WATER TECHNOLOGY
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Native Vegetation Management Plan

New High School for Medowie

Department of Education

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ACKNOWLEDGEMENT OF COUNTRY

The Board and employees of Water Technology acknowledge and respect the Aboriginal and Torres Strait Islander Peoples as the Traditional Custodians of Country throughout Australia. We specifically acknowledge the Traditional Custodians of the land on which our offices reside and where we undertake our work.

We respect the knowledge, skills and lived experiences of Aboriginal and Torres Strait Islander Peoples, who we continue to learn from and collaborate with. We also extend our respect to all First Nations Peoples, their cultures and to their Elders, past and present.

Artwork by Maurice Goolagong 2023. This piece was commissioned by Water Technology and visualises the important connections we have to water, and the cultural significance of journeys taken by traditional custodians of our land to meeting places, where communities connect with each other around waterways.

The symbolism in the artwork includes:

- *Seven circles representing each of the States and Territories in Australia where we do our work.*
- *Blue dots between each circle representing the waterways that connect us.*
- *The animals that rely on healthy waterways for their home*
- *Black and white dots representing all the different communities that we visit in our work.*
- *Hands that are for the people we help on our journey.*

New High School for Medowie

The following report is a Native Vegetation Management Plan (NVMP) undertaken for the New High School for Medowie on behalf of the Department of Education (DoE). The report documents the findings of an ecological assessment inclusive of a site visit. A plan for vegetation removal and future vegetation maintenance is provided which will be suitable for submission for the REF pathway. The NVMP takes into account the Koala Plan of Management (KPoM) that this project as a separate report.

Yours sincerely

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EXECUTIVE SUMMARY

This native vegetation management plan (NVMP) has been prepared to identify areas that will require vegetation maintenance and revegetation after the proposed construction project has been completed at 6 Abundance Road, Medowie (New High School for Medowie). The purpose of this plan is to be suitable for submission for the REF pathway to satisfy their construction conditions.

This report documents the findings of the native vegetation management plan, which identified any areas that could require weed control, ideal areas for revegetation and areas for retention/maintenance. The NVMP typically consist of managing the entire site and not just the area where works are undertaken and any disturbances incurred by the activity will be offset by the improvement of other native vegetation found on site.

The site assessment mapped the extent of the weeds on the site, identified ideal locations for photo monitoring points and identified opportunities for school pedestrian access points.

The results were then displayed in maps and recommendations for weed management and species for any revegetation were given which can be found in the mitigation section of this report. These recommendations include species associated to the PCT 3995 - Hunter Coast Paperbark-Swamp Mahogany Forest (which occurs on site), koala preferred food trees from the Port Stephens Comprehensive Koala Plan of Management, and planting of spiny shrub species to provide bird habitat and prevent entry to sensitive places.

The area mapped as PCT 3995 should be classified as a sensitive area considering it is a Threatened Ecological Community (TEC) being associated to the Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions TEC, which is listed as Endangered under the Biodiversity Conservation Act 2016.

The site assessment found sections of the vegetation present are in good condition, with few weed species present. Other sections of the subject site were large, grazed paddocks that did not possess significant ecological value. It is in these areas along the roadside that revegetation is recommended. The site assessment also discovered multiple large piles of dumped rubbish within the TEC area which will need to be removed as a recommendation.

The NVMP includes 5 years of monitoring with follow up assessments taken on a yearly basis.

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1 INTRODUCTION

This Native Vegetation Management Plan (NVMP) has been prepared to support the Review of Environmental Factors (REF) for the proposed New High School for Medowie (the activity). The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37A of the T&I SEPP.

The activity will be carried out at 6 Abundance Road, Medowie (the site). The purpose of this report is to provide a detailed methodology in relation to the management and regeneration of native vegetation on the site post construction works.

1.1 Project Background

The proposed New High School for Medowie is located in the Port Stephens Council Local Government Area (LGA), in the Hunter and Central Coast region of New South Wales. The site is situated at 6 Abundance Road, Medowie, NSW, 2318 (the site).

The proposed activity involves the construction of the New High School for Medowie (Figure 1-1).

The site contains a densely vegetated area to the southwest corner. Further, isolated trees are scattered throughout.

The existing dwelling and other structures on the site will be demolished as part of the works. No other works are proposed in the area.

The proposed new school will accommodate 640 students in 29 permanent teaching spaces including 3 support teaching spaces across 3-storeys of buildings on the site. Approximately 10,500 sqm of General Floor Area (GFA) is proposed. The proposed activity will be delivered across 1 stage, and will consist of the following:

- 29 permanent teaching spaces including 3 support teaching spaces, to accommodate 640 students, and school hall to accommodate 1,000 students. Approximately 10,500 sqm of GFA is proposed.
- Main vehicular ingress and egress to Ferrodale Road to the north, with a new pedestrian and vehicle crossing proposed.
- Main pedestrian access to Abundance Road.
- Kiss and ride, and bus drop and pick up areas to Abundance Road (6 x parallel spaces).
- New pedestrian wombat crossing to Abundance Road.
- Approximately 55 x car parking spaces and 3 x accessible parking spaces.
- Approximately 70 x bicycle parking spaces.
- Block A (Admin) consisting of administration and learning spaces.
- Block B (Foodtech/Workshop) consisting of food technology room and workshops.
- Block C (Hall) consisting of school hall to accommodate 1,000 students.
- Central quad, 1 playing field and 1 sports courtyard.

The proposed activity will also include the following spaces; general learning spaces, General support learning spaces, administrative services, staff areas, gym and canteen, library areas for science, wood and metal, food

and textiles, health PE, performing arts, additional learning spaces, student amenities, storage, movement (stairs and covered walkways).

1.2 Objective

Department of Education (DoE) has requested a Native Vegetation Management Plan (NVMP) at 6 Abundance Road, Medowie which will revegetate, monitor and improve the vegetation retained within the entire site after the construction period for the New High School for Medowie.

Water Technology has been engaged by DoE to prepare the NVMP to offset any vegetation impacted during the construction of the new school.

The preliminary arborist report (Assurance Trees, Jan 2025) states that out of the 95 trees assessed, 36 trees will require removal, of which 25 are listed as weeds and should be removed as part of the regional weed program. The report also states that a single threatened tree in the form of a Wallangarra White Gum (*Eucalyptus scoparia*) was sighted in the northeast corner of the site along Ferodale Road. *E. scoparia* is listed as Endangered under the NSW BC Act and Vulnerable under the federal EPBC Act. From a native vegetation management perspective, this tree should not be removed, and protection methods should be prioritised during the construction stage.

The Bushfire report (Ecological Australia - January 2025) was also assessed for this report and any vegetation within the proposed 40m - 79m Asset Protection Zone (APZ) would be assessed to minimise the native vegetation clearance within this zone.

1.3 Purpose

The purpose of this report is to provide a detailed methodology in relation to the management and regeneration of native vegetation on the site.

The aims of this NVMP are to:

- provide a sensitive area retainment zone in the southern section that has been previously assessed and found to have Preferred Koala Food Trees, hollow-bearing trees, and PCT 3995- Hunter Coast Paperbark-Swamp Mahogany Forest which is a Threatened Ecological Community (TEC);
- provide protective measures for the threatened tree Wallangarra White Gum (*Eucalyptus scoparia*) located in the northeast corner of the site along Ferodale Road during the construction stage;
- provide a weed management plan for the TEC zoned areas mapped on site; and
- improve the fauna habitat and connectivity through the site connecting Preferred Koala Habitat to that of other areas of Preferred Koala Habitat surrounding the site that is within the Port Stephens ARK (Area of Regional Koala Significance) Zone.

This can be achieved through implementing the following objectives including:

- improving the structure and diversity of the TEC by using locally sourced native species that include trees, shrubs and ground cover plants that are typical of PCT 3995- Hunter Coast Paperbark-Swamp Mahogany Forest present within the area and within the site boundary; and
- assisting in natural regeneration through weed management, monitoring and maintenance for the period of the NVMP.

1.4 Timeframe

A NVMP is generally implemented over a minimum period of three to five years, however, it can also occur in perpetuity, depending on the individual circumstances of the project.

Such circumstances include (but not limited to) the:

- impacts on native vegetation, threatened ecological communities, threatened flora and fauna, and their habitats and,
- ecosystem/native vegetation condition and management requirements (such as APZ management).

A Native Vegetation Management Plan should generally be reviewed and updated every 5 years; however, this timeframe can vary depending on factors like the local environment, land use changes, and the specific regulations in your area, so it's important to consult with relevant authorities for precise guidance. Considering there is a large patch of TEC consisting of Preferred Koala Food Trees mapped in the Port Stephens ARKS, the site should ideally be managed in perpetuity with the NVMP report being reviewed and any management requirements be addressed with necessary updates at 5 yearly intervals. This could also be used as a learning/curriculum opportunity for future students to get involved with the monitoring/maintenance projects. For the purpose of this report, the NVMP has been prepared for a five-year period.

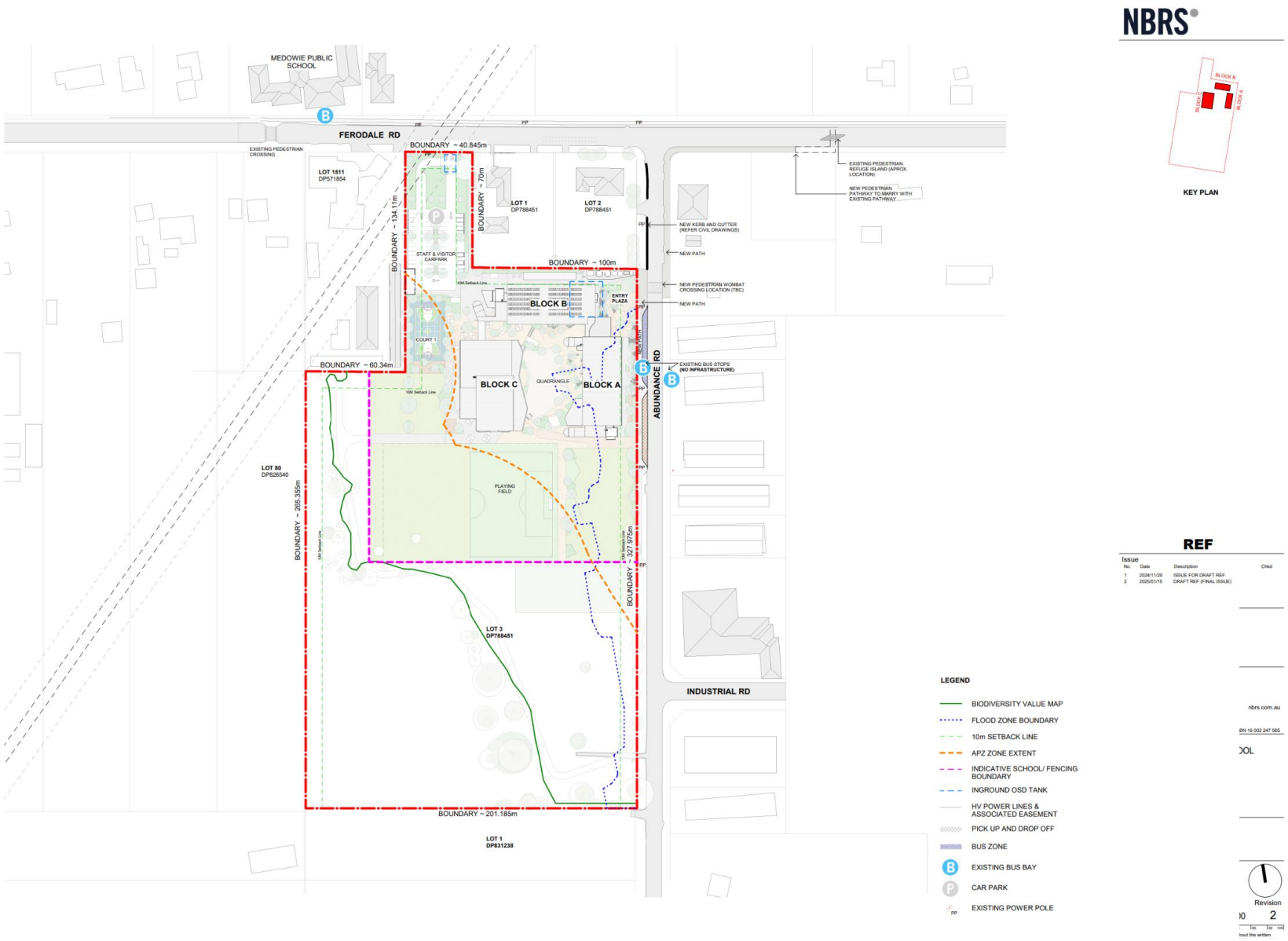

Figure 1-1 Site Plans

2 SITE BACKGROUND

2.1 Site Location and Background

The site has a street address of 6 Abundance Road, Medowie (Figure 2-1). It is 6.51 ha in area, and comprises 1 allotment, legally described as Lot 3 in DP788451 (Figure 2-2).

A large portion of the site is currently unused and vacant. A small, shed structure and caravan are located adjacent to the northern boundary. A cluster of buildings, including a single storey swelling, an outhouse/shed structure and temporary greenhouse are located within the south eastern corner.

The site contains a largely vegetated area to the south west corner. The site is relatively flat with a gradual fall from the west to east towards Abundance Road.

The site has primary frontage to Abundance Road to the east and Ferodale Road to the north. Abundance Road and Ferodale Road are both classified Local Roads. Medowie Road, approximately 1km east of the site, is classified as a Regional Road.

The area surrounding the site mostly consists of industrial, rural residential, educational, and agricultural lands. Adjacent to the north western boundary is a Shell petrol station and mechanical garage. Adjacent to the north eastern boundary is a medical health clinic. Across Abundance Road along the eastern boundary are a number of warehouses and light industrial developments. Directly north of the site across Ferrodale Road are large lots used for agricultural purposes. Medowie Public School is located on Ferodale Road, to the north west of the site, opposite the Shell petrol station.

2.2 Importance of native vegetation

Council has developed several policies for the protection of native vegetation and waterways within the Port Stephens LGA. These are enforced through provisions in the Port Stephens Development Control Plan 2014 (DCP). Permits are available to clear existing vegetation based on an assessment of the potential impact to adjoining vegetation and the resultant habitat loss to the local biodiversity. The majority of the vegetation within the subject site has been cleared of mature trees as part of the landscaping of the original residential development. A large patch of mature canopy trees remains in the southwest corner of the site.

PCT 3995 is associated with the following TEC:

- Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions (Endangered, BC Act 2016).

Desktop analysis of the site using recent high-resolution satellite imagery indicated that this PCT is likely present within the subject site (Figure 2-3). A qualified ecologist conducted an on-ground site assessment to determine the presence and condition of native vegetation on site and if it confirms to the listed associated TEC above.

There was also a threatened Wallangarra White Gum (Endangered BC Act; Vulnerable EPBC Act) near the proposed Ferodale Road entrance of which protection measures would need to be taken in this area during the design and construction phases to prevent accidental damage or destruction to the threatened species. Refer to Section 10 – Tree Protection Plan for Tree 1 of the Arboricultural Impact Assessment (Assurance Trees -January 2025).

The area is also marked as an Area of Regional Koala Significance (ARKS) and has multiple koalas recorded nearby. The vegetation on site can be used for connectivity by koalas to travel between the Medowie State Conservation area to the north and the Tilligerry State Conservation area to the south. The site assessment

confirmed small native sections within all strata levels along the Abundance Road fence line and thickening out these areas will provide a safer travel route in the open paddock areas of the site.

It will be these three areas that require a protection and rehabilitation plan which will be the focus of this NVMP.

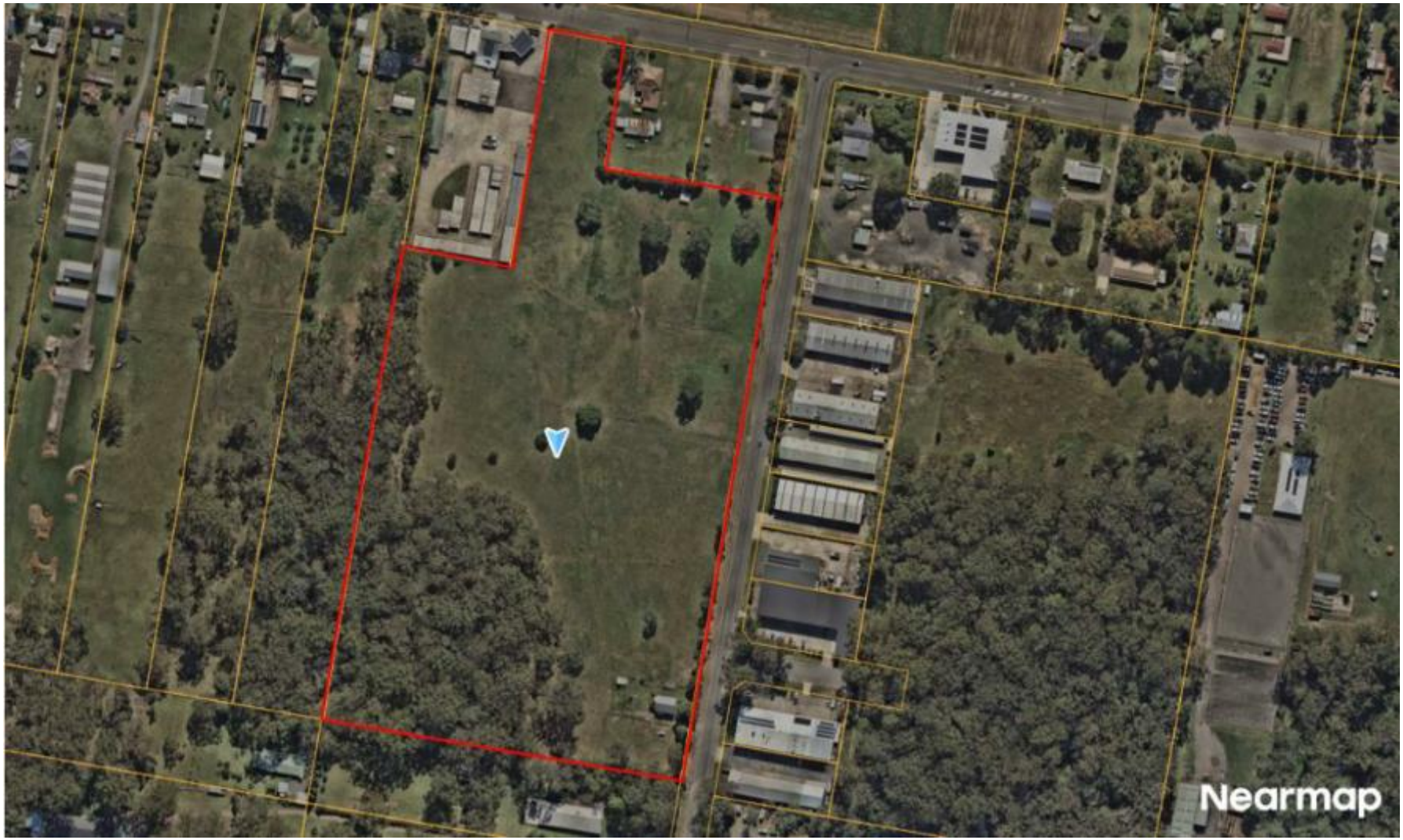

Figure 2-1 Aerial image of the site (Source: Nearmap)

Figure 2-2 Lot and DP boundary.

Figure 2-3 PCT mapping.

2.3 Biodiveristy Mapping

The Department of Climate Change, Energy, the Environment and Water under Part 7 of the BC Act prepare the Biodiversity Values Map. It identifies land with high biodiversity value that is particularly sensitive to impacts from development and clearing. The map forms part of the Biodiversity Offsets Scheme threshold, which is one of the triggers for determining whether the Biodiversity Offset Scheme applies to a clearing or development proposal.

The subject site contains areas mapped as possessing Biodiversity Values (BV) recorded as Core Habitat within an approved Comprehensive Koala Plan of Management (Koala SEPP). These coincide with the area of remnant native vegetation present in the south west corner of the site. The BV map can be seen in (Figure 2-4).

Figure 2-4 Biodiversity Values

2.4 Threatened Species Assessment

Analysis of the NSW OEH SEED mapping indicates there are several threatened species that have been previously recorded within close proximity to the site (Figure 2-5). These include:

- Koala (*Phascolarctos cinereus*) (Endangered - EPBC Act and BC Act);
- Grey-headed Flying Fox (*Pteropus poliocephalus*) (Vulnerable - EPBC Act and BC Act);
- Squirrel Glider (*Petaurus norfolcensis*) (Vulnerable – BC Act);
- Greater Broad-nosed Bat (*Scoteanax rueppellii*) (Vulnerable – BC Act); and
- Little Bent-winged Bat (*Miniopterus australis*) (Vulnerable – BC Act).

No threatened flora species have been recorded within or close to the site.

Figure 2-5 Threatened Species Map

2.5 BioNet Vegetation Classification

The NSW State Vegetation Type Map is a regional-scale map of NSW Plant Community Types. The map represents the current extent of each Plant Community Type (PCT), Vegetation Class and Vegetation Formation, across all tenures in NSW.

According to the NSW State Vegetation Type Mapping, one PCT is mapped as occurring within the subject site (Figure 2-3):

- PCT 3995 – Hunter Coast Paperbark-Swamp Mahogany Forest

Desktop analysis of the site using recent high-resolution satellite imagery indicated that this PCT is likely present within the subject site. A qualified ecologist conducted an on-ground site assessment to determine the presence and condition of native vegetation on site and if it conforms to the listed associated TECs above.

Additional PCTs occur in close proximity to, but not within the subject site. These include PCT 3436 – Hunter Coast Sandy Creekflat Low Paperbark Scrub.

PCT 3995 is associated with the following threatened Ecological Community:

- Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions which is listed as Endangered under the NSW BC Act. It is also associated with the Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland.

2.6 Soil landscape

Analysis of the NSW eSpade database indicates that the soil profile of the site is likely me-Medowie soils within the area. Soils are deep (>150 cm), well-drained red and yellow Structured Loams (Um4.13, Um6.13, Um6.12, Um6.41) on deeply weathered clay deposits and moderately deep to deep (60–>200 cm), well-drained Red Podzolic Soils (Dr2.21) and deep (200–>300 cm) Yellow Podzolic Soils (Dy3.21, Dy2.11), with some shallow well-drained Lithosols (Um1.43) on sandy/ pebbly deposits with clay lenses. This soil landscape is prone to seasonal waterlogging (localised lower slopes) and is a water erosion hazard. It has strongly acidic soils with low inherent fertility and high potential aluminium toxicity.

2.7 Waterways and Key Fish Habitat

One of the objectives of the FM Act is to conserve key fish habitats.

To achieve the objectives of the FM Act, DPI-Fisheries has identified 'Key Fish Habitats' – those aquatic habitats that are important to the sustainability of the recreational and commercial fishing industries, the maintenance of fish populations generally, and the survival and recovery of threatened aquatic species. Key Fish Habitat Mapping has been produced to provide guidance on the whereabouts of all Key Fish Habitat areas in NSW.

The subject site is not mapped as containing any Key Fish Habitat. Furthermore, the subject site is not in close proximity to any significant waterways or drainage areas or any waterfront land. The nearest waterbody is Grahamstown Lake, which is approximately 1 km west of the site (Figure 2-6). As such, there are no further provisions within the FM Act and WM Act that require consideration as part of the proposed activity.

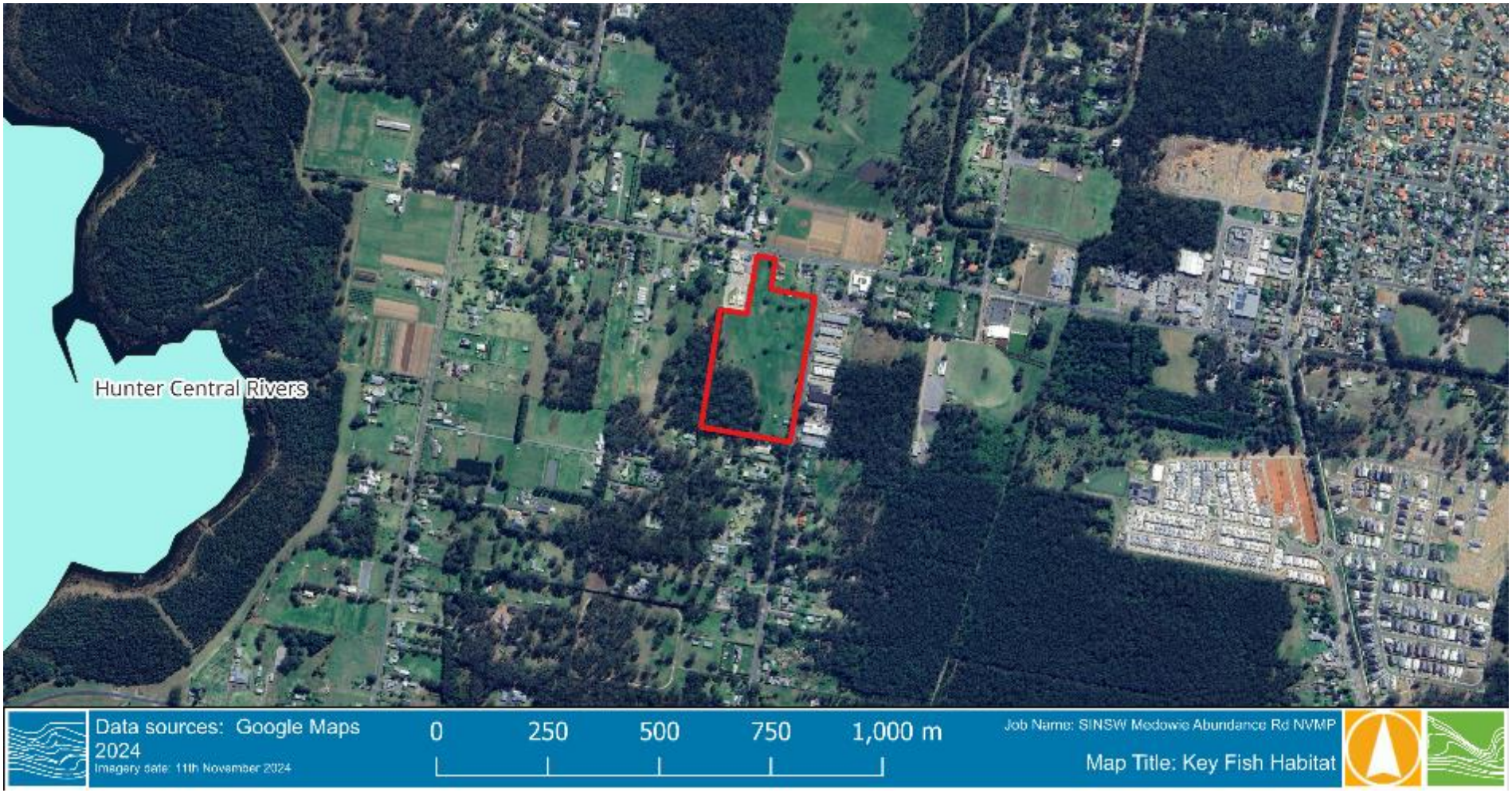

Figure 2-6 Key Fish Habitat

3 SITE ASSESSMENT

A site inspection was conducted on 15th-17th October 2024 by Ecologist Caroline Weller who was assisted by Ecologist Petra Arola who was preparing the Koala Plan of Management (KPoM) that will be submitted as a separate report. The weather conditions were rainy to clear days with a maximum temperature of 19.1°C-22.6°C and approximately 9mm of rain during the three-day period. The site inspection consisted of a random meander but also used floristic findings from vegetation plots undertaken for the Fauna and Flora Assessment which accompanies the Review of Environmental Factors (REF) for this site. Therefore, the entire vegetation on site was ground-truthed. Further, any areas of weed infestations, sitings of Weeds of National Significance (WONS), scoping for idealistic sites for photo monitoring, and opportunistic fauna sightings or potential habitat located was also undertaken for the site. Any areas of weed infestation would then be mapped and a section on weed management would be recommended to use as a guideline for control works to occur for the next five years of management following the construction period.

3.1 Vegetation condition

The vegetation found onsite is a majority of paddock exotic grass species with a high weedy value (approximately 75% weed coverage and 25% natives). Most of the natives were found in the forest section in the southwestern corner. While most of the weeds occur in the open paddock area, there were still some woody weed species such as Lantana (*Lantana camara*), African Olive (*Olea europaea* subsp. *cuspidata*), Privet (*Lingustrum sp*) and Camphor Laurel (*Cinnamomum camphora*) within the forested section. The edge of the future APZ zone for the school buildings stops at the forested zone and therefore no native tree clearing in this section is to be expected. Sections along the Abundance Road fence boundary also had native species of all stratum levels. Therefore, if revegetation occurs it is recommended to expand this section along the road to use as a screen/ windbreak. This would also be greatly beneficial in re-establishing the koala habitat and connectivity within the Port Stephens ARKS zones. A threatened established Wallangarra White Gum (*Eucalyptus scoparia*) was found on site along Ferodale Drive in the northeast corner and will need to have protection measures in place during the construction period.

The dominant native trees found on site include Swamp Mahogany (*Eucalyptus robusta*), Smooth-barked Apple (*Angophora costata*), and Blackbutt (*E. pilularis*). The dominant shrub layer includes Sweet Pittosporum (*Pittosporum undulatum*), Sydney Wattle (*Acacia longifolia*) and Prickly Beard-heath (*Leucopogon juniperinus*). The dominant native groundcover includes Kidney Weed (*Dichondra repens*), Blady Grass (*Imperata cylindrica)* and Right-angle Grass (*Entolasia stricta*). The majority of the natives were found within the dense forested section that was confirmed to be PCT 3995 - Hunter Coast Paperbark – Swamp Mahogany Forest.

A lot of the weeds occur in the proposed activity site which is primarily paddock areas with few planted natives in the activity envelope. Other weeds occur around the house that is still being used by the caretakers of the horses onsite that are being leased on agistment. The dominant exotic canopy trees found include Camphor Laurel (*Cinnamomum camphora*) and Large-leaved Privet (*Lingustrum lucidium*). The dominant shrub layer include African Olive (*Olea europaea subsp. cuspidata*), Lantana (*Lantana camara*) and Small-leaved Privet (*Lingustrum sinense*), Swan Plant (*Gomphocarpus fruticosus*) and Evergreen Ash (*Fraxinus griffithii*). Dominant ground cover includes species such as Pattersons Curse (*Echium plantagineum*), Brome Grass (*Bromus sp*), Fireweed (*Senecio madagascariensis*), Quaking Grass (*Briza sp*) and Rye Grass (*Lolium perenne).*

A comprehensive flora list of the vegetation occurring on the property at the time of this assessment is provided in Table 3-1 and Table 3-2

Table 3-1 Comprehensive Native species list

NATIVE SPECIES	
Scientific Name	**Common Name**
Canopy Species	
Angophora costata	Sydney Red Gum, Smooth-barked Apple
Eucalyptus sp.	Stringybark
Eucalyptus globoidea	White Stringybark
Eucalyptus haemastoma	Scribbly Gum
Eucalyptus parramattensis	Parramatta Red Gum
Eucalyptus pilularis	Blackbutt
Eucalyptus robusta	Swamp Mahogany
Eucalyptus scoparia	Wallangarra White Gum
Eucalyptus tereticornis	Forest Red Gum
Glochidion ferdinandi	Cheese Tree
Grevillea robusta	Silky Oak
Melia azedarach	White Cedar
Midstorey species	
Acacia longifolia	Wattle
Breynia oblongifolia	Coffee Bush
Bursaria spinosa	Blackthorn
Exocarpos cupressiformis	Cherry Ballart, Native Cherry
Hakea salicifolia	Willow-leaved Hakea
Leucopogon juniperinus	Prickly Beard-heath
Melaleuca bracteata	‘Revolution Gold’
Persoonia linearis	Narrow-leaved Geebung
Pittosporum undulatum	Native Daphne, Sweet Pittosporum
Climbers/Scramblers	
Eustrephus latifolius	Wombat Berry
Glycine sp.	Glycine
Glycine microphylla	Small-leaf glycine
Hardenbergia violacea	Purple Coral Pea, False Sarsaparilla
Hibbertia scandens	Climbing Guinea Flower
Kennedia rubicunda	Dusky Coral Pea
Parsonsia straminea	Monkey Rope, Common Silkpod
Passiflora sp	Native Passionfruit
Rubus parvifolius	Native Raspberry
Groundcover species	
Carex sp.	Sedge
Dianella caerulea	Blue Flax-lily
Dichondra repens	Kidney Weed

NATIVE SPECIES	
Entolasia stricta	Wiry Panic, Right-angle Grass
Geranium solanderi	Native Geranium
Hydrocotyle sp.	Pennywort
Imperata cylindrica	Blady Grass
Lobelia purpurescens	Pratia
Lomandra filiformis	Wattle Mat-rush
Lomandra longifolia	Spiny-headed Mat-rush
Microlaena stipoides	Weeping Grass
Microtis unifolia	Common Onion Orchid
Oplismenus imbecillis	Creeping Beard Grass, Basket Grass
Oxalis perennans	Grassland Wood-sorrel
Poa labillardierei	Poa
Pratia purpurascens	Pratia
Pteridium esculentum	Common Bracken
Viola hederacea	Ivy-leaved Violet

Table 3-2 Comprehensive exotic species list

WEED SPECIES		
Scientific Name	**Common Name**	**WONS WEED (*)**
Canopy Species		
Cinnamomum camphora	Camphor Laurel	
Fraxinus griffithii	Evergreen Ash	
Jacaranda mimosifolia	Jacaranda	
Lingustrum lucidium	Large-leaved Privet	
Pinus radiata	Radiata Pine	
Populus sp	Poplar	
Platanus x acerifolia	London Plane, Maple-leaved Plane	
Midstorey species		
Abelia grandifola	Abelia	
Brunfelsia pauciflora	Yesterday-Today-Tomorrow	
Gomphocarpus fruticosus	Cotton Ballon Bush, Swan Plant	
Lantana camara	Lantana	*
Lingustrum sinense	Small-leaved Privet	
Nerium oleander	Oleander	
Ochna serrulata	Mickey Mouse Plant	
Olea europaea subsp. cuspidata	African Olive	
Opuntia stricta	Common Pear, Cactus	*
Photinia × fraseri	Photinia ‘Red Robin’	
Phytolacca octandra	Inkweed	

WEED SPECIES		
Pyracantha angustifolia	Orange Firethorn	
Ricinus communis	Castor Oil Plant	
Sida rhombifolia	Paddy's Lucerne	
Solanum mauritianum	Tobacco bush	
Climbers/Scramblers		
Araujia sericifera	Moth Vine	
Cardiospermum grandiflorum	Balloon Vine	
Lonicera japonica	Japanese Honeysuckle	
Groundcover species		
Agapanthus praecox. subsp.orientalis	Agapanthus, Lily of the Nile	
Anagallis arvensis	Scarlet Pimpernel, Red Chickweed	
Andropogon virginicus	Whiskey Grass	
Bidens pilosa	Cobbler's Peg, Farmer's Fiend	
Briza maxima	Quaking Grass, Giant Shivery Grass	
Briza minor	Quaking Grass, Small Shivery Grass	
Bromus sp	Brome Grass	
Cirsium vulgare	*Spear Thistle*	
Hyparrhenia hirta	Coolatai grass	
Conyza bonariensis	Fleabane	
Cordyline sp	Cordyline	
Cynodon dactylon	Couch	
Echium plantagineum	Patterson's Curse	
Ehrharta calycina	Veldt Grass	
Hypochaeris radicata	Cat's ear. Flat Weed	
Lolium perenne	Ryegrass	
Medicago murex	Medick	
Oryzopsis sp	Rice Grass	
Paspalum dilatatum	Paspalum	
Pennisetum clandestinum	Kikuyu grass	
Plantago lanceolata	Ribwort	
Poa sp	Poa	
Ranunculus sp.	Buttercup	
Rumex sp.	Dock, Sorrel	
Senecio madagascariensis	Fireweed	*
Soliva sessilis	Bindyi, Lawn Burweed	
Sonchus oleraceus	Common Sow Thistle	
Sporobolus sp.	Rats Tail Grass	
Stellaria media	Chickweed	
Taraxacum officinale	Dandelion, Pissabed	

WEED SPECIES		
Trifolium sp.	Clover	
Trifolium repens	White Clover	
Urtica urens	Small Nettle	
Verbena bonariensis	Purpletop	
Veronica filiformis	Speedwell	
Vicia sativa	Vetch	

3.2 Miscellaneous

It was noted during the site assessment that there were zones that had signs of historical rubbish dumping. This was particularly concerning with two large rubbish zones being within the threatened ecological community (TEC) area. It is recommended that these will be removed, and that caution may be needed as there were some barrels with hazardous warning signs which could lead to soil contamination and pollution and may eventuate to native vegetation degradation. The fauna and flora site (Water Technology 2025) assessment undertaken in conjunction with the NVMP site assessment also encountered bandicoots which are natural diggers and that could further spread the soil contamination or affect the native species wellbeing. It is recommended that a professional may be needed in case there is asbestos which is common amongst historical dumping grounds.

Another note of concern particularly in an area of high koala population density is some discarded barbed wire around the house. This can cause harm to any animal travelling in the area and is also recommended for removal.

4 MITIGATION MEASURES

To rehabilitate the site after the expected large-scale disturbances in building an entire new school, the following management strategies should be implemented these strategies to ensure the disturbance will be managed, so as to not cause any significant impact. The below mitigations measures and recommendations are for the entire site and any disturbances within the activity zone be offset to the management of other native vegetated areas such as the PCT 3995 - Hunter Coast Paperbark-Swamp Mahogany Forest zone in the southwest which is classified as a TEC. It is typical for a NVMP to be monitored over a 5-year period and then updated if needed which is recommended for this case since there in a TEC present on site.

4.1 Weed Management

Regular removal of non-native flora species using manual techniques should be undertaken to prevent exotic flora from establishing within the management zones. This should first be undertaken for all weeds post-construction. Following this there should be regular monitoring of the establishing vegetation through monthly inspections. Weed control requires the destruction of all parts of any plant (flowers, seeds, stems and roots) with disposal in Council's regular waste collection (organic materials). It is recommended that weed removal to be conducted by hand around the protected vegetation found on site by hand by professional bush regenerators.

Weed management is usually broken down into three categories.

4.1.1 Vines

These include weed species such as Japanese Honeysuckle (*Lonicera japonica*), Moth Vine (*Araujia sericifera*), Balloon Vine (*Cardiospermum grandiflorum*) which occur on site. They are the highest priority because once they climb up into the canopy, they can smother and kill an entire tree. Control methods include skirting the tree, which involves cutting the vines at chest height and dragging the lower section to the ground and cutting it again at 10cm above ground level. The side of the vine is then scraped, and herbicide is then carefully applied. Vines larger than the size of your thumb may require multiple scrapes on either side. Vines growing on the ground can be wound up into a ball until it reaches the base (where it is harder to pull up) and then apply the scrape and paste method. Non-chemical methods can be used by skirting the tree and then tracing the vine back to the base and digging up the roots. Either way, it is imperative that the remains are disposed of appropriately or hung off the ground to dry. If they are left on the ground, they may be able to take root again and re-establish.

4.1.2 Woody weeds

Woody weeds include Privet (*Ligustrum sp*), Lantana (*Lantana camara*), Camphor Laurel (*Cinnamomum camphora*), African Olive (*Olea europaea subsp. cuspidata)* and Evergreen Ash (*Fraxinus griffithii*) dominating the site. These should be pulled out of the ground at the early sapling stage. If plants cannot be pulled from the ground, then the chemical cut and paint method should be used. The plant is to be cut as close to the ground as possible with secateurs or loppers and then herbicide is immediately applied. If any regrowth from the trees cut down occurs, then a drill method may be needed. Multiple holes at an angle of 45-degrees are created around the circumference of the tree with herbicide applied as soon as possible. It is not recommended to hand dig out the larger saplings as this may create an erosion issue.

4.1.3 Herbaceous

These consist of your typical annual/herb weeds such as Thistles (*Cirsium sp*), Patterson's Curse (*Echium plantagineum*), Purple top (*Verbena bonariensis*) and Fireweed (*Senecio madagascariensis*). They generally have seeds that spread by the thousands in puffball-like structures during the flowering period and are generally spread by wind. These are more easily controlled in the early life stages before they flower and can

generally be mown or pulled / dug out of the ground. Smothering or mulching can also control these types of weeds as they require direct sunlight and do not survive in damp, dark environments. Other herbaceous weeds such as grasses are spread by rhizomes where they stretch out and sprout new roots into the ground. This can also be controlled by regular mowing.

4.1.4 Notes on the selective use of herbicide

Given the extensive area, it may be required to adopt broad acre herbicide application as a treatment (i.e., backpack spray). This should be undertaken during the school holidays to prevent students walking over the herbicide before it has a chance to dry. All proper Personal Protective Equipment should be worn by the qualified user and the herbicide manual recommendations for preparing the herbicide such as the correct quantities and ventilation should be followed. Selective manual chemical application may be appropriate for the vines and larger saplings where manual removal of weeds in the early stage of growth has proven to be complicated. Chemical use should be used minimally and only for selective individual plants, to avoid the chemical absorbing into the soil and down into the TEC mapped on site.

Weed management should occur every month throughout the duration of the five-year NVMP. Refer to the planning schedule in Table 6-1 for more information.

It is recommended that selective manual removal be used within the TEC area as this will decrease the chances of accidental destruction by spray drift etc of the nearby natives.

4.2 Bushfire APZ establishment

It is expected in most new developments that an Asset Protection Zone (APZ) would need to be established to prevent bushfire damage and allow the firefighters a safe access zone to contain the bushfire if the need arises. APZ establishment would include removing the shrub layer at the bases of trees, creating a canopy gap of a minimum of 2m and removing the lower branches up to 3m from the ground, while maintaining a consistent mowing regime.

The sports field and basketball courts will act as a firebreak barrier between the buildings and the bushland where the majority of vegetation will need to be cleared. This is also referred to as the Inner Protection Zone (IPZ). The Outer Protection Zone (OPZ) generally requires vegetation management such as removing shrubs growing directly underneath canopy trees and the removal of lower branches up to 3m from the ground. This will increase the gap for the fire to each into the canopy of the trees and get out of hand. There may also need to have a 2m canopy gap between the treetops and large vegetation patches such as the TEC zone (NSW Rural Fire Services -Appendix 4 *Planning for Bushfire Protection* 2019). Maintaining these gaps will also mitigate the risk of bushfire impacting the local koala population. Understorey vegetation such as grasses can be controlled through a mowing regime.

4.3 Revegetation

Revegetation generally occurs to offset disturbance made during the construction period but in this case, there is minimal natives to be removed, and any natives found within the activity space such as the Silky Oak (*Grevillea robusta*) and White Cedar (*Melia azedarach*) were likely to be planted. The removal of these trees may not be enough to trigger mitigation measures alone, but it is also expected that the activities will consist of extensive soil disturbance which will require offsetting. Revegetation species are ideally from the same PCT found on site or of local providence. Some councils also provide free tube stock handouts for certain properties that are involved in environmental initiatives such as the Land for Wildlife scheme.

It is recommended that revegetation to occur along the school fence line on Abundance Road and planted approximately 10-20m apart. There are already approximately 16 proposed trees allocated to this area in the site plans, it is recommended that a minimum of 10 of the proposed tree plantings be of koala preferred

species. Other benefits of revegetating this area would include shade and privacy for the students. The revegetation zone is out of the APZ zone and therefore will not impact the bushfire impact or APZ maintenance.

4.3.1 Source of planting stock

All plants should be sourced from local native plant nurseries. At the time of writing this report, the recommended Koala Food Tree plants of *Eucalyptus robusta* and *Eucalyptus tereticornis* were available from Newcastle Wildflower Garden Nursery in tube stock for the price of $6.95 each. However, it is recommended to ring prior to the planting day to confirm this is still correct.

Where plants are not available, seed should be collected from the local area such as the mapped PCT zone in accordance with seed collection guidelines by qualified ecologists and propagated on site before transplanting into prepared areas. Substitution with similar native species may occur where there will be a lengthy delay in obtaining those species listed above.

4.3.2 Planting methods

All plants should be either tube stock (groundcover plants) or minimum 10cm (4 inch) pot-sized for the shrubs and small trees.

The soil is expected to be highly disturbed from the installation of the new school buildings meaning that additional deep ripping may not be required.

An area surrounding the planting site should be completely removed of all exotic plants and mulched to a depth of 10cm. To prevent unnecessary plant mortality, mulch should not be placed around the stems of any plants. Jute matting can be placed over the dense paddock grasses, but any other weeds taller than 10cm may need to be removed for maximum efficiency.

All plants should be watered at the time of the planting. Follow up watering is only required if a dry period is experienced after the initial planting.

Due to the extensive presence of rabbits and kangaroos found during the site visit, installation of individual tree guards surrounding the shrubs and small trees will provide protection and improve likelihood of establishment. They should be tall enough so the kangaroos will not be able to reach over the top. Wire meshing that is bent inwardly may be suitable for this.

4.3.3 Post-planting management

Weed monitoring and removal is to be conducted monthly to ensure competition with the native plants is minimised. For the paddock grasses, a consistent mowing regime will reduce the spread of the exotic grasses and WONS such as Fireweed. If there is a high mortality within the revegetation works, follow up planting should be conducted in the second year to maintain adequate vegetation coverage of the Vegetation Regeneration Zone (VRZ). Species selection should be determined based on the success of the initial planting; as well as including those species growing successfully in the adjoining TEC zone.

4.4 Rubbish Removal

Care should be taken when removing historical waste as there me be hazardous contaminates such as asbestos and other chemicals. Care should also be used as these areas can also be opportunistically used for reptile species such as snakes. If in doubt seek a professional and always ensure the correct PPE is worn such as gloves, steel-capped boots etc. Rubbish removal should be conducted by professionals in case there may be asbestos and signs of barrels of chemicals.

4.5 4.5 Protection of threatened vegetation found on site

This will include individual species such as the Wallangarra White Gum (*Eucalyptus scoparia*) which is listed as Endangered under the NSW BC Act and Vulnerable under the federal EPBC Act and the PCT 3995 which is listed as Endangered under the Biodiversity Conservation Act 2016.

Fencing should be considered to protect the *E. scoparia* with a qualified arborist present when working around this tree and setting up the protective fencing to ensure it is undertaken correctly and making sure the root zone is also being protected.

4.6 Monitoring and reporting

It is recommended to establish photo monitoring to assess the condition of vegetation post activity works. Indications of degradation may include increased weed establishment. These photo points can also help determine if any of the revegetation works will need supplementary plantings across the five-year duration.

4.6.1 Photo points

During the site assessment, seven reference point locations within the rehabilitation site were identified as seen in **Figure 4-1**. The GPS coordinates are listed in Table 4-1. It was intentional to use easily identified landmarks such as the corner points for reference because conditions may change during the construction process.

Table 4-1 Coordinates for the photo monitoring points.

Name of photo point	Co-ordinates
Photo Point 1 - Near Petrol Station	-32.740 789, 151.854 124
Photo Point 2 – North section near *E. scoparia*	-32.739 698, 151.855 291
Photo Point 3 – North east corner on Abundance Road	-32.740 508, 151.856 195
Photo Point 4 – South east corner below house	-3a2.743 362, 151.855 629
Photo point 5 - Bottom south east PCT/APZ	-32.743 245, 151.854 824
Photo point 6 – South west corner in PCT zone	-32.743060, 151.853 623
Photo point 7 – South west section in dogleg area of PCT zone	-32.741 854, 151.853 902

Monitoring is recommended to be undertaken regularly throughout the period of operation of this NVMP to ensure that:

- Erosion and sediment controls are in place and effective until sufficient rehabilitation is achieved (i.e., 70% cover of exposed ground);

- The species density for each zone is achieved with replanting along the fence line at 20m apart (replanting may be necessary if this is not achieved); and
- Non-native species do not establish within the management zones, or within TEC zone.
- This monitoring should be conducted at a minimum every six months and precede any required weed management.

Photographs showing before and after images to illustrate the extent of the rehabilitation work should be taken after the completion of the rehabilitation works then annually to document changes in vegetation condition and structure. These can be taken at the suggested photo points with the coordinates seen in Figure 6 1. We have provided photos for the photo points suggested (Appendix B).

4.6.2 Final Report

A final report should be prepared for Department of Education at the end of the five-year period. This report should list:

- The number and species of all plants planted in the revegetation process;
- The extent of weed management required, and treatments applied;
- Photographs taken annually from the reference points to document the changes in the condition and structure of the rehabilitation works; and
- Any issues associated with the rehabilitation works that may affect the future survival of the vegetation.

Figure 4-1 Photo Monitoring Points

5 MANAGEMENT ZONES

The management zones have been outlined in the Vegetation Management Map (Figure 5-1). They mostly consist of the areas of primary focus such as around the threatened tree species found on site, the mapped TEC zone and the bushfire APZ area. Other areas that also need to be considered are areas around the old house, the open paddock areas and the landscaped areas around the proposed school buildings.

5.1 Around the Threatened Wallangarra White Gum (*Eucalyptus scoparia*)

This area is located to the north of the site located off Ferodale Road. This area can be seen as the light blue area Zone 1 in the Vegetation Management Map (Figure 5-1). The trunk was found to have scratch marks which is likely to be from a possum due to the shallow indentation marks that were close together. It is expected that this zone would have the highest chance of being impacted by being located within the activity footprint and along the road edge and main access point to the north of the site.

5.1.1 Weed management

There is a large weed infestation of Lantana and Japanese Honeysuckle (*Lonicera japonica*) underneath the Wallangarra White Gum that will be recommended to be removed by hand. Other weeds in this area include African Olive and Tobacco Bush. It should be noted that Lantana is considered a Weed of National Significance (WoNs) and should be treated as a priority. Refer to the methods outlined in Section 4.1 for the treatment methods for these weeds.

5.2 Within the TEC mapped zone

Fencing should be considered to prevent contamination during the construction period. This will prevent further rubbish and weed seed spreading into the TEC zone. However, the fencing should be koala friendly (see associated KPoM). This area is mapped as red area Zone 2 in the Vegetation Management Map (Figure 5-1).

5.2.1 Weed management

There are sporadic patches of Lantana throughout the entire zone. Considering that Lantana is a WoNS weed and that it is within a TEC then this should be treated as a high priority. Other weeds in this area include Small-leaved Privet seedlings, African Olive, Ochna, Agapanthus and a large Camphor Laurel tree. Refer to the methods outlined in Section 4.1 for the treatment methods for these weeds.

5.2.2 Rubbish removal zones

There were two large historical rubbish dump piles found in this area one of which had multiple barrels with hazardous warning signs. Therefore, it is recommended that the rubbish be removed by professionals for safety reasons. Another reason for a professional removalist is because there may be a chance of asbestos material though no obvious signs were identified during the inspection. Caution should also be made during removal as these areas are also potential habitat for reptile species such as snakes.

5.3 Within the bushfire APZ Area

This area is the 16m orange buffer zone seen in Figure 5-2 which is from the bushfire assessment report (Eco Logical Nov 2023). It is also referred to as the orange zone 3 in the Vegetation Management Map (Figure 5-1). The zone does not need much to establish as the majority is within the open paddock areas. The area also includes the existing dwelling located in the south east corner of site which is planned for demolition along with the small shed nearby. The temporary greenhouse was already removed at the time of the site inspection.

5.3.1 APZ establishment

The initial establishment will be the most labour intensive whereas the following years maintenance works will be essentially keeping down the regrowth. There is also the proposed road access for the firefighters which would also act as a vegetation break.

5.3.2 Around the house

The house is proposed for demolition, and it would likely be during this stage that the exotic weeds around the house and rubbish would also be removed. The nearby shed will also be included in removal. It will be the established driveway that would be the main access point for the firefighters.

5.3.2.1 Weed management

Weeds in this zone include Evergreen Ash which is a large hedge along Abundance Road. It is recommended that these would be removed and replaced with Preferred Koala Food Trees to enhance the connectivity for the koala movement. Other woody weeds around the house includes Cordyline (*Cordyline sp*), Abelia (*Abelia grandifola*), Yesterday Today Tomorrow (*Brunfelsia pauciflora*). Herbaceous weeds found in this area include Purpletop (*Verbena bonariensis*), Thistles (*Cirsium vulgare*), Dock (*Rumex sp*), Agapanthus (*Agapanthus praecox. subsp.orientalis*) and Buttercup (*Ranunculus sp).* Refer to the methods outlined in Section 4.1 for the treatment methods for these weeds.

5.4 Open paddock area

This area is currently holding horses on adjustment which will be removed prior to construction. This can be seen in the Zone 4 purple area seen in Figure 5-1. The internal fences and the small shed in the northern paddock will also be removed. It is this area that will be the most disturbed during the construction phase. There are a few native Silky Oak (*Grevillea robusta*) trees that have likely been planted as they are not native to the Sydney region.

5.4.1 Weed management

The weeds in this zone are primarily paddock weeds including Patterson's Curse (*Echium plantagineum*), Fireweed (*Senecio madagascariensis*), Coolatai Grass (*Hyparrhenia hirta*), Brome Grass (*Bromus sp*) and Quaking Grass (*Briza sp*). Fireweed is considered a WoNS and should be prioritised for treatment. Refer to the methods outlined in Section 4.1 for the treatment methods for these weeds.

5.4.2 Area to be revegetated

It is recommended that revegetation occurs along the Abundance Road fence line to enhance the connectivity with the area. Planted species should include Preferred Koala Food Trees and species within the PCT 3995 indicative list. These would include Eucalyptus species such as Swamp Mahogany (*Eucalyptus robusta)* and Forest Red Gum (*Eucalyptus tereticornis)*. Considering the entire site is classified as having a high bush fire rating, the plantings should not be dense and spread every 20 m. The area to be revegetated would be within the school fence line outside of the APZ zone. This can be seen as part of Zone 4 on Vegetation Management Plan (Figure 5-1)

5.4.3 Proposed Landscaping around the school buildings

Generally small areas of shrubs and groundcovers are planted around the school buildings for aesthetic values. It is recommended that this garden bed be filled with species on the PCT list attached in the Appendix. Alternatively, any natives would be suitable instead of exotics so that there is a reduced chance of weed seed being spread into the TEC found on site.

Figure 5-1 Vegetation Management Plan

Figure 5-2 Bushfire Asset Protection Zone (Source Eco Logical Nov 2023)

6 WORKS SCHEDULE

The NVMP shall operate for the duration period of five years. This period is adequate to allow time for:

- The establishment of the APZ area;
- Native regeneration to occur within the VRZ;
- Assisted replanting to be established; and
- Monitoring to be effective in preventing exotic species from encroaching upon the TEC.

The proposed works are scheduled according to the chart below (Table 6-1).

Table 6-1 Schedule of the Native Vegetation Management Plan for the 5-year timeframe

	Year 1				Year 2				Year 3				Year 4				Year 5			
Months (abbreviated)	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND
Install erosion/ weed suppressant controls	■																			
Revegetation works within management zones		■	■	■																
Establishment of APZ	■																			
Maintenance of APZ			■				■				■				■				■	
Weed management	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Replanting if required						■								■						
Monitoring and reporting	■		■		■		■		■		■		■		■		■		■	
Final Report																				■

JFM = January, February, March; AMJ = April, May, June; JAS = July, August, September; OND = October, November, December

6.1 Budget

An indicative budget for the proposed revegetation works can be seen in Table 6-2. Prices were based off the Newcastle Wildflower Garden Nursery stock list for the plants and Arborgreen stock list for the stakes and matting. Note prices for labour are an approximation and a quote from a qualified bush regeneration company may be needed closer to the time of works for a more accurate pricing.

Table 6-2 Indicative Budget for a 5-year NVMP.

Description	No.	Rate	Cost
Weed management			
Labour	20 days	$300/day	$6,000
APZ establishment and maintenance			
Labour	5 days	$300/day	$1,500
Zone 4			
Trees	10	$6.95	$69.50
Labour	0.5 days	$300/day	$150
Guards with stake included	30	$3	$90
Allowance for replanting (including labour)			$300
Monitoring and reporting			$24,000
Total			**$32,109.50**

7 REFERENCES

Port Stephens (2014) Port Stephens Council Development Control Plan. Available at: https://www.portstephens.nsw.gov.au/development/strategies-and-planning-guides/development-control-plan

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SEED Map (2024) NSW Government. Accessible at: https://geo.seed.nsw.gov.au/Public_Viewer/index.html?viewer=Public_Viewer&locale=en-AU

ESpade soil landscape profile tool. Accessible at: https://www.environment.nsw.gov.au/eSpade2Webapp/

Arborgreen (Accessed 10/12/2024) https://www.arborgreen.com.au/

Newcastle Wildflower Garden Nursery stock list (Accessed 10/12/2024) https://www.newcastlewildflower.com.au/stock-list

GYDE List of requirements for Medowie High School SSDA Consultant Plans/ reports (2024). Site Plans

EcoLogical Australia (ELA) (2025). Bushfire Protection Assessment- New High School for Medowie. Prepared for School Infrastructure NSW (SINSW) on behalf of the NSW Department of Education (DoE)

Assurance Trees (January 2025). New High School for Medowie- Arboricultural Impact Assessment

APPENDIX A- INDICATIVE SPECIES LIST FOR PCT 3995- HUNTER COAST PAPERBARK – SWAMP MAHOGANY FOREST

PCT 3995- Hunter Coast Paperbark – Swamp Mahogany Forest TEC- YES/ NO

Indicative Species List

TREE SPECIES	FERN SPECIES	FORB SPECIES
Angophora costata	***Gleichenia dicarpa***	*Centella asiatica*
Angophora inopina	*Hypolepis muelleri*	*Centella cordifolia*
Banksia integrifolia	***Pteridium esculentum***	*Commelina cyanea*
Banksia serrata	***Telmatoblechnum indicum***	***Dianella caerulea***
Casuarina glauca	GRASS & GRASSLIKE SPECIES	*Dianella longifolia*
Corymbia maculata	*Baloskion pallens*	***Gonocarpus micranthus***
Eucalyptus robusta	*Baloskion tetraphyllum*	*Gonocarpus tetragynus*
Eucalyptus tereticornis	*Chorizandra sphaerocephala*	*Goodenia bellidifolia*
Eucalyptus x kirtoniana	*Empodisma minus*	*Goodenia heterophylla*
Glochidion ferdinandi	***Entolasia marginata***	*Goodenia paniculata*
Melaleuca quinquenervia	*Entolasia stricta*	***Liparophyllum exaltatum***
SHRUB SPECIES	*Ficinia nodosa*	*Pomax umbellata*
Acacia irrorata	***Gahnia clarkei***	*Viola hederacea*
Acacia longifolia	*Hemarthria uncinata*	OTHER SPECIES/CLIMBERS
Acacia ulicifolia	*Imperata cylindrica*	*Calochlaena dubia*
Breynia oblongifolia	*Isolepis inundata*	***Cassytha glabella***
Dodonaea triquetra	*Juncus continuus*	*Cayratia clematidea*
Leptospermum juniperinum	*Lepidosperma forsythii*	*Clematis aristata*
Leptospermum polygalifolium	*Lepidosperma longitudinale*	*Eustrephus latifolius*
Melaleuca ericifolia	*Lomandra longifolia*	*Geitonoplesium cymosum*
Melaleuca linariifolia	*Machaerina articulata*	*Glycine clandestina*
Melaleuca sieberi	*Machaerina juncea*	*Hibbertia scandens*
Monotoca elliptica	*Microlaena stipoides*	***Kennedia rubicunda***
Polyscias sambucifolia	*Oplismenus imbecillis*	*Pandorea pandorana subsp. pandorana*
Pultenaea retusa	*Paspalidium distans*	***Parsonsia straminea***
Pultenaea villosa	***Pseudoraphis paradoxa***	*Polymeria calycina*
Viminaria juncea	*Schoenus brevifolius*	*Stephania japonica var. discolor*

BOLD= Dominant species

APPENDIX B- MONITORING PHOTOS

Figure 7-1 Near Petrol Station

Figure 7-2 Top Section near E. scoparia

Figure 7-3 Top east corner on Abundance Road

Figure 7-4 South east corner below house

Figure 7-5 Bottom southeast PCT/APZ area.

Figure 7-6 South west Section in dogleg area of PCT zone.

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