Moriah College

Vegetation Management Plan

Moriah College

19 December 2024

Final

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Report No. 19139RP3

The preparation of this report has been in accordance with the brief provided by the Client and has relied upon the data and results collected at or under the times and conditions specified in the report. All findings, conclusions or commendations contained within the report are based only on the aforementioned circumstances. The report has been prepared for use by the Client and no responsibility for its use by other parties is accepted by Cumberland Ecology.

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1. Introduction

1.1. Introduction

Cumberland Ecology has been commissioned by Moriah College (the 'client') to prepare a revised Vegetation Management Plan (VMP) to satisfy consent conditions for the approved State Significant Development (SSD) application for Moriah College Queens Park Campus (hereafter referred to as the 'project'). The project is located within the Queens Park Campus (Lot 22 DP 879582, Lot 1 DP 701512, Lot 3 DP 701512), and is hereafter referred to as the 'subject land'. The area within the subject land that will be disturbed by the development is referred to as the 'development site' (see Figure 1).

This VMP has been prepared with particular reference to areas within and immediately adjoining the development site hereafter referred to as the 'VMP Area' (Figure 1). The VMP Area has been set aside for conservation of the ecological community Eastern Suburbs Banksia Scrub in the Sydney Basin Bioregion (ESBS), which is listed as a Critically Endangered Ecological Community (CEEC) under the NSW *Biodiversity Conservation Act 2016* (BC Act) and as an Endangered Ecological Community (EEC) under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

1.1.1. Background

A Biodiversity Development Assessment Report (BDAR) was prepared by Cumberland Ecology (ref. 19139RP1) to support a SSD for the project in February 2020. Following the submission of the BDAR, a VMP was also required to specify the management of the retained native vegetation within the VMP Area. It is understood that the SSD (SSD-10352) has received approval subject to a number of conditions of consent relating to biodiversity and the preparation of this VMP. These conditions have been reproduced below:

Part D Prior to the issue of a Construction Certificate

Vegetation Management Plan

D7. Prior to the commencement of construction, the Applicant must prepare a revised Vegetation Management Plan to the satisfaction of the Planning Secretary. The plan must:

(a) be prepared in consultation with Council and EES Group [Environment and Heritage Group (EHG)];

(b) include procedures to demonstrate how plants and seeds of local provenance are to be obtained and used in the VMP Area;

(c) be consistent with, and not compromise the objectives and methods of the Centennial Parklands and York Road Eastern Suburbs Banksia Scrub Vegetation Management Plan, prepared by WSP on behalf of the CPMP Trust dated November 2018;

(d) ensure any provisions are consistent with the conditions of previous development approvals issued by the commonwealth, NSW State government and Council that relate to protection and conservation of ESBS on the site and on adjoining Lot 23 in DP 879582, including (but not limited to) the following development consents and approvals:

(i) LD 282/00 issued by Waverley Council on 22 May 2001 [consent conditions reproduced in Appendix A];

(ii) EPBC 2002/575 issued by the Commonwealth Government on 25 October 2002 [consent conditions reproduced in Appendix A]*;*

(iii) EPBC 2004/1676 issued by the Commonwealth Government on 20 August 2004 [consent conditions reproduced in Appendix A];

(iv) DA 446-10-2003 issued by the Minister for Infrastructure and Planning on 21 October 2004 [consent conditions reproduced in Appendix A].

(e) include conservation management measures relating to the endangered Maroubra Woodland Snail (Meridolum maryae).

Part G Prior to the issue of Occupation / Commencement of Operation

Vegetation Management Plan Area

G29. Prior to the commencement of operation, revegetation of the VMP area must be undertaken by a suitably qualified bush regenerator(s) with experience in restoring and maintaining the ESBS vegetation community, in accordance with the VMP approved under condition D7.

Part H Post Occupation

Vegetation Management Plan Area

H11. The VMP area must be managed, maintained and monitored by a suitably qualified bush regenerator with experience in restoring and maintaining ESBS vegetation community in perpetuity, in accordance with the VMP approved under condition D7.

Consent condition D7.C states that a VMP already exists for the native vegetation immediately to the south-west of the subject land in Banksia Reserve (Lot 23 DP879582). This VMP was prepared by WSP on behalf of the Centennial Park and Moore Park Trust in 2018 (CPaMPT, (2018)) (the 'CPaMPT VMP') for the remnant patches of Eastern Suburbs Banksia Scrub within Centennial Park, Queens Park and York Road. The CPaMPT VMP aims to direct best practise restoration works over a ten-year period (2018-2028). Particular focus was given to sections of the report detailing management actions for the 'York Road remnant.'

This VMP has been prepared for the additional area of ESBS (Zone 1) within the Moriah College campus grounds as well as a small buffer area (Zone 2) to be re-established as ESBS within land that currently comprises cleared land and playing fields (Figure 2), collectively referred to as the VMP Area. The objective of this VMP is to link to, be consistent with and complement measures for the management of ESBS that have been prescribed in the CPaMPT VMP, due to the proximity of the VMP Area to already managed ESBS in Banksia Reserve. The management actions prescribed as part of this VMP are also consistent with the previous consent conditions listed above. The areas of existing ESBS within the VMP Area are not currently managed by the CPaMPT VMP for York Road and as such, this VMP aims to satisfy the remainder of the relevant consent criteria listed above.

1.2. Purpose

The purpose of this VMP is to provide guidelines for the revegetation, regeneration and management of vegetation associated with the project, within the VMP Area. Specifically, the VMP provides guidelines in order to:

- Revegetate and regenerate areas of the VMP Area within the newly re-established buffer area using appropriate bushland regeneration techniques and weed control techniques;
- Manage the clearing of vegetation associated with the development in order to minimise indirect impacts on the VMP Area; and
- Manage other indirect impacts on retained native vegetation associated with the project, as identified in the BDAR (Cumberland Ecology 2020, 19139RP1).
- Be consistent with, and not compromise the objectives of the CPaMPT VMP or any other relevant condition of consent from the previous approvals as listed in *Section 1.1.1*, above.

The aims of the VMP are as follows:

- To improve the biodiversity values of the VMP Area;
- To re-establish native vegetation that is representative of ESBS in the VMP Area;
- To establish and enhance habitat for local fauna species with the potential to occur or known to occur within the VMP Area;
- To enhance the ecological character of the VMP Area by removal and routine control of weed and exotic species present; and
- Minimise indirect impacts of the development on the VMP Area.

In order to accomplish the aims of the VMP, four separate management plans have been developed that apply to different areas of the subject land depending on the works to be undertaken. The three separate management plans and the areas they apply to are as follows:

- Vegetation Clearing Plan – applies to all areas of the subject land to be cleared for development (see Chapter 5);
- Weed Management Plan – applies to the VMP Area (see Chapter 6);
- Revegetation Plan – applies to all areas to be replanted with ESBS species within the VMP Area (see Chapter 4 and Chapter 7); and
- Maroubra Woodland Snail Management Plan – applies to the VMP Area (Chapter 8).

1.3. Description of the Subject Land and VMP Area

The subject land is wholly located within the Waverley Local Government Area (LGA); approximately 5 km from the Sydney Central Business District (CBD).

Moriah College is an independent Jewish School established in 1943. The Moriah College campus is bound by Queens Park Road to the north, Baronga Avenue to the east, and York Road to the south and west. Moriah College Queens Park Campus includes the following addresses (See Figure 1):

- 101 York Road, Queens Park/Lot 22 DP 879582 - approximate area of 4,830m². The lot contains the ELC buildings and car parking.
- 1 Queens Park Road, Queens Park/Lot 1 DP 701512 - approximate area of 1.45 hectares. The lot comprises the junior school campus
- 3 Queens Park Road, Queens Park/Lot 3 DP 701512 - approximate area of 2.6 hectares. The lot comprises the senior school campus.

The development site comprises the area of land directly impacted by the project as shown in Figure 1. Areas of vegetation within the development site will be cleared of vegetation.

A conservation area (Banksia Reserve) is located immediately south-west of the subject land and adjacent to the development footprint, comprising Lot 23 DP879582. This conservation area contains an intact stand of ESBS that will not be directly impacted by the project and is currently managed in accordance with the CPaMPT VMP.

The VMP Area is situated along the south western boundary of the subject land and includes the extant ESBS vegetation that will be retained within the subject land and the buffer zone that will be re-established along the boundary to Banksia Reserve (Figure 1). A metal palisade school boundary fence runs through the VMP Area was installed in late 2020 after a person was caught climbing the Centennial Park boundary fence attempting to enter the College grounds. Moriah College has sensitive security requirements and needed to install the fence to securely manage their boundary with the Centennial Parklands managed land to the southwest. The fence was installed under exempt development pursuant to Section 3.16, 3.39(3) and Schedule 5 (Fences other than security fences or fences covered by the Swimming Pools Act 1992) of the State Environmental Planning Policy – Transport & infrastructure.

The fence is located within Moriah College lands to separate it from the Centennial Parklands fence which is located on the boundary between the two lots. The palisade fence has access gates which will enable vegetation management throughout the VMP Area (Figure 1).

The VMP Area will be managed for an initial period of 5 years according to the specifications outlined in this VMP, with the requirement to re-assess the VMP Area following the final inspection prescribed in this VMP and prepare an updated VMP to be implemented in perpetuity.

1.4. Relevant Legislation

Legislation relevant to this VMP includes:

- *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act);
- *NSW Environmental Planning and Assessment Act 1979* (EP&A Act);
- NSW *Biosecurity Act 2015* (Biosecurity Act);
- *NSW Pesticides Act 1999*; and
- *NSW Biodiversity Conservation Act 2016* (BC Act).

1.4.1. State and Local Government Planning Instruments

Planning Instruments that relate to the development include:

- State Environmental Planning Policy 19 – Bushland in Urban Areas (SEPP 19); and
- Waverly Development Control Plan (2012).

1.4.1.1. SEPP 19 – Bushland in Urban Areas

SEPP 19 is designed to protect bushland in public open space zones and reservations, and to ensure that bush preservation is given a high priority when local environmental plans for urban development are prepared. SEPP 19 applies to several areas or part areas, including Waverly Local Government Area (LGA) (listed in Schedule 1 as Waverly).

1.4.1.2. Waverly Development Control Plan 2012

Waverly DCP 2012 Part B, Section 3.2.1 - development in or near areas of biodiversity significance applies to the project as the VMP Area as has been mapped as 'Biodiversity' on the Terrestrial Biodiversity Map in the Waverly LEP 2012 2012 (Bio_001).

Part B, Section 3.2.1 of the Waverly DCP 2012 has the overall objectives:

- *to retain, protect and enhance remnant native vegetation for local wildlife and benefits to the community; and*
- *to protect and promote the recovery of threatened species, populations, and endangered ecological communities*.

The following controls are included:

a. *A minimum of 90% of the proposed plantings (not including turfed areas) are to be indigenous or local native plants listed in Annexure B2 – 1 of Waverly DCP (2012).*

b. *All noxious weeds on the property at the time of development are to be removed by a suitably qualified person.*

c. *Trees with hollows are to be retained for habitat wherever possible to provide habitat for arboreal fauna. Consideration must be given to the potential risk of damage to public or private property as determined by a suitably qualified arborist.*

d. *Sites that are undeveloped should be protected to encourage regeneration from the seed bank. Sunshine Wattle has a persistent soil seed bank which may last for up to 50 years.*

e. *Council may require additional supporting information for an application including the following:*

   i. *Vegetation management/protection plan; and*

   ii. *Flora or fauna impact assessment.*

f. *Remnant vegetation is to be protected unless:*

   i. *Trees and vegetation are removed/trimmed in accordance with the Roads Act 1993;*

   ii. *The work needs to be carried out by Council, the State Emergency Services, the Rural Fire Service of NSW, or a public authority in response to an emergency;*

   iii. *Works are carried out by State or Federal Government Departments or Authorities under current legislative requirements; or*

   iv. *The tree or vegetation is a recognised noxious weed (Noxious Weeds Act 1993). The applicant must first seek advice from Council and Council must be notified in writing seven (7) days prior to the commencement of removal work.*

2. Methodology

2.1. Literature Review

As mentioned previously, this VMP is required to be consistent with the CPaMPT VMP as well as previous development approvals issued by local, state and commonwealth government agencies. The preparation of this VMP involved a thorough review of these documents to ensure the management actions and objectives do not compromise previous management plans and development approvals.

The preparation of the VMP also involved a literature review to determine the most up to date methods of weed control for exotic species that are present in the subject land. This literature review involved a variety of sources including government fact sheets and websites. Personal experience of a Cumberland Ecology botanist formerly employed in bushland restoration was also utilised.

The field data and vegetation descriptions utilised in the BDAR (Ref. 19139RP1) were utilised for the preparation of this VMP. A detailed methodology of the flora surveys undertaken is provided in the BDAR (Cumberland Ecology, 2020).

In order to prepare a species planting list, and revegetation strategies for ESBS to be planted within the VMP Area, survey data collected for BDAR was reviewed, along with the description of the vegetation community under broad scale mapping for the locality (5 km radius of the subject land) (OEH 2016). The species list prepared for revegetation within the VMP Area includes species listed as diagnostic for the ESBS vegetation community.

3. Existing Biodiversity Values

This chapter presents the results of previous surveys and describes the flora of the subject land and VMP Area (Cumberland Ecology 2020).

3.1. Vegetation Communities of the Subject Land and VMP Area

Approximately 0.63 ha of native vegetation is present on the subject land representing approximately 14% of the subject land. The majority of the native vegetation within the subject land is scattered throughout the Urban Native/Exotic Vegetation outside of the VMP area. The remaining native vegetation is represented by the small patch of ESBS on the western boundary of the subject land.

Aside from the VMP Area in the south west corner, the native vegetation within the subject land is entirely of planted origin, often comprising monospecific stands of trees and a large portion of non-endemic species, and as a result is not considered to comprise a naturally occurring community. Nevertheless, recent advice provided from DPIE regarding how to assess native vegetation that is not generally considered to conform to a vegetation community, is to still nominate a Plant Community Type (PCT) based on the native species present and surrounding naturally occurring PCTs. A description of the vegetation communities identified within the subject land is provided below.

3.1.1. Eastern Suburbs Banksia Scrub in the Sydney Basin Bioregion (ESBS)

NSW Plant Community Type: 1061 – Old-man Banksia, She-oak, Red Bloodwood Heathland on Coastal Sands

BC Act Status: Critically Endangered

EPBC Act Status: Endangered

Old-man Banksia, She-oak, Red Bloodwood Heathland on Coastal Sands is an open to dense shrubland community found on large, deep Pleistocene sand dunes along the New South Wales coast. This plant community type in the Botany and Woollahra area is included as a component of Eastern Suburbs Banksia Scrub (ESBS) and has been listed as an Endangered Ecological Community (EEC) under both the BC Act and the EPBC Act.

A patch of moderate condition ESBS, covering approximately 0.12 ha, is present in the VMP Area. The area is entirely fenced and separated from the school land and is maintained in a natural state with no construction or infrastructure. The canopy is represented by small trees (3-4m) and the dominant species observed were *Leptospermum laevigatum* (Coast Teatree) and *Acacia longifolia* subsp. *sophorae* (Coastal Wattle). Common species within the shrub stratum (1-2m) include *Acacia suaveolens* (Sweet Wattle), *Acacia ulicifolia* (Prickly Moses), *Monotoca elliptica* (Tree Broom-heath), *Kunzea ambigua* (Tickbush) and *Bossiaea heterophylla* (Variable Bossiaea). Less frequent shrub species recorded include *Astroloma pinifolium* (Pine Heath), *Xanthosia pilosa* (Woolly Xanthosia) and *Persoonia lanceolata* (Lance Leaf Geebung). The ground cover (<1m) was sparse but was dominated by grasses,mat-rushes and flax-lillies. The common species recorded included *Lomandra longifolia* (Spiny-headed mat-rush), *Dianella caerulea* subsp. *producta* (Blue Flax-Lilly), *D. revoluta* (Blue Flax-Lilly), *Dichelachne crinite* (Longhair Plumegrass) and *Austrostipa pubescens*.

The lack of fire and isolation from similar vegetation accounts for the limited diversity and moderate condition of this patch of vegetation.

Due to the small size of the patch of ESBS within the subject land, representative plot and random meander data was collected in Banksia Reserve. Random meander surveys were conducted throughout the ESBS within the subject land. The main structural features of this community were therefore collected immediately adjacent the subject land and are shown in Photograph 1.

Photograph 1 Structure of the Eastern Suburbs Banksia Scrub within Banksia Reserve

3.1.2. Urban Native/Exotic Vegetation – Degraded Condition

NSW Plant Community Type: 1778: Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney

BC Act Status: Not Listed

EPBC Act Status: Not Listed

The Urban Native/Exotic vegetation within the subject land is comprised of garden beds and rows of trees of primarily planted origin. Common native canopy tree species planted throughout the areas mapped as Urban Native/Exotic vegetation include *Eucalyptus robusta* (Swamp Mahogany), *Eucalyptus scoparia* (Wallangara White Gum), *Ficus rubiginosa* (Port Jackson Fig), *Melaleuca quinquenervia* (Broad-leaved Paperbark), *Melia azedarach* (White Cedar), and *Tristaniopsis laurina* (Water Gum). Native shrubs and small trees present throughout this area of vegetation include *Acacia longifolia* (Golden Wattle), *Acacia suaveolens* (Sweet Wattle), *Banksia ericifolia* (Heath-leaved Banksia), *Pittosporum undulatum* (Sweet Pittosporum) and *Westringia fruticosa* (Coastal Rosemary). Native groundcover species present within this area of vegetation include *Cynodon dactylon* (Common Couch), *Lomandra hystrix* (Green Mat-rush) and *Lomandra longifolia* (Spiny-head Mat-rush).

Planted exotics species feature heavily throughout these plantings with trees such as *Olea europaea* ssp. *europaea* (Common Olive), *Pinus radiata* (Monterey Pine), *Ficus benjamina* (Weeping Fig), *Fraxinus* spp. (Ash), *Jacaranda mimosifolia* (Jacaranda), *Platanus x acerifolia* (London Planetree) and *Schinus mole* var. *areira* (Pepper

Tree). Common exotic shrubs and shrubby weeds throughout this area of vegetation include *Murraya paniculata* (False Orange) hedges, *Rododendron* spp. (Azaleas), *Lantana camara* (Lantana) and *Cestrum parqui* (Green Cestrum). Common ground layer planted exotic species and weeds include *Agapanthus praecox* subsp. o*rientalis* (Agapanthus), *Asparagus aethiopicus* (Asparagus Fern), *Bidens pilosa* (Cobbler's Pegs), *Buxus microphylla* (Japanese Boxwood), *Conyza sumatriensis* (Tall Fleabane), *Ehrharta erecta* (Panic Veldtgrass), *Lolium perenne* (Perennial Ryegrass), *Ophiopogon japonicus* (Dwarf Lilyturf), *Lysimachia arvensis* (Scarlet Pimpernel), *Poa annua* (Winter Grass), *Acetosa sagittata* (Turkey Rhubarb) and *Romulea rosea* (Onion Weed). Representative photographs of planted exotic species are provided as Photograph 2 and Photograph 3 below.

The vegetation is likely to originally have been ESBS prior to clearing. The remnant *Leptospermum laevigatum* (Coast Teatree) individuals have been retained during the original construction of the retaining wall. Since then the area has become infested with exotics. The lack of fire and weed control accounts for the degraded condition of this patch of vegetation and it currently does not conform to ESBS.

Vegetation and trees within these areas are proposed to be removed as part of the project.

Photograph 2 Large *Ficus benjamina* (Weeping Fig) within the Urban Native/Exotic Vegetation (proposed for removal)

Photograph 3 *Pinus radiata* (Monterey Pine) within the Urban Native/Exotic Vegetation

3.2. Flora Species

3.2.1. General Species

A total of 98 flora species were recorded during surveys of the subject land, and 22 flora species were recorded within the VMP Area. Of the total flora species, 44 species are native either to the locality or non-endemic natives and 54 are exotic species. A total species list collected from Cumberland Ecology flora surveys is provided in Appendix B.

3.2.2. Threatened Species

No threatened flora species known from within the locality were recorded during surveys of the subject land.

3.2.3. Priority Weeds and Weeds of National Significance

Priority Weeds are weeds prioritised for control under the Biosecurity Act. State Level Priority Weeds have specific legal requirements for management written into the Biosecurity Act under regulations and controls, while Regional Priority Weeds have recommended management actions and strategic regional responses under the Greater Sydney Strategic Weed Management Plan (LLS: Greater Sydney 2017).

Thirty-two Weeds of National Significance (WoNS) have been identified by Australian governments based on their invasiveness, potential for spread and environmental, social, and economic impacts. All 32 WoNS are now included under the Biosecurity Act as State Level Priority Weeds, and therefore all have specific legislative requirements for management.

A list of Priority Weeds recorded during the surveys undertaken by Cumberland Ecology (2020) is provided in Table 1. Appendix 1 of the Greater Sydney Regional Strategic Weed Management Plan (LLS: Greater Sydney 2017) should be referred to for a summary of the legislative requirements, recommended regional management objectives, and regional strategic responses pertaining to these weed species. Additional species identified as being of regional concern under that plan are identified in Appendix B of the plan.

Table 1 Priority Weeds

Scientific Name	Common Name	Status
Acetosa sagittata	Rambling Dock	OWRC
Agapanthus praecox subsp. orientalis		OWRC
Asparagus aethiopicus	Asparagus Fern	SP, WONS
Celtis sinensis	Japanese Hackberry	OWRC
Cenchrus clandestinus	Kikuyu Grass	OWRC
Cenchrus setaceus	Fountain Grass	OWRC
Cestrum parqui	Green Cestrum	RP
Cinnamomum camphora	Camphor Laurel	OWRC
Erythrina x sykesii	Coral tree	OWRC
Lantana camara	Lantana	SP, WONS
Olea europaea	Common Olive	RP
Parietaria judaica	Pellitory	OWRC
Phoenix canariensis	Canary Island Date Palm	OWRC
Pinus radiata	Radiata Pine	OWRC
Prunus spp.		OWRC

Status: RP = Regional Priority Weed, SP = State Priority Weed; WONS = Weed of National Significance

3.3. Fauna Habitat

The vegetation within the VMP Area of the subject land is expected to currently provide poor to moderate quality habitat for fauna. The VMP Area represents a small area of remnant ESBS vegetation in moderate condition, with only a few exotic flora species. The vegetated portion of the VMP Area is likely to provide potential roosting, nesting and foraging habitat for a variety of native fauna including birds, mammals, gastropods and reptiles.

The remainder of the vegetation within the subject land has been heavily modified by historical and current landuses. These areas are dominated by planted, managed, gardens comprising native and exotic species and thus provide sub-optimal habitat for native fauna. The microhabitats within these small remaining areas of potential habitat within the subject land were found to be degraded (Cumberland Ecology 2020) and no significant habitat features, e.g. tree hollows, nests, large fallen logs or rock piles, were recorded during surveys (Cumberland Ecology 2020). However, this sub-optimal habitat is likely to provide nesting and foraging space for mobile, urban adapted species.

4. Vegetation Management

The VMP Area comprises areas of remnant ESBS and currently cleared lands that will be managed to improve the current condition. As mentioned previously, this VMP is required to be consistent with the CPaMPT VMP as well as previous development approvals issued by local, state and commonwealth government agencies. As such, the management actions outlined in this chapter have been designed to be consistent with the CPaMPT VMP and previous approvals, and aim to not compromise their objectives.

Works within the VMP Area should commence immediately following approval of this VMP by Waverley Council and EHG. A detailed timing of management actions to be undertaken is provided in Chapter 10.

It is expected that the intensive actions detailed in the VMP will be undertaken over an initial five-year period to mitigate development risks and improve the health of the ESBS vegetation, and that there will be an ongoing maintenance program, including monitoring, general weed maintenance and plant failure replacement activities that will be undertaken into perpetuity to sustain the health of the ESBS community within the VMP Area, under an updated VMP.

4.1. Management Zones

The VMP Area is comprised of areas containing ESBS that are to be retained by the development and currently cleared lands to be re-established as a buffer area containing ESBS species. These areas will be rehabilitated by means of regeneration through weed management and revegetation with ESBS species through bushland regeneration techniques.

The specific objectives and actions to be undertaken in the VMP Area will be undertaken in two separate management zones including:

- Zone 1 – Remnant ESBS; and
- Zone 2 – Buffer area.

4.1.1. Zone 1 Objectives

Management Zone 1 is representative of the existing patch of ESBS adjacent the subject land. Management objectives for Zone 1 are:

- Removal of all exotic vegetation;
- Control exotic weed species; and
- Promote natural regeneration.

4.1.1.1. Actions

Initial actions within Zone 1 will be the removal of all exotic vegetation. In particular, the removal of *Eragrostis brownii*, *Conyza bonariensis, Gamochaeta pensylvanica and Taraxacum officinale*. These are four weed species to be targeted that were identified within the VMP Area during flora surveys (Cumberland Ecology 2020) and their removal will facilitate the natural regeneration of native species present. Following completion of the removal of all (or most) exotic vegetation as identified above, rehabilitation actions will be undertaken that will support enhanced diversity of the remnant ESBS including periodic weeding practises and promotion of natural

regeneration. While no re-vegetation practises are proposed to occur within Zone 1, consideration should be given to supplementary plantings of local provenance using species and growth forms that are not present in the VMP area.

4.1.2. Zone 2 Objectives

Management Zone 2 is representative of the 3-10 m buffer zone dictated by the LD 282/00 approval. Management objectives for the Zone 2 are:

- Establish landscaped areas suitable for revegetation of ESBS species;
- Replanting an array of native understorey, shrub and ground layer species characteristic of ESBS to replace cleared lands;
- Protect revegetated area;
- Removal of all exotic vegetation;
- Control exotic weed species; and
- Promote natural regeneration.

4.1.2.1. Actions

Parts of Zone 2 comprise existing developed areas with hardstand. Other areas include turfed areas of sand at close to the correct level for the buffer plantings.

Initial actions within Zone 2 will be to prepare the buffer area for revegetation and rehabilitation. Actions include but are not limited to removal of hardstand areas and areas of exotic grasses and demarcation of the buffer area in accordance with the boundary for Zone 2 (Figure 2) using appropriate methods such as protective fencing.

In some portions of Zone 2, sand is already in place at or close to the desired level for planting of the buffer. In such areas, existing grasses and weeds will be scraped and removed down to a depth of approximately 30 cm to expose clean sand suitable for planting of native species.

Where hardstand occurs, it will be demolished and debris removed to expose underlying deep sands.

Once hardstand areas and turf areas are removed and Zone 2 demarcated, additional sands will be applied and contoured to create a gently sloping buffer that reflects the topography of the adjacent reserve. As required to achieve the correct depth of sand in the buffer, additional clean sand will be emplaced. Such sand will be won from areas of the development site where sands are being excavated and would otherwise be removed. Sand taken in this way will be taken from at least 50 cm below ground level to ensure that it is free from weeds. Before emplacement it will also be certified as contaminant-free by the site auditor.

Following preparation of the buffer area, revegetation and rehabilitation practises will be undertaken with local native plant species from the list of ESBS characteristic species included in the Final Determination.

To acquire suitable seeds for propagation, Moriah College will engage a suitably licenced bush regeneration contractor to collect seeds from remnants of ESBS. Moriah College will then contract a local nursery to propagate seeds to a size suitable for planting within the buffer.

If seed collection is not possible, seedlings of ESBS species listed in Appendix D will be sourced from local nurseries such as IndigiGrow. The selection of species to be planted in Zone 2 has been prepared to be consistent with the ESBS which occurs naturally within the surrounding areas, particularly in Banksia Reserve. Species selected are species known to occur in the locality and naturally occur in the community within the Sydney Basin.

Plantings will include local native grass and grasslike species, herbs and shrubs as set out in Appendix D. Note that vigorous native plants that tend to outcompete other native species have not been included in this list. The species excluded include *Acacia longifolia*, Pittosporum *undulatum* and *Commelina cyanea*. The exclusions have been prescribed to encourage a greater diversity of native plants within the buffer in the long term.

4.1.3. Timing of Actions

Within the first year of commencement of the VMP, the following actions will need to be undertaken within the VMP Area:

Seed collection: Within the first three months after commencement of project engage licenced seed collectors to collect ESBS seeds from a range of species including small trees, shrubs, grasses and herbs.

Propagation: Within the first three to six months engage a local nursery to propagate seed to produce seedlings ready for planting.

Contingency Sourcing of Plants: should seed collection not be possible, native plants will be sourced from nurseries to supply plant species from the list of species in Appendix D.

Site Preparation: Site preparation will occur after hard stand is demolished, exposing additional sands to add to buffer lands. The demolition is predicted to take approximately six months.

Sand recontouring: After demolition of hard stand, clean sands will be transferred as needed to lower areas of the buffer and the buffer surface will be recontoured to link to the adjacent reserve.

Removal of exotic groundcover and understorey: After six months, all exotic groundcover and understorey will be removed from vegetated areas of the buffer. Where parts of Zone 2 have been previously turfed, turf and approximately 30 cm of sand will be scraped and replaced with clean sand for planting; and

Planting: Between six and twelve months, once the buffer topography is completed, native groundcover, shrubs, understorey and canopy will be planted.

Monitoring: Monitoring of planting will occur at three-month intervals, with a major monitoring using BAM plots occurring annually.

Further Planting: Top up planting will occur if necessary to replace lost plantings, as indicated by monitoring work.

In every subsequent year of implementation of the VMP, the following actions will need to be undertaken into perpetuity:

- Follow up weeding to remove any exotic species that may have grown from the soil seed bank; and
- Replacement of any plantings that die off.

Additionally, educational signage will be installed along the perimeter of the VMP Area to improve local knowledge of the ESBS present and the fauna species that utilise it.

5. Vegetation Clearing Plan

This chapter outlines the protocols to be followed during clearing and construction phases to minimise the impacts on native flora and fauna and to avoid indirect impacts on the retained native vegetation in the VMP Area.

5.1. Hygiene Protocols

To avoid the spread of *Phytophthora cinnamomi* and other soil borne pathogens appropriate hygiene procedures and guidelines described in Best Practice Management Guidelines for *Phytophthora cinnamomi* within the Sydney Metropolitan Catchment Management Authority Area (Botanic Gardens Trust 2008) will be followed.

This will involve all machinery, clothing (such as boots and gloves), and tools, which will have contact with soil to be disinfected with a spray prior to entering and leaving the site.

Recommended disinfectant products include:

- Noncorrosive disinfectants including Coolacide®, Phytoclean®, or Biogram® which can be for cleaning footwear, tools, tyres, machinery and other items in contact with soil;
- 70% Methylated spirits solution in a spray bottle which is suitable for personal use (clothing); and
- Sodium Hypochlorite 1%, which is effective, but can damage clothing and degrades rapidly in light.

5.2. Ecological Inductions

Inductions will be undertaken for all personnel who will work within the subject land or VMP Area prior to the commencement of any works. The induction will describe the ESBS community and the ecological importance of protecting the community, detail the protection status of the community under state and federal legislation, and detail penalties under the BC Act and the EPBC Act. The induction will specify in detail which areas of vegetation are to be retained and protected and the importance of not damaging retained vegetation. The induction will specify that unauthorised personnel are not permitted to enter retained vegetation areas, and that no machinery or stockpiling of materials is permitted within the VMP Area.

5.3. Marking Limits of Vegetation Clearing

5.3.1. Protection of Vegetation during Clearing and Construction Phases

Vegetation clearing will take place in areas in close proximity to the VMP Area, so appropriate measures are needed to delineate clearing areas and protect retained vegetation with the VMP Area. At present, there is an existing fence along the western extent of the VMP Area. Erection of construction fencing to surround the VMP area along the unfenced boundaries will be required that can provide adequate delineation of clearing limits. This fencing is to remain in place until all works are completed in adjoining areas. No vehicles or machinery will be permitted to enter the VMP Area.

To avoid unnecessary damage to vegetation or inadvertent habitat removal, disturbance is to be restricted to the delineated area. No stockpiling of equipment, soils, or machinery is to take place within the delineated VMP Area.

The person responsible for the clearance and/or construction activities will be responsible for ensuring that the fencing is maintained for the duration of the construction period.

Sediment control measures should be installed to prevent run-off of soil, weed propagules, excess nutrients, and pollutants into adjacent vegetated areas. Sediment fencing should be installed along the eastern and northern boundary of the VMP Area to protect all retained vegetation. Additional sediment fencing is also likely to be required to prevent offsite soil runoff. Clearing should not take place during periods of heavy rain in order to minimise erosion and sediment run-off.

5.3.2. Signage

Signs will be placed on the fencing around the VMP Area at a spacing such that a sign is always visible to personnel working in any adjacent area within the subject land. The sign will detail the presence of ESBS vegetation and that the vegetation is protected and not to be impacted upon. Example text for the signs is "*WARNING – This is a protected Eastern Suburbs Banksia Scrub area. No encroachment or access within this area*."

5.4. Vegetation Protection Buffer Zone

In undertaking previous DAs, Moriah College has been subjected to a number of consent conditions in relation the ongoing protection of the ESBS in Banksia Reserve south west of the subject land. One specific measure is the establishment of a zone within Lot 22 to buffer the ESBS on Lot 23. Consistent with the previous VMP (Urban Bushland Management Consultant 2002), the VMP area has been designed to include a buffer area varying in width between 3-10 metres on the boundary of Lot 22 and Lot 23 is to be re-established to prevent development occurring in close proximity to the ESBS in Lot 23 (Figure 2). The buffer zone will assist with mitigation of indirect impacts arising from development, including:

- Overshading by buildings;
- Invasion by weeds; and
- Surface runoff and sediment movement.

5.5. Weed Management

As vegetation will be cleared near the VMP Area, erosion and the spread of weeds propagules can take place if appropriate mitigation measures are not implemented. In order to minimise the spread of weeds throughout the subject land and into the adjoining VMP Area, appropriate weed control activities will be undertaken. Prior to construction, weeds present within the extent of the development will be identified and controlled if necessary to prevent spread. The amount of bare soil exposed at any one time will be minimised, and sediment fencing will be installed along the boundary of the VMP Area, and downslope of any activities involving earthworks to prevent the spread of weeds from the development site.

Any weed materials will be carefully removed off site in a manner appropriate to the species or at the direction of the ecologist (used for pre-clearing surveys) or as required of Council, so as to prevent the spread of propagules to uncleared areas of native vegetation, both on and off site.

A wash-down station will be established and all construction vehicles entering and leaving the site will be required to be washed down to prevent weed seeds entering or leaving the site. These procedures will also assist in preventing the introduction of *Phytophthora cinnamomi*, which is a pathogen of native vegetation that is carried in contaminated soil.

Machinery and tools involved in weed management will also be washed down prior to entry to the subject land and following activities on site to prevent new weed infestations on and off.

5.6. Pre-clearance Surveys

Consistent with the BDAR (Cumberland Ecology 2020), prior to the commencement of any vegetation clearing, a pre-clearance survey needs to be undertaken by a licensed fauna ecologist within one week of any clearing activities. During the survey native fauna and habitat that have the potential to be disturbed during clearing will be identified, and habitat marked out with flagging tape and/or spray paint. Pre-clearing surveys are to be undertaken by a suitably qualified ecologist. Pre-clearing surveys will include:

- Demarcation of key habitat features, such as hollow-bearing trees, fallen logs (>10cm diameter) and bushrock;
- Checking trees for the presence of bird nests and arboreal mammals, such as possums, and bats, prior to felling;
- Animals found to be occupying trees and habitat will be safely removed before the clearing of trees and relocated into areas to be retained; and
- Provision of a report following the completion of a pre-clearing survey, detailing the location and type of each habitat feature as well as location of where salvaged bushrock can be stockpiled until placed within retained vegetation (all stockpile areas must be within the development (i.e. outside of the VMP Area)).

5.7. Fauna Relocation and Clearing Protocols

Consistent with the BDAR (Cumberland Ecology 2020), to minimise impacts to native fauna species, clearing should be undertaken in the following two-stage process under the supervision of a suitably qualified ecologist:

- The initial phase of clearing will involve clearing around identified habitat features and leaving the features overnight; and
- The second stage will involve clearing of the habitat features left overnight followed by an inspection.
- An ecologist should investigate all fallen trees for the presence of hollows not detected prior to clearing. Inspections should be undertaken of these hollows for native fauna.

A fauna ecologist will be present while clearing to rescue animals injured during the clearance operation. Provisions will be made to protect any native fauna during clearing activities by the following means:

- All staff working on the vegetation clearing will be briefed about the possible fauna present and should avoid injuring any present;

- Animals disturbed or dislodged during the clearance but not injured will be assisted to move to the adjacent bushland or other specified locations; and
- If animals are injured during the vegetation clearance, appropriate steps will be taken to humanely treat the animal (either taken to the nearest veterinary clinic for treatment, or if the animal is unlikely to survive, it will be humanely euthanized).

5.8. Erosion Control

Construction activities will be undertaken in accordance with Managing Urban Stormwater – Soils and Construction Volume 1 known as "The Blue Book" (Landcom 2004). During construction works adequate erosion control measures, such as silt fencing, are to be used to prevent movement of weed seeds, and, nutrient-enriched soils during rain events. This will prevent nutrient enrichment, and weed spread, within on-site revegetation areas, and potentially within local offsite bushland areas. Erosion controls will be implemented along all perimeters of the VMP Area that are downslope of clearing/construction works. This include implementation of the following measures:

- Installation of sediment control fences, e.g. silt fencing;
- Covering soil stockpiles; and
- Avoiding soil disturbance prior to heavy rainfall.

6. Weed Management Plan

6.1. Introduction

6.1.1. Application of Regeneration and Revegetation restoration strategies within the VMP Area

The VMP Area is comprised of remnant and regrowth vegetation that has scattered exotic weeds, as well as cleared areas.

Due to the condition of the vegetation within zone 1, regeneration strategies are required in order to improve the condition of the ESBS. However, consistent with the CPaMPT VMP – in particular; the York Road remnant, no re-vegetation practises are proposed within Zone 1. Re-vegetation practises are proposed only for Zone 2 with species consistent with ESBS, and weed control activities will be carried out to assist regeneration of native plantings.

6.1.2. Relevant Legislation

Under the Biosecurity Act all weeds are required to be controlled by all persons under a "General Biosecurity Duty". The General Biosecurity Duty means that all public and private land owners or managers and all other people who deal with weed species (biosecurity matters) must use the most appropriate approach to prevent, eliminate, or minimise the negative impact (biosecurity risk) of those weeds (DPI 2017). The power for enforcement of penalties relating to compliance with the legislation is given to Local Control Authorities (i.e. Local Governments).

State-wide management of weeds under the Biosecurity Act is directed by the NSW Invasive Species Plan (LLS: Greater Sydney 2017). This assigns weed responses to four categories:

- Prevention of new weeds establishing;
- Eradication of small and localised infestations where feasible;
- Containment of larger infestation to stop wider spread; and
- Protection of key assets, such as threatened plants and agricultural land, to prevent their damage or degradation by weed invasion.

Under the Biosecurity Act some weed species have been prioritised for management by specific regulations and controls under the act. These are known as State Level Priority Weeds. Specific legal requirements exist for how these weeds are managed.

The state has been divided into 11 regions (each covering a number of LGAs) under the Biosecurity Act, with each region managed by a Regional Weeds Committee. Management actions for weeds within a region are detailed within a Regional Strategic Weed Management Plan. Within each region, additional weed species have been prioritised for management to the State Level Priority Weeds. These species are known as Regional Priority Weeds.

The Regional Strategic Weed Management Plans identify the Regional Priority Weeds, and for these weeds, detail recommended management objectives to achieve "outcomes to demonstrate compliance with the

General Biosecurity Duty". For these weeds "strategic responses in the region" are also detailed to achieve the relevant management objective (i.e. Prevention, Eradication, Containment or Asset Protection).

A further set of weeds are identified within the Regional Strategic Weed Management Plans as being "other weeds of regional concern". The Biosecurity Act provides powers to Local Control Authorities to take action in relation to these weeds in particular circumstances, for example where a weed threatens a high value asset, and prevention, elimination or reduction of the risk is feasible and reasonable. Examples of high values assets include the Environment, Human Health, and Agriculture.

The subject land is located within the Greater Sydney Local Land Services region, and weed management within the region is be undertaken under the direction of the Greater Sydney Regional Strategic Weed Management Plan (LLS: Greater Sydney 2017). Appendix 1 of the plan outlines the State Listed Priority Weeds, Regional Priority Weeds, and other weeds of regional concern.

6.1.3. Species Lists

Weeds identified by Cumberland Ecology (2020) within the subject land (see Appendix B) make up the weed species lists used for the basis of this Weed Management Plan. A list of control methods for specific weeds recorded on the subject land is provided in Appendix C.

Priority weeds for the Greater Sydney Region recorded on the subject land are listed in Table 1.

6.1.4. Best Management Practice

Contractors for weed removal within the VMP Area will have regard to the following, to minimise impacts upon existing vegetation and habitats:

- The main principles of the Bradley Method of bush regeneration, i.e. not over-clearing (remove only targeted species), employment of minimal disturbance techniques to avoid soil and surrounding vegetation disturbance, and replacement of disturbed mulch/leaf-litter;
- Removal of fruiting/seeding parts of weeds carefully, when present, to minimise spread of plant propagules;
- Use of chemicals and sprays only during suitable weather conditions (i.e. not during wet or windy conditions), and only during appropriate seasons;
- All equipment should be thoroughly cleaned prior to entering the site to minimise contamination;
- Proximity to watercourses and swampy areas; and
- Presence of native fauna or nesting/breeding sites.

6.1.5. Weed Control Methods

Weed control is to be implemented across the VMP Area. Weed control works should be approached using the strategies outlined below.

6.1.5.1. Manual Weed Removal

Manual removal, or hand weeding, is an effective form of weed control when all viable parts of the plant are removed from the soil (roots, fruiting material and rhizomes) and site. All weeds removed by hand will be handled according to best practice bush regeneration techniques to prevent subsequent seed set from the removed weeds. Any weed material containing propagules, or plant parts capable of asexual reproduction will be bagged and removed from site.

6.1.5.2. Use of Herbicides

All herbicides should be used according to recommendations on the herbicide label. Appropriate Personal Protective Equipment (PPE) should be worn and consideration given to time of day, likelihood of rainfall, wind direction and likely impact on native species as per guidelines on the label. Use of glyphosate will be appropriate for most species. Glyphosate is the preferred herbicide for use in environmentally sensitive areas as it is rapidly broken down by microbes in the soil so residue is short lived and will not affect remnant and planted native individuals in the long term following application. As runoff is a likely means of herbicide residue entering watercourses, chemical treatment should be avoided prior to or directly after rains.

It is important to note that there can be legal restrictions and permit requirements for use of specific herbicides for specific plants, and chemical labels and permit requirements always need to be read prior to herbicide application. While the recommended methods for weed treatment detailed in Appendix C are effective, some will require a permit. Some relevant permit numbers are PER9907, and PER11916. These permits need to be obtained from the Federal Government body, the Australian Pesticides and Veterinary Management Authority.

Manual removal will be an appropriate form of control for some species, and all chemical treatment should be carried out according to best practice guidelines.

Planting should not be undertaken within 10 days of herbicide application.

6.1.6. Types of Weed Control

6.1.6.1. Primary Weeding

Primary weeding is the first stage of bushland regeneration. Primary weeding may involve techniques such as:

- The selective spraying of weeds, with selective and non-selective herbicides (targeting weeds listed in Table 1);
- Cutting/scraping and painting deep rooted woody weeds and climbers with hand tools, chainsaws and brush cutters and painting cut stumps with herbicides containing Glyphosate or Picloram;
- Target drilling and injecting certain large tree weeds such as willow with herbicides such as Glyphosate; and
- Selective hand removal of weeds and wicker wiping of tall herbaceous weeds in situations where damage to proximate, low growing native plants can be avoided.

Primary weeding in the VMP Area can be implemented over the course of the initial period of regeneration works, and/or anytime after 10 days of herbicide application. Primary weeding can be implemented immediately after DA approval.

6.1.6.2. Follow up Weeding

Follow-up weeding is undertaken in areas that have received past primary weeding treatments and involves the selective removal or treatment of weeds, whilst allowing regenerating or planted native plants to grow. All weeds should be targeted where possible during the follow-up weeding phase. The follow-up bushland regeneration works are likely to be required once a month until weeds are at negligible levels. Site visits may be more frequent if determined necessary.

It is recommended that woody weeds, climbers, and key herbaceous weeds are subject to a programme of intense follow up weeding around any regenerating native plants to encourage the spread of the native plant species.

Follow-up weeding should be implemented for a minimum period of five continuous years for the VMP area, after primary weeding and revegetation works have been completed. After the five-year follow-up and maintenance period has been completed, a review should be conducted to determine ongoing on-site maintenance requirements necessary to maintain ESBS health into perpetuity.

6.2. Weed Management in the VMP Area

The VMP Area has become slightly modified and degraded because of historic and surrounding land uses. To successfully rehabilitate and improve the health of the ESBS within the VMP Area, weeding and revegetation works are required. The details of these works are provided below and the directions under the following headings should be undertaken sequentially.

6.2.1. Site-preparation for Revegetation

Zone 1 of the VMP area has some existing native vegetation that will be retained. Prior to commencing initial weed management in the VMP Area, the ground layer should be searched for native shrubs, herbs and grasses present within the area. These plants will be retained and, where practical, should have a biodegradable tree guard installed around them to protect them from herbicide drift. If biodegradable plant guards cannot be sourced, no tree guards are to be used.

Such work will not be required in Zone 2, which comprises hard stand and areas of lawn comprised of exotic species.

6.2.2. Primary Weeding

The goal of primary weeding in the VMP Area will be to eliminate all the priority weeds and larger weed infestations to allow planting to take place to fill gaps in the understorey and canopy without competition from weed species.

The first priority for weed treatment will be targeting mature individuals of State Level Priority Weeds and Regional Priority Weeds if present in the VMP Area (Table 1). Many of these species are perennial and take

several years to reach reproductive maturity so are easily controlled provided juveniles are continuously eradicated before reaching maturity. Following control of mature individuals of priority weed species, primary weeding should be undertaken throughout the VMP Area areas. The aims of primary weeding will be:

- Eliminating any woody weed species; and
- Targeting and eliminating any large infestations of exotic herbs and grasses, particularly species identified within the Greater Sydney Regional Strategic Weed Management Plan as being of regional concern.

Prior to chemical treatment any seed on mature exotic plants should be bagged to prevent seed fall and addition to the soil seed bank.

Priority will also be given to control of exotic perennial grasses that have potential to spread into the revegetation areas. Where present, these grasses will be either hand weeded or sprayed with herbicide. Additionally, the initial plantings of native species will focus on achieving the early establishment of native grasses and graminoid species from within the list of species to be planted. These are intended to become established and to preclude further invasion by exotic species.During site visits for primary weeding the bushland maintenance team should start from one end of the management zone and work towards the other end to achieve the aims listed above through the entirety of the management zone. Spot spraying with herbicide will be used in any areas where there is negligible risk damage to native vegetation as it is more cost and time effective than hand weeding techniques.

6.2.3. Ongoing Weed Maintenance in the VMP Area

The most cost and time effective method of controlling weed regrowth in a revegetation area or weedy bushland area is by spraying a non-selective Glyphosate herbicide. A list of effective methods for control of weeds on site is found in Appendix C.

Ongoing maintenance of the revegetation and regeneration areas should generally occur for a five year period by the contracted bushland regeneration company, and each area is recommended to be covered in its entirety once every month (particularly during warmer months), to diminish the soil seed bank of weeds present on site. In order to eliminate these species, they need to be controlled before they have a chance to set seed.

Tree guards should remain around native remnant plants, and native plants that have been planted, for at least six months to protect them from herbivory. Rabbits can devastate revegetation areas soon after planting, if tree guards are not used. Tree guards will also allow herbicide to be used, without damage to native plants through herbicide drift.

The following sequential steps are recommended to manage each area of the site effectively for each site visit:

1. Initially the bushland regeneration team visiting the site should sweep from one end of each area to the other. During this sweep, weeds within each tree guard alongside native plants should be removed by hand along with any weeds within an area dominated by native species (such as a patch of native grasses). During this sweep, woody weeds that require other techniques such as manual removal, stem injection or basal bark application etc. should be targeted.

2. A member of the team should then sweep the entire area, spraying all regrowth weeds between native plantings/remnant natives in open areas with herbicide, and spot spraying where possible in regeneration areas.

It is important that during site visits for ongoing weed maintenance that as many weed species as possible are controlled. This will minimise maturity and set seed of weeds between site visits. Some weed species such as *Bidens pilosa* and *Ehrharta erecta* are prolific seeders, and many weeds can have seed that remains viable in the soil for long periods of time. In order to effectively diminish the soil seed bank it is important that individuals are not allowed to set seed.

Priority will also be given to control of exotic perennial grasses that have potential to spread into the revegetation areas. Where present, these grasses will be either hand weeded or sprayed with herbicide. Additionally, the initial plantings of native species will focus on achieving the early establishment of native grasses and graminoid species from within the list of species to be planted. These are intended to become established and to preclude further invasion by exotic species.

During site visits for weed control, Priority Weeds (Table 1) should be prioritised for control. Individuals of these species should also not be allowed to set seed.

Temporary sediment fencing should be retained until it is determined plants have established enough to prevent surface soil runoff.

All vegetation to be removed from the VMP Area and subject land will be disposed of at a waste facility that accepts and processes green waste, and will be transported in a manner that prevents the spread of exotic weed propagules.

7. Revegetation Plan

7.1. Introduction

The Revegetation Plan has been prepared to re-establish the buffer area (Zone 2) along the boundaries of Lot 22 and Lot 23. The revegetation of Zone 2 with species indicative of ESBS within the VMP Area will also enhance the value of the VMP Area as a habitat resource for native fauna species.

7.2. Objectives

The long term management goal of Zone 2 is be to revegetate the ground and shrub layers of Zone 2 to provide high quality native vegetation comprised of ESBS species. The short to medium term management goals should be to eradicate all major weed infestations.

The aim for Zone 2 is to achieve the following performance-based outcomes:

- Control threats affecting the health of regenerating native vegetation and inhibiting the future regeneration of the community;
- Increase species diversity and cover of native species within the VMP Area;
- Improve the resistance of native vegetation within the VMP Area to future weed colonisation and establishment and related threats, by initiating the two above aims; and
- Use measurable indicators to monitor regeneration responses and to assist in prioritising bushland regeneration works during the works program.

7.3. Recommended Revegetation Techniques

Following site preparation, revegetation works will take place in Zone 2 using the planting of seedlings propagated from locally sourced plant material. Local provenance seeds should be collected from other ESBS remnants in the Sydney Basin where possible. If seed collection is not possible, plantings will be sourced from local nurseries including IndigiGrow as a first choice for local native nurseries. The selection of species to be planted in Zone 2 should prioritise species that do not already occur in Banksia Reserve, and be a subset of the full list of ESBS species provided in Appendix D. The species list can be created following review of the full list of species that already occur in Banksia Reserve. Species selected are species known to occur in the locality and naturally occur in the community within the Sydney Basin.

Appropriate species for ESBS revegetation within the VMP Area are provided in Appendix D. The species identified in Appendix D should be used for revegetation and all plants will be sourced from local provenance; these may come from seed collections or cuttings from within the existing remnant vegetation within and surrounding the VMP Area. Species not included in the Appendix D list should not be planted in the VMP Area. If required, in order to ensure increased diversity, tube stock of species identified in Appendix D may be acquired from nearby native plant nurseries, in the event that seed collections do not deliver sufficient diversity.

Although protocols are outlined below for revegetation through planting, as the VMP Area still contains native species, it is considered appropriate that direct seeding is used in combination with weed control to restore the ground layer in some areas. Direct seeding can also be used in conjunction with planting within Zone 2.

The specific combination of planting and direct seeding should be determined through a cost/benefit analysis undertaken by the contracted bushland regeneration company.

Planting densities and a species planting list has been provided for ESBS in subsequent sections of this VMP and in Appendix D.

7.3.1. Species Selection and Planting Densities for ESBS

7.3.1.1. Species Selection

It is recommended that a mix of local small trees, shrubs, and ground layer plants are replanted at the specified densities outlined below. Lists of suitable ESBS plant species for revegetation are provided in Appendix D however, the selection of species to be planted in Zone 2 should prioritise species that do not already occur in Banksia Reserve.

All plants will be disease and pest-free, hardened off and well-watered at the time of planting. All plants are to be provided in a healthy condition. They must have good root development and a sturdy shoot system.

Final species selection will be based upon:

- Nursery location within 10 km of the subject land, with IndigiGrow as a first choice of local nurseries;
- Availability of seed material;
- Species more suited to the disturbed soil of the VMP Area
- Exclusion of plants likely to naturally regenerate on the site; and
- Previous experience with species re-vegetation performance.

7.3.1.2. Planting Densities

The recommended revegetation planting specifications for ESBS are as follows:

- Small Trees/ Shrubs @ 4 unit / 10 m^2
- Groundcovers @ 4 unit / 1m^2 (can be planted in clumps)

Planting densities should be modified as required (reduced) with regard to existing native vegetation within specific structural layers within a specific patch identified for revegetation. Additionally, any plant dieback should be replaced by new plantings in order to maintain the densities provided above.

7.3.2. Characteristic Planting Units

It is advised that species should be planted in characteristic planting units to correspond with the topology, aspect, soil type and proximity to water. In particular, species should be selected that can be more suited to the disturbed soil of the VMP Area.

Grasses may be planted in clumps of 3+ (spaced 15–20 cm apart within clumps) to generate physical / structural support for each other and microclimates. Wind pollinated grasses such as *Eragrostis brownii* should be planted in clumps to create a natural grassy understorey in an effort to establish a >300 mm deep root layer.

Priority will also be given to control of exotic perennial grasses by achieving the early establishment of native grasses and graminoid species from within the list of species to be planted. These are intended to become established at the earliest stages of planting and to help preclude invasion by exotic grass species. This is also important to help prevent the spread of exotic perennial grasses across the subject site into the adjacent conservation area.

7.3.3. Plant Supply

All plants must be sourced from local provenance, ideally within 10 km of the subject land with IndigiGrow as a first choice of local nurseries. If required, prior to the initiation of planting procedures it may be necessary to collect or source suitable quantities of local native seed sourced from ESBS remnants within the Sydney Basin to ensure suitable volumes of seed are available for the propagation phase of the bushland revegetation works programme.

Local native plant species should be collected using principles prescribed in 'Bringing the Bush back to Western Sydney' (DIPNR 2003). Seeds and vegetative propagules to be collected and propagated in a local commercial or community nursery should be of local provenance and ideally sourced not more than 10 km from the subject land.

7.4. Maintenance of Plantings

After planting works have been completed, treated areas should be maintained by appropriately qualified personnel, selectively spot spraying and hand weeding around native plants, watering plants and replacing dead plants as needed. Re-growing weeds will be treated following planting as detailed in Chapter 6.

Provision should be made to water newly reconstructed areas, as required, in the first three months after installation, (on at least four to five occasions, depending on rainfall). Plants that have died should be replaced as required. Plants that a have died should be replaced by the bushland maintenance team with a planting of the same form during the next site visit by the team. At the end of the maintenance period the density of living planted plants should be as outlined in *Section 7.3.1.2*.

7.5. Protective Fencing

Protective fencing is already installed around Zone 1 in order to prohibit public access into this section of the VMP Area and eliminate illegal dumping. The fencing will be extended along the boundary of the VMP area in areas not already fenced to inhibit foot traffic and avoid trampling of restored vegetation and habitat. This fencing must be checked on a regular basis (minimum annually) to identify any damage and associated maintenance requirements, and any necessary repairs should be conducted.

Fencing will be updated to include permanent educational signage that will identify the importance of the vegetation being managed as well as any threatened species that are known to utilise the community. It is expected that the signage installed will have to be approved by Council prior to its installation.

8. Maroubra Woodland Snail Management Plan

8.1. Introduction

The Maroubra Woodland Snail (*Meridolum maryae*) requires management within the VMP Area to satisfy the following condition of consent listed under the approval advice for the project:

(e) include conservation management measures relating to the endangered Maroubra Woodland Snail (Meridolum maryae).

The Maroubra Woodland Snail (*Meridolum maryae*) is currently listed as endangered under both the NSW BC Act and the Commonwealth EPBC Act. As part of the biodiversity assessment for the project, Cumberland Ecology undertook two surveys in September 2020 and March 2021 to determine the presence of the species within the subject land. No evidence for the species was recorded during the survey periods. Notwithstanding this, due to the occurrence of suitable habitat immediately adjacent the subject land, as well as the ESBS restoration actions proposed as part of this VMP, it is considered appropriate to develop specific management actions to assist in the conservation for the species for areas within the VMP area.

8.2. Conservation and Management Advice

According to the conservation advice for the species, there is no National Recovery Plan and no NSW Save our Species program for the Maroubra Woodland Snail. As such, recommended conservation and management actions are derived from threat information for the species and recovery actions of the Dural Land Snail (*Pommerhelix duralensis*). Relevant threats to the species that require conservation and management actions include:

- Habitat loss, disturbance and modification; and
- Invasive species.

Conservation and management actions are recommended to assist the recovery of the species to counteract the threats to the species listed above. These are discussed in detail in the sections below.

8.3. Conservation Management Measures

8.3.1. Habitat Restoration

Further to the re-establishment of ESBS in the VMP area, specific actions to benefit the Maroubra Woodland Snail will also be implemented, including the placement of coarse woody debris and boulders for additional shelter habitat for the species. During the course of clearing in the remainder of the development site, suitable coarse woody debris such as logs will be sectioned into manageable lengths and placed in appropriate locations in the VMP area. These will provide additional structure and are expected to provide shelter habitat for the Maroubra Woodland Snail as well as other species. In addition, sandstone boulders salvaged from the development site should also be placed within the VMP area.

8.3.2. Weed Control

The infestation of heathland habitat by weeds such as *Chrysanthemoides monilifera* (Bitou Bush) are potentially detrimental to the species, as it is considered unlikely to be tolerant of highly disturbed or weedy habitats. As

such, weed control methods consistent with Chapter 6 of this VMP area will assist in the rehabilitation of habitat for the Maroubra Woodland Snail.

8.3.3. Fencing

Protective fencing is already installed around Zone 1 in order to prohibit public access into this section of the VMP Area and eliminate illegal dumping. The fencing will be extended along the boundary of the VMP area in areas not already fenced to inhibit foot traffic and avoid trampling of restored vegetation and habitat. This fencing must be checked on a regular basis (minimum annually) to identify any damage and associated maintenance requirements, and any necessary repairs should be conducted.

Fencing will be updated to include permanent educational signage that will identify the importance of the Maroubra Woodland Snail habitat being managed, as well as any other threatened species with potential to utilise the community. It is expected that the signage installed will have to be approved by Council prior to its installation.

8.3.4. Monitoring

Further to the monitoring requirements outlined in Chapter 9 of this VMP, monitoring actions will be undertaken for invasive species known to impose predation pressures on snails. Specifically, monitoring for the presence and density of introduced predatory species such as rats and foxes. This will include searches for evidence of rats and foxes including scats and nesting materials. Should evidence of predatory species be recorded, appropriate baiting and trapping for the species recorded should be undertaken to discourage the use of the VMP area.

8.3.5. Other Considerations

As mentioned previously, no evidence for the Maroubra Woodland Snail was recorded during the survey periods within the subject land. The actions discussed above aim only to restore habitat for the species to encourage independent migration into the VMP area. Currently, translocation is not recommended for the species and as such, is not included in the conservation management actions discussed in the sections above.

9. Monitoring and Reporting

A project manager/supervisor with the Bushland Regeneration Contractor (BRC) should be assigned to coordinate, supervise, and manage all works and correspondence with respect to the revegetation using ESBS species. Ideally, the project manager must be available for the duration of the project and become familiar with the site and progress of all aspects of works undertaken.

The project manager will be responsible for allocation of maintenance tasks to personnel in response to establishment issues and ensure other factors, such as, monitoring results are reported (e.g. plant losses/re-planting, weed control, irrigation). Regular monitoring and feedback from personnel will assist in the allocation of labour relative to available funds.

9.1. Monitoring Program

The following monitoring activities are to be conducted within the VMP Area, unless otherwise stated as part of the monthly site visits:

- Note any weed outbreaks in the regeneration and revegetation areas;
- Note approximate survival percentage of plantings;
- Note areas where erosion control is inadequate and needed;
- Photographs taken from northern-eastern corner (Photograph Monitoring Point) of each monitoring quadrat facing across the quadrat (south-west); and
- Note any evidence of invasive fauna including but not limited to scats and nesting material across the VMP area.

These notes are both to be reported in the annual monitoring report, and to be used to plan priorities for the next month's regeneration works. The locations of the monitoring points are provided in Figure 2 and Table 2.

Each six months a site inspection will be conducted to survey monitoring quadrats. Monitoring will be undertaken in three 2 m x 10 m quadrats within the VMP Area. The locations of monitoring quadrats are provided in Figure 2 and Table 2. In each monitoring quadrat notes will be made of the following:

- Percentage coverage of exotic and native species;
- Native and exotic species present;
- Percentage survival of native plantings; and
- Photopoints to be established on one corner of each monitoring plot (Figure 2)

Table 2 Locations of Six Monthly Monitoring Plots

Monitoring Plot Number	Easting	Northing	Vegetation Community to be Revegetated/Regenerated
1	337500.9	6247592	ESBS

Monitoring Plot Number	Easting	Northing	Vegetation Community to be Revegetated/Regenerated
2	337529.7	6247565	ESBS
3	337566.5	6247472	ESBS

9.2. Reporting

A brief and concise report should be submitted every year for the life of the VMP (5 years). This report will be forwarded to Waverley Council and Biodiversity, Conservation and Science group (BCS), and will provide a record of the implementation of the VMP. The report will:

- Describe the bushland regeneration works undertaken;
- State the findings of the monitoring activities;
- Discuss any problems encountered in implementing the VMP; and
- Recommend any adaptations or additions to the VMP.

The report should contain the photographs taken during the monitoring surveys, as well as a short description of weeds in the VMP Area and a short comparison of the photographs to the previous years. The report should also recommend and prioritise areas where weed control should be targeted within the VMP Area.

A final report should be prepared at the end of the initial five-year intensive management period of the VMP documenting the success of the works against performance criteria. Although it is intended that management of the VMP Area will continue in perpetuity, this VMP will be current only for the first five years. After this time, management requirements will be reviewed and if required a new VMP will be prepared to guide subsequent management of the VMP Area. The final report will be submitted to Waverley Council and BCS for review.

10. Timing and Responsibilities

The VMP Area is to be managed in a series of phases as follows:

- Phase 1 – Site Preparation;
- Phase 2 – Restoration Works Commence;
- Phase 3 – Maintenance; and
- Phase 4 – Monitoring and Reporting

Timing and responsibilities at each phase of management within the VMP Area are shown within Table 3. This table assigns each activity within each phase to those responsible.

Table 3 Timing and Responsibilities

Management	Action	Responsibility	Key Performance Indicators	Timing
Phase 1: Site Preparation				
VMP Area	Delineation of clearing boundary	Property Owner or Construction Subcontractor	Existing fencing remains in place in Zone 1 Removal of any hardstand areas in Zone 2	Before construction works commence
VMP Area	Establish fixed monitoring points and quadrats	Bush Regeneration Contractor or Ecologist	3 monitoring plots established (star pickets or stakes with flagging tape installed at the north-east corner) GPS locations of all monitoring plots (3 total) corners recorded (12 total)	Prior to commencement of Revegetation and Weeding works
Extent of Development	Vegetation Clearance	Construction Contractor	Vegetation removed across Development Footprint	During Construction Works
Extent of development and VMP Area	Habitat feature salvage	Construction Contractor and Bush Regeneration Contractor or Ecologist	habitat features salvaged, cut into manageable sections and re-established in the VMP area	During Construction Works

Management	Action	Responsibility	Key Performance Indicators	Timing
VMP Area	Installation of educational signage on fencing	Property Owner or Construction Subcontractor	Permanent fencing and educational signage has been installed around Zone 1 in the VMP Area	Prior to commencement of Revegetation and Weeding works.
Phase 2: Restoration Works				
VMP Area	Fixed Point Monitoring	Bush Regeneration Contractor	Photographs (3 total) taken of fixed monitoring sites before initial weeding	Prior to commencement of restoration works for each area.
VMP Area	Carry out primary weeding	Bush Regeneration Contractor	0 large weed infestations remaining 0 reproductively mature priority weeds and woody weeds remaining	First two months of restoration works
VMP Area	Seed collection	Bush Regeneration Contractor	Engage licenced seed collector to collect seed from other ESBS remnants within the Sydney Basin	First three months of restoration works
Propagation (off site at a location to be determined)	Propagation	Local nursery.	Sufficient numbers and diversity of plants propagated to plant out site.	Within the first three to six months.
Contingency sourcing of plants if propagation fails to provide sufficient plants.	Contingency plant sourcing.	Bush Regeneration Contractor	Sources of plants are available to back up propagated plants as required.	Within the first three to six months.
Site Preparation	Demolition of hard sand and sourcing of additional sand from site as required.	Bush Regeneration Contractor and Site Manager.	Sufficient sand is available to top up lower areas of the site prior to replanting.	Within first six months.
Sand recontouring.	Shaping landscape from areas where	Bush Regeneration	Sand contours match or blend smoothly with adjacent reserve.	Within first six months.

Management	Action	Responsibility	Key Performance Indicators	Timing
	hardstand occurs.	Contractor and Site Manager.		
VMP Area	Shrubs and ground cover ESBS species planted throughout Zone 2	Bush Regeneration Contractor	Native plants planted (species from Appendix D and Planting Schedule) at following densities: Small Trees/ Shrubs @ 4 unit / 10 m2 Groundcovers @ 4 unit / 1m2 Plants sourced from IndigiGrow	Between six to twelve months of commencement of works
VMP Area	Fixed Point Monitoring	Bush Regeneration Contractor	Photographs (3 total) of fixed monitoring sites to compare the survival and retention of plantings.	Every 3 months after the first year of plantings immediately prior to monthly works. Every 6 months following the initial year for five year intensive maintenance period under the VMP.
Phase 3: Maintenance				
VMP Area	Carry out maintenance weeding (control of all weed species including annual weeds) throughout VMP Area	Bush Regeneration Contractor	0 new weed species or infestations at end of each visit	Monthly for duration of 5 year intensive maintenance period under VMP
VMP Area	Maintenance of plantings	Bush Regeneration Contractor	0 dead plantings remaining (each	Monthly duration of 5 year

Management	Action	Responsibility	Key Performance Indicators	Timing
			replaced with new planting) Plants watered when drought stressed. Additional plantings where required due to observed gaps in any strata. Densities for each stratum will be as below or greater: Small Trees/ Shrubs @ 4 unit / 10 m2 Groundcovers @ 4 unit / 1m2	maintenance period under VMP
Phase 4: Monitoring and reporting				
VMP Area	Biannual inspection of site	Bushland Management or Ecologist	Site inspection completed as outlined in Chapter 9.	Every 6 months for 5 year maintenance period of VMP
VMP Area	Progress report preparation	Bushland Management or Ecologist	Annual Report prepared on progress of restoration works.	Once a year for the 5 year maintenance period of VMP
VMP Area	Final Inspection of Site	Bushland Management or Ecologist	Final inspection carried out at completion of 5 years of maintenance under VMP.	After 5 years of maintenance under VMP
VMP Area	Final Report	Bushland Management or Ecologist	Final report prepared detailing success of restoration or outlining further works needed.	After 5 years of maintenance under VMP

11. References

Botanic Gardens Trust (2008). Best Practice Management Guidelines for Phytophthora cinnamomi within the Sydney Metropolitan Catchment Management Authority Area. Sydney, Botanic Gardens Trust Royal Botanic Gardens.

CPaMPT (2018). "Centennial Parklands and York Road Eastern Suburbs Banksia Scrub."

DPI (2017). Fact Sheet: Weed Management Legislation is Changing. D. o. P. Industries.

Landcom (2004). Managing Urban Stormwater: Soils and Construction ("Blue Book"), Fourth Edition, NSW Government, Parramatta.

LLS: Greater Sydney, Ed. (2017). Greater Sydney Regional Strategic Weed Management Plan 2017 - 2022, Local Land Services NSW.

OEH (2016). The Native Vegetation of the Sydney Metropolitan Area - VIS_ID 4489. Sydney, Office of Environment and Heritage.

Botanic Gardens Trust (2008). Best Practice Management Guidelines for Phytophthora cinnamomi within the Sydney Metropolitan Catchment Management Authority Area. Sydney, Botanic Gardens Trust Royal Botanic Gardens.

CPaMPT (2018). "Centennial Parklands and York Road Eastern Suburbs Banksia Scrub."

DPI (2017). Fact Sheet: Weed Management Legislation is Changing. D. o. P. Industries.

Landcom (2004). Managing Urban Stormwater: Soils and Construction ("Blue Book"), Fourth Edition, NSW Government, Parramatta.

LLS: Greater Sydney, Ed. (2017). Greater Sydney Regional Strategic Weed Management Plan 2017 - 2022, Local Land Services NSW.

OEH (2013). The Native Vegetation of the Sydney Metropolitan Area. Volume 2: Vegetation Community Profiles. Sydney, NSW Office of Environment and Heritage.

Botanic Gardens Trust (2008). Best Practice Management Guidelines for Phytophthora cinnamomi within the Sydney Metropolitan Catchment Management Authority Area. Sydney, Botanic Gardens Trust Royal Botanic Gardens.

CPaMPT (2018). "Centennial Parklands and York Road Eastern Suburbs Banksia Scrub."

DPI (2017). Fact Sheet: Weed Management Legislation is Changing. D. o. P. Industries.

Landcom (2004). Managing Urban Stormwater: Soils and Construction ("Blue Book"), Fourth Edition, NSW Government, Parramatta.

LLS: Greater Sydney, Ed. (2017). Greater Sydney Regional Strategic Weed Management Plan 2017 - 2022, Local Land Services NSW.

OEH (2013). The Native Vegetation of the Sydney Metropolitan Area. Volume 2: Vegetation Community Profiles. Sydney, NSW Office of Environment and Heritage.

APPENDIX A :

Previous Conditions of Consent relating to the Preparation of this VMP

This appendix provides the documents associated with the consent conditions listed in the Development Consent for SSD 10352, including:

(i) LD 282/00 issued by Waverley Council on 22 May 2001;

(ii) EPBC 2002/575 issued by the Commonwealth Government on 25 October 2002;

(iii) EPBC 2004/1676 issued by the Commonwealth Government on 20 August 2004;

(iv) DA 446-10-2003 issued by the Minister for Infrastructure and Planning on 21 October 2004.

A.1. (i) LD 282/00 issued by Waverley Council on 22 May 2001

Following extensive research. the LD-282/00 application is not available on Council's DA tracker or the EPBC Act Public Portal. Nonetheless, it is addressed in the assessment report associated with SSD-10352. The commentary is duplicated in the extract below and appended thereafter, and confirms that the application was reviewed by the EPBC who imposed conditions of consent under *EPBC 2002/575*.

Previous development consents and approvals

- the requirements of previous development consent conditions imposed to protect areas of remnant and adjoining ESBS should be reinstated as part of the SSD proposal. This includes a 3m-10m wide vegetated buffer to the ESBS on Lot 23, which was required to compensate previous clearing and loss of ESBS carried out by the Applicant under development consent LD 282/00 and approved by Waverley Council on 22 May 2001.
- LD 282/00 was determined to be a controlled action under the EPBC Act and therefore the site is also subject to conditions imposed by the Commonwealth government under EPBC 2002/575 (in effect to 28 October 2052). The conditions require the provision of a vegetated buffer no less than 3m in width to the ESBS on Lot 23.
- it was recommended that any structures and hard surfaces that currently encroach within the buffer area be removed as part of the SSD proposal.

Vegetation Management

- the VMP should have no bearing on the ongoing management of Lot 23, which is land that is owned and managed by the CPMP Trust and is subject to a separate VMP.
- a revised VMP that applies only to land under the ownership of the Applicant, and that is consistent with the objectives and methods of the VMP for Lot 23, should be prepared prior to the issue of a construction certificate and endorsed by EESG, Council and the CPMP Trust.

In summary, the EPBC conditions require the provision of a vegetated buffer no less than 3m in width to the ESBS on Lot 23. Further, any structures or hard surfaces that encroach within the buffer area are to be removed as part of the project. Additionally, included below is the development consent for DA/282/00 and the associated Plan of Management. The requirements of EPBC 2002/575 have also been incorporated into this Plan of Management and the LD 282/00 consent.

WAVERLEY COUNCIL
Notice of determination
of a development application
issued under *the Environmental Planning and Assessment Act 1979* section 81 (1) (a)

Moriah College
C/- Colin Ding & Partners
Level 6
66 Berry Street
NORTH SYDNEY NSW 2060

LD No·	LD 282/00
Date Determined:	November 29, 2001
Contact Person:	Michael Buckley
Telephone:	9369 8
Between:	9.00–10.00am and 4 00–5.00pm, Monday to Friday

Determination

Your Development Application to **demolition, construction and refurbishment of education buildings together with the construction of new buildings, carparking, roadway and removal of remnant bushland**

at **Moriah College, Queens Park Road, Queens Park,**

has been determined by consent being granted subject to conditions itemised in Attachment 1.

Consent to operate from — Date: November 29, 2001
NB: Where the consent is subject to a condition that the consent is not to operate until the applicant satisfies a particular condition the date should not be endorsed until that condition has been satisfied.

Consent will lapse on — Date: November 29,2006
NB: Clause 69A of the Regulation contains additional particulars to be included in a Notice of Determination where a condition under Section 94 of the Environmental Planning and Assessment Act 1979 has been imposed.

Building Code of Australia building classification

Class 9b

other approvals
list *Local Government Act 1993* approvals granted under s 78A (5)

general terms of other approvals integrated as part of the consent (list approvals)

1) **RIGHT OF APPEAL**: If you are dissatisfied with this decision section 97 of the *Environmental Planning and Assessment Act 1979* gives you the right to appeal to the Land and Environment Court within 12 months after the date on which you receive this notice.

*section 97 of the Environmental Planning and Assessment Act 1979 does not apply to the determination of a development application for State significant development or local designated development that has been the subject of a Commission of Inquiry

2) **RIGHT OF REVIEW** If you are not satisfied with any condition of this consent you may write to Council and ask for a review of the determination You must give your reasons for this request and pay the prescribed fee for this review. The fee and written request for review must be received within 28 days of the date of determination.

signed

On behalf of the Consent Authority

Name **Michael Buckley**
date **November 29, 2001.**

ATTACHMENT 1
TO LD 282/01

CONDITIONS OF CONSENT

1 Compliance in all respects with Plan Nos. DA03 to DA16, inclusive, C100 and L01, tables and documentation prepared by Rice Daubney, MPN Group P/L and Site Image, received by Council 5 May 2000, except where amended by the following conditions of consent.

2. The existing intersection controls at the York Road/Baronga Avenue intersection are to be retained after the completion of the Stage I redevelopment of the site. The operation of this intersection is to be monitored and is to be the subject of a review by Council and the Waverley Traffic Committee 12 months after completion of the works for Stage I. If, following this review, it is determined that the intersection needs to be upgraded, then all costs associated with the upgrade are to be borne by the applicant.

3. That the submitted draft Plan of Management be implemented and that a joint management committee be established, represented by Moriah College, Waverley Council and Queens Park Precinct Committee.

4. A deposit of guarantee satisfactory to Council for the amount of $10,000 must be provided as security for the payment of the cost of any one or more of the following:

   a) making good any damage caused to any property of Council as a consequence of the doing of anything which the consent relates;

   b) completing any public works (such as roadwork, kerbing and guttering, footway construction, stormwater drainage and environmental controls) required in connection with the consent;

   c) remedying any defects in such public work that arise within six months after the work is completed.

5. A standard A or B-Class hoarding designed and constructed in accordance with the requirements of the Work Cover Authority being erected on the street alignments of the property, prior to the commencement of building operations, and such hoardings to be maintained during the course of building operations

   Where the hoarding is proposed to be erected over the footpath or any public place, the permission of Council must be obtained prior to the erection of the hoarding

6. The building and demolition work must only be done between the hours of 7am and 5pm on Mondays to Saturdays and building work must not be carried out on Sundays and public holidays.

7. Excavation works involving the use of heavy earth movement equipment including rock breakers and the like must only be done between the hours of 7am and 5pm on Mondays to Fridays. Work must not be carried out on Saturday, Sundays or public holidays.

8. The building work must not be commenced until:

   a) a Construction Certificate has been obtained from Council or an Accredited Certifier in accordance with Section 81A(2) of the Environmental Planning & Assessment Act, 1979; and

   b) a Principal Certifying Authority has been appointed and Council has been notified of the appointment in accordance with Section 81A(2)(b) of the Environmental Planning & Assessment Act, 1979 and Form 7 of the Schedule 1 of the Regulations; and

   c) Council is given at least two days notice in writing of intention to commence the building works.

   The owner/applicant may make application to Council or an Accredited Certifier for the issue of a Construction Certificate and to be the Principal Certifying Authority.

   Should Council be appointed the Principal Certifying Authority, the applicant/owner is to pay an inspection fee of $14,150 in accordance with Council's Pricing Policy prior to commencement of any works.

9 All building work must be carried out in accordance with the provisions of the Building Code of Australia.

10 All building work must be carried out in accordance with the provisions of the Building Code of Australia.

11. The Principal Certifying Authority must be informed in writing before any site works, building or demolition commences of·

   a) the name and contractor licence number of the licencee who has contracted to do, or intends to do, work ; or

   b) the name and permit number of the owner/builder who intends to do the work; and

   c) any change to these arrangements for doing of the work

12. The payment of a long service levy as required under Section 34 of the Building and Construction Industry Long Service Payments Act, 1986, in respect to this building work, and in this regard, proof that the levy has been paid is to be submitted to Council prior to the issue of a Construction Certificate.

   Note: Council acts as an agent for the Long Services Payment Corporation and the levy may be paid at Council's office. The levy rate is 0.2% of building work costing $25,000 or more.

13. All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with the appropriate

professional standards and must be properly guarded and protected to prevent them from being dangerous to life or property.

14. If the soil requires it:

    a) retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil must be provided; and

    b) adequate provision must be made for drainage.

15. If an excavation associated with the erection or demolition of a building extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made, at their own expense, must:

    a) preserve and protect the building from damage; and

    b) if necessary, must underpin and support the building in an approved manner; and

    c) must, at least seven days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished.

16. If a public place or pedestrian vehicular traffic may be obstructed because of the carrying out of work involved in the erection or demolition of a building; or a public place is required to be enclosed in connection with the erection or demolition of a building; then:

    a) a hoarding fence must be erected between the building site and the public place of the proposed building and the public place If necessary, an awning sufficient to prevent any substance from, or in connection with, the work falling onto the public place, is also to be erected;

    b) the work is to be kept lit during the time between sunset and sunrise if the work may be of a sort of danger to persons using the public place,

    c) a hoarding, fence or awning is to be removed when it is no longer required for the purpose for which it was provided.

17. A sign is to be erected at the street frontage of the site stating the following:

    a) unauthorised entry to the work site is prohibited; and

    b) the name of the person in charge of the work site and a telephone number at which that person can be contacted outside working hours

18. Toilet facilities being provided on the work site in accordance with the requirements of Sydney Water.

19. A final Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that

the requirements of Section 109H of the Environmental Planning and Assessment Act, 1979 have been satisfied.

20. A Certificate of Adequacy prepared by a practicing Structural Engineer, certifying the adequacy of existing building structures to carry the extra load of proposed additions are to be provided to Council or the Accredited Certifier prior to the issue of a construction certificate.

21 A smoke alarm system is to be installed within the building in accordance with the requirements of the Building Code of Australia.

22. Erosion, sediment and pollution control measures are to be implemented on this site. These measures are to be in accordance with Council's Soil and Water Management Policy and are to be implemented prior to commencement of any work or activities on or around the site. Details of these measures are to be submitted to Council prior to the issuing of a Construction Certificate.

23 The building works are to be inspected during construction by the Council or by an Accredited Certifier or other suitably qualified person and documentary evidence of compliance with the relevant terms of the approval/standards of construction detailed in the Building Code of Australia, is to be obtained prior to proceeding to the subsequent stages of construction. Inspections are to include the following:

a) sediment control measures;
b) foundation material;
c) footings, slabs and structural beams and columns;
d) floor, wall and roof frame;
e) storm water drains prior to covering.

24. In accordance with the requirements of Council's Stormwater Management Policy, provision is to be made for on-site stormwater detention (OSD). The applicant is advised that the on-site stormwater detention systems must be designed and constructed in accordance with the requirements of Council's OSD Technical Specification and relevant information can be obtained from Council's Planning & Environmental Services Department. Full details of OSD must be submitted prior to the issue of a Construction Certificate.

25. The submission of a Compliance Certificate under Section 73 of the Sydney Water Act 1994. Sydney Water may require you to construct works and/or pay developer charges. Accordingly, you should make immediate application to Sydney Water (call 132092) to avoid problems in servicing your development.

26 The applicant to confer with Sydney Electricity to obtain that authority's needs for the location of a kiosk type distribution centre on the subject land, and if deemed necessary, the applicant to make available land to that Authority for the siting of such kiosk/sub-station. Documentary evidence of compliance is to be provided to the satisfaction of the Principle Certifying Authority

27 The method of collection and disposal of garbage and refuse arising from the usage of the building being in accordance with Waverley Development Control Plan No. 19 - Controls for Site Minimisation and Management In this regard, a site waste management plan is to be prepared and approved by the Principle Certifying Authority prior to the issue of a Construction Certificate.

28. The applicant is advised that Council policy prohibits the use of organochlorin pesticides as termite barriers in new development. Rather, in accordance with Australian Standard 3660: Protection of building from subterranean termites - Prevention, detection and treatment of infestation, physical barriers are to be used.

29. Hazardous or intractable wastes arising from the demolition process shall be removed and disposed of in accordance with the requirements of WorkCover and the EPA and with the provisions of:

- New South Wales Occupational Health and Safety Act, 1983;
- New South Wales Construction Safety Act, 1912; Regulation 84A-J Construction Work Involving Asbestos or Asbestos Cement 1983,
- The Occupational Health & Safety (Hazardous Substances) Regulation 1996;
- The Occupational Health & Safety (Asbestos Removal Work) Regulation 1996; and
- Environmental Offences and Penalties Act, 1997.

31. Open parking areas with greater than 10 spaces, or in the case of commercial/industrial premises, 20 movements per day, must drain to a stormwater treatment device capable of removing litter, oil, grease and sediment prior to discharge to the stormwater system. This shall be carried out in accordance with:

1. Waverley Council Stormwater policy
2. EPA Environmental Protection Manual for Authorised Officers: Technical Section (Stormwater first Flush Pollution)
3. EPA Managing Urban Stormwater: treatment techniques.

32. A Soil and Water Management Plan (also known as an Erosion and Sediment Control Plan) shall be prepared according to SSROC's Soil and Water Management Brochure and the EPA's Managing Urban Stormwater Construction Activities. This Plan shall be implemented prior to commencement of any works or activities. All controls in the Plan shall be maintained at all time. A copy of the Soil and Water Management Plan must be kept on site at all times and made available to Council officers on request.

33. Site water disposed to Council's stormwater system must have a suspended solid level of less than 50 mg/L. This may require treatment such as transfer to settling ponds, use of approved chemicals to settle out sediment or passing the contaminated water through a treatment device. Site water may also be disposed of through the services of a licensed liquid waste transporter.

34. Stockpiles of topsoil, sand, aggregate, soil or other material shall not be located on any drainage line or easement, natural watercourse, footpath or roadway and shall be protected with adequate sediment controls.

35. A vehicle wheel wash, cattle grid, wheel shaker or other appropriate device, shall be installed in accordance with the approved site Soil and Water Management Plan prior to commencement of any site works or activities

36. Liquid and solid wastes generated on the site shall be collected, transported and disposed of in accordance with the Protection of the Environment Operations Act, 1997. Records shall be kept of all waste disposal from the site.

37. The applicant is to undertake dilapidation reports for potentially affected properties, at the applicant's expense. The dilapidation reports are to be completed prior to the issue of the Construction Certificate.

DA File

LD 282/00
MB:cdc

6 June 2001

Colin Ging & Partners Pty Ltd.
Level6, 66 Berry Street
Locked Bag 2106
North Sydney NSW 2060

Dear madam/Sir

DEVELOPMENT APPLICATION LD 282/00 –
Premises: MORIAH COLLEGE, QUEENS PARK
Lot 3 DP 701512 & Lot 22 DP 879582

Please be advised that Council at its meeting on 22 May 2001 gave consideration to your proposal and subsequently resolved the following:

*"That Council as the consent authority grant a "**Deferred Commencement**" consent pursuant to Section 80(3) of the Environmental Planning and Assessment Act 1979, for **expansion, demolition, construct new buildings, carparking, internal roadway and refurbish existing buildings**, subject to the following requirements.*

The development consent is not to operate until the applicant satisfies the following requirements.

1. To reduce to impact upon the Eastern Suburbs Banksia Shrub, the proposed car parking located along the western and northwestern alignment (adjacent to Lot 23) of the proposed internal roadway be deleted from the proposal.

   a. Appropriate fencing for protection of the bushland will separate the redesign of this section of roadway. The fencing design, height and location is to be to the satisfaction of the National Parks and Wildlife Services.

   b. The deletion of the car parking spaces and any subsequent redesign of the internal roadway will be to the satisfaction of National Parks and Wildlife Service and Council's Corporate and Technical Services.

2 Detailed Engineering Design Plans are to be prepared by the applicant for the seagull island in York Road west of Baronga Avenue (including acceleration/deceleration lanes) and the central concrete median island in Baronga Avenue. All costs associated with the construction of these devices are to be borne by the applicant. These plans, including a Construction Plan of Management are to be approved by both Council and the Waverley Traffic Committee.

All correspondence should be addressed to the General Manager

Cnr. Paul Street
& Bondi Road
Bondi Junction
2022 Australia

DX 12006
Bondi Junction
Ph: (02) 9369 8000
Fax: (02) 9387 1820

Email:
waver@ozemail.com.au
Homepage:
www.waverley.nsw.
gov.au

ENGLISH

If you do not understand this correspondence, please come to Council or contact the Telephone Interpreter Service (TIS) on 131 450 and ask them to connect you to Council on 9369-8000 We will try to answer your enquiries by using an interpreter.

CHINESE

如果您不明白本信件的內容，請到市議會來，或撥 131 450 同電話傳譯服務聯絡，請他們替您接通市議會電話 9369 8000。我們將通過電話傳譯員回答您的有關問題及查詢。

SPANISH

Si Ud. no entiende esta correspondencia, le rogamos concurrir al Concejo Municipal o llamar al Servicio Telefónico de Intérpretes (TIS) al 131 450 y pedirles que le comuniquen con el Concejo en el 9369-8000. Trataremos de contestar sus consultas usando un intérprete.

KOREAN

만일 이 서신을 이해하지 못하시겠거든 카운슬로 직접 오시거나, 아니면 전화 131 450 으로 전화 통역 서비스(TIS)에 연락하셔서 통역에게 9369 8000으로 당신을 카운슬에 전화로 연결시켜 달라고 요청하십시오. 그러면 우리는 통역을 이용해서 당신의 문의에 답변해 드릴 것입니다.

HUNGARIAN

Ha a szöveget nem érti keresse fel a Council-t – Kerületi Tanácsot – vagy hívja fel a telefontolmács szolgálatot – Telephone Interpreter Service-t, rövidítve T.I.S. – a 131 450 telefonszámon, és kérje az összekötetést a Tanáccsal, a Tanács száma: 9369-8000. A Tanács tolmácson keresztül válaszolni fog a kérdéseire.

JAPANESE

もし、この文書が理解できなかったらカウンシルに来るか、電話通訳サービス 13 14 50 に電話して、カウンシル (9369-8000) に電話をつないでもらって下さい。そうすればその通訳を通してお問い合せにお答えいたします。

POLISH

Jeśli nie rozumie Pan/i/tego pisma, proszę udać się do Rady Miejskiej (Council) lub skontaktować się z Telefonicznym Biurem Tłumaczy (Telephone Interpreