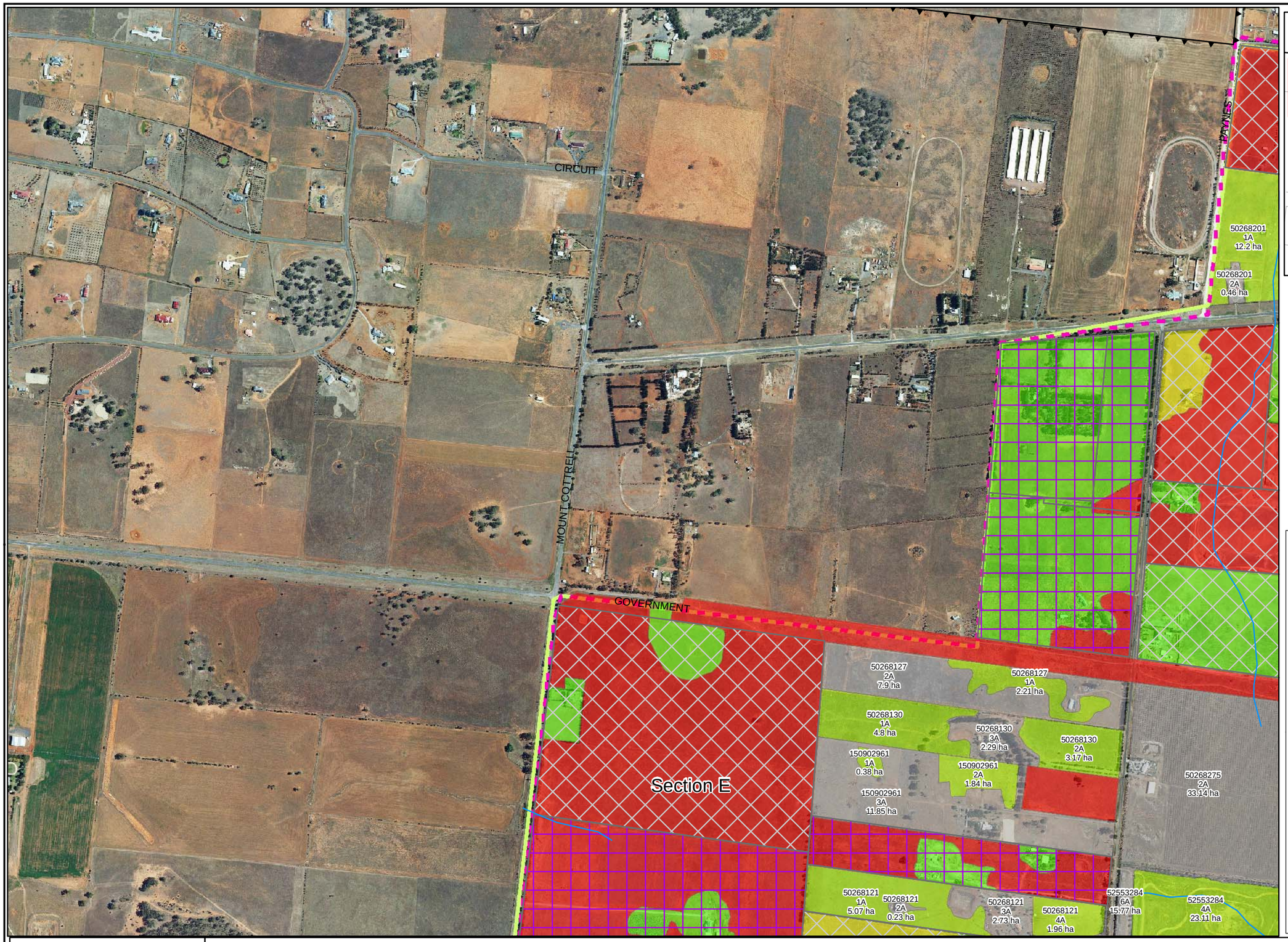

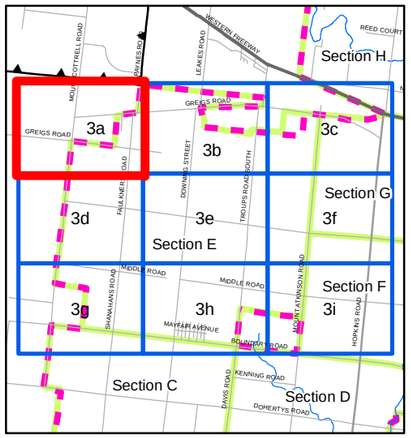

Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 3a: Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

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Meters

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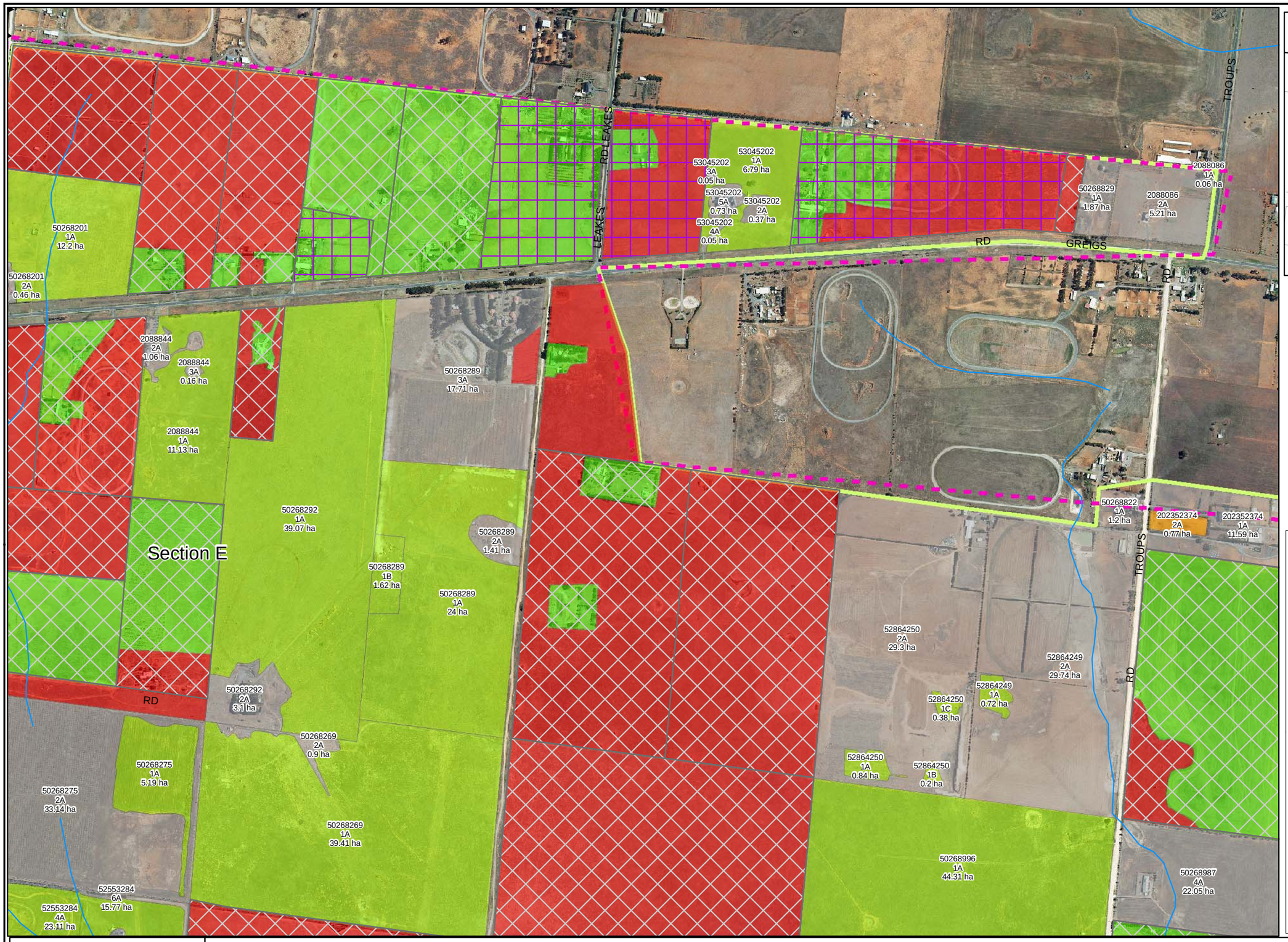

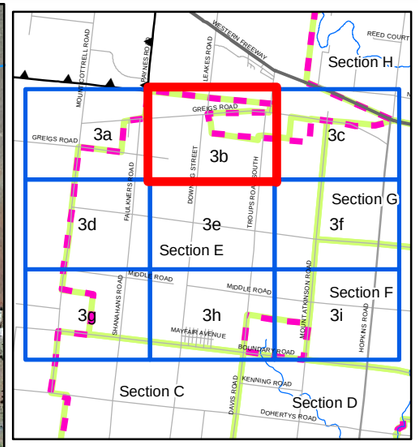

Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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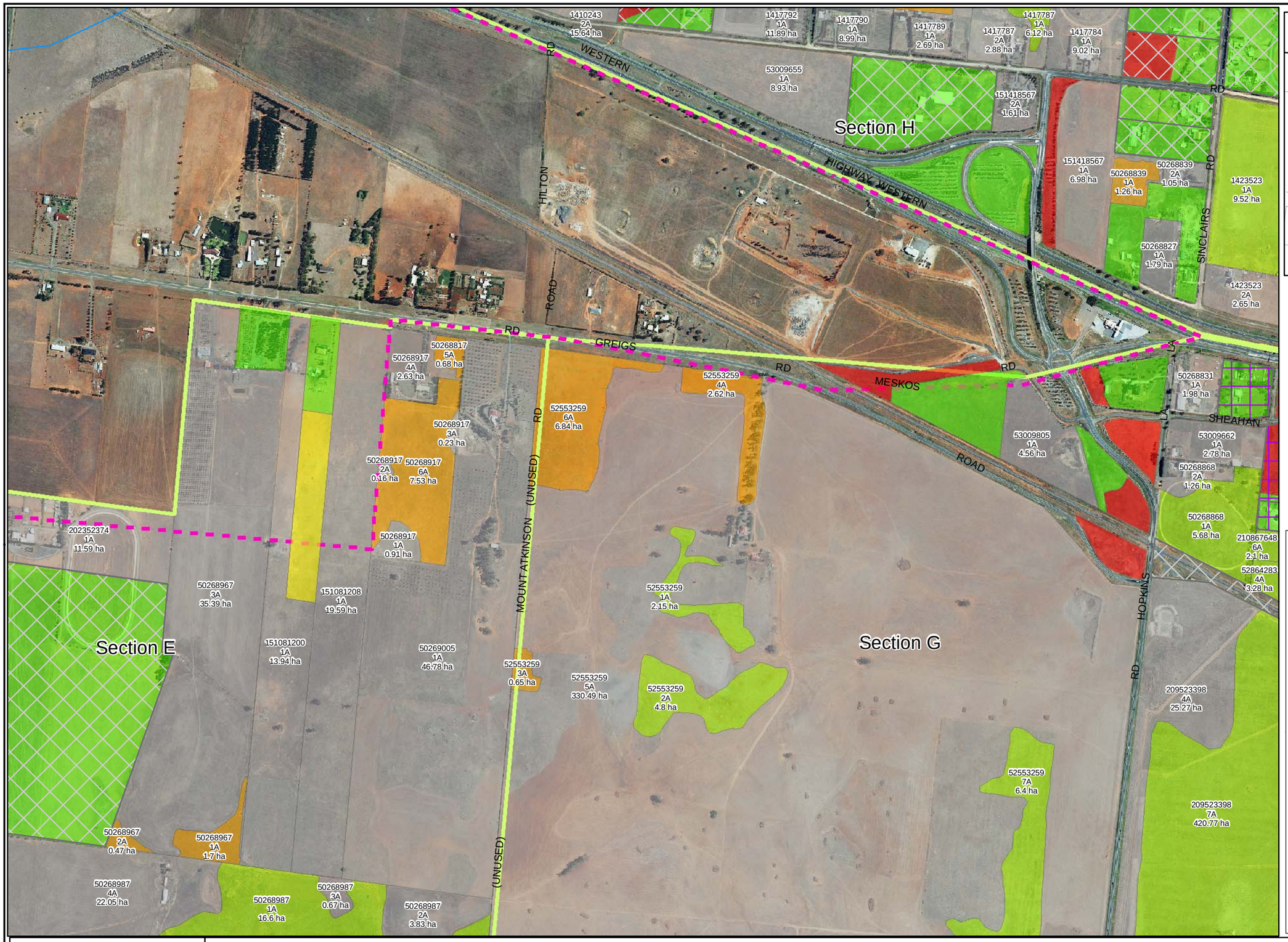
Figure 3b: Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

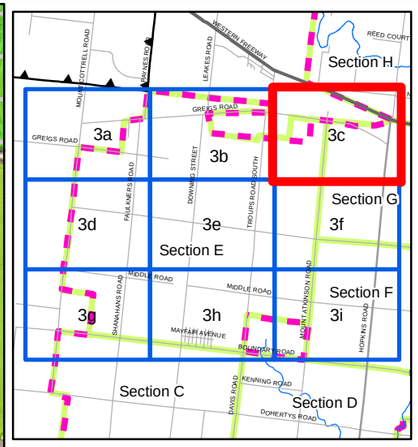
Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

0 50100 200 300 400 500
Meters

N W E S





Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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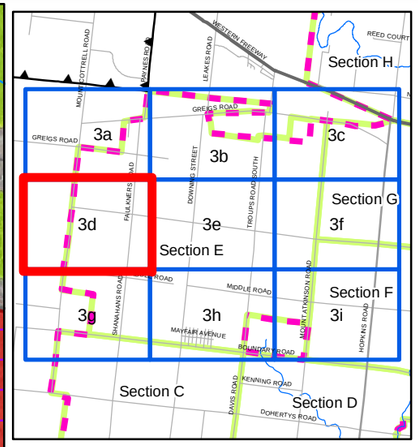
Figure 3c: Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

0 50100 200 300 400 500
Meters

N W E S



Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 3d: Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

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Meters

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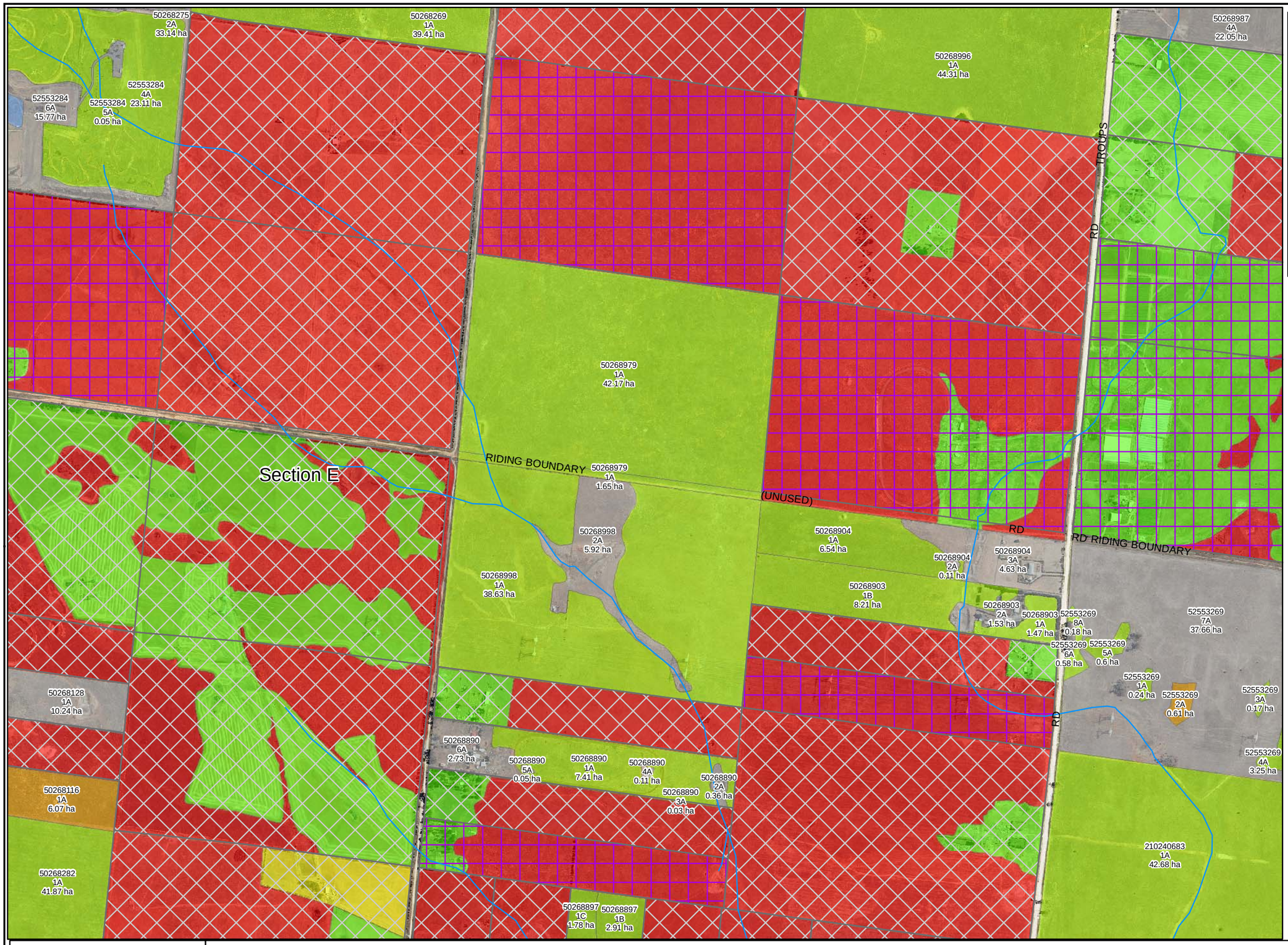

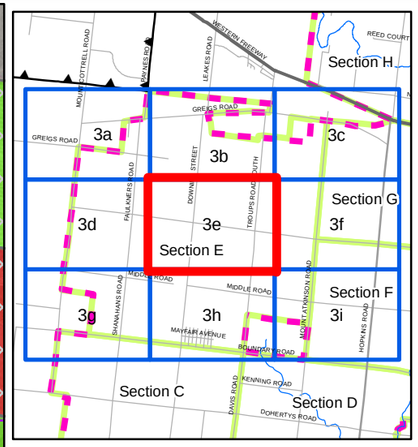

Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 3e: Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

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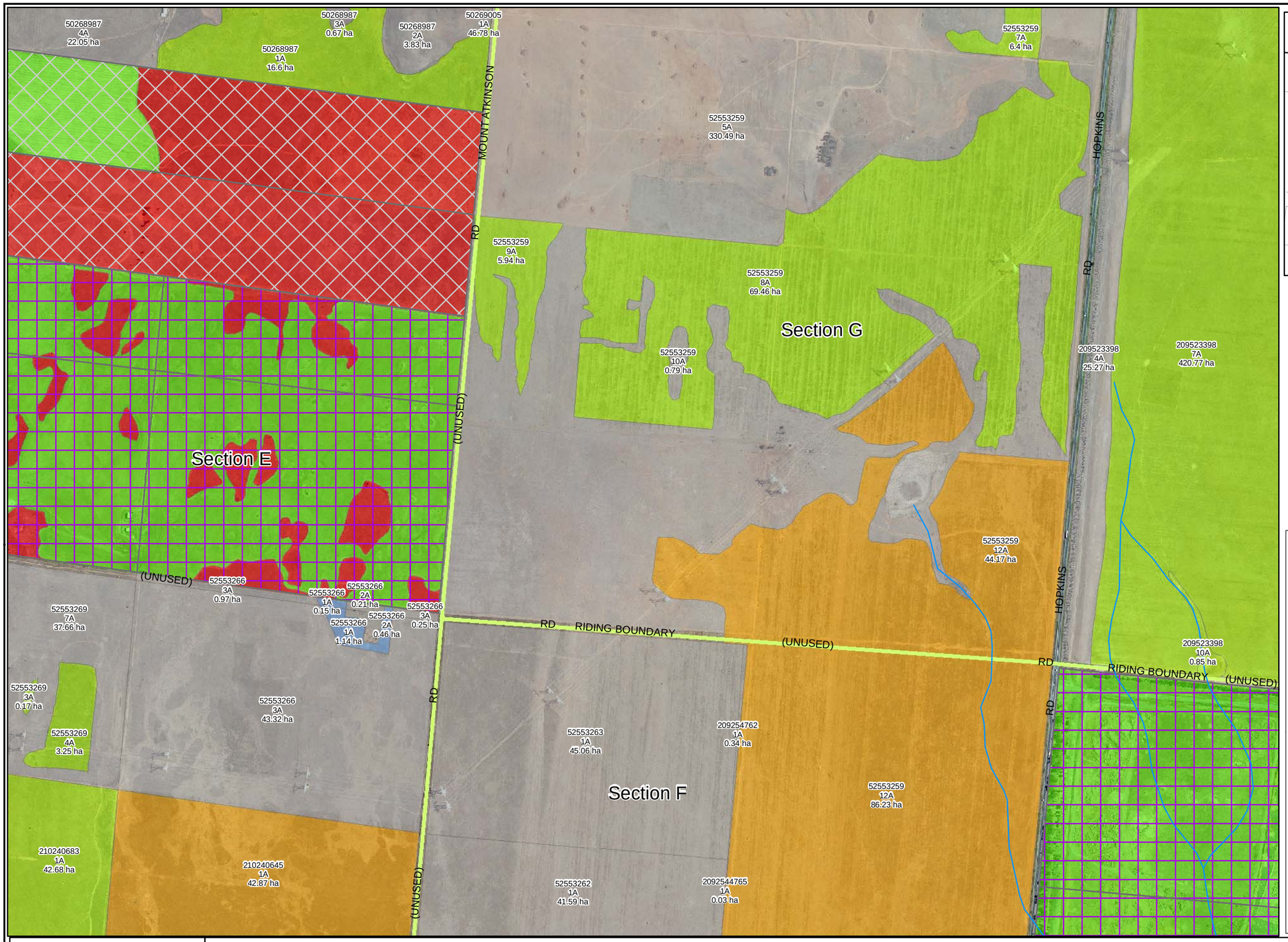

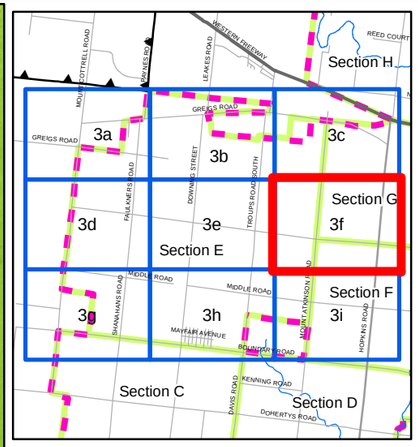

Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 3f : Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

0 50100 200 300 400 500
Meters

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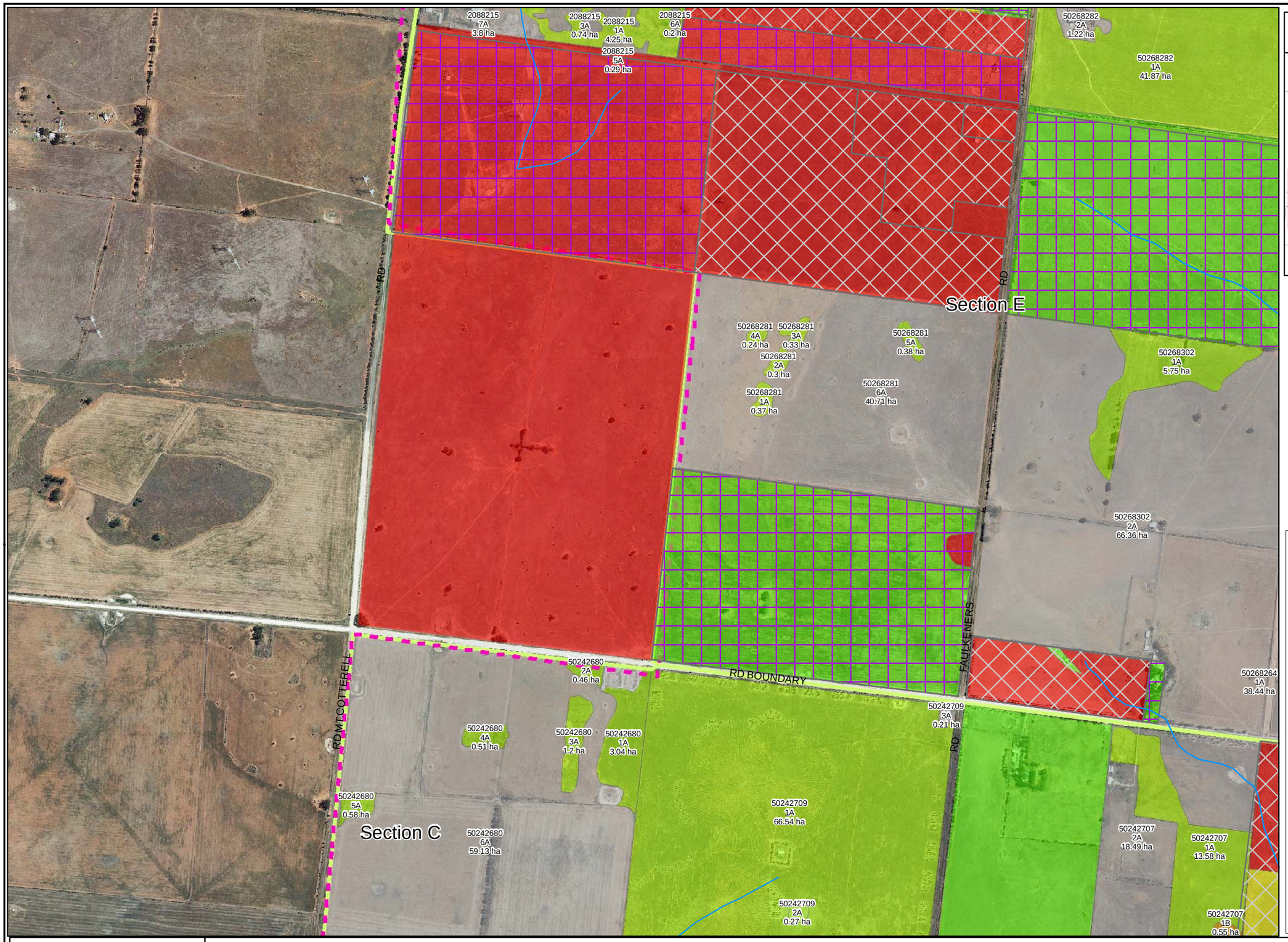

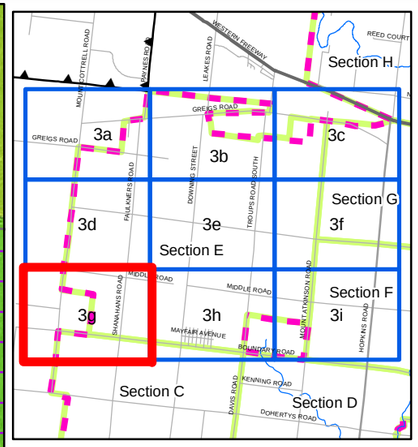

Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 3g: Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

0 50100 200 300 400 500
Meters

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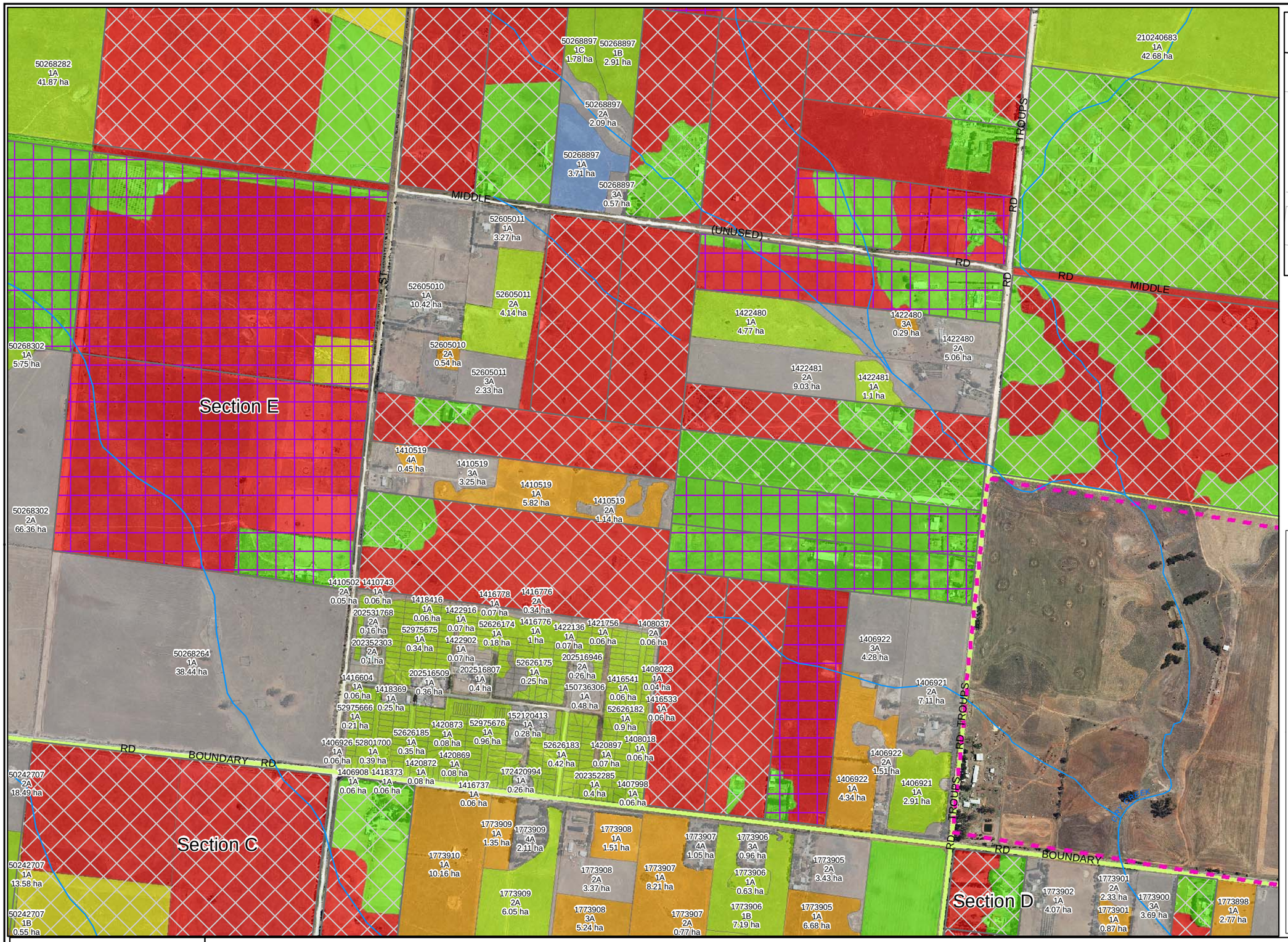

Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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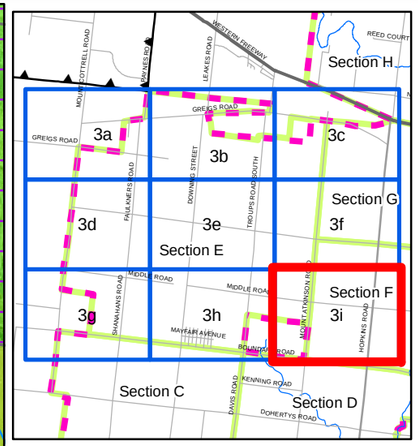
Figure 3h: Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

0 50100 200 300 400 500
Meters

N W E S



Legend

Site Condition Score

- Degraded Treeless Vegetation
- 1 to 20
- 20 to 30
- 30 to 75

Reconnaissance Survey

- Highly Likely Native Vegetation - Grassy
- Possible Native Vegetation
- No Native Vegetation
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained

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Figure 3i : Vegetation quality of habitat zones and results of reconnaissance survey, Section E.

Date: 18 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 3.mxd

0 50100 200 300 400 500
Meters

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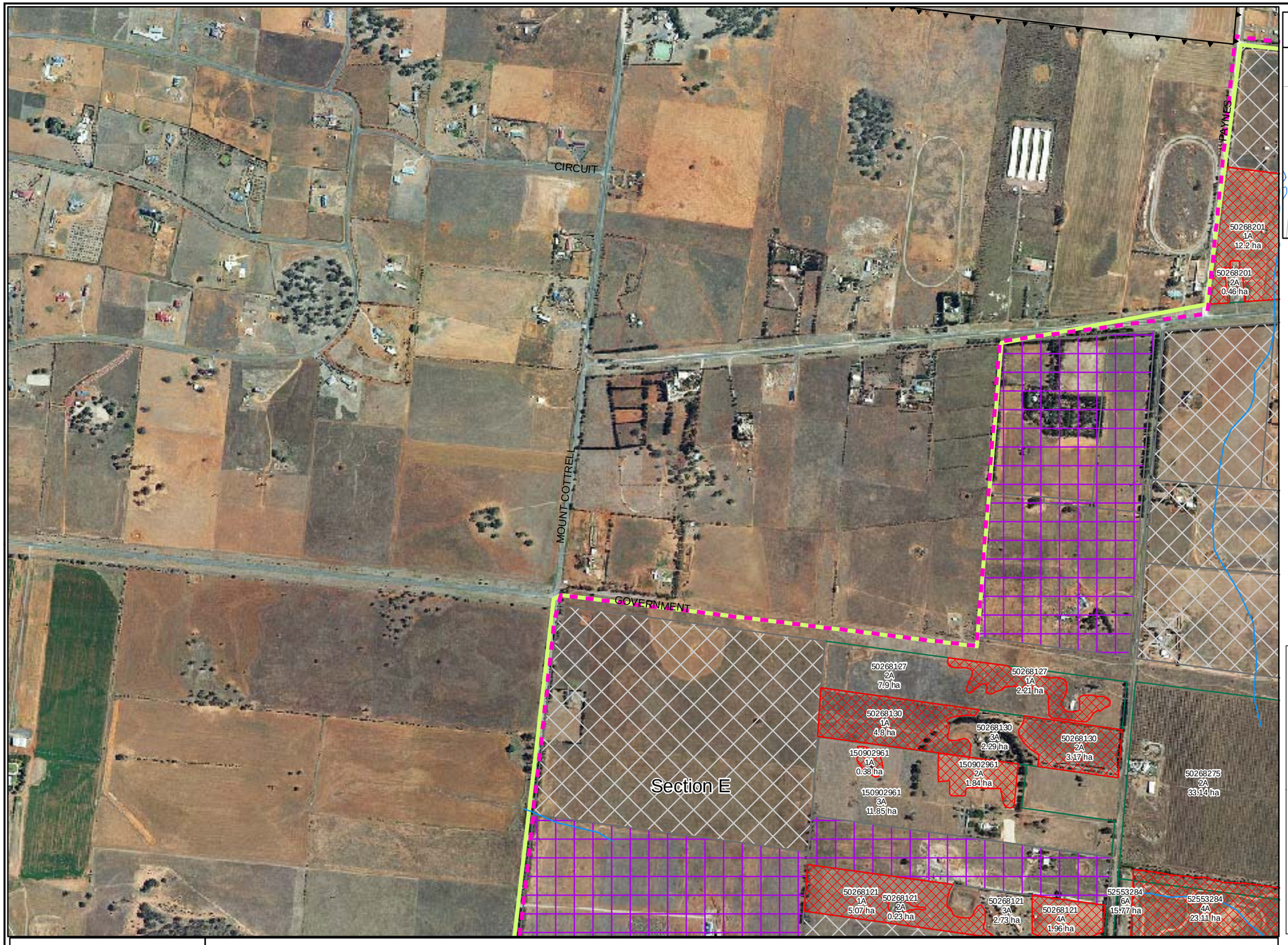

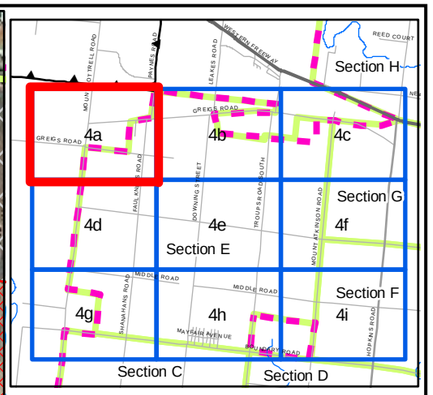

Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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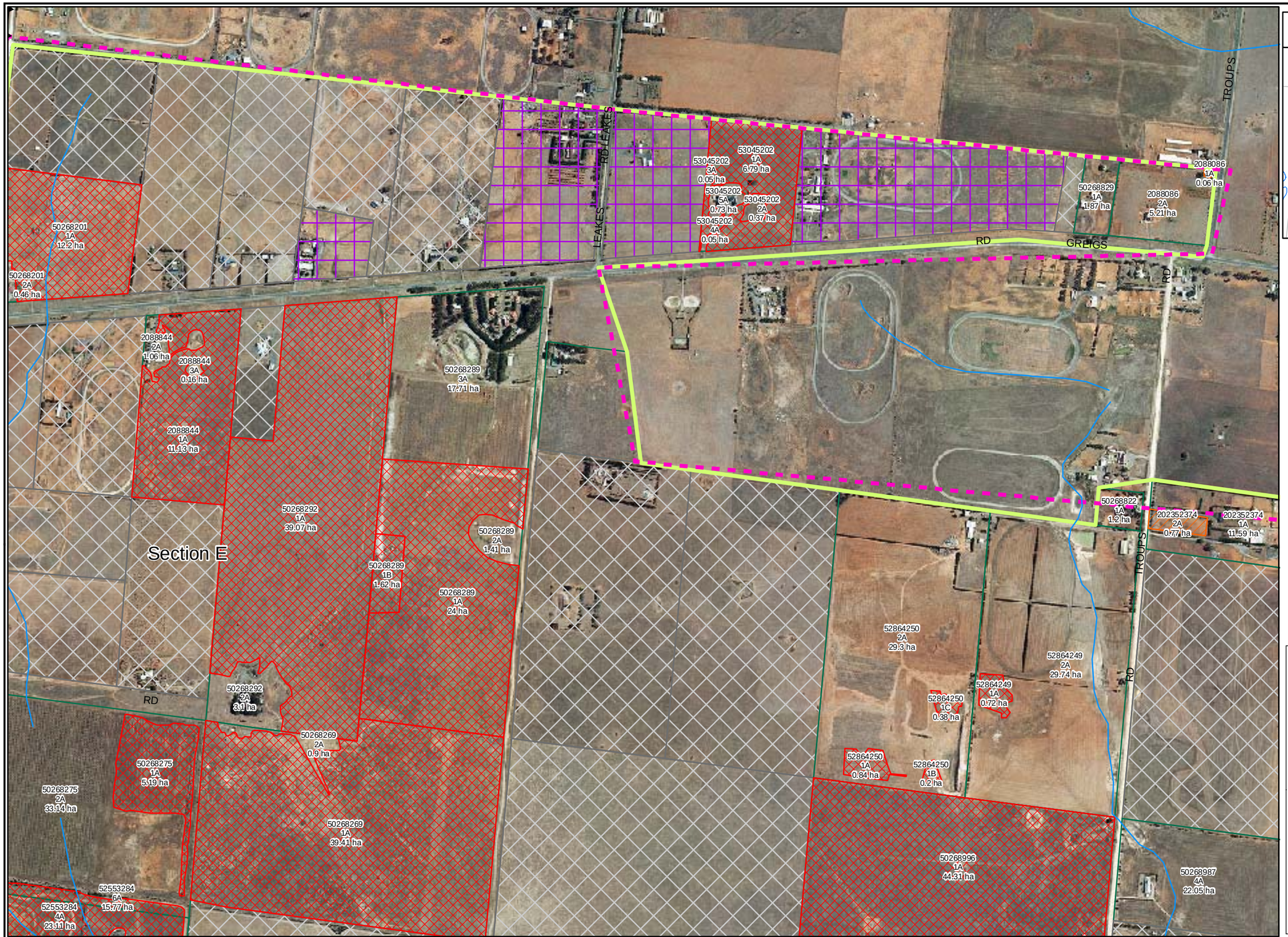
Figure 4a: Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

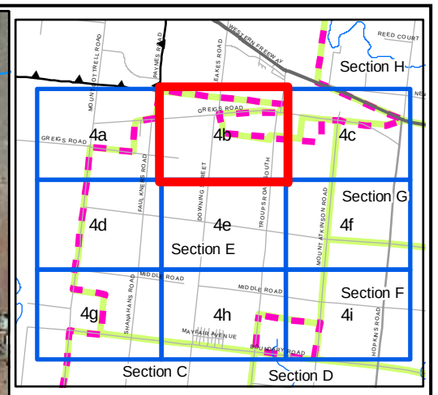
Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

0 50100 200 300 400 500
Meters

N W E S





Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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Figure 4b: Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

0 50100 200 300 400 500
Meters

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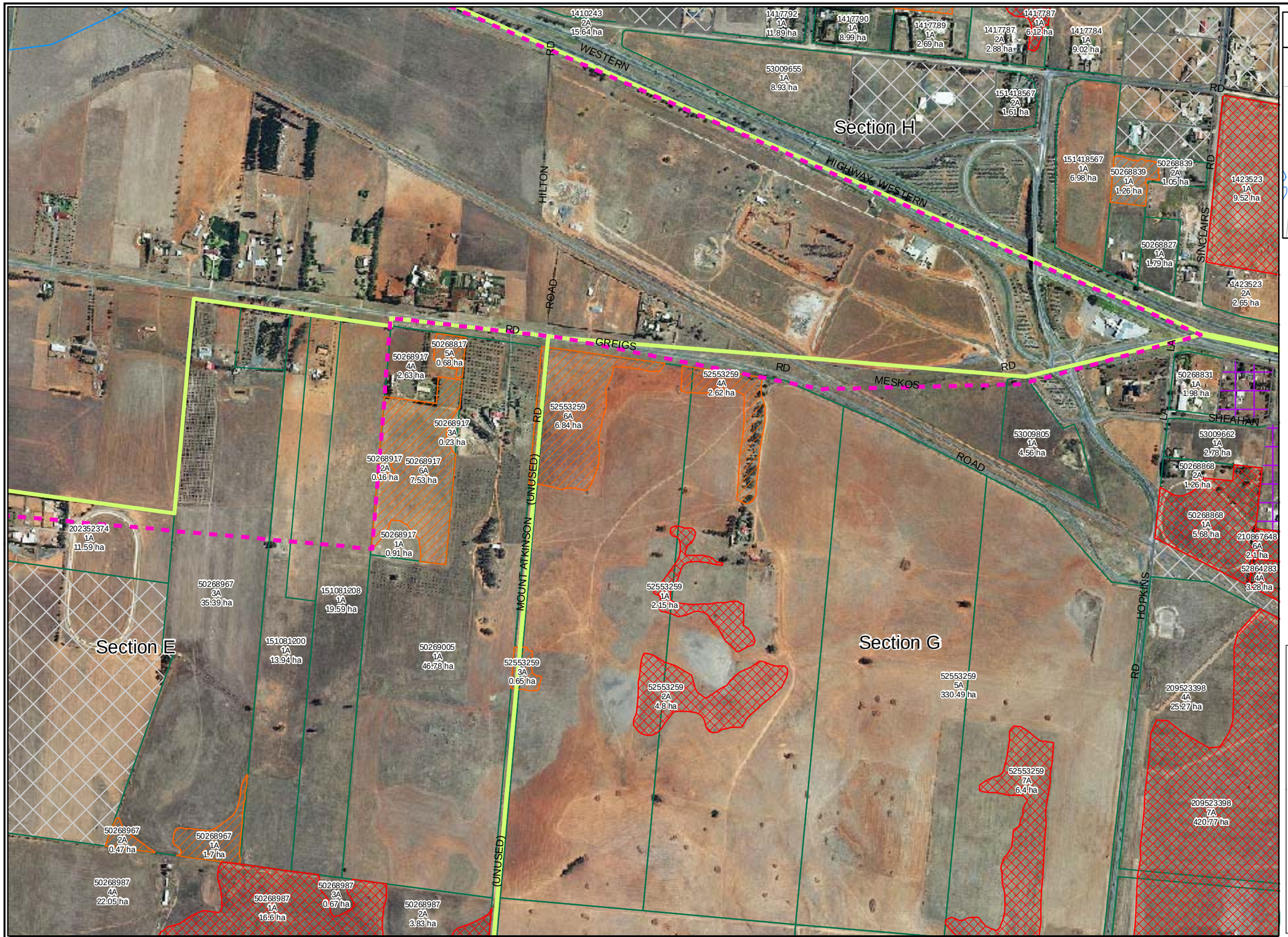

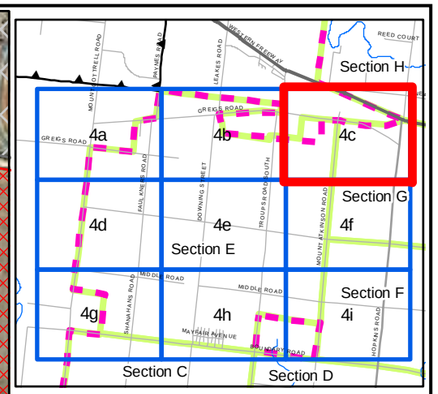

Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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Figure 4c: Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

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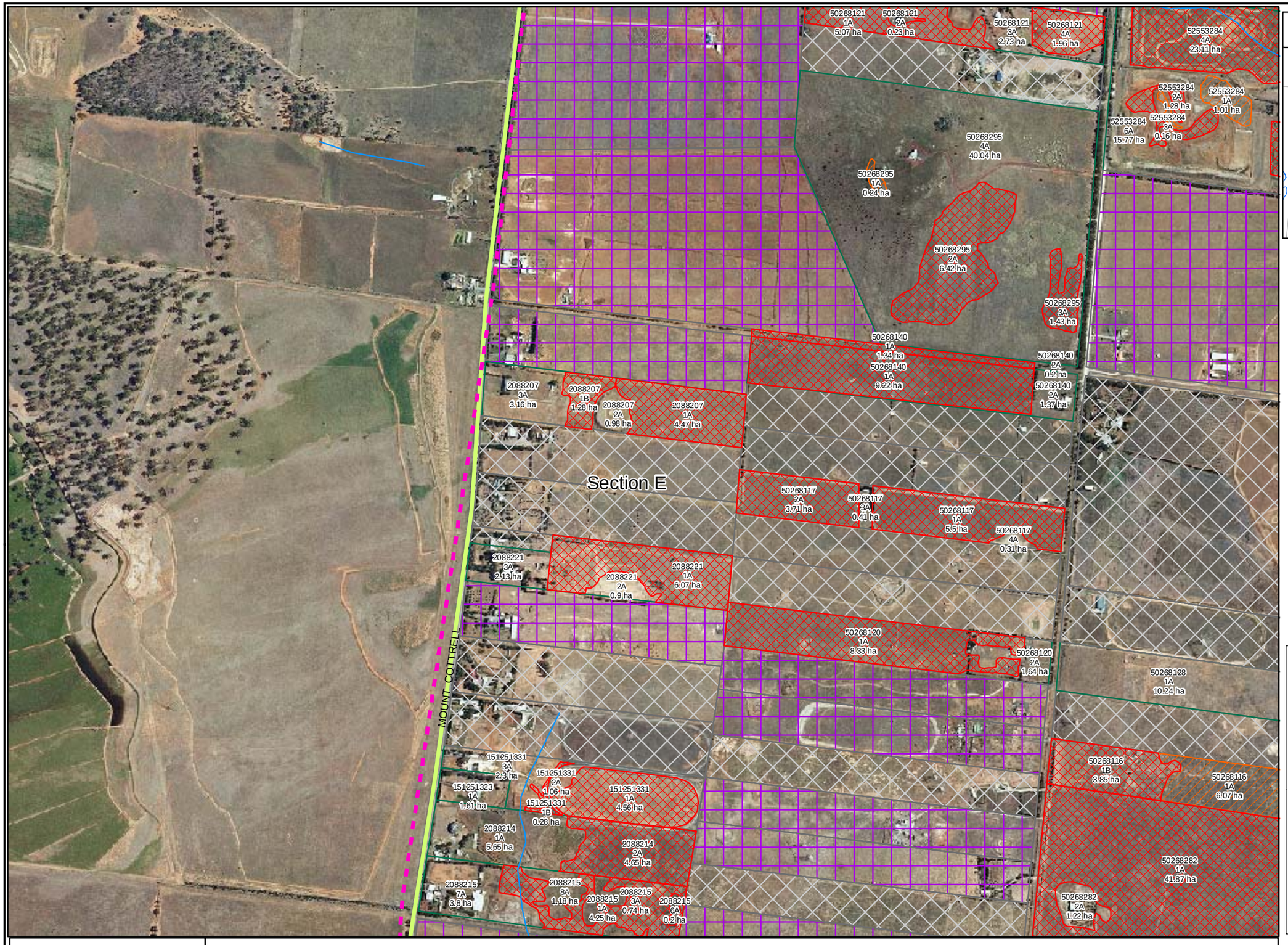

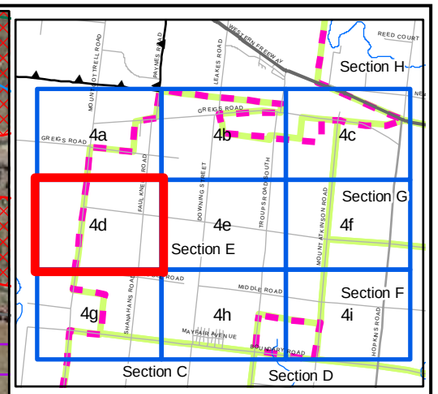

Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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Figure 4d: Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

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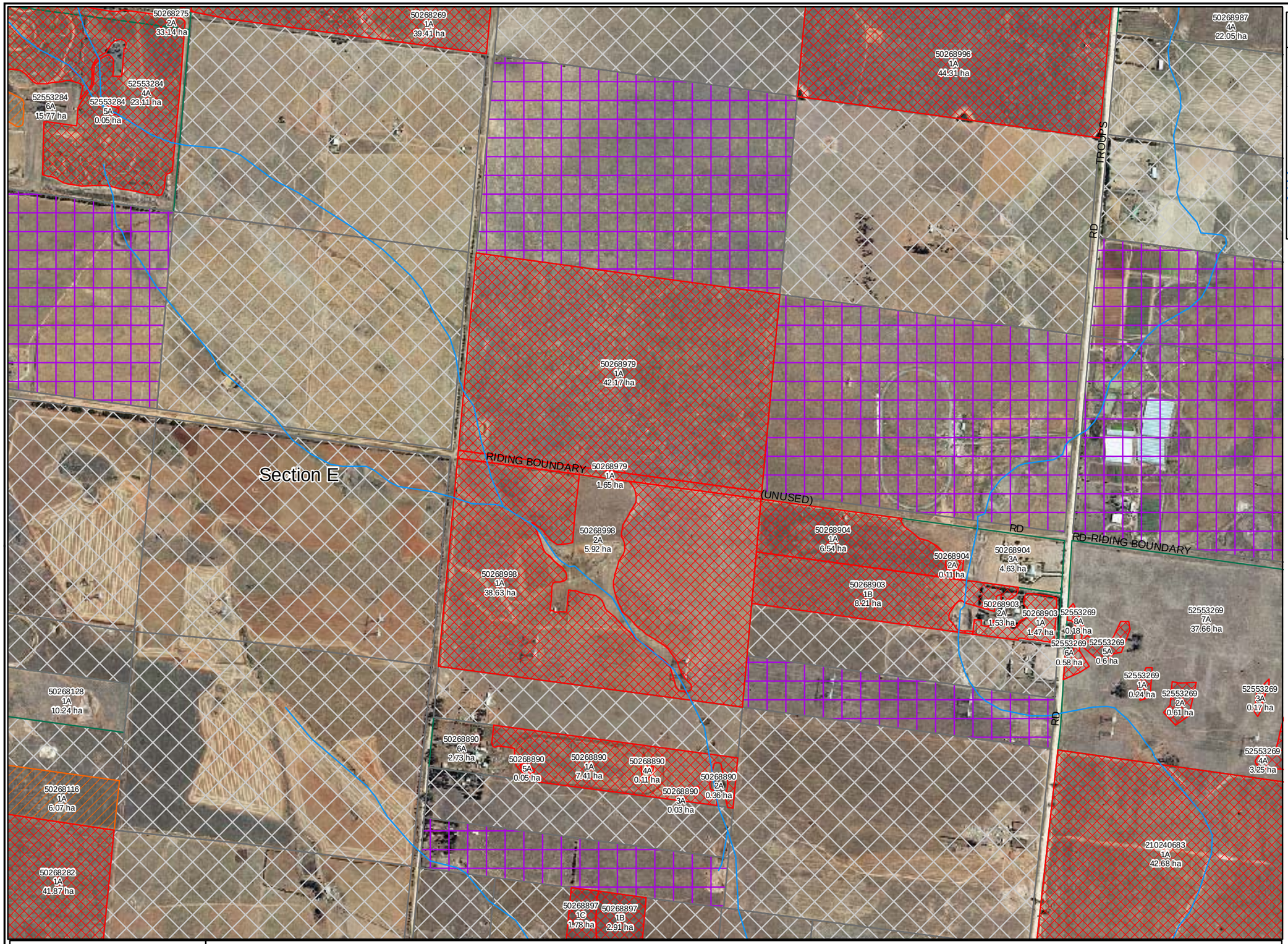

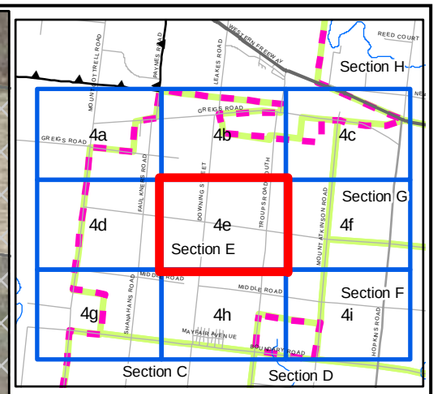

Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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Figure 4e: Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

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Meters

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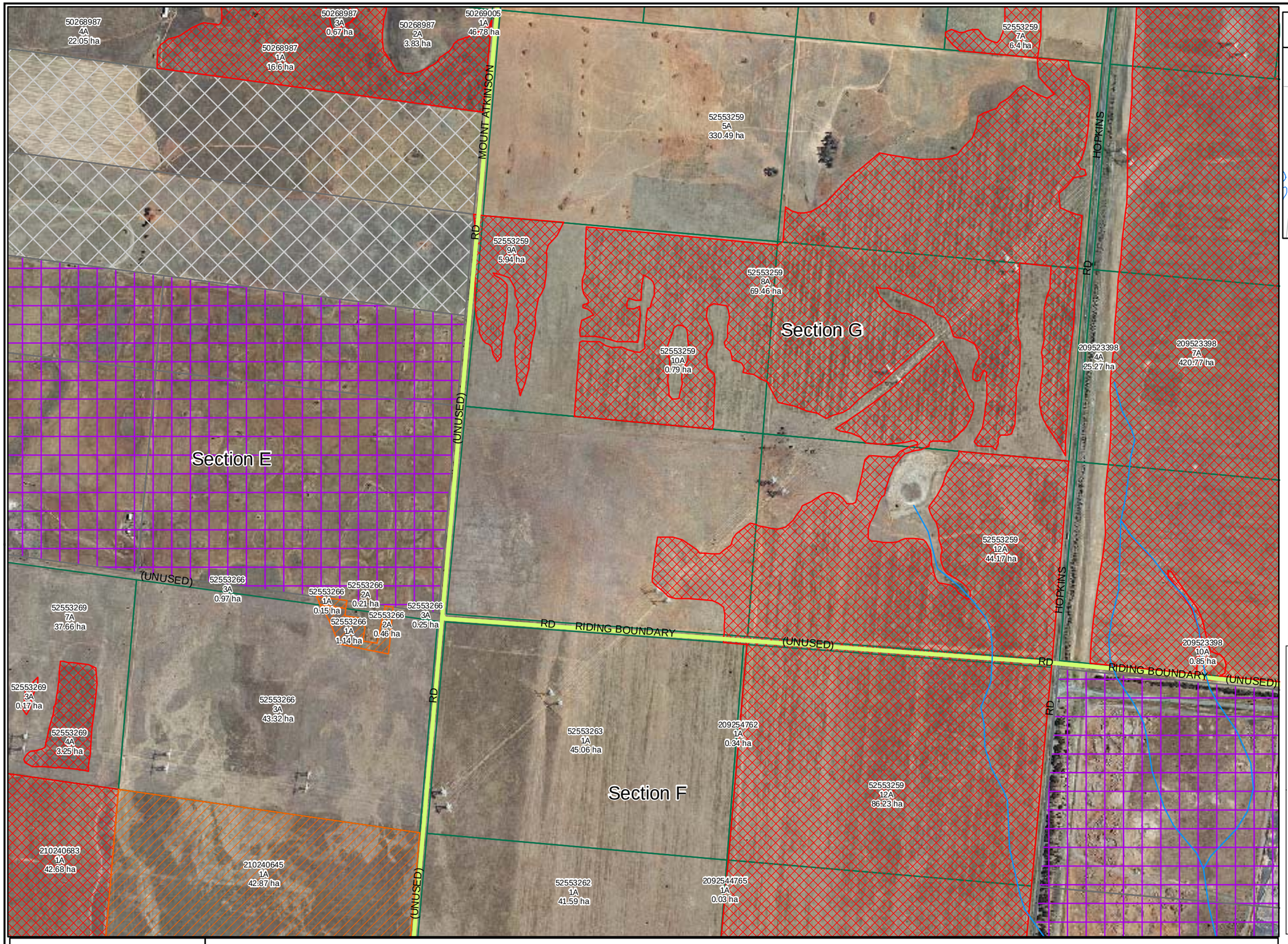

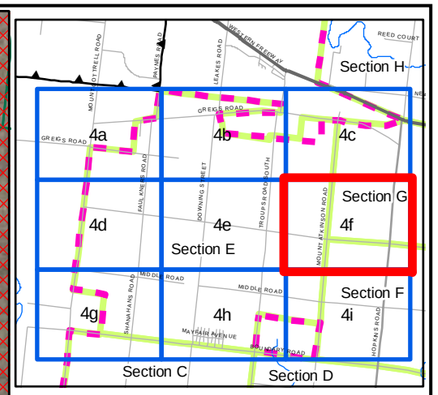

Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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Figure 4 f : Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

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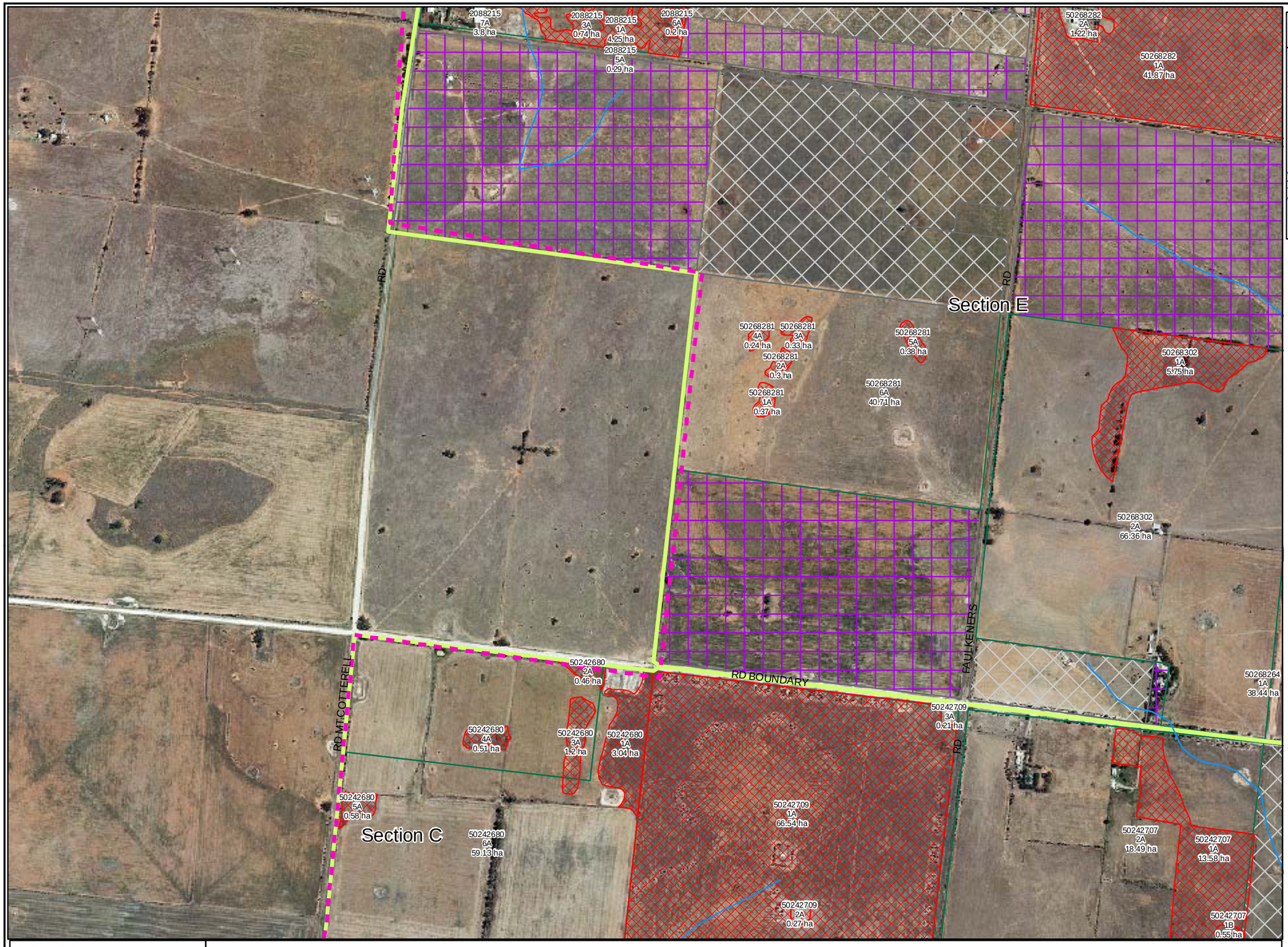

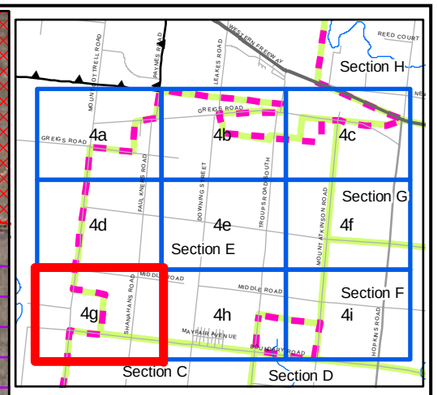

Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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Figure 4g: Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

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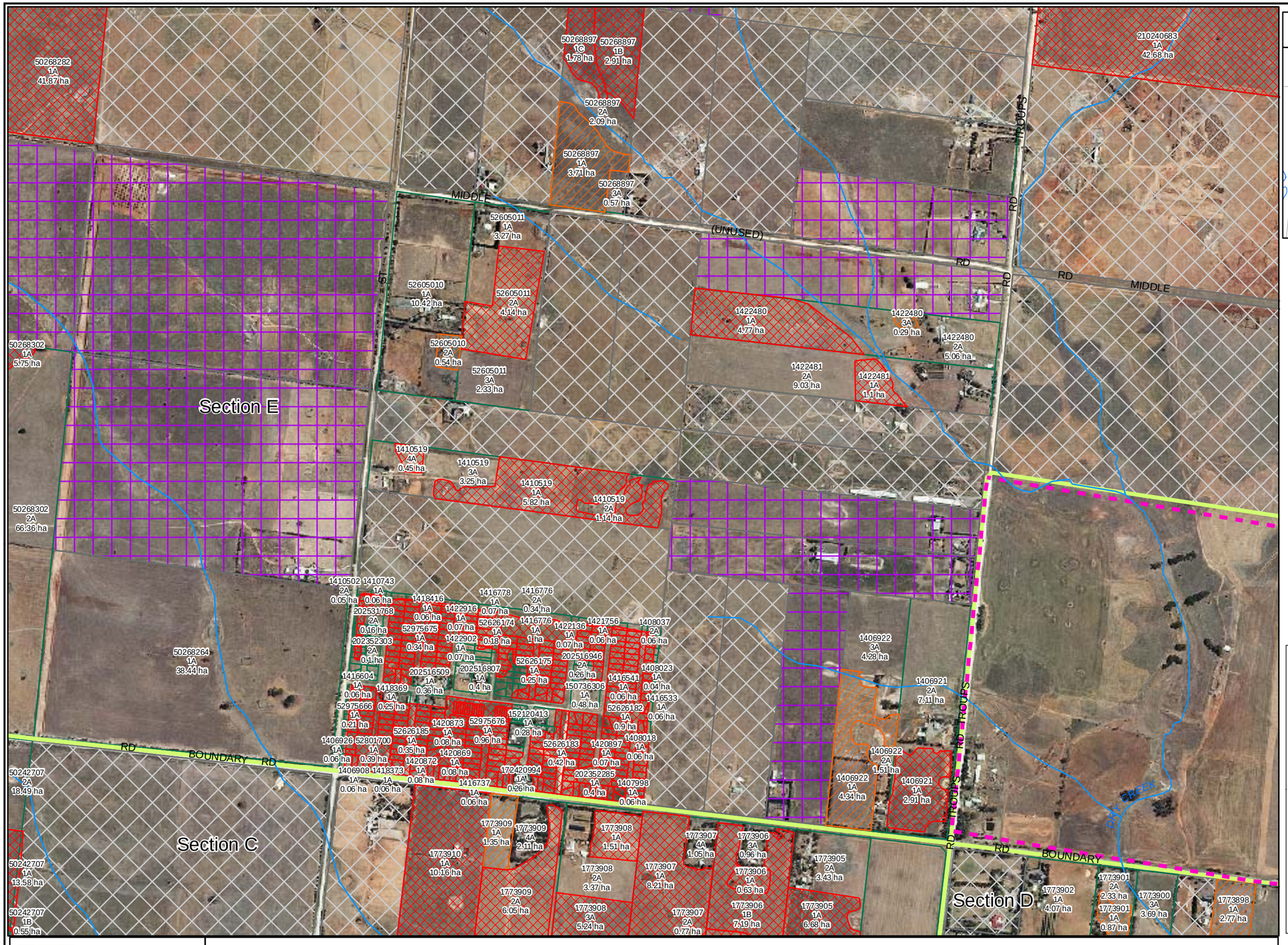

Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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Figure 4h: Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

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Meters

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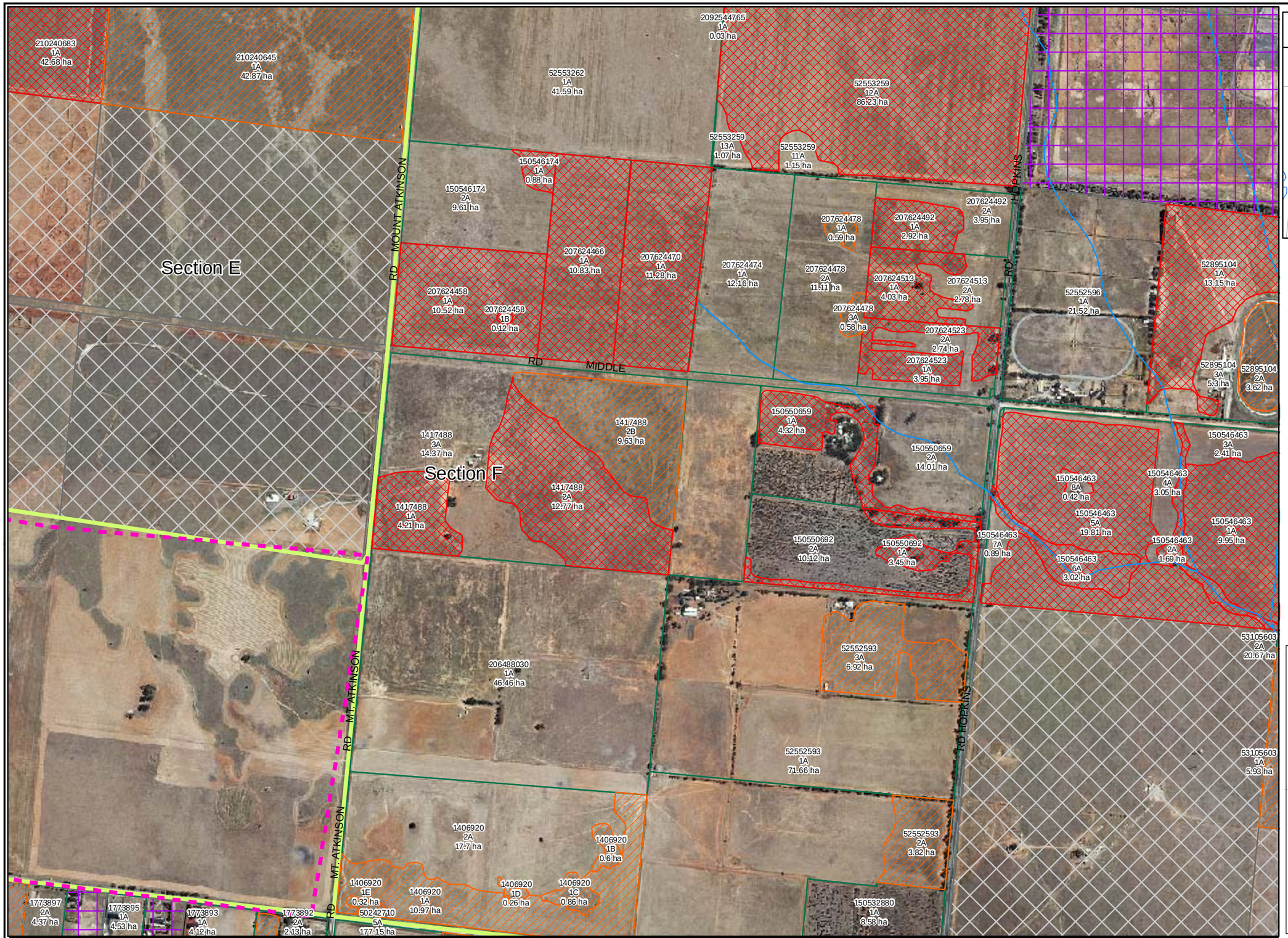

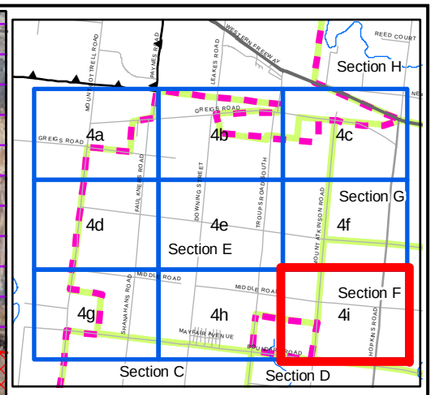

Legend

Conservation Significance

- Very High
- High
- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Access status for properties not assessed

- Access Denied
- Access unable to be obtained
- Access obtained

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Figure 4 i : Conservation significance of habitat zones according to the Native Vegetation Framework (NRE 2002), Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 4.mxd

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Meters

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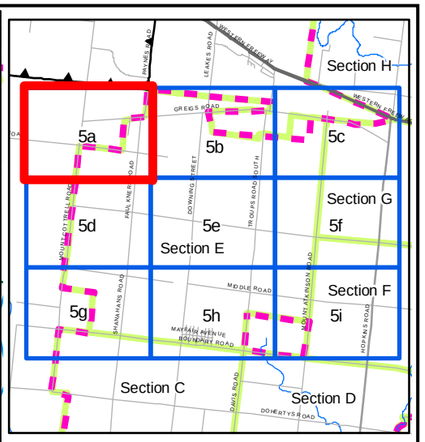

Legend

Incidental records

- Nationally significant^
- State Significant*

Flora

Database records

- Nationally significant^
- State significant*

Fauna

Database records

- Nationally significant^
- State significant*

Incidental records

- Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Figure 5a: National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

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Meters

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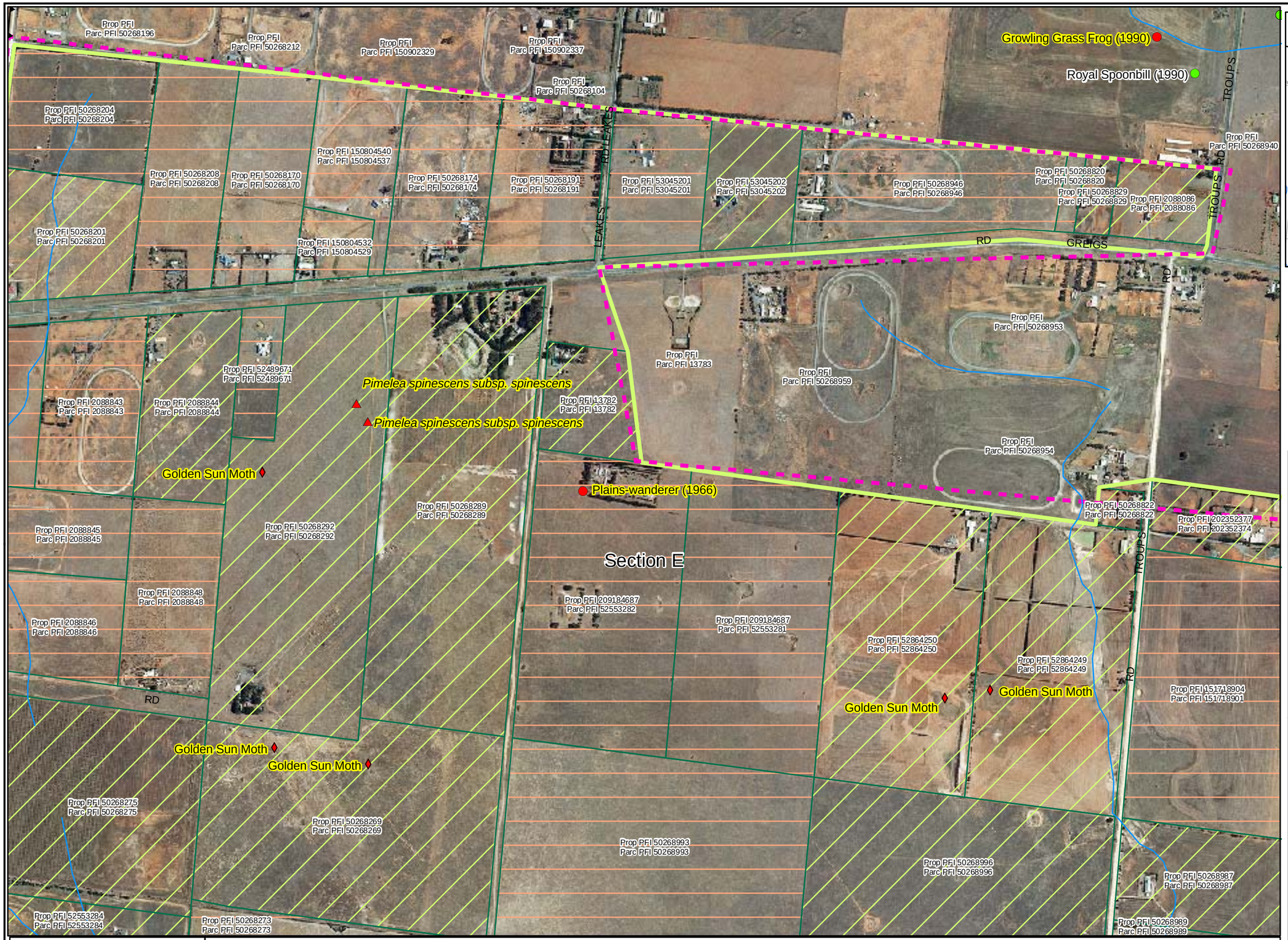

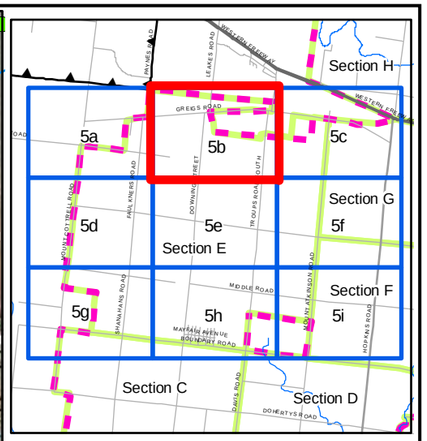

Legend

Incidental records

- Nationally significant^
- State Significant*

Flora

Database records

- Nationally significant^
- State significant*

Fauna

Database records

- Nationally significant^
- State significant*

Incidental records

- Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Figure 5 b: National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

0 50100 200 300 400 500
Meters

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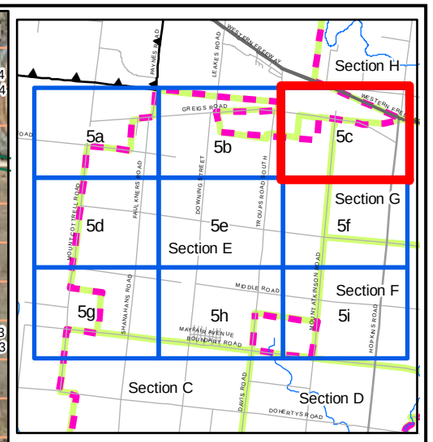

Legend

Incidental records

- Nationally significant^
- State Significant*

Flora

Database records

- Nationally significant^
- State significant*

Fauna

Database records

- Nationally significant^
- State significant*

Incidental records

- Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Figure 5c: National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

0 50100 200 300 400 500
Meters

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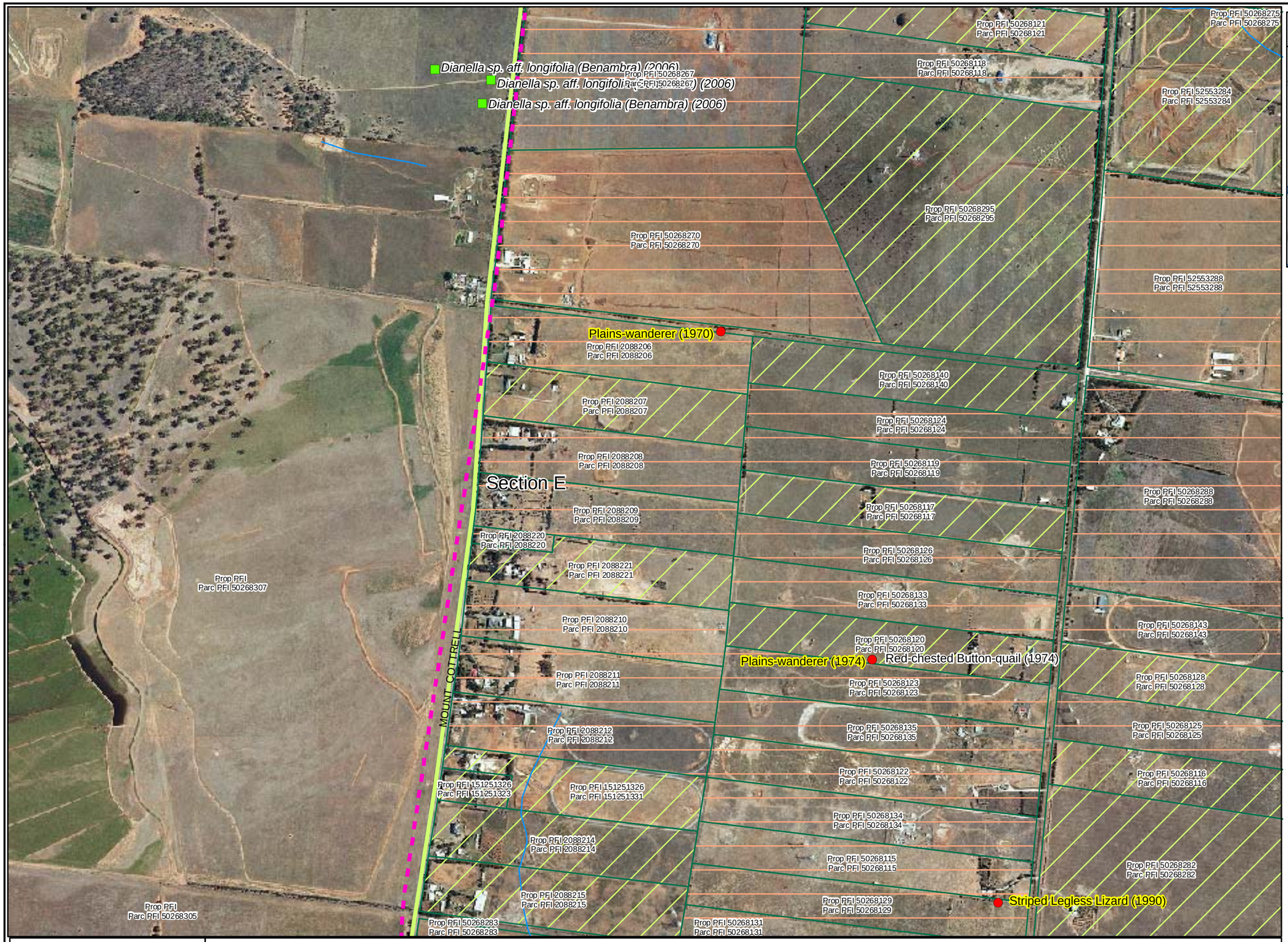

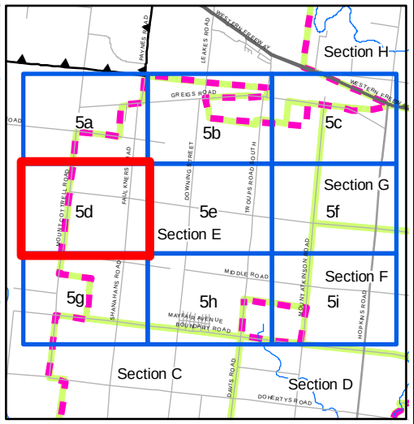

Legend

Incidental records

- Nationally significant^
- State Significant*

Flora

Database records

- Nationally significant^
- State significant*

Fauna

Database records

- Nationally significant^
- State significant*

Incidental records

- Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Figure 5 d: National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

0 50100 200 300 400 500
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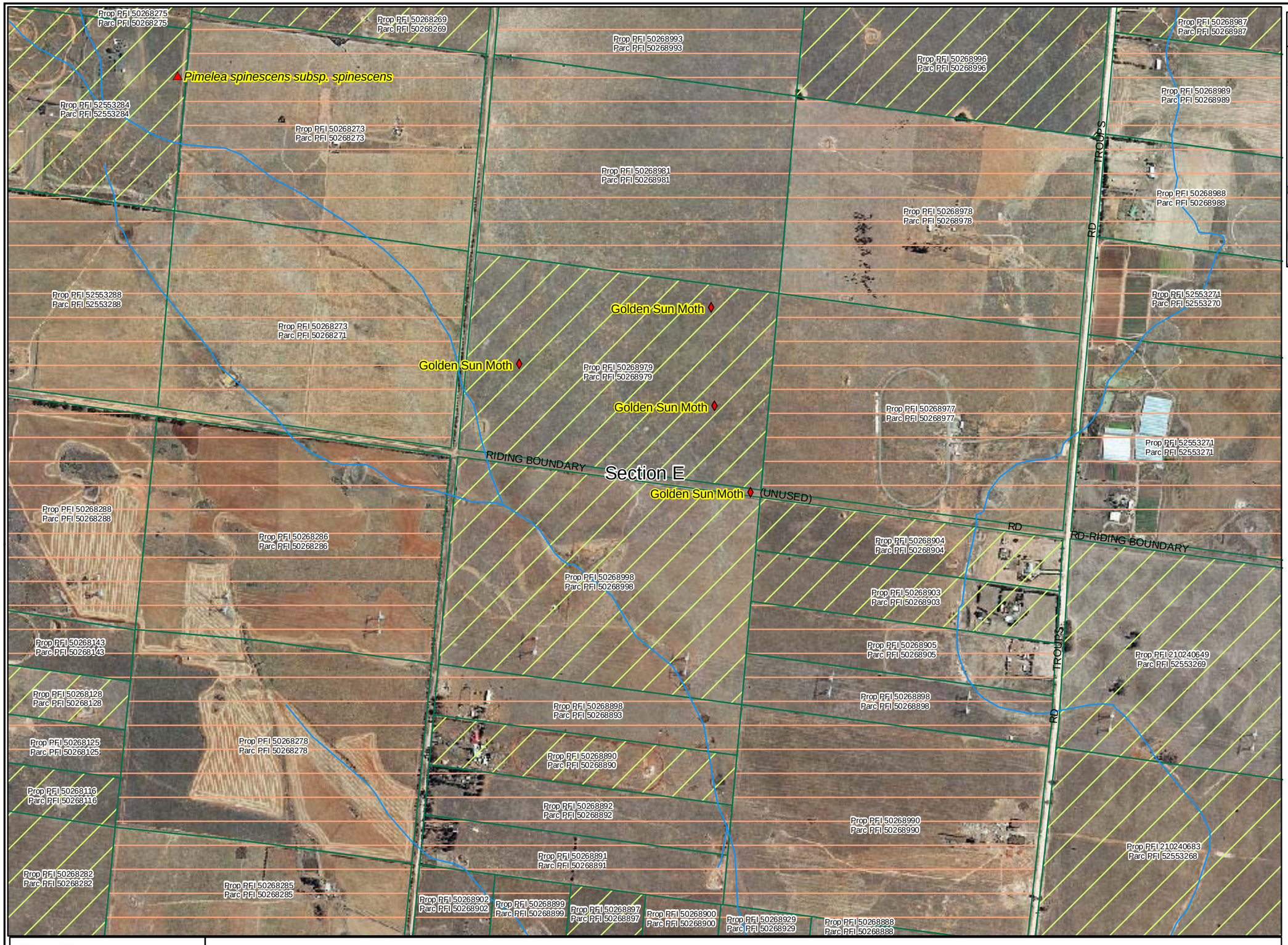

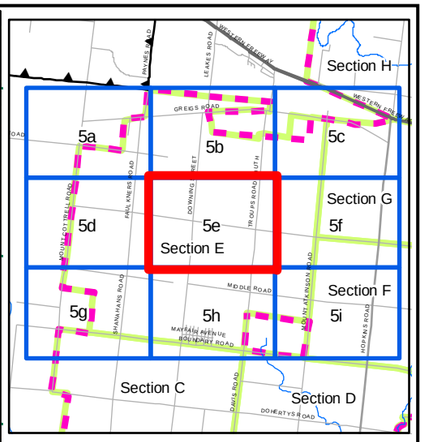

Legend

Incidental records

- Nationally significant^
- State Significant*

Flora

Database records

- Nationally significant^
- State significant*

Fauna

Database records

- Nationally significant^
- State significant*

Incidental records

- Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Figure 5e: National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

0 50100 200 300 400 500
Meters

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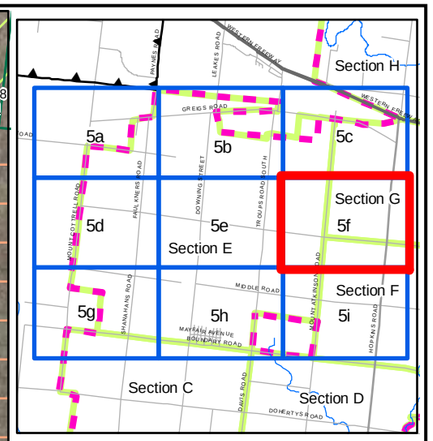

Legend

Incidental records

- Nationally significant^
- State Significant*

Flora

Database records

- Nationally significant^
- State significant*

Fauna

Database records

- Nationally significant^
- State significant*

Incidental records

- Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Figure 5 f : National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

0 50100 200 300 400 500
Meters

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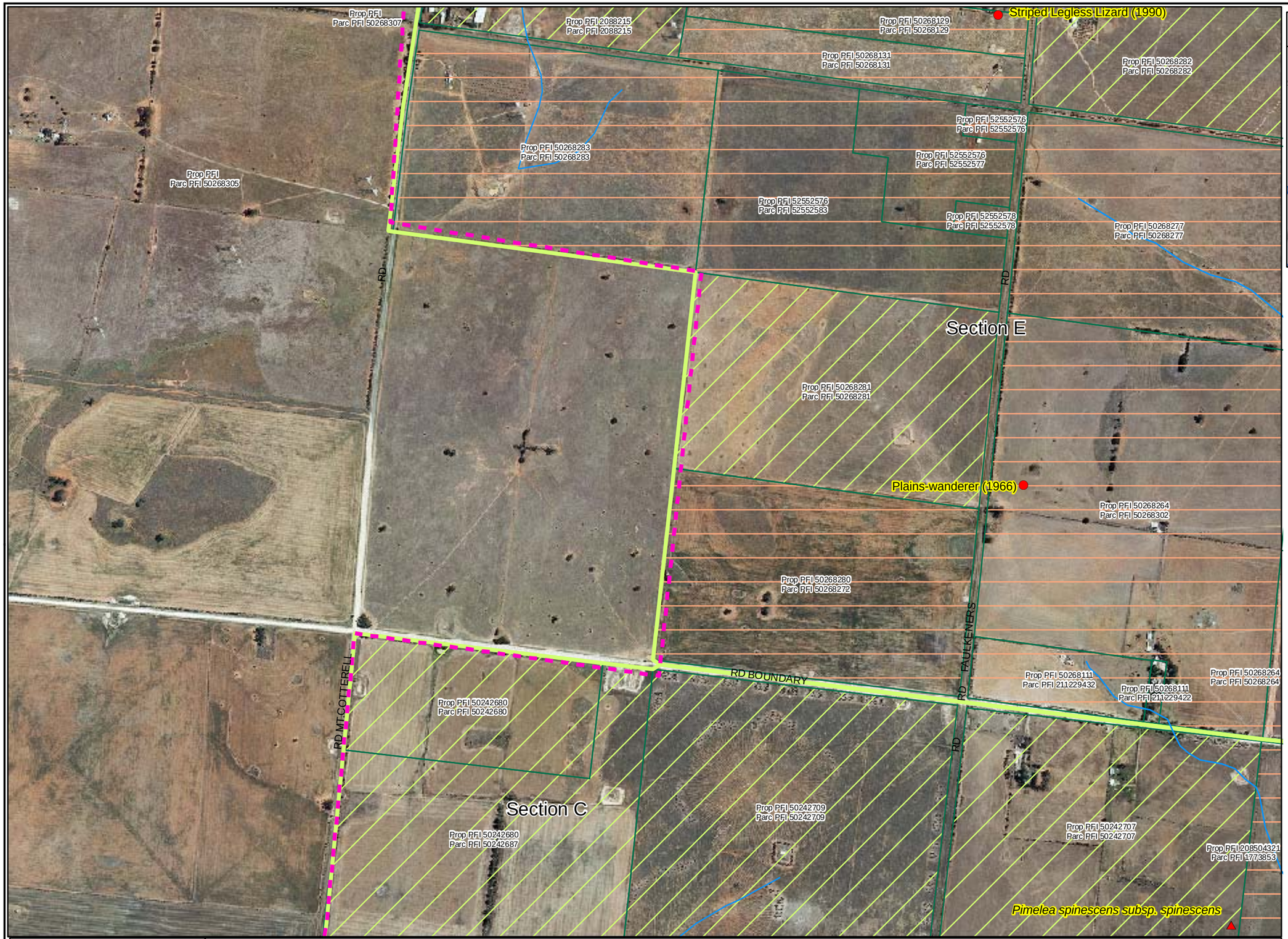

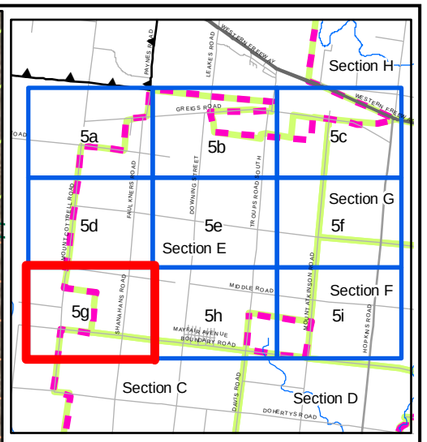

Legend

Incidental records

- Nationally significant^
- State Significant*

Flora

Database records

- Nationally significant^
- State significant*

Fauna

Database records

- Nationally significant^
- State significant*

Incidental records

- Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Figure 5 g: National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

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Meters

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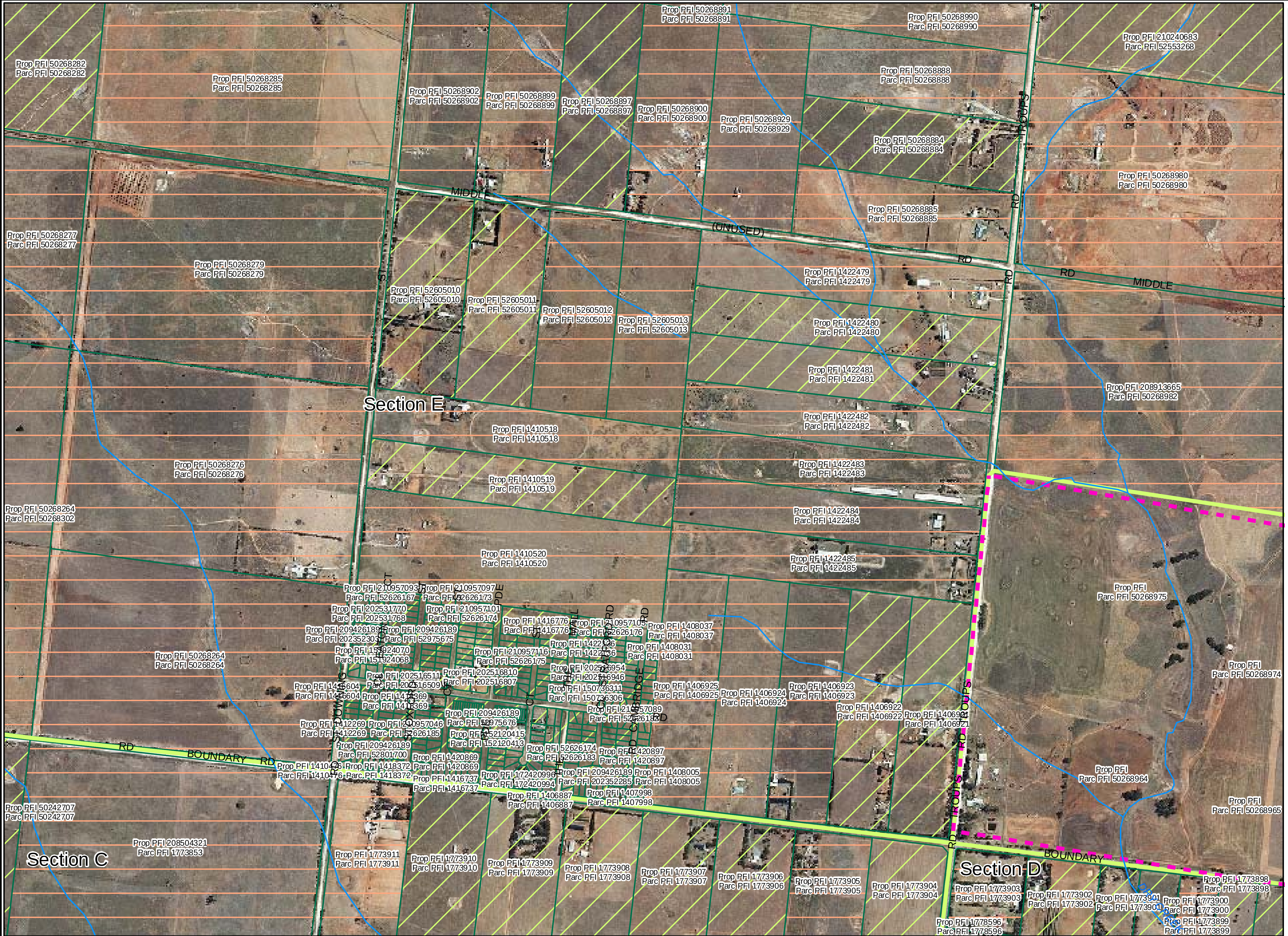

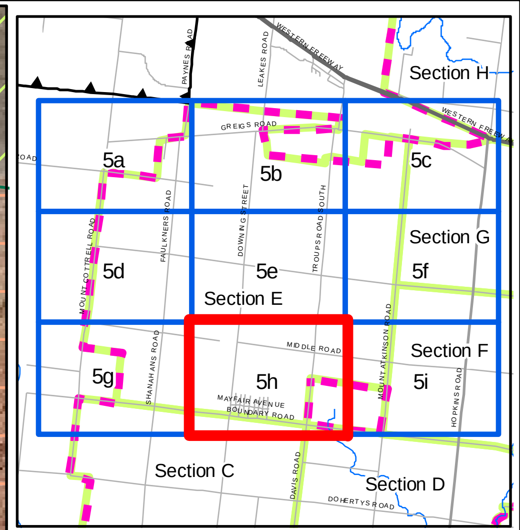

Legend

Incidental records

- ▲ Nationally significant^
- ▲ State Significant*

Flora

Database records

- ■ Nationally significant^
- ■ State significant*

Fauna

Database records

- ● Nationally significant^
- ● State significant*

Incidental records

- ♦ Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Figure 5 h: National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

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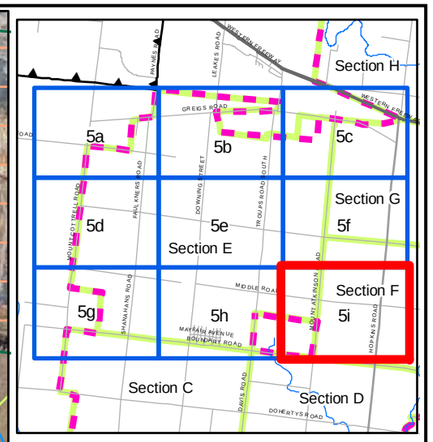

Legend

Incidental records

- Nationally significant^
- State Significant*

Flora

Database records

- Nationally significant^
- State significant*

Fauna

Database records

- Nationally significant^
- State significant*

Incidental records

- Nationally significant^

- Urban Growth Boundary
- Section boundary
- Melton/Wyndham Investigation Area

Parcels

Assessment status

- Assessed
- Not assessed

Incidental records collected October 08 to March 09 by Biosis Research Pty. Ltd.

^ Nationally significant species labels highlighted in yellow

* FFG listed and/or DSE VROT Advisory list

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Wollongong, Queanbeyan, Wangaratta

Figure 5 i : National and State Significant and DSE Advisory list (VROT) flora and fauna species locations, Section E.

Date: 19 June 2009
Checked by: NHF
Drawn by: SKM
File number: 7813

Location: ...7813\Mapping\Section E\7813 Section E Fig 5.mxd

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APPENDICES

APPENDIX 1

DSE Vegetation Assessment Methodology

A1.1 Habitat hectares

Habitat hectares are calculated where at least 25 % of the understorey cover is native or a group (i.e. at least 3) of trees where the tree canopy cover is at least 20% (DSE 2007). Such sites are termed 'patches' of native vegetation.

Each vegetation patch has one or more habitat quality zones. Each habitat zone consists of one ecological vegetation class (EVC) and has uniform quality within limits.

The assessment process compares the vegetation of the habitat zone against a DSE 'benchmark' description of the EVC, using methods described in the DSE assessment manual (DSE 2004). A habitat score for the habitat zone is calculated by this method.

Each habitat zone has a habitat score of between 0 and 100, with extensive intact vegetation having a theoretical score of 100. Habitat score is calculated using ten components: large trees, tree canopy cover, understorey, weediness, recruitment, organic litter, logs, patch size, neighbourhood context and distance to core area. In naturally treeless vegetation, or vegetation that can exist in different structural forms, the score is standardised to account for the absence of some or all 'woody' criteria.

The habitat hectare value of a habitat zone is given by its habitat score (expressed as a decimal between 0 and 1) multiplied by its land area in hectares. For example, 4 ha of vegetation with a habitat score of 50 contain 2.0 habitat hectares.

Habitat hectares are used to measure losses arising from clearing, and also gains obtained through protection measures and active management of existing vegetation.

A1.2 Indigenous canopy trees

The following information on indigenous canopy trees does not apply if the subject land contains only treeless vegetation types.

Large Old Trees within patches

'Large Old Trees' within native vegetation patches are subject to offset requirements, as outlined in the Native Vegetation Management Framework (NRE 2002: Table 6, p 55). Trees smaller than benchmark size within patches are not included in this assessment, as they are addressed in the habitat hectare analysis.

Scattered trees outside patches

Trees over predominantly introduced understoreys are offset through tree protection/ replacement ratios.

Trees in areas where less than 25 % of the understorey cover is native are assessed as 'scattered old trees'. Trees are offset by the protection of other old trees and/or recruitment of new trees.

For land parcels (usually a title boundary) where tree density is greater than eight per hectare, the offset ratios are outlined in the Native Vegetation Management Framework (NRE 2002, p 55). For areas where tree density is less, the offset ratios are specified in the Regional Native Vegetation Plan. Offsets for small trees are also included in the Native Vegetation Plan.

APPENDIX 2

Flora results: Section E

A.2.1. Flora Results

The table below lists the flora species (103 indigenous species, 80 introduced species) recorded within Section E of the Melton/Wyndham Investigation Area during the current assessment.

Significance of species (Source: DSE Flora Information System)

Australian status:

CE	Listed under EPBC Act as critically endangered
E	Listed under EPBC Act as endangered
V	Listed under EPBC Act as vulnerable
R	Rare (Briggs & Leigh 1996)

Victorian status (DSE Flora Information System, 2007 Version):

e	Endangered
v	Vulnerable
r	Rare
listed	Listed as threatened under the Flora and Fauna Guarantee Act 1988
p	Protected species under the Flora and Fauna Guarantee Act 1988 (Note: all species part of the Western (Basalt) Plains Grassland Community are also protected in addition to those species shown in Table A2.1)

Species of regional significance recorded during the Melton/Wyndham Investigation (51) are highlighted in **bold.** These species are those recorded in less than 5% of sites (quadrats/defined area lists) from the Victorian Volcanic Plain Bioregion in the DSE Flora Information System unless there is reason to believe they are undersampled in the available data.

All indigenous species have at least local significance

Table A2.1 Flora recorded within Section E during the Melton/Wyndham Investigation

Status	Scientific name	Common name
Indigenous species:		
	Acacia melanoxylon	Blackwood
p	*Acacia* spp.	Wattle
	Acaena echinata	Sheep's Burr
	Acaena spp.	Sheep's Burr
	Alternanthera denticulata	**Lesser Joyweed**
k	***Alternanthera* sp. 1 (Plains)**	**Plains Joyweed**
	Arthropodium minus	**Small Vanilla-lily**
	Arthropodium spp.	Vanilla Lily
	Asperula conferta	Common Woodruff
	Asperula scoparia	Prickly Woodruff
r, R	*Asperula wimmerana*	Wimmera Woodruff
	Atriplex semibaccata	Berry Saltbush
	Atriplex spp.	Saltbush
	Austrodanthonia auriculata	**Lobed Wallaby-grass**
	Austrodanthonia caespitosa	Common Wallaby-grass
	Austrodanthonia carphoides	**Short Wallaby-grass**
	Austrodanthonia duttoniana	Brown-back Wallaby-grass

Status	Scientific name	Common name
	Austrodanthonia eriantha	Hill Wallaby-grass
	Austrodanthonia fulva	**Copper-awned Wallaby-grass**
	Austrodanthonia geniculata	Kneed Wallaby-grass
	Austrodanthonia penicillata	**Weeping Wallaby-grass**
	Austrodanthonia pilosa	**Velvet Wallaby-grass**
	Austrodanthonia racemosa var. *racemosa*	Slender Wallaby-grass
	Austrodanthonia setacea	Bristly Wallaby-grass
	Austrodanthonia spp.	Wallaby Grass
	Austrostipa aristiglumis	**Plump Spear-grass**
	Austrostipa bigeniculata	Kneed Spear-grass
	Austrostipa curticoma	Short-crown Spear-grass
	Austrostipa elegantissima	**Feather Spear-grass**
	Austrostipa rudis	**Veined Spear-grass**
	Austrostipa scabra	**Rough Spear-grass**
	Austrostipa semibarbata	**Fibrous Spear-grass**
	Austrostipa setacea	**Corkscrew Spear-grass**
	Austrostipa spp.	Spear Grass
	Austrostipa stuposa	**Quizzical Spear-grass**
	Bothriochloa macra	**Red-leg Grass**
p	***Brachyscome basaltica* var. *gracilis***	**Woodland Swamp-daisy**
p	***Brachyscome dentata***	**Lobe-seed Daisy**
p	*Brachyscome* spp.	Daisy
p	*Calocephalus citreus*	Lemon Beauty-heads
p	***Calocephalus lacteus***	**Milky Beauty-heads**
p	***Cassinia arcuata***	**Drooping Cassinia**
p	*Cassinia* spp.	Cassinia
#	*Chamaesyce drummondii*	Flat Spurge
	Cheilanthes austrotenuifolia	**Green Rock-fern**
	Cheilanthes spp.	Rock Fern
r	*Chenopodium desertorum* subsp. *desertorum*	Frosted Goosefoot
	Chenopodium pumilio	**Clammy Goosefoot**
	Chloris truncata	Windmill Grass
p	***Chrysocephalum apiculatum***	**Common Everlasting**
p	***Chrysocephalum* sp. 1**	**Plains Everlasting**
p	*Chrysocephalum* spp.	Everlasting
	Convolvulus angustissimus	**Blushing Bindweed**
k	***Convolvulus angustissimus* subsp. *omnigracilis***	**Slender Bindweed**
	Convolvulus erubescens spp. agg.	Pink Bindweed
	Convolvulus spp.	Bindweed
	Crassula colorata	**Dense Crassula**
	Crassula decumbens* var. *decumbens	**Spreading Crassula**
	Crassula sieberiana	**Sieber Crassula**
	Crassula spp.	Crassula
f, e	*Cullen parvum*	Small Scurf-pea
	Dianella revoluta* var. *revoluta	**Black-anther Flax-lily**
	Dichondra repens	Kidney-weed
	Dichondra spp.	Kidney Weed
	Einadia hastata	**Saloop**
	Einadia nutans subsp. *nutans*	Nodding Saltbush
	Elatine gratioloides	**Waterwort**
	Eleocharis acuta	Common Spike-sedge
	Elymus scaber var. *scaber*	Common Wheat-grass

Status	Scientific name	Common name
	Enchylaena tomentosa* var. *tomentosa	**Ruby Saltbush**
	Epilobium spp.	Willow Herb
	Erodium crinitum	**Blue Heron's-bill**
	Eryngium ovinum	Blue Devil
	Eryngium spp.	Eryngium
	Eucalyptus camaldulensis	River Red-gum
	Eucalyptus spp.	Eucalypt
p	*Euchiton* spp.	Cudweed
	Galium spp.	Bedstraw
	Goodenia pinnatifida	**Cut-leaf Goodenia**
	Goodenia spp.	Goodenia
k	*Haloragis glauca* f. *glauca*	Bluish Raspwort
	Haloragis heterophylla	Varied Raspwort
	Haloragis spp.	Raspwort
	Hydrocotyle spp.	Pennywort
	Isolepis spp.	Club Sedge
	Juncus spp.	Rush
	Juncus subsecundus	Finger Rush
p	*Leptorhynchos* spp.	Buttons
p	*Leptorhynchos squamatus*	Scaly Buttons
	Lobelia pratioides	Poison Lobelia
	Lomandra effusa	Scented Mat-rush
	Lomandra micrantha	**Small-flower Mat-rush**
	Lomandra multiflora* subsp. *multiflora	**Many-flowered Mat-rush**
	Maireana decalvans	**Black Cotton-bush**
	Maireana enchylaenoides	**Wingless Bluebush**
	Maireana spp.	Bluebush
	Marsilea drummondii	**Common Nardoo**
	Melicytus dentatus	Tree Violet
	Melicytus spp.	Tree Violet
	Microlaena stipoides var. *stipoides*	Weeping Grass
	Oxalis exilis	Shady Wood-sorrel
	Oxalis perennans	Grassland Wood-sorrel
	Persicaria prostrata	**Creeping Knotweed**
	***Pimelea curviflora* s.s.**	**Curved Rice-flower**
C, e	*Pimelea spinescens* subsp. *spinescens*	Spiny Rice-flower
	Plantago gaudichaudii	Narrow Plantain
	Plantago varia	**Variable Plantain**
	Poa labillardierei	Common Tussock-grass
	Poa sieberiana	Grey Tussock-grass
	Poa sieberiana* var. *hirtella	**Grey Tussock-grass**
	Poa spp.	Tussock Grass
p	***Pseudognaphalium luteoalbum***	**Jersey Cudweed**
	Ptilotus macrocephalus	**Feather Heads**
	Ptilotus spathulatus* f. *spathulatus	**Pussy Tails**
	Rumex brownii	Slender Dock
	Rumex dumosus	Wiry Dock
	Schoenus apogon	Common Bog-sedge
	Sclerolaena muricata	**Black Roly-poly**
k	*Sclerolaena muricata* var. *semiglabra*	Dark Roly-poly
p	*Senecio quadridentatus*	Cotton Fireweed
p	*Solenogyne dominii*	Smooth Solenogyne

Status	Scientific name	Common name
	Stackhousia subterranea	**Plains Stackhousia**
	Themeda triandra	Kangaroo Grass
	Velleia spp.	Velleia
p	***Vittadinia cuneata***	**Fuzzy New Holland Daisy**
p	***Vittadinia gracilis***	**Woolly New Holland Daisy**
	Wahlenbergia luteola	**Bronze Bluebell**
	Wahlenbergia spp.	Bluebell
	Walwhalleya proluta	Rigid Panic
Introduced species:		
	Acacia baileyana	Cootamundra Wattle
	Agrostis capillaris	Brown-top Bent
	Aira spp.	Hair Grass
	Anagallis arvensis var. *arvensis*	Scarlet Pimpernel
	Arctotheca calendula	Cape Weed
	Avena barbata	Bearded Oat
	Avena fatua	Wild Oat
	Avena spp.	Oat
	Brassica spp.	Turnip
	Briza maxima	Large Quaking-grass
	Briza minor	Lesser Quaking-grass
	Bromus hordeaceus subsp. *hordeaceus*	Soft Brome
	Cirsium vulgare	Spear Thistle
	Crataegus monogyna	Hawthorn
	Cynara cardunculus	Artichoke Thistle
	Cynodon dactylon var. *dactylon*	Couch
	Dactylis glomerata	Cocksfoot
	Echium plantagineum	Paterson's Curse
	Echium vulgare	Viper's Bugloss
	Ehrharta erecta var. *erecta*	Panic Veldt-grass
	Ehrharta longiflora	Annual Veldt-grass
	Erodium botrys	Big Heron's-bill
	Foeniculum vulgare	Fennel
	Galenia pubescens var. *pubescens*	Galenia
	Galenia spp.	Galenia
	Gazania spp.	Gazania
	Helminthotheca echioides	Ox-tongue
	Hordeum leporinum	Barley-grass
	Hordeum marinum	Sea Barley-grass
	Hordeum murinum s.l.	Barley-grass
	Hordeum spp.	Barley Grass
	Hypericum perforatum subsp. veronense	St John's Wort
	Hypochoeris glabra	Smooth Cat's-ear
	Hypochoeris radicata	Flatweed
	Juncus capitatus	Capitate Rush
	Leontodon taraxacoides subsp. *taraxacoides*	Hairy Hawkbit
	Lepidium africanum	Common Peppercress
	Lolium perenne	Perennial Rye-grass
	Lolium rigidum	Wimmera Rye-grass
	Lolium spp.	Rye Grass
	Lotus spp. (naturalised)	Trefoil
	Lycium ferocissimum	African Box-thorn
	Malva spp.	Mallow
	Marrubium vulgare	Horehound

Status	Scientific name	Common name
	Medicago spp.	Medic
	Nassella leucotricha	Texas Needle-grass
	Nassella neesiana	Chilean Needle-grass
	Nassella spp.	Needle Grass
	Nassella trichotoma	Serrated Tussock
	Olea europaea	Olive
	Onopordum acanthium subsp. *acanthium*	Scotch Thistle
	Oxalis pes-caprae	Soursob
	Parapholis incurva	Coast Barb-grass
	Paspalum dilatatum	Paspalum
	Paspalum spp.	Paspalum
	Pentaschistis airoides subsp. *airoides*	False Hair-grass
	Phalaris aquatica	Toowoomba Canary-grass
	Phalaris spp.	Canary Grass
	Physalis spp.	Ground Cherry
	Pinus radiata	Radiata Pine
	Pinus spp.	Pine
#	*Pittosporum undulatum*	Sweet Pittosporum
	Plantago coronopus	Buck's-horn Plantain
	Plantago lanceolata	Ribwort
	Poa bulbosa	Bulbous Meadow-grass
	Polygonum aviculare s.s.	Hogweed
	Raphanus raphanistrum	Wild Radish
	Romulea minutiflora	Small-flower Onion-grass
	Romulea rosea	Onion Grass
	Romulea spp.	Onion Grass
	Rosa rubiginosa	Sweet Briar
	Rumex spp. (naturalised)	Dock (naturalised)
	Salvia verbenaca	Wild Sage
	Scolymus hispanicus	Golden Thistle
	Senecio pterophorus	African Daisy
	Silybum marianum	Variegated Thistle
	Sinapis spp.	Mustard
	Solanum elaeagnifolium	Silver-leaf Nightshade
	Solanum linnaeanum	Apple of Sodom
	Solanum nigrum s.s.	Black Nightshade
	Sonchus asper s.s.	Rough Sow-thistle
	Sonchus oleraceus	Common Sow-thistle
	Trifolium angustifolium var. *angustifolium*	Narrow-leaf Clover
	Trifolium arvense var. *arvense*	Hare's-foot Clover
	Trifolium glomeratum	Cluster Clover
	Trifolium spp.	Clover
	Trifolium subterraneum	Subterranean Clover
	Vulpia bromoides	Squirrel-tail Fescue
	Vulpia myuros	Rat's-tail Fescue
	Vulpia spp.	Fescue
	Xanthium spinosum	Bathurst Burr

Table A2.2 Existing flora records within a 5km buffer zone of Section E (Source: Flora Information System 2007)

Status	Scientific name	Common name
Indigneous species:		
	Acacia acinacea s.l.	Gold-dust Wattle
	Acacia implexa	Lightwood
	Acacia mearnsii	Black Wattle
	Acacia melanoxylon	Blackwood
	Acacia paradoxa	Hedge Wattle
	Acacia pycnantha	Golden Wattle
#	*Acacia retinodes* s.l.	Wirilda
	Acacia verniciflua	Varnish Wattle
	Acaena agnipila	Hairy Sheep's Burr
	Acaena echinata	Sheep's Burr
	Acaena novae-zelandiae	Bidgee-widgee
	Acaena ovina	Australian Sheep's Burr
	Acaena spp.	Sheep's Burr
	Adiantum aethiopicum	Common Maidenhair
f	*Allocasuarina luehmannii*	Buloke
	Allocasuarina verticillata	Drooping Sheoak
	Alternanthera denticulata s.s.	Lesser Joyweed
k	*Alternanthera* sp. 1 (Plains)	Plains Joyweed
V	*Amphibromus fluitans*	River Swamp Wallaby-grass
	Amphibromus nervosus	Common Swamp Wallaby-grass
	Amphibromus spp.	Swamp Wallaby-grass
v	*Amyema linophylla* subsp. *orientale*	Buloke Mistletoe
	Amyema miquelii	Box Mistletoe
	Amyema pendula	Drooping Mistletoe
	Aphanes australiana	Australian Piert
	Aphanes spp.	Piert
	Aphelia pumilio	Dwarf Aphelia
	Archidium stellatum	Earth Moss
	Arthropodium minus	Small Vanilla-lily
	Arthropodium spp. (s.s.)	Vanilla Lily
	Asperula conferta	Common Woodruff
	Asperula scoparia	Prickly Woodruff
	Asplenium flabellifolium	Necklace Fern
	Atriplex nummularia	Old-man Saltbush
	Atriplex semibaccata	Berry Saltbush
	Austrodanthonia auriculata	Lobed Wallaby-grass
	Austrodanthonia bipartita s.s.	Leafy Wallaby-grass
	Austrodanthonia caespitosa	Common Wallaby-grass
	Austrodanthonia carphoides	Short Wallaby-grass
	Austrodanthonia duttoniana	Brown-back Wallaby-grass
	Austrodanthonia eriantha	Hill Wallaby-grass
	Austrodanthonia fulva	Copper-awned Wallaby-grass
	Austrodanthonia geniculata	Kneed Wallaby-grass
	Austrodanthonia induta	Shiny Wallaby-grass
	Austrodanthonia laevis	Smooth Wallaby-grass
	Austrodanthonia penicillata	Weeping Wallaby-grass
	Austrodanthonia pilosa	Velvet Wallaby-grass
	Austrodanthonia racemosa var. *racemosa*	Slender Wallaby-grass

Status	Scientific name	Common name
	Austrodanthonia setacea	Bristly Wallaby-grass
	Austrostipa aristiglumis	Plump Spear-grass
	Austrostipa bigeniculata	Kneed Spear-grass
	Austrostipa blackii	Crested Spear-grass
	Austrostipa curticoma	Short-crown Spear-grass
	Austrostipa densiflora	Dense Spear-grass
	Austrostipa elegantissima	Feather Spear-grass
	Austrostipa eremophila	Desert Spear-grass
r	*Austrostipa exilis*	Heath Spear-grass
	Austrostipa flavescens	Coast Spear-grass
	Austrostipa gibbosa	Spurred Spear-grass
r	*Austrostipa hemipogon*	Half-bearded Spear-grass
	Austrostipa mollis	Supple Spear-grass
	Austrostipa nodosa	Knotty Spear-grass
	Austrostipa oligostachya	Fine-head Spear-grass
	Austrostipa rudis	Veined Spear-grass
	Austrostipa scabra	Rough Spear-grass
	Austrostipa semibarbata	Fibrous Spear-grass
	Austrostipa setacea	Corkscrew Spear-grass
	Austrostipa stuposa	Quizzical Spear-grass
	Bolboschoenus caldwellii	Salt Club-sedge
	Bolboschoenus medianus	Marsh Club-sedge
	Bothriochloa macra	Red-leg Grass
	Brachyscome basaltica var. *gracilis*	Woodland Swamp-daisy
	Brachyscome dentata	Lobe-seed Daisy
	Bursaria spinosa	Sweet Bursaria
	Bursaria spinosa subsp. *spinosa*	Sweet Bursaria
	Caesia calliantha	Blue Grass-lily
	Calandrinia calyptrata	Pink Purslane
	Callistemon sieberi	River Bottlebrush
	Calocephalus citreus	Lemon Beauty-heads
	Calocephalus lacteus	Milky Beauty-heads
	Calochilus robertsonii	Purple Beard-orchid
	Calotis anthemoides	Cut-leaf Burr-daisy
	Calotis scabiosifolia	Rough Burr-daisy
	Calotis scapigera	Tufted Burr-daisy
	Carex appressa	Tall Sedge
	Carex bichenoviana	Plains Sedge
	Carex breviculmis	Common Grass-sedge
	Carex gaudichaudiana	Fen Sedge
	Carex incomitata	Hillside Sedge
	Carex inversa	Knob Sedge
	Carex tereticaulis	Poong'ort
	Cassinia arcuata	Drooping Cassinia
	Cassinia longifolia	Shiny Cassinia
	Centipeda cunninghamii	Common Sneezeweed
#	*Chamaesyce drummondii*	Flat Spurge
	Cheilanthes austrotenuifolia	Green Rock-fern
	Cheilanthes distans	Bristly Cloak-fern
	Cheilanthes sieberi subsp. *sieberi*	Narrow Rock-fern
	Chenopodium desertorum	Frosted Goosefoot
	Chenopodium desertorum subsp. *microphyllum*	Small-leaf Goosefoot
	Chenopodium glaucum	Glaucous Goosefoot

Status	Scientific name	Common name
	Chenopodium pumilio	Clammy Goosefoot
	Chenopodium spp.	Goosefoot
	Chloris truncata	Windmill Grass
	Chrysocephalum apiculatum s.s.	Common Everlasting
	Chrysocephalum semipapposum	Clustered Everlasting
	Chrysocephalum sp. 1	Plains Everlasting
	Clematis aristata	Mountain Clematis
	Clematis microphylla s.l.	Small-leaved Clematis
	Convolvulus angustissimus	Blushing Bindweed
	Convolvulus angustissimus subsp. *angustissimus*	Blushing Bindweed
k	*Convolvulus angustissimus* subsp. *omnigracilis*	Slender Bindweed
	Convolvulus remotus	Grass Bindweed
	Correa glabra var. *glabra*	Rock Correa
	Craspedia glauca spp. agg.	Common Billy-buttons
	Crassula closiana	Stalked Crassula
	Crassula decumbens var. *decumbens*	Spreading Crassula
	Crassula helmsii	Swamp Crassula
	Crassula peduncularis	Purple Crassula
	Crassula sieberiana s.s.	Sieber Crassula
	Crassula tetramera	Australian Stonecrop
f,e	*Cullen parvum*	Small Scurf-pea
f,e	*Cullen tenax*	Tough Scurf-pea
	Cymbonotus preissianus	Austral Bear's-ear
	Cynoglossum suaveolens	Sweet Hound's-tongue
	Damasonium minus	Star Fruit
	Daucus glochidiatus	Australian Carrot
	Daviesia leptophylla	Narrow-leaf Bitter-pea
k	*Desmodium varians*	Slender Tick-trefoil
	Deyeuxia quadriseta	Reed Bent-grass
	Dianella admixta	Black-anther Flax-lily
f, E, e	*Dianella amoena*	Matted Flax-lily
	Dianella longifolia s.l.	Pale Flax-lily
	Dianella longifolia var. *grandis* s.l.	Glaucous Flax-lily
	Dianella revoluta var. *revoluta* s.l.	Black-anther Flax-lily
v, K	*Dianella* sp. aff. *longifolia* (Benambra)	Arching Flax-lily
	Dichelachne crinita	Long-hair Plume-grass
	Dichelachne rara	Common Plume-grass
	Dichondra repens	Kidney-weed
	Dillwynia cinerascens s.s.	Grey Parrot-pea
	Distichlis distichophylla	Australian Salt-grass
f, E, v	*Diuris basaltica*	Small Golden Moths
e	*Diuris* X *fastidiosa*	Proud Diuris
	Dodonaea viscosa subsp. *cuneata*	Wedge-leaf Hop-bush
	Drosera peltata subsp. *peltata*	Pale Sundew
	Dysphania glomulifera ssp. *glomulifera*	Globular Pigweed
	Einadia nutans subsp. *nutans*	Nodding Saltbush
	Elatine gratioloides	Waterwort
	Eleocharis acuta	Common Spike-sedge
	Eleocharis pusilla	Small Spike-sedge
	Elymus scaber var. *scaber*	Common Wheat-grass
	Enchylaena tomentosa var. *tomentosa*	Ruby Saltbush
	Enneapogon nigricans	Nigger-heads
	Epilobium billardierianum	Variable Willow-herb

Status	Scientific name	Common name
	Epilobium billardierianum subsp. *cinereum*	Grey Willow-herb
	Epilobium hirtigerum	Hairy Willow-herb
	Eragrostis parviflora	Weeping Love-grass
	Eremophila deserti	Turkey Bush
	Erodium crinitum	Blue Heron's-bill
	Eryngium ovinum	Blue Devil
	Eryngium vesiculosum	Prickfoot
	Eucalyptus baueriana	Blue Box
	Eucalyptus behriana	Bull Mallee
	Eucalyptus camaldulensis	River Red-gum
	Eucalyptus melliodora	Yellow Box
	Eucalyptus microcarpa	Grey Box
	Eucalyptus polyanthemos	Red Box
	Euchiton collinus s.s.	Creeping Cudweed
	Euchiton involucratus s.s.	Star Cudweed
	Euchiton sphaericus	Annual Cudweed
	Eutaxia microphylla	Common Eutaxia
	Exocarpos cupressiformis	Cherry Ballart
	Ficinia nodosa	Knobby Club-sedge
	Galium gaudichaudii	Rough Bedstraw
	Galium migrans	Wandering Bedstraw
	Galium propinquum	Maori Bedstraw
	Geranium potentilloides	Soft Crane's-bill
	Geranium retrorsum s.s.	Grassland Crane's-bill
v	*Geranium solanderi* var. *solanderi* s.s.	Austral Crane's-bill
	Geranium sp. 2	Variable Crane's-bill
	Geranium sp. 5	Naked Crane's-bill
	Glossostigma elatinoides	Small Mud-mat
	Glycine clandestina	Twining Glycine
f, V, v	*Glycine latrobeana*	Clover Glycine
	Glycine microphylla	Small-leaf Glycine
	Glycine tabacina s.s.	Variable Glycine
	Goodenia gracilis	Slender Goodenia
	Goodenia pinnatifida	Cut-leaf Goodenia
	Gratiola peruviana	Austral Brooklime
	Haloragis aspera	Rough Raspwort
	Haloragis heterophylla	Varied Raspwort
v	*Helichrysum* aff. *rutidolepis* (Lowland Swamps)	Pale Swamp Everlasting
	Heliotropium europaeum	Common Heliotrope
	Hydrocotyle laxiflora	Stinking Pennywort
	Hydrocotyle spp.	Pennywort
	Hypericum gramineum	Small St John's Wort
	Indigofera australis	Austral Indigo
	Ischyrodon lepturus	Golden Silk-moss
	Isolepis cernua var. *cernua*	Nodding Club-sedge
	Isolepis cernua var. *platycarpa*	Broad-fruit Club-sedge
	Isolepis hookeriana	Grassy Club-sedge
	Isolepis inundata	Swamp Club-sedge
	Isolepis marginata	Little Club-sedge
	Isolepis victoriensis	Victorian Club-sedge
	Juncus amabilis	Hollow Rush
	Juncus australis	Austral Rush
	Juncus bufonius	Toad Rush

Status	Scientific name	Common name
	Juncus filicaulis	Thread Rush
	Juncus flavidus	Gold Rush
	Juncus gregiflorus	Green Rush
	Juncus holoschoenus	Joint-leaf Rush
	Juncus homalocaulis	Wiry Rush
	Juncus pallidus	Pale Rush
	Juncus pauciflorus	Loose-flower Rush
	Juncus radula	Hoary Rush
	Juncus sarophorus	Broom Rush
	Juncus subsecundus	Finger Rush
	Juncus usitatus	Billabong Rush
	Kennedia prostrata	Running Postman
	Lachnagrostis aemula s.s.	Leafy Blown-grass
	Lachnagrostis filiformis	Common Blown-grass
	Lagenophora huegelii	Coarse Bottle-daisy
	Lemna disperma	Common Duckweed
	Lepidium spp.	Peppercress
	Leptorhynchos squamatus	Scaly Buttons
	Leptospermum lanigerum	Woolly Tea-tree
	Lilaeopsis polyantha	Australian Lilaeopsis
	Linum marginale	Native Flax
	Lobelia anceps	Angled Lobelia
	Lobelia irrigua	Salt Pratia
	Lobelia pedunculata s.l.	Matted Pratia
	Lobelia pratioides	Poison Lobelia
	Lomandra filiformis	Wattle Mat-rush
	Lomandra micrantha s.l.	Small-flower Mat-rush
	Lysiana exocarpi	Harlequin Mistletoe
	Lythrum hyssopifolia	Small Loosestrife
	Maireana brevifolia	Short-leaf Bluebush
	Maireana decalvans	Black Cotton-bush
	Maireana enchylaenoides	Wingless Bluebush
	Maireana humillima	Dwarf Bluebush
	Malva preissiana s.l.	Australian Hollyhock
	Marsilea drummondii	Common Nardoo
	Marsilea hirsuta	Short-fruit Nardoo
	Melicytus dentatus s.s.	Tree Violet
	Mentha diemenica	Slender Mint
	Mentha satureoides	Creeping mint
	Microlaena stipoides var. *stipoides*	Weeping Grass
	Mimulus repens	Creeping Monkey-flower
	Muehlenbeckia florulenta	Tangled Lignum
	Muellerina eucalyptoides	Creeping Mistletoe
#	*Myoporum insulare*	Common Boobialla
	Myriophyllum crispatum	Upright Water-milfoil
	Myriophyllum muelleri	Hooded Water-milfoil
	Myriophyllum simulans	Amphibious Water-milfoil
	Myriophyllum verrucosum	Red Water-milfoil
	Myrsine howittiana	Mutton-wood
	Neopaxia australasica	White Purslane
r	*Nicotiana suaveolens*	Austral Tobacco
	Notodanthonia semiannularis	Wetland Wallaby-grass
	Oxalis exilis	Shady Wood-sorrel

Status	Scientific name	Common name
	Oxalis perennans	Grassland Wood-sorrel
	Oxalis radicosa	Stout-rooted Wood-sorrel
	Ozothamnus obcordatus	Grey Everlasting
	Panicum effusum	Hairy Panic
	Panicum spp.	Panic
	Pelargonium australe	Austral Stork's-bill
	Pelargonium rodneyanum	Magenta Stork's-bill
	Pellaea falcata	Sickle Fern
	Pentapogon quadrifidus var. *quadrifidus*	Five-awned Spear-grass
	Persicaria decipiens	Slender Knotweed
	Persicaria lapathifolia	Pale Knotweed
	Persicaria prostrata	Creeping Knotweed
	Phragmites australis	Common Reed
	Pimelea curviflora s.s.	Curved Rice-flower
	Pimelea glauca	Smooth Rice-flower
	Pimelea humilis	Common Rice-flower
	Pimelea linifolia	Slender Rice-flower
	Pimelea octophylla	Woolly Rice-flower
C, e	*Pimelea spinescens* subsp. *spinescens*	Spiny Rice-flower
	Plantago gaudichaudii	Narrow Plantain
	Plantago spp.	Plantain
	Plantago varia	Variable Plantain
	Pleurosorus rutifolius s.s.	Blanket Fern
	Poa labillardierei	Common Tussock-grass
k	*Poa labillardierei* var. (Volcanic Plains)	Basalt Tussock-grass
	Poa sieberiana var. *sieberiana*	Grey Tussock-grass
	Portulaca oleracea	Common Purslane
	Potamogeton cheesemanii	Red Pondweed
	Potamogeton crispus	Curly Pondweed
	Potamogeton ochreatus	Blunt Pondweed
	Potamogeton pectinatus	Fennel Pondweed
	Potamogeton tricarinatus	Floating Pondweed
	Pseudognaphalium luteoalbum	Jersey Cudweed
	Pseudoleskea imbricata	Braid Moss
	Pteridium esculentum	Austral Bracken
	Pterostylis spp.	Greenhood
	Ptilotus macrocephalus	Feather Heads
	Ptilotus spathulatus f. *spathulatus*	Pussy Tails
r	*Ranunculus diminutus*	Brackish Plains Buttercup
r	*Rhagodia parabolica*	Fragrant Saltbush
	Rubus parvifolius	Small-leaf Bramble
	Rumex bidens	Mud Dock
	Rumex brownii	Slender Dock
	Rumex dumosus	Wiry Dock
	Rumex tenax	Narrow-leaf Dock
	Ruppia megacarpa	Large-fruit Tassel
f, E, e	*Rutidosis leptorhynchoides*	Button Wrinklewort
	Salsola tragus subsp. *tragus*	Prickly Saltwort
	Sambucus gaudichaudiana	White Elderberry
	Samolus repens	Creeping Brookweed
	Schoenoplectus pungens	Sharp Club-sedge
	Schoenoplectus tabernaemontani	River Club-sedge
	Schoenus apogon	Common Bog-sedge

Status	Scientific name	Common name
k	*Sclerolaena muricata* var. *muricata*	Black Roly-poly
	Sclerolaena muricata var. *villosa*	Grey Roly-poly
	Scutellaria humilis	Dwarf Skullcap
	Sebaea ovata	Yellow Sebaea
	Senecio bathurstianus	Dissected Fireweed
	Senecio glomeratus	Annual Fireweed
f, V, e	*Senecio macrocarpus*	Large-headed Fireweed
	Senecio pinnatifolius	Variable Groundsel
	Senecio quadridentatus	Cotton Fireweed
	Sida corrugata	Variable Sida
	Solanum laciniatum	Large Kangaroo Apple
	Solenogyne dominii	Smooth Solenogyne
	Solenogyne gunnii	Hairy Solenogyne
	Sonchus hydrophilus	Native Sow-thistle
	Spergularia media s.l.	Coast Sand-spurrey
	Spergularia sp. 3	Salt Sea-spurrey
	Spergularia spp.	Sand Spurrey
	Sporobolus virginicus	Salt Couch
	Stackhousia monogyna	Creamy Stackhousia
	Stackhousia subterranea	Plains Stackhousia
	Stellaria pungens	Prickly Starwort
	Templetonia stenophylla	Leafy Templetonia
	Tetragonia implexicoma	Bower Spinach
	Thelymitra pauciflora s.l.	Slender Sun-orchid
	Themeda triandra	Kangaroo Grass
	Thysanotus patersonii	Twining Fringe-lily
	Tricoryne elatior	Yellow Rush-lily
	Triglochin procera s.l.	Water Ribbons
	Triglochin striata	Streaked Arrowgrass
r	*Tripogon loliiformis*	Rye Beetle-grass
	Triptilodiscus pygmaeus	Common Sunray
	Typha domingensis	Narrow-leaf Cumbungi
	Typha orientalis	Broad-leaf Cumbungi
	Urtica incisa	Scrub Nettle
	Velleia paradoxa	Spur Velleia
	Veronica gracilis	Slender Speedwell
	Vittadinia cervicularis	Annual New Holland Daisy
	Vittadinia cuneata var. *cuneata*	Fuzzy New Holland Daisy
	Vittadinia gracilis	Woolly New Holland Daisy
	Vittadinia spp.	New Holland Daisy
	Wahlenbergia communis s.s.	Tufted Bluebell
	Wahlenbergia gracilenta s.l.	Annual Bluebell
	Wahlenbergia gracilis	Sprawling Bluebell
	Wahlenbergia luteola	Bronze Bluebell
	Walwhalleya proluta	Rigid Panic
	Wilsonia rotundifolia	Round-leaf Wilsonia
	Xerochrysum viscosum	Shiny Everlasting
Introduced species:		
	Acacia decurrens	Early Black-wattle
	Acetosella vulgaris	Sheep Sorrel
	Agrostis capillaris	Brown-top Bent
	Aira caryophyllea	Silvery Hair-grass
	Aira cupaniana	Quicksilver Grass

Status	Scientific name	Common name
	Aira elegantissima	Delicate Hair-grass
	Allium vineale	Crow Garlic
	Amaranthus albus	Stiff Tumbleweed
	Amaranthus muricatus	Rough-fruit Amaranth
	Anagallis arvensis	Pimpernel
	Anagallis minima	Chaffweed
	Anthoxanthum odoratum	Sweet Vernal-grass
	Aptenia cordifolia	Heart-leaf Ice-plant
	Arctotheca calendula	Cape Weed
	Asparagus asparagoides	Bridal Creeper
	Asphodelus fistulosus	Onion Weed
	Aster subulatus	Aster-weed
	Atriplex prostrata	Hastate Orache
	Austrocylindropuntia cylindrica	Cane Cactus
	Avena barbata	Bearded Oat
	Avena fatua	Wild Oat
	Avena sativa	Oat
	Avena sterilis	Sterile Oat
	Avena sterilis subsp. *ludoviciana*	Sterile Oat
	Barbarea intermedia	Wintercress
	Berkheya rigida	African Thistle
	Brachypodium distachyon	False Brome
	Brachythecium albicans	Whitish Feather-moss
	Brassica fruticulosa	Twiggy Turnip
	Brassica rapa	White Turnip
	Briza maxima	Large Quaking-grass
	Briza minor	Lesser Quaking-grass
	Bromus catharticus	Prairie Grass
	Bromus diandrus	Great Brome
	Bromus hordeaceus subsp. *hordeaceus*	Soft Brome
	Bromus lanceolatus	Mediterranean Brome
	Bromus madritensis	Madrid Brome
	Bromus rubens	Red Brome
	Callitriche stagnalis	Common Water-starwort
	Capsella bursa-pastoris	Shepherd's Purse
	Carduus pycnocephalus	Slender Thistle
	Carduus tenuiflorus	Winged Slender-thistle
	Carthamus lanatus	Saffron Thistle
	Catapodium rigidum	Fern Grass
	Centaurium erythraea	Common Centaury
	Centaurium tenuiflorum	Slender Centaury
	Cerastium balearicum	Balearic Mouse-ear Chickweed
	Cerastium glomeratum s.l.	Common Mouse-ear Chickweed
	Chamaecytisus palmensis	Tree Lucerne
	Chenopodium album	Fat Hen
	Chenopodium macrospermum	Red-stem Goosefoot
	Chenopodium murale	Sowbane
	Chloris gayana	Rhodes Grass
	Chondrilla juncea	Skeleton Weed
	Cicendia filiformis	Slender Cicendia
	Cicendia quadrangularis	Square Cicendia
	Cirsium vulgare	Spear Thistle

Status	Scientific name	Common name
	Convolvulus arvensis	Common Bindweed
	Conyza bonariensis	Flaxleaf Fleabane
	Conyza sumatrensis	Tall Fleabane
	Cotoneaster pannosus	Velvet Cotoneaster
	Cotula bipinnata	Ferny Cotula
	Cotula coronopifolia	Water Buttons
	Crataegus monogyna	Hawthorn
	Cucumis myriocarpus subsp. *leptodermis*	Paddy Melon
	Cuscuta epithymum	Common Dodder
	Cynara cardunculus	Artichoke Thistle
	Cynodon dactylon var. *dactylon*	Couch
	Cynosurus echinatus	Rough Dog's-tail
	Cyperus eragrostis	Drain Flat-sedge
	Dactylis glomerata	Cocksfoot
	Diplotaxis tenuifolia	Sand Rocket
	Dittrichia graveolens	Stinkwort
	Ecballium elaterium	Squirting Cucumber
	Echinochloa crus-galli	Barnyard Grass
	Echium plantagineum	Paterson's Curse
	Ehrharta erecta var. *erecta*	Panic Veldt-grass
	Ehrharta longiflora	Annual Veldt-grass
	Eleusine tristachya	American Crows-foot Grass
	Elytrigia repens	English Couch
	Emex australis	Spiny Emex
	Eragrostis cilianensis	Stink Grass
	Erodium botrys	Big Heron's-bill
	Erodium cicutarium	Common Heron's-bill
	Erodium malacoides	Oval Heron's-bill
	Erodium moschatum	Musky Heron's-bill
	Eucalyptus cladocalyx	Sugar Gum
	Euphorbia lathyris	Caper Spurge
	Euphorbia peplus	Petty Spurge
	Festuca arundinacea	Tall Fescue
	Foeniculum vulgare	Fennel
	Fraxinus spp.	Ash
	Fumaria bastardii	Bastard's Fumitory
	Fumaria muralis subsp. *muralis*	Wall Fumitory
	Galenia pubescens var. *pubescens*	Galenia
	Galium aparine	Cleavers
	Gamochaeta calviceps	Silky Cudweed
	Gamochaeta purpurea s.s.	Spiked Cudweed
	Gaudinia fragilis	Fragile Oat
	Gazania linearis	Gazania
	Genista monspessulana	Montpellier Broom
	Geranium dissectum	Cut-leaf Crane's-bill
	Geranium molle var. *molle*	Dove's Foot
	Hainardia cylindrica	Common Barb-grass
	Hedypnois cretica	Cretan Hedypnois
	Heliotropium supinum	Creeping Heliotrope
	Helminthotheca echioides	Ox-tongue
	Hieracium spp.	Hawkweed
	Hirschfeldia incana	Buchan Weed
	Holcus annuus	Annual Fog

Status	Scientific name	Common name
	Holcus lanatus	Yorkshire Fog
	Hordeum hystrix	Mediterranean Barley-grass
	Hordeum leporinum	Barley-grass
	Hordeum marinum	Sea Barley-grass
	Hordeum murinum s.l.	Barley-grass
	Hypericum perforatum subsp. *veronense*	St John's Wort
	Hypochoeris glabra	Smooth Cat's-ear
	Hypochoeris radicata	Flatweed
	Isolepis hystrix	Awned Club-sedge
	Isolepis levynsiana	Tiny Flat-sedge
	Juncus acutus subsp. *acutus*	Spiny Rush
	Juncus capitatus	Capitate Rush
	Kickxia elatine	Hairy Toadflax
	Lactuca saligna	Willow-leaf Lettuce
	Lactuca serriola	Prickly Lettuce
	Lagurus ovatus	Hare's-tail Grass
	Leontodon taraxacoides subsp. *taraxacoides*	Hairy Hawkbit
	Lepidium africanum	Common Peppercress
	Lepidium didymum	Lesser Swine-cress
	Lepidium draba	Hoary Cress
	Lilaea scilloides	Lilaea
	Logfia gallica	French Cudweed
	Lolium perenne	Perennial Rye-grass
	Lolium rigidum	Wimmera Rye-grass
	Lolium temulentum	Darnel
	Lophopyrum ponticum	Tall Wheat-grass
	Lotus angustissimus	Slender Bird's-foot Trefoil
	Lotus subbiflorus	Hairy Bird's-foot Trefoil
	Lycium ferocissimum	African Box-thorn
	Maclura pomifera	Osage Orange
	Malva dendromorpha	Tree Mallow
	Malva nicaeensis	Mallow of Nice
	Malva parviflora	Small-flower Mallow
	Marrubium vulgare	Horehound
	Medicago arabica	Spotted Medic
	Medicago minima	Little Medic
	Medicago polymorpha	Burr Medic
	Melilotus indicus	Sweet Melilot
	Modiola caroliniana	Red-flower Mallow
	Moenchia erecta	Erect Chickweed
	Moraea flaccida	One-leaf Cape-tulip
	Moraea miniata	Two-leaf Cape-tulip
	Moraea setifolia	Thread Iris
	Nassella hyalina	Cane Needle-grass
	Nassella leucotricha	Texas Needle-grass
	Nassella neesiana	Chilean Needle-grass
	Nassella trichotoma	Serrated Tussock
	Nicotiana glauca	Tree Tobacco
	Olea europaea	Olive
	Onopordum acanthium subsp. *acanthium*	Scotch Thistle
	Opuntia monacantha	Drooping Prickly-pear
	Opuntia robusta	Wheel Cactus
	Opuntia stricta	Common Prickly-pear

Status	Scientific name	Common name
	Oxalis corniculata s.s.	Creeping Wood-sorrel
	Oxalis pes-caprae	Soursob
	Parapholis incurva	Coast Barb-grass
	Paronychia franciscana	Chile Nailwort
	Paspalum dilatatum	Paspalum
	Paspalum distichum	Water Couch
	Pennisetum clandestinum	Kikuyu
	Pentaschistis airoides subsp. *airoides*	False Hair-grass
	Petrorhagia dubia	Velvety Pink
	Phalaris aquatica	Toowoomba Canary-grass
	Phalaris minor	Lesser Canary-grass
	Phleum pratense	Timothy Grass
	Physalis viscosa	Sticky Ground-cherry
	Phytolacca octandra	Red-ink Weed
	Pinus radiata	Radiata Pine
	Plantago coronopus	Buck's-horn Plantain
	Plantago lanceolata	Ribwort
	Plantago major	Greater Plantain
	Poa annua	Annual Meadow-grass
	Poa trivialis subsp. *trivialis*	Rough Meadow-grass
	Polycarpon tetraphyllum	Four-leaved Allseed
	Polygala monspeliaca	Annual Milkwort
	Polygonum aviculare s.s.	Hogweed
	Polypogon monspeliensis	Annual Beard-grass
	Prunus cerasifera	Cherry Plum
	Prunus persica	Peach
	Puccinellia fasciculata	Borrer's Saltmarsh-grass
	Ranunculus ophioglossifolius	Snake-tongue Buttercup
	Ranunculus repens	Creeping Buttercup
	Raphanus raphanistrum	Wild Radish
	Rapistrum rugosum	Giant Mustard
	Reseda lutea	Cut-leaf Mignonette
	Romulea minutiflora	Small-flower Onion-grass
	Romulea rosea var. *australis* s.s.	Common Onion-grass
	Rosa rubiginosa	Sweet Briar
	Rostraria cristata	Annual Cat's-tail
	Rubus fruticosus spp. agg.	Blackberry
	Rumex conglomeratus	Clustered Dock
	Rumex crispus	Curled Dock
	Rumex pulcher subsp. *pulcher*	Fiddle Dock
	Sagina maritima	Sea Pearlwort
	Salix alba	White Willow
	Salix X *rubens*	Basket Willow
	Salvia verbenaca	Wild Sage
	Schinus molle	Pepper Tree
	Scorzonera laciniata	Scorzonera
	Setaria parviflora	Slender Pigeon Grass
	Setaria pumila subsp. *pumila*	Pale Pigeon-grass
	Silybum marianum	Variegated Thistle
	Sisymbrium irio	London Rocket
	Sisymbrium officinale	Hedge Mustard
	Sisymbrium orientale	Indian Hedge-mustard
	Solanum linnaeanum	Apple of Sodom

Status	Scientific name	Common name
	Solanum nigrum s.s.	Black Nightshade
	Solanum pseudocapsicum	Madeira Winter-cherry
	Soliva sessilis	Jo Jo
	Sonchus asper s.s.	Rough Sow-thistle
	Sonchus oleraceus	Common Sow-thistle
	Spergularia media s.s.	Greater Sea-spurrey
	Sporobolus africanus	Rat-tail Grass
	Stellaria media	Chickweed
	Suaeda baccifera	Berry Seablite
	Taraxacum officinale spp. agg.	Garden Dandelion
	Tradescantia fluminensis	Wandering Jew
	Tragopogon porrifolius	Salsify
	Tribolium acutiflorum s.l.	Desmazeria
	Tribolium obliterum	Desmazeria
	Trifolium angustifolium var. *angustifolium*	Narrow-leaf Clover
	Trifolium arvense var. *arvense*	Hare's-foot Clover
	Trifolium campestre var. *campestre*	Hop Clover
	Trifolium dubium	Suckling Clover
	Trifolium fragiferum var. *fragiferum*	Strawberry Clover
	Trifolium glomeratum	Cluster Clover
	Trifolium hirtum	Hairy Clover
	Trifolium pratense	Red Clover
	Trifolium repens var. *repens*	White Clover
	Trifolium striatum	Knotted Clover
	Trifolium subterraneum	Subterranean Clover
	Trifolium tomentosum var. *tomentosum*	Woolly Clover
	Triticum aestivum	Wheat
	Ulex europaeus	Gorse
	Ulmus X *hollandica*	Dutch Elm
	Urtica urens	Small Nettle
	Vellereophyton dealbatum	White Cudweed
	Verbascum thapsus subsp. *thapsus*	Great Mullein
	Veronica persica	Persian Speedwell
	Vicia sativa	Common Vetch
	Vinca major	Blue Periwinkle
	Vulpia bromoides	Squirrel-tail Fescue
	Vulpia muralis	Wall Fescue
	Vulpia myuros	Rat's-tail Fescue
	Xanthium spinosum	Bathurst Burr

A2.2 Significant flora species

Table A2.2 Flora of national or state significance recorded or predicted to occur within Section E of the Melton/Wyndham Investigation Area

Australian status:

CE	Listed under EPBC Act as critically endangered
E	Listed under EPBC Act as endangered
V	Listed under EPBC Act as vulnerable
R	Rare (Walsh & Stajsic 2007)

Victorian status (DSE Flora Information System, 2007 Version):

e	Endangered
v	Vulnerable
r	Rare
f	Listed as threatened under FFG Act

Source of record:

FIS:	Recorded within 5 km of centre of study area, DSE Flora Information System
DEWHA:	Predicted to occur in local area, EPBC Act Protected Matters Search Tool

Likelihood scale:

	No habitat present	Habitat poorly represented	Habitat moderately well represented	Habitat well represented
No records from bioregion (terrestrial) or neighbouring basin (aquatic)	Negligible	Negligible	Low	Medium
Records from bioregion (terrestrial) or basin/neighbouring basin (aquatic)	Negligible	Low	Medium	High
Records from within 5 km (terrestrial) or from catchment (aquatic)	Negligible	Medium	High	High

Scientific name	Common name	Aust. status	Vic. status	Source of record	FFG	Occurrence in study area
National Significance						
Amphibromus fluitans	River Swamp Wallaby-grass	V		FIS		High
Carex tasmanica	Curly Sedge	V	v	DEWHA	listed	Low
Dianella amoena	Matted Flax-lily	E	e	FIS	listed	High
Diuris basaltica	Small Golden Moths	E	v	FIS/DEWHA	listed	High
Glycine latrobeana	Clover Glycine	V	v	FIS/DEWHA	listed	High
Pimelea spinescens subsp. *spinescens*	Spiny Rice-flower	C	e	FIS/DEWHA	listed	Recorded
Prasophyllum frenchii	Maroon Leek-orchid	E	e	DEWHA	listed	Low
Rutidosis leptorhynchoides	Button Wrinklewort	E	e	FIS/DEWHA	listed	High
Senecio macrocarpus	Large-headed Fireweed	V	e	FIS/DEWHA	listed	High
State Significance						
Allocasuarina luehmannii	Buloke			FIS	listed	Recorded
Amyema linophylla subsp. *orientale*	Buloke Mistletoe		v	FIS		High
Austrostipa exilis	Heath Spear-grass		r	FIS		High

Scientific name	Common name	Aust. status	Vic. status	Source of record	FFG	Occurrence in study area
Austrostipa hemipogon	Half-bearded Spear-grass		r	FIS		High
Cullen parvum	Small Scurf-pea		e	FIS	listed	High
Cullen tenax	Tough Scurf-pea		e	FIS	listed	High
Dianella sp. aff. *longifolia* (Benambra)	Arching Flax-lily		v, K	FIS		High
Diuris X *fastidiosa*	Proud Diuris		e	FIS		High
Geranium solanderi var. *solanderi*	Austral Crane's-bill		v	FIS		High
Helichrysum aff. *rutidolepis* (Lowland Swamps)	Pale Swamp Everlasting		v	FIS		High
Nicotiana suaveolens	Austral Tobacco		r	FIS		High
Ranunculus diminutus	Brackish Plains Buttercup		r	FIS		Low
Rhagodia parabolica	Fragrant Saltbush		r	FIS		High
Tripogon loliiformis	Rye Beetle-grass		r	FIS		High

APPENDIX 3

EVC Benchmarks

Department of Sustainability and Environment

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	*Pimelea humilis*	Common Rice-flower
LH	*Rumex dumosus*	Wiry Dock
MH	*Calocephalus citreus*	Lemon Beauty-heads
MH	*Acaena echinata*	Sheep's Burr
MH	*Leptorhynchos squamatus*	Scaly Buttons
MH	*Eryngium ovinum*	Blue Devil
SH	*Solenogyne dominii*	Smooth Solenogyne
SH	*Lobelia pratioides*	Poison Lobelia
LTG	*Austrostipa bigeniculata*	Kneed Spear-grass
LTG	*Dichelachne crinita*	Long-hair Plume-grass
MTG	*Themeda triandra*	Kangaroo Grass
MTG	*Austrodanthonia caespitosa*	Common Wallaby-grass
MTG	*Elymus scaber* var. *scaber*	Common Wheat-grass
MTG	*Schoenus apogon*	Common Bog-sedge
MNG	*Microlaena stipoides* var. *stipoides*	Weeping Grass
MNG	*Thelymitra pauciflora* s.l.	Slender Sun-orchid
MNG	*Microtis unifolia*	Common Onion-orchid
SC	*Convolvulus erubescens*	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	*Plantago lanceolata*	Ribwort	high	low
LH	*Cirsium vulgare*	Spear Thistle	high	high
LH	*Sonchus oleraceus*	Common Sow-thistle	high	low
MH	*Hypochoeris radicata*	Cat's Ear	high	low
MH	*Leontodon taraxacoides* ssp. *taraxacoides*	Hairy Hawkbit	high	low
MH	*Trifolium subterraneum*	Subterranean Clover	high	low
MH	*Plantago coronopus*	Buck's-horn Plantain	high	low
MH	*Trifolium striatum*	Knotted Clover	high	low
MH	*Trifolium dubium*	Suckling Clover	high	low
LTG	*Phalaris aquatica*	Toowoomba Canary-grass	high	high
LNG	*Holcus lanatus*	Yorkshire Fog	high	high
MTG	*Romulea rosea*	Onion Grass	high	low
MTG	*Vulpia bromoides*	Squirrel-tail Fescue	high	low
MTG	*Briza minor*	Lesser Quaking-grass	high	low
MTG	*Bromus hordeaceus* ssp. *hordeaceus*	Soft Brome	high	low
MTG	*Briza maxima*	Large Quaking-grass	high	low
MTG	*Lolium rigidum*	Wimmera Rye-grass	high	low
MTG	*Lolium perenne*	Perennial Rye-grass	high	low
MTG	*Nassella neesiana*	Chilean Needle-grass	high	high
MNG	*Cynosurus echinatus*	Rough Dog's-tail	high	low
MNG	*Juncus capitatus*	Capitate Rush	high	low

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Department of Sustainability and Environment

EVC/Bioregion Benchmark for Vegetation Quality Assessment

Victorian Volcanic Plain bioregion

EVC 132_63: *Low-rainfall* Plains Grassland

Description:
Treeless vegetation mostly < 1 m tall dominated by largely graminoid and herb life forms. Occupies cracking basalt soils prone to seasonal waterlogging in areas receiving < 500 mm annual rainfall.

Life forms:

Life form	#Spp	%Cover	LF code
Small Shrub*	1	5%	SS
Prostrate Shrub	1	5%	PS
Large Herb*	2	5%	LH
Medium Herb	8	20%	MH
Small or Prostrate Herb*	3	10%	SH
Large Tufted Graminoid	1	5%	LTG
Medium to Small Tufted Graminoid	10	30%	MTG
Medium to Tiny Non-tufted Graminoid*	2	5%	MNG
Bryophytes/Lichens and Soil Crust**	na	20%	BL

* Largely seasonal life form
** Note: treat as one life form in this EVC

LF Code	Species typical of at least part of EVC range	Common Name
SS	*Pimelea curviflora* s.s.	Curved Rice-flower
PS	*Atriplex semibaccata*	Berry Saltbush
LH	*Ptilotus macrocephalus*	Feather-heads
MH	*Acaena echinata*	Sheep's Burr
MH	*Plantago gaudichaudii*	Narrow Plantain
MH	*Maireana enchylaenoides*	Wingless Bluebush
MH	*Calocephalus citreus*	Lemon Beauty-heads
SH	*Solenogyne dominii*	Smooth Solenogyne
SH	*Oxalis perennans*	Grassland Wood-sorrel
SH	*Chamaesyce drummondii*	Flat Spurge
SH	*Goodenia pinnatifida*	Cut-leaf Goodenia
LTG	*Austrostipa bigeniculata*	Kneed Spear-grass
MTG	*Austrostipa scabra*	Rough Spear-grass
MTG	*Austrostipa nodosa*	Knotty Spear-grass
MTG	*Whalleya proluta*	Rigid Panic
MTG	*Austrodanthonia duttoniana*	Brown-back Wallaby-grass
TTG	*Centrolepis strigosa* ssp. *strigosa*	Hairy Centrolepis
TTG	*Centrolepis aristata*	Pointed Centrolepis
SC	*Convolvulus erubescens* spp. agg.	Pink Bindweed

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

Organic Litter:
10% cover

EVC 132_63: *Low-rainfall* Plains Grassland - Victorian Volcanic Plain bioregion

Weediness:

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

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

Weediness:

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

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EVC/Bioregion Benchmark for Vegetation Quality Assessment

Victorian Volcanic Plain bioregion

EVC 895: Escarpment Shrubland

Description:

Occurs on rocky escarpments in steep valleys or gorges, associated with limestone or basalt. Sites have moderate to high fertility, are well-drained but subject to regular summer drought due to shallow soils. Eucalypt woodland to 15 m tall or non-eucalypt shrubland to 8 m tall, with occasional eucalypts; lichen-covered rock outcrops are common.

[+] eucalypt woodland only components (ignore when assessing shrubland areas and standardise site condition score as required)

Large trees[+]:

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

Tree Canopy Cover:

% cover	Character Species	Common Name
15%	*Acacia implexa*	Lightwood
	Allocasuarina verticillata	Drooping Sheoak
	Acacia mearnsii	Black Wattle
	Bursaria spinosa	Sweet Bursaria
	Eucalyptus viminalis ssp. viminalis	Manna Gum

Understorey:

Life form	# Spp	% Cover	LF code
Immature Canopy Tree[+]		5%	IT
Understorey Tree or Large Shrub[+]	3	10%	T
Medium Shrub	3	10%	MS
Small Shrub	2	5%	SS
Large Herb	3	5%	LH
Medium Herb	4	10%	MH
Small or Prostrate Herb	5	5%	SH
Large Tufted Graminoid	1	5%	LTG
Large Non-tufted Graminoid	1	5%	LNG
Medium to Small Tufted Graminoid	9	25%	MTG
Medium to Tiny Non-tufted Graminoid	3	5%	MNG
Ground Fern	1	5%	GF
Scrambler or Climber	1	5%	SC
Bryophytes/Lichens	na	10%	BL
Soil Crust	na	10%	S/C

LF Code		Species typical of at least part of EVC range	Common Name
MS	r	*Rhagodia parabolica*	Fragrant Saltbush
MS		*Hymenanthera dentata* s.l.	Tree Violet
SS		*Enchylaena tomentosa* var. *tomentosa*	Ruby Saltbush
LH		*Wahlenbergia communis* s.l.	Tufted Bluebell
MH		*Oxalis perennans*	Grassland Wood-sorrel
MH		*Maireana enchylaenoides*	Wingless Bluebush
MH		*Einadia nutans* ssp. *nutans*	Nodding Saltbush
SH		*Chamaesyce drummondii*	Flat Spurge
SH		*Dichondra repens*	Kidney-weed
LTG		*Austrostipa bigeniculata*	Kneed Spear-grass
MTG		*Austrodanthonia racemosa* var. *racemosa*	Stiped Wallaby-grass
MTG		*Austrodanthonia setacea*	Bristly Wallaby-grass
MNG		*Panicum effusum*	Hairy Panic
GF		*Cheilanthes distans*	Bristly Cloak-fern
SC		*Clematis microphylla*	Small-leaved Clematis
SC		*Convolvulus erubescens* spp. agg.	Pink Bindweed

Victoria The Place To Be

EVC 895: Escarpment Shrubland - Victorian Volcanic Plain bioregion

Recruitment:
Continuous

Organic Litter:
20 % cover

Logs:
15 m/0.1 ha+.
5 m/0.1 ha. (note: large log class does not apply)

Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
T	*Schinus molle*	Pepper Tree	high	high
MS	*Lycium ferocissimum*	African Box-thorn	high	high
MS	*Genista monspessulana*	Montpellier Broom	high	high
SS	*Marrubium vulgare*	Horehound	high	high
LH	*Sonchus oleraceus*	Common Sow-thistle	high	low
LH	*Helminthotheca echioides*	Ox-tongue	high	high
LH	*Lactuca serriola*	Prickly Lettuce	high	low
LH	*Sisymbrium officinale*	Hedge Mustard	high	high
LH	*Sonchus asper* s.l.	Rough Sow-thistle	high	low
LH	*Verbascum thapsus* ssp. *thapsus*	Great Mullein	high	high
LH	*Echium plantagineum*	Paterson's Curse	high	high
LH	*Centaurium tenuiflorum*	Slender Centaury	high	low
LH	*Foeniculum vulgare*	Fennel	high	high
MH	*Hypochoeris radicata*	Cat's Ear	high	low
MH	*Trifolium arvense* var. *arvense*	Hare's-foot Clover	high	low
MH	*Trifolium subterraneum*	Subterranean Clover	high	low
MH	*Trifolium campestre* var. *campestre*	Hop Clover	high	low
MH	*Trifolium angustifolium* var. *angustifolium*	Narrow-leaf Clover	high	low
MH	*Lotus suaveolens*	Hairy Bird's-foot Trefoil	high	low
MH	*Cerastium glomeratum* s.l.	Common Mouse-ear Chickweed	high	low
SH	*Medicago polymorpha*	Burr Medic	high	low
SH	*Trifolium glomeratum*	Cluster Clover	high	low
SH	*Modiola caroliniana*	Red-flower Mallow	high	low
SH	*Aptenia cordifolia*	Heart-leaf Ice-plant	high	high
LTG	*Phalaris aquatica*	Toowoomba Canary-grass	high	high
LNG	*Holcus lanatus*	Yorkshire Fog	high	high
LNG	*Avena fatua*	Wild Oat	high	low
MTG	*Nassella trichotoma*	Serrated Tussock	high	high
MTG	*Ehrharta longiflora*	Annual Veldt-grass	high	low
MTG	*Briza maxima*	Large Quaking-grass	high	low
MTG	*Bromus hordeaceus* ssp. *hordeaceus*	Soft Brome	high	low
MTG	*Sporobolus africanus*	Rat-tail Grass	high	high
MTG	*Vulpia bromoides*	Squirrel-tail Fescue	high	low
MTG	*Romulea rosea*	Onion Grass	high	low
MTG	*Pentaschistis airoides* ssp. *airoides*	False Hair-grass	high	low
MTG	*Lolium perenne*	Perennial Rye-grass	high	high
MTG	*Dactylis glomerata*	Cocksfoot	high	high
MTG	*Vulpia myuros*	Rat's-tail Fescue	high	low
MTG	*Bromus rubens*	Red Brome	high	low
MTG	*Avena barbata*	Bearded Oat	high	low
MTG	*Aira caryophyllea*	Silvery Hair-grass	high	low
SC	*Vicia sativa* ssp. *sativa*	Common Vetch	high	low

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EVC/Bioregion Benchmark for Vegetation Quality Assessment

Victorian Volcanic Plain bioregion

EVC 55_61: Plains Grassy Woodland

Description:
An open, eucalypt woodland to 15 m tall. Occupies poorly drained, fertile soils on flat or gently undulating plains at low elevations. The understorey consists of a few sparse shrubs over a species-rich grassy and herbaceous ground layer. This variant occupies areas receiving approximately 500 – 700 mm annual rainfall.

Large trees:

Species	DBH(cm)	#/ha
Eucalyptus spp.	80 cm	8 / ha

Tree Canopy Cover:

%cover	Character Species	Common Name
10%	*Eucalyptus camaldulensis*	River Red Gum

Understorey:

Life form	#Spp	%Cover	LF code
Immature Canopy Tree		5%	IT
Understorey Tree or Large Shrub	1	5%	T
Medium Shrub	3	10%	MS
Small Shrub	2	1%	SS
Prostrate Shrub	1	1%	PS
Large Herb	3	5%	LH
Medium Herb	8	15%	MH
Small or Prostrate Herb	3	5%	SH
Large Tufted Graminoid	2	5%	LTG
Medium to Small Tufted Graminoid	12	45%	MTG
Medium to Tiny Non-tufted Graminoid	2	5%	MNG
Bryophytes/Lichens	na	10%	BL
Soil Crust	na	10%	S/C

LF Code	Species typical of at least part of EVC range	Common Name
MS	*Acacia pycnantha*	Golden Wattle
MS	*Acacia paradoxa*	Hedge Wattle
SS	*Pimelea humilis*	Common Rice-flower
PS	*Astroloma humifusum*	Cranberry Heath
PS	*Bossiaea prostrata*	Creeping Bossiaea
MH	*Oxalis perennans*	Grassland Wood-sorrel
MH	*Gonocarpus tetragynus*	Common Raspwort
MH	*Acaena echinata*	Sheep's Burr
SH	*Dichondra repens*	Kidney-weed
SH	*Hydrocotyle laxiflora*	Stinking Pennywort
LTG	*Austrostipa mollis*	Supple Spear-grass
LTG	*Austrostipa bigeniculata*	Kneed Spear-grass
MTG	*Themeda triandra*	Kangaroo Grass
MTG	*Elymus scaber* var. *scaber*	Common Wheat-grass
MTG	*Austrodanthonia setacea*	Bristly Wallaby-grass
MTG	*Austrodanthonia racemosa* var. *racemosa*	Stiped Wallaby-grass
MNG	*Microlaena stipoides* var. *stipoides*	Weeping Grass

Recruitment:
Continuous

Organic Litter:
10 % cover

Logs:
10 m/0.1 ha.

Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	*Lycium ferocissimum*	African Box-thorn	high	high
LH	*Cirsium vulgare*	Spear Thistle	high	high
LH	*Sonchus oleraceus*	Common Sow-thistle	high	low
LH	*Plantago lanceolata*	Ribwort	high	low
MH	*Hypochoeris radicata*	Cat's Ear	high	low
LNG	*Holcus lanatus*	Yorkshire Fog	high	high
MTG	*Vulpia bromoides*	Squirrel-tail Fescue	high	low
MTG	*Romulea rosea*	Onion Grass	high	low
MTG	*Briza minor*	Lesser Quaking-grass	high	low
MTG	*Briza maxima*	Large Quaking-grass	high	low

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APPENDIX 4

Results Summary Tables

A4.1 Vegetation Quality Assessment

Notes to Table:

Habitas ID #	Parcel PFI or Property PFI	
Vegetation Category DT	Degraded Treeless Vegetation RP Remnant Patch	
Ecological Vegetation Class (EVC)	H-s PG CGW LS L-r P G ES	Heavier-soils Plains Grassland Creekline Grassy Woodland Lignum Swamp Low-rainfall Plains Grassland Escarpment Shrubland
Conservation Status	E	Endangered
Conservation Significance (CS)	VH H	Very High High
Key Areas & Management Zones	MZ	Management Zones

*Section E is entirely contained within the Victorian Volcanic Plain Bioregion.

^ Presence of significant species was not a factor in increasing conservation significance of patches in Section E. All patches of Very High conservation significance are endangered EVCs in the Victorian Volcanic Plain Bioregion with a habitat score >40.

Table A4.1 Section E Habitat Hectare assessment results from the Melton/Wyndham Investigation Area assessment (undertaken by Biosis Research Pty. Ltd. October 2008 - March 2009)

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
50268121	1	A	RP	5.07	L-r PG	E	0	0	7	15	3	4	0	1.36	39.44	10	49.44	2.51	VH	HS >40	2	5.01			5.01		a
50268121	2	A	DT	0.23			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								a
50268127	1	A	RP	2.21	L-r PG	E	0	0	6	15	6	5	0	1.36	43.52	10	53.52	1.18	VH	HS >40	2	2.37			2.37		a
50268127	2	A	DT	7.90			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								a
50268130	2	A	RP	3.17	L-r PG	E	0	0	7	15	3	5	0	1.36	40.80	15	55.80	1.77	VH	HS >40	2	3.54			3.54		a
50268130	3	A	DT	2.29			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								a
50268130	1	A	RP	4.80	L-r PG	E	0	0	7	15	3	5	0	1.36	40.80	15	55.80	2.68	VH	HS >40	2	5.36			5.36		a
50268201	2	A	DT	0.46			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			a

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
150902961	1	A	RP	0.38	PGW	E	0	0	9	15	6	4	2	1.00	36.00	10	46.00	0.17	VH	HS >40	2	0.35			0.35		a
150902961	2	A	RP	1.84	H-s PG	E	0	0	9	5	6	5	0	1.36	34.00	10	44.00	0.81	VH	HS >40	2	1.62			1.62		a
150902961	3	A	DT	11.85			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								a
2088086	1	A	RP	0.06	PGW	E	10	3	11	5	0	3	0	1.00	32.00	5	37.00	0.02	H		1.5		0.03			0.03	b
2088086	2	A	DT	5.21			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
2088844	1	A	RP	11.13	L-r PG	E	0	0	9	15	3	4	0	1.36	42.16	15	57.16	6.36	VH	HS >40	2	12.72		Yes			b
2088844	2	A	DT	1.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			b
2088844	3	A	DT	0.16			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			b
50268201	1	A	RP	12.20	L-r PG	E	0	0	9	15	6	5	0	1.36	47.60	5	52.60	6.42	VH	HS >40	2	12.83		Yes			b
50268269	1	A	RP	39.41	L-r PG	E	0	0	7	15	10	5	0	1.36	50.32	15	65.32	25.74	VH	HS >40	2	51.49		Yes			b
50268269	2	A	DT	0.90			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			b
50268275	1	A	RP	5.19	L-r PG	E	0	0	6	10	10	5	0	1.36	42.16	15	57.16	2.97	VH	HS >40	2	5.93		Yes - MZ			b
50268275	2	A	DT	33.14			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes -pt MZ			b
50268289	3	A	DT	17.71			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
50268289	1	B	RP	1.62	L-r PG	E	0	0	11	5	3	5	0	1.36	32.64	15	47.64	0.77	VH	HS >40	2	1.54		Yes			b
50268289	2	A	DT	1.41			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			b
50268289	1	A	RP	24.00	L-r PG	E	0	0	9	5	6	4	0	1.36	32.64	15	47.64	11.43	VH	HS >40	2	22.87		Yes			b
50268292	2	A	DT	3.10			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			b
50268292	1	A	RP	39.07	L-r PG	E	0	0	9	15	6	4	0	1.36	46.24	15	61.24	23.93	VH	HS >40	2	47.85		Yes			b
50268822	1	A	DT	1.20			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
50268829	1	A	DT	1.87			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
50268996	1	A	RP	44.31	L-r PG	E	0	0	11	15	6	4	0	1.36	48.96	15	63.96	28.34	VH	HS >40	2	56.68		Yes			b
52864249	1	A	RP	0.72	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.42	VH	HS >40	2	0.84			0.84		b
52864249	2	A	DT	29.74			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
52864250	1	A	RP	0.84	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.57	VH	HS >40	2	1.14			1.14		b
52864250	1	B	RP	0.20	L-r PG	E	0	0	7	15	10	4	0	1.36	48.96	15	63.96	0.13	VH	HS >40	2	0.26			0.26		b
52864250	1	C	RP	0.38	L-r PG	E	0	0	7	15	10	4	0	1.36	48.96	5	53.96	0.21	VH	HS >40	2	0.41			0.41		b
52864250	2	A	DT	29.30			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
53045202	1	A	RP	6.79	H-s PG	E	0	0	6	15	6	4	0	1.36	42.16	10	52.16	3.54	VH	HS >40	2	7.08			7.08		b
53045202	5	A	DT	0.73			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
53045202	2	A	DT	0.37			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
53045202	4	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
53045202	3	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								b
202352374	2	A	RP	0.77	L-r PG	E	0	0	6	5	3	5	0	1.36	25.84	0	25.84	0.20	H		1.5		0.30			0.30	b
50268817	5	A	RP	0.68	L-r PG	E	0	0	6	5	6	4	0	1.36	28.56	5	33.56	0.23	H		1.5		0.34			0.34	c
50268917	7	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
50268917	6	A	RP	7.53	L-r PG	E	0	0	6	5	6	4	0	1.36	28.56	10	38.56	2.90	H		1.5		4.36			4.36	c
50268917	2	A	DT	0.16			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
50268917	1	A	DT	0.91			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
50268917	3	A	DT	0.23			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
50268917	4	A	DT	2.63			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
50268967	1	A	RP	1.70	L-r PG	E	0	0	6	5	3	4	0	1.36	24.48	10	34.48	0.59	H		1.5		0.88			0.88	c
50268967	2	A	RP	0.47	L-r PG	E	0	0	2	5	6	4	0	1.36	23.12	10	33.12	0.16	H		1.5		0.23			0.23	c
50268967	3	A	DT	35.39			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
50268987	3	A	DT	0.67			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			c
50268987	4	A	DT	22.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
50269005	1	A	DT	46.78			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
151081200	1	A	DT	13.94			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
151081208	1	A	DT	19.59			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
202352374	1	A	DT	11.59			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								c
2088207	1	A	RP	4.47	L-r PG	E	0	0	9	15	6	5	0	1.36	47.60	15	62.60	2.80	VH	HS >40	2	5.60			5.60		d
2088207	2	A	DT	0.98			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
2088207	1	B	RP	1.28	L-r PG	E	0	0	9	5	6	4	0	1.36	32.64	15	47.64	0.61	VH	HS >40	2	1.22			1.22		d
2088207	3	A	DT	3.16			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
2088214	2	A	RP	4.65	L-r PG	E	0	0	9	15	6	5	0	1.36	47.60	15	62.60	2.91	VH	HS >40	2	5.82		Yes			d
2088214	1	A	DT	5.65			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes -pt MZ			d
2088215	7	A	DT	3.80			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes -pt MZ			d
2088215	8	A	DT	1.18			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			d
2088215	3	A	DT	0.74			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			d
2088215	4	A	DT	0.12			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			d
2088215	6	A	DT	0.20			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			d
2088215	1	A	RP	4.25	L-r PG	E	0	0	7	15	10	5	0	1.36	50.32	15	65.32	2.78	VH	HS >40	2	5.55		Yes			d
2088221	1	A	RP	6.07	L-r PG	E	0	0	9	0	6	5	0	1.36	27.20	15	42.20	2.56	VH	HS >40	2	5.12		Yes			d
2088221	2	A	DT	0.90			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			d
2088221	3	A	DT	2.13			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
50268116	1	A	RP	6.07	L-r PG	E	0	0	11	5	0	2	0	1.36	24.48	15	39.48	2.40	H		1.5		3.59	Yes - MZ			d
50268116	1	B	RP	3.85	L-r PG	E	0	0	9	5	6	4	0	1.36	32.64	15	47.64	1.83	VH	HS >40	2	3.67		Yes - MZ			d
50268117	3	A	DT	0.41			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
50268117	4	A	DT	0.31			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
50268117	2	A	RP	3.71	L-r PG	E	0	0	11	5	6	5	0	1.36	36.72	15	51.72	1.92	VH	HS >40	2	3.84			3.84		d
50268117	1	A	RP	5.50	L-r PG	E	0	0	11	5	6	5	0	1.36	36.72	15	51.72	2.84	VH	HS >40	2	5.69			5.69		d
50268120	1	A	RP	8.33	L-r PG	E	0	0	6	15	3	5	0	1.36	39.44	15	54.44	4.53	VH	HS >40	2	9.07		Yes			d

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
50268120	2	A	DT	1.64			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes -pt MZ			d
50268121	3	A	DT	2.73			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
50268121	4	A	RP	1.96	L-r PG	E	0	0	11	5	6	5	0	1.36	36.72	10	46.72	0.92	VH	HS >40	2	1.83			1.83		d
50268128	1	A	DT	10.24			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
50268140	1	A	RP	1.34	L-r PG	E	0	0	2	15	3	5	0	1.36	34.00	15	49.00	0.66	VH	HS >40	2	1.31		Yes			d
50268140	1	A	RP	9.22	L-r PG	E	0	0	2	15	3	5	0	1.36	34.00	15	49.00	4.52	VH	HS >40	2	9.04		Yes			d
50268140	2	A	DT	1.37			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
50268140	2	A	DT	0.20			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
50268282	1	A	RP	41.87	L-r PG	E	0	0	11	5	6	5	0	1.36	36.72	15	51.72	21.66	VH	HS >40	2	43.31		Yes			d
50268282	2	A	DT	1.22			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			d
50268295	1	A	RP	0.24	ES	E	0	0	9	10	0	3	0	1.36	29.92	0	29.92	0.07	H		1.5		0.11			0.11	d
50268295	2	A	RP	6.42	L-r PG	E	0	0	6	10	3	2	0	1.36	28.56	15	43.56	2.80	VH	HS >40	2	5.59			5.59		d
50268295	3	A	RP	1.43	L-r PG	E	0	0	7	10	6	2	0	1.36	34.00	15	49.00	0.70	VH	HS >40	2	1.40			1.40		d
50268295	4	A	DT	40.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
52553284	1	A	RP	1.01	L-r PG	E	0	0	6	5	0	2	0	1.36	17.68	5	22.68	0.23	H		1.5		0.34	Yes - MZ			d
52553284	2	A	RP	1.28	L-r PG	E	0	0	6	15	3	4	0	1.36	38.08	5	43.08	0.55	VH	HS >40	2	1.10		Yes - MZ			d
52553284	3	A	RP	0.16	L-r PG	E	0	0	6	5	0	2	0	1.36	17.68	5	22.68	0.04	H		1.5		0.05	Yes - MZ			d
52553284	6	A	DT	15.77			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			d
151251323	1	A	DT	1.61			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								d
151251331	1	A	RP	4.56	H-s PG	E	0	0	9	10	10	5	0	1.36	46.24	15	61.24	2.79	VH	HS >40	2	5.59		Yes			d
151251331	1	B	RP	0.28	H-s PG	E	0	0	6	10	3	4	0	1.36	31.28	15	46.28	0.13	VH	HS >40	2	0.26		Yes - MZ			d
151251331	2	A	DT	1.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			d
151251331	3	A	DT	2.30			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes -pt MZ			d
50268890	5	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								e
50268890	6	A	DT	2.73			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								e
50268890	2	A	DT	0.36			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								e
50268890	3	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								e
50268890	1	A	RP	7.41	L-r PG	E	0	0	6	15	3	4	0	1.36	38.08	15	53.08	3.93	VH	HS >40	2	7.87			7.87		e
50268890	4	A	DT	0.11			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								e
50268903	1	B	RP	8.21	L-r PG	E	0	0	11	15	6	5	0	1.36	50.32	15	65.32	5.36	VH	HS >40	2	10.73		Yes			e
50268903	2	A	DT	1.53			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			e
50268903	1	A	RP	1.47	L-r PG	E	0	0	9	15	6	5	0	1.36	47.60	10	57.60	0.85	VH	HS >40	2	1.69		Yes			e
50268904	1	A	RP	6.54	L-r PG	E	0	0	6	15	10	5	0	1.36	48.96	15	63.96	4.18	VH	HS >40	2	8.37		Yes			e
50268904	2	A	DT	0.11			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			e
50268904	3	A	DT	4.63			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								e
50268979	1	A	RP	42.17	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	28.69	VH	HS >40	2	57.38		Yes			e

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
50268979	1	A	RP	1.65	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	1.12	VH	HS >40	2	2.25		Yes			e
50268998	1	A	RP	38.63	L-r PG	E	0	0	6	15	10	4	0	1.36	47.60	15	62.60	24.18	VH	HS >40	2	48.36		Yes			e
50268998	2	A	DT	5.92			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			e
52553269	1	A	RP	0.24	H-s PG	E	0	0	6	15	3	3	0	1.36	36.72	15	51.72	0.12	VH	HS >40	2	0.25			0.25		e
52553269	2	A	RP	0.61	H-s PG	E	0	0	6	5	3	5	0	1.36	25.84	15	40.84	0.25	VH	HS >40	2	0.50			0.50		e
52553269	5	A	RP	0.60	H-s PG	E	0	0	6	15	3	5	0	1.36	39.44	15	54.44	0.33	VH	HS >40	2	0.65			0.65		e
52553269	6	A	RP	0.58	L-r PG	E	0	0	6	15	3	4	0	1.36	38.08	15	53.08	0.31	VH	HS >40	2	0.62			0.62		e
52553269	8	A	DT	0.18			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								e
52553269	7	A	DT	37.66			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes -pt MZ			e
52553284	4	A	RP	23.11	L-r PG	E	0	0	9	20	10	5	0	1.36	59.84	15	74.84	17.30	VH	HS >40	2	34.59		Yes			e
52553284	5	A	RP	0.05	PGWet	E	0	0	7	10	6	3	0	1.36	35.00	15	50.00	0.03	VH	HS >40	2	0.05		Yes			e
210240683	1	A	RP	42.68	L-r PG	E	0	0	11	15	10	5	0	1.36	55.76	15	70.76	30.20	VH	HS >40	2	60.40		Yes			e
50268987	1	A	RP	16.60	L-r PG	E	0	0	9	10	3	5	0	1.36	36.72	15	51.72	8.59	VH	HS >40	2	17.17		Yes			f
50268987	2	A	DT	3.83			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			f
52553266	1	A	RP	1.14	L-r PG	E	0	0	2	5	0	2	0	1.36	12.24	15	27.24	0.31	H		1.5		0.47			0.47	f
52553266	3	A	DT	43.32			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								f
52553266	2	A	DT	0.46			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								f
52553266	3	A	DT	0.25			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								f
52553266	3	A	DT	0.97			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								f
52553266	1	A	RP	0.05	L-r PG	E	0	0	2	5	0	2	0	1.36	12.24	15	27.24	0.01	H		1.5		0.02			0.02	f
52553266	1	A	RP	0.15	L-r PG	E	0	0	2	5	0	2	0	1.36	12.24	15	27.24	0.04	H		1.5		0.06			0.06	f
52553266	2	A	DT	0.21			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								f
52553269	3	A	RP	0.17	H-s PG	E	0	0	6	15	3	3	0	1.36	36.72	15	51.72	0.09	VH	HS >40	2	0.18			0.18		f
52553269	4	A	RP	3.25	H-s PG	E	0	0	6	15	3	5	0	1.36	39.44	15	54.44	1.77	VH	HS >40	2	3.54		Yes - MZ			f
210240645	1	A	RP	42.87	L-r PG	E	0	0	6	5	3	4	0	1.36	24.48	15	39.48	16.93	H		1.5		25.39	Yes - MZ			f
2088215	5	A	DT	0.29			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			g
50268281	6	A	DT	40.71			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								g
50268281	1	A	RP	0.37	L-r PG	E	0	0	9	15	6	5	0	1.36	47.60	15	62.60	0.23	VH	HS >40	2	0.46			0.46		g
50268281	2	A	RP	0.30	L-r PG	E	0	0	9	5	6	5	0	1.36	34.00	15	49.00	0.15	VH	HS >40	2	0.29			0.29		g
50268281	3	A	RP	0.33	L-r PG	E	0	0	9	5	6	5	0	1.36	34.00	15	49.00	0.16	VH	HS >40	2	0.32			0.32		g
50268281	4	A	RP	0.24	L-r PG	E	0	0	9	5	6	5	0	1.36	34.00	15	49.00	0.12	VH	HS >40	2	0.24			0.24		g
50268281	5	A	RP	0.38	L-r PG	E	0	0	9	5	6	5	0	1.36	34.00	15	49.00	0.19	VH	HS >40	2	0.37			0.37		g
50268302	1	A	RP	5.75	L-r PG	E	0	0	15	15	6	5	0	1.36	55.76	15	70.76	4.07	VH	HS >40	2	8.14		Yes			g
50268302	2	A	DT	66.36			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes -pt MZ			g
1406880	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406881	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1406882	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406883	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406884	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1406885	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1406886	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406887	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406893	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406894	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406895	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406896	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406897	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406898	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406899	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406900	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406901	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406902	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406903	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1406904	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406905	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406906	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1406907	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406908	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1406921	1	A	RP	2.91	L-r PG	E	0	0	9	5	6	5	0	1.36	34.00	10	44.00	1.28	VH	HS >40	2	2.56			2.56		h
1406921	2	A	DT	7.11			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
1406922	1	A	RP	4.34	L-r PG	E	0	0	9	5	3	5	0	1.36	29.92	10	39.92	1.73	H		1.5		2.60			2.60	h
1406922	2	A	DT	1.51			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
1406922	3	A	DT	4.28			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
1406926	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1407995	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1407996	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1407997	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1407998	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1407999	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408000	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408001	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408002	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1408003	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408004	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408005	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408006	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408007	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408008	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408009	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408010	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408011	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408012	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408013	2	A	DT	0.00			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408013	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1408014	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408015	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408015	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408016	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408017	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408017	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408018	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408019	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408019	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408020	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408021	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408021	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408022	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408023	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408023	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408024	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408025	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408025	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408026	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408027	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408027	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408028	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408029	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408029	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1408030	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408031	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408031	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408032	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408033	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408033	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1408034	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408035	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408035	1	A	RP	0.03	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.02	VH	HS >40	2	0.04		Yes			h
1408036	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408037	2	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408037	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.01		Yes			h
1408038	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408039	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1408040	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1408041	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1408041	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.01		Yes			h
1410474	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410474	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410476	2	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410476	1	A	RP	0.03	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.03		Yes			h
1410477	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410477	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410478	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410478	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410479	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410479	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410480	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410480	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410481	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410481	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410482	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410482	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410483	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410483	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410484	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1410484	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410485	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410485	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410486	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410486	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410488	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410489	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410490	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410490	1	A	RP	0.00	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.00	VH	HS >40	2	0.00		Yes			h
1410491	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410491	3	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410491	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1410492	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410492	3	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410492	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1410493	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410493	3	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410493	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1410494	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410494	3	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410494	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1410499	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410499	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410500	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410500	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410501	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410501	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1410502	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410502	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.01		Yes			h
1410519	3	A	DT	3.25			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
1410519	4	A	RP	0.45	L-r PG	E	0	0	7	5	3	5	0	1.36	27.20	15	42.20	0.19	VH	HS >40	2	0.38			0.38		h
1410519	1	A	RP	5.82	L-r PG	E	0	0	7	5	3	5	0	1.36	27.20	15	42.20	2.46	VH	HS >40	2	4.91			4.91		h
1410519	2	A	DT	1.14			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
1410689	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410691	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410693	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1410695	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410697	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410701	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410705	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410709	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410713	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410717	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410721	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410723	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410725	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410729	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410733	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410735	2	A	DT	0.00			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410735	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410737	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410739	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410741	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410741	2	A	DT	0.00			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410743	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1410743	2	A	DT	0.00			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410745	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.01		Yes			h
1410745	2	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410747	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1410747	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.01		Yes			h
1411408	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1411409	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1411410	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1411411	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1411412	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1411413	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1411414	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.08		Yes			h
1411415	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1411417	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1411418	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1411419	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.08		Yes			h
1411420	1	A	DT	0.07			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1412262	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1412263	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1412264	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1412265	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1412266	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1412267	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1412268	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1412269	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.04	VH	HS >40	2	0.08		Yes			h
1412270	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1412271	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1412272	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1412273	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1412274	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1412275	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416530	2	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416530	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416531	2	A	DT	0.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416531	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416532	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416533	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416534	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416535	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416536	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416537	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416538	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416539	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416540	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1416541	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416542	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1416544	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1416546	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416548	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416551	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1416553	1	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416553	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416554	1	A	DT	0.18			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1416555	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416558	1	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416560	1	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416562	1	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416564	1	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416566	1	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416568	1	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416570	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416572	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416574	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416575	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416576	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416577	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416578	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416579	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416580	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416581	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416582	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416583	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416584	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416585	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416586	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416587	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416588	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416589	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416590	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416591	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416592	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416593	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416602	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416603	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416604	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416605	2	A	DT	0.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416605	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416734	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1416735	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1416736	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416737	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416738	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416739	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416740	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416741	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416742	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416743	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416744	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416745	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416746	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416747	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416748	2	A	DT	0.00			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416748	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416749	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416750	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416751	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416752	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416753	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416754	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416755	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416756	1	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416758	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416760	2	A	DT	0.07			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416760	1	A	RP	0.00	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.00	VH	HS >40	2	0.00		Yes			h
1416762	2	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416762	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1416764	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416764	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1416765	1	A	DT	0.07			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416766	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416766	3	A	RP	0.00	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.00	VH	HS >40	2	0.00		Yes			h
1416766	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1416767	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416767	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1416768	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1416768	3	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.01		Yes			h
1416768	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1416769	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L			0.00		Yes - MZ			h
1416769	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1416770	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416770	3	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.01		Yes			h
1416770	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1416771	2	A	DT	0.00		E	0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416771	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416772	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416773	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1416774	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.08		Yes			h
1416775	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.05	VH	HS >40	2	0.10		Yes			h
1416776	2	A	DT	0.34			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416776	1	A	RP	1.00	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.68	VH	HS >40	2	1.36		Yes			h
1416777	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.05	VH	HS >40	2	0.10		Yes			h
1416778	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.05	VH	HS >40	2	0.10		Yes			h
1416779	2	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1416779	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.03		Yes			h
1418369	1	A	DT	0.25			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1418370	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418371	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418372	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1418373	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418374	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418375	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1418376	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418377	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418378	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418379	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418380	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418381	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418382	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418383	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418384	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418385	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1418386	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418387	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418388	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418389	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418390	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418391	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418392	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418393	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418394	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1418395	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1418396	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418397	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1418398	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418399	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418400	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418401	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418402	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418403	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418404	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418405	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418406	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418407	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418408	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418409	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418410	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418411	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418412	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1418413	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418414	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418415	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418416	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1418417	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418418	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1418418	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.03		Yes			h
1418419	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1418420	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1418421	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1418421	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.01		Yes			h
1420862	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420863	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420864	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420865	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420866	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420867	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.08		Yes			h
1420868	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420869	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.08		Yes			h
1420870	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420871	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420872	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.08		Yes			h
1420873	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.08		Yes			h
1420874	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420875	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420876	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420877	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420878	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420879	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420891	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1420892	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1420893	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420894	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420895	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420896	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420897	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420898	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1420899	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1420900	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420901	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420902	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1420903	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1420904	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	5	58.04	0.03	VH	HS >40	2	0.07		Yes			h
1421733	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421735	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1421737	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421739	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421741	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421743	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421744	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1421744	1	A	RP	0.03	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.03		Yes			h
1421745	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421746	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421747	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421748	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421749	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421750	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421751	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421752	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1421753	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1421754	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1421755	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1421756	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1421757	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1421757	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.03		Yes			h
1421758	2	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1421758	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.03		Yes			h
1422093	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1422094	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1422095	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422096	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422097	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422098	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1422099	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422100	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422101	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422102	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422103	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422104	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422105	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422106	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1422107	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422108	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422109	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422111	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422113	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422115	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422118	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1422120	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422122	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422124	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422126	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422127	1	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422128	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422129	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422130	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422131	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422132	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422133	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422134	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422135	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422136	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1422137	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1422138	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1422139	2	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422139	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.01		Yes			h
1422480	1	A	RP	4.77	L-r PG	E	0	0	4	10	6	5	0	1.36	34.00	15	49.00	2.34	VH	HS >40	2	4.67			4.67		h
1422480	3	A	RP	0.29	L-r PG	E	0	0	4	10	3	5	0	1.36	29.92	5	34.92	0.10	H		1.5		0.15			0.15	h
1422480	2	A	DT	5.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
1422481	1	A	RP	1.10	L-r PG	E	0	0	9	5	6	5	0	1.36	34.00	15	49.00	0.54	VH	HS >40	2	1.08			1.08		h
1422481	2	A	DT	9.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
1422897	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1422899	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422900	1	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422901	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422902	1	A	DT	0.07			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422903	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1422904	1	A	DT	0.07			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422905	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422906	1	A	DT	0.07			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422907	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422908	1	A	DT	0.07			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422909	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422910	2	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422910	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
1422911	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422912	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1422913	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422914	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.05	VH	HS >40	2	0.10		Yes			h
1422915	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1422916	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.05	VH	HS >40	2	0.10		Yes			h
1422917	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1422918	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.05	VH	HS >40	2	0.10		Yes			h
1422919	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.04	VH	HS >40	2	0.08		Yes			h
1422920	2	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422920	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.03		Yes			h
1422921	2	A	DT	0.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1422921	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.01	VH	HS >40	2	0.03		Yes			h
1423800	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1423801	2	A	DT	0.00			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1423801	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
1423802	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423803	2	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1423803	1	A	RP	0.03	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.03		Yes			h
1423804	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423805	2	A	DT	0.06			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1423805	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.01		Yes			h
1423806	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423807	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1423807	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1423808	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423809	2	A	DT	0.05			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1423809	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
1423810	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423811	2	A	DT	0.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1423811	1	A	RP	0.01	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.01		Yes			h
1423811	1	A	RP	0.02	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.01	VH	HS >40	2	0.02		Yes			h
1423812	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423813	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
1423813	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423814	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423815	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1423816	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423817	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
1423818	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
1423819	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.08		Yes			h
50268264	1	A	DT	38.44			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
50268897	1	C	RP	1.78	L-r PG	E	0	0	9	15	3	5	0	1.36	43.52	15	58.52	1.04	VH	HS >40	2	2.08		Yes			h
50268897	1	B	RP	2.91	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	1.98	VH	HS >40	2	3.96		Yes			h
50268897	3	A	DT	0.57			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
50268897	1	A	RP	3.71	L-r PG	E	0	0	9	0	0	0	0	1.36	12.24	15	27.24	1.01	H		1.5		1.52	Yes - MZ			h
50268897	2	A	DT	2.09			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52605010	1	A	DT	10.42			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
52605010	2	A	RP	0.54	L-r PG	E	0	0	6	5	3	4	0	1.36	24.48	15	39.48	0.21	H		1.5		0.32			0.32	h
52605011	1	A	DT	3.27			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
52605011	2	A	RP	4.14	L-r PG	E	0	0	9	5	6	5	0	1.36	34.00	15	49.00	2.03	VH	HS >40	2	4.06			4.06		h
52605011	3	A	DT	2.33			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L								h
52626167	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
52626167	2	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52626173	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52626173	1	A	RP	0.08	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.05	VH	HS >40	2	0.11		Yes			h
52626174	3	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52626174	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52626174	1	A	RP	0.18	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.10	VH	HS >40	2	0.19		Yes			h
52626175	1	A	RP	0.25	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.13	VH	HS >40	2	0.27		Yes			h
52626176	2	A	DT	0.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52626176	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
52626177	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52626177	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	15	68.04	0.03	VH	HS >40	2	0.07		Yes			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
52626182	3	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52626182	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52626182	1	A	RP	0.90	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.48	VH	HS >40	2	0.95		Yes			h
52626183	1	A	RP	0.42	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.22	VH	HS >40	2	0.45		Yes			h
52626185	1	A	RP	0.35	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.19	VH	HS >40	2	0.37		Yes			h
52801700	1	A	RP	0.39	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.21	VH	HS >40	2	0.41		Yes			h
52973312	1	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52973399	1	A	DT	0.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52973411	1	A	RP	0.03	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.03		Yes			h
52973412	1	A	RP	0.04	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.02	VH	HS >40	2	0.04		Yes			h
52973414	1	A	DT	0.03			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52973415	1	A	RP	0.00	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.00	VH	HS >40	2	0.00		Yes			h
52973427	1	A	DT	0.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52974705	1	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52975666	1	A	RP	0.21	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.11	VH	HS >40	2	0.22		Yes			h
52975675	2	A	DT	0.02			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52975675	1	A	RP	0.34	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.18	VH	HS >40	2	0.36		Yes			h
52975676	2	A	DT	0.09			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52975676	1	A	RP	0.96	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.51	VH	HS >40	2	1.02		Yes			h
52976943	2	A	DT	0.00			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52976943	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
52976944	1	A	DT	0.10			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52976964	2	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52976964	1	A	RP	0.07	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.04	VH	HS >40	2	0.07		Yes			h
52976965	2	A	DT	0.04			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
52976965	1	A	RP	0.06	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.06		Yes			h
52982501	1	A	DT	0.00			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
150736306	1	A	DT	0.48			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
152120413	1	A	DT	0.28			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
172420994	1	A	DT	0.26			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
202352285	1	A	RP	0.40	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.21	VH	HS >40	2	0.42		Yes			h
202352303	3	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
202352303	2	A	DT	0.10			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
202352303	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
202516509	1	A	DT	0.36			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
202516641	1	A	DT	0.30			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h

Habitas ID#	Site	Zone	Vegetation category	Area (ha)	EVC	Conservation Status	Large Trees	Tree Canopy Cover	Lack of Weeds	Understorey	Recruitment	Organic Litter	Logs	Standardiser	Site Condition	Landscape Context	Habitat Score	Habitat Hectares	Conservation Significance	Reason for Significance	Net Outcome Ratio	VHCS Offset Prescription (Total)	High CS Offset Prescription (Total)	Key area & Management Zones	VHCS Offset Prescription (excl. Key	High CS Offset Prescription (excl. Key	Map sheet
202516807	1	A	DT	0.40			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
202516946	2	A	DT	0.26			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
202516946	1	A	RP	0.09	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.05	VH	HS >40	2	0.10		Yes			h
202531768	3	A	DT	0.01			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
202531768	2	A	DT	0.16			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
202531768	1	A	RP	0.05	L-r PG	E	0	0	9	15	10	5	0	1.36	53.04	0	53.04	0.03	VH	HS >40	2	0.05		Yes			h
209426187	1	A	DT	0.23			0	0	0	0	0	0	0	0.00	0.00	0	0.00	0.00	L					Yes - MZ			h
Totals				1344.60														363.73				673.12	40.76		82.55	9.87	

APPENDIX 5

Significant Fauna Results

A5.1 Significant fauna species

Table A5.1. Fauna of national or state significance recorded, or predicted to occur, within the local area

Source: DSE Atlas of Victorian Wildlife 2007 Version, BA database (1998–14.05.09), DEWHA database (14.05.09)

- AVW data search encompassed a 5 km radius (fish removed)
- DEWHA and BA data search encompassed a 5 km radius

- **Status of species:**

CR critically endangered
EN endangered
VU vulnerable
L listed under Flora and Fauna Guarantee Act

Sources used to derive species status:
EPBC *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)
DSE Advisory List of Threatened Vertebrate Fauna in Victoria (DSE 2007b)
FFG *Flora and Fauna Guarantee Act 1988* (Vic.)

# denotes species predicted to occur or with habitat predicted to occur in the local area (DEWHA database)

Likelihood scale:

	No habitat present	Habitat poorly represented	Habitat moderately well represented	Habitat well represented
No records from bioregion (terrestrial) or neighbouring basin (aquatic)	Negligible	Negligible	Low	Medium
Records from bioregion (terrestrial) or basin/neighbouring basin (aquatic)	Negligible	Low	Medium	High
Records from within 5 km (terrestrial) or from catchment (aquatic)	Negligible	Medium	High	High

Scientific Name	Common Name	Last record	EPBC Act	DSE 2007	FFG Act	Occurrence in study area
National Significance						
Pedionomus torquatus	Plains-wanderer	2004	VU	CR	L	Recorded (AVW)
Rostratula australis	Australian Painted Snipe	#	VU	CR	L	Low
Lathamus discolor	Swift Parrot	1991/#	EN	EN	L	Low
Anthochaera phrygia	Regent Honeyeater	#	EN	CR	L	Negligible
Dasyurus maculatus	Spot-tailed Quoll	#	EN	EN	L	Negligible
Isoodon obesulus obesulus	Southern Brown Bandicoot	#	EN	NT		Negligible
Pteropus poliocephalus	Grey-headed Flying-fox	#	VU	VU	L	Low
Pseudomys fumeus	Smoky Mouse	#	EN	CR	L	Negligible

Scientific Name	Common Name	Last record	EPBC Act	DSE 2007	FFG Act	Occurrence in study area
Delma impar	Striped Legless Lizard	1991/#	VU	EN	L	Recorded (AVW)
Tympanocryptis pinguicolla	Grassland Earless Dragon	#	EN	CR	L	Medium
Litoria raniformis	Growling Grass Frog	2006/#	VU	EN	L	Low
Prototroctes maraena	Australian Grayling	#	VU	VU	L	Negligible
Galaxiella pusilla	Dwarf Galaxias	#	VU	VU	L	Negligible
Macquaria australasica	Macquarie Perch	1926	EN	EN	L	Negligible
Synemon plana	Golden Sun Moth	#	CR	EN	L	Recorded (Biosis Research)
State Significance						
Turnix pyrrhothorax	Red-chested Button-quail	1974		VU	L	Recorded (AVW)
Actitis hypoleucos	Common Sandpiper	1990		VU		Low
Grus rubicunda	Brolga	1989		VU	L	Low
Platalea regia	Royal Spoonbill	2006		VU		Low
Ardea modesta	Eastern Great Egret	2005/#		VU	L	Low
Botaurus poiciloptilus	Australasian Bittern	1973		EN	L	Negligible
Anas rhynchotis	Australasian Shoveler	2006		VU		Negligible
Stictonetta naevosa	Freckled Duck	1991		EN	L	Negligible
Aythya australis	Hardhead	2006		VU		Negligible
Oxyura australis	Blue-billed Duck	2006		EN	L	Negligible
Biziura lobata	Musk Duck	2006		VU		Negligible
Accipiter novaehollandiae	Grey Goshawk	2006		VU	L	Low
Haliaeetus leucogaster	White-bellied Sea-Eagle	2006/#		VU	L	Low
Falco subniger	Black Falcon	2003		VU		High
Ninox connivens	Barking Owl	1986		EN	L	Negligible
Ninox strenua	Powerful Owl	1972		VU	L	Negligible
Tyto novaehollandiae	Masked Owl	1989		EN	L	Negligible
Lophocroa leadbeateri	Major Mitchell's Cockatoo	2004		VU	L	Negligible
Melanodryas cucullata	Hooded Robin	1988		NT	L	Negligible
Pomatostomus temporalis	Grey-crowned Babbler	1987		EN	L	Negligible
Pyrrholaemus sagittatus	Speckled Warbler	2007		VU	L	Negligible
Stagonopleura guttata	Diamond Firetail	2006		VU	L	Low
Pseudophryne bibronii	Brown Toadlet	1990		EN	L	Low

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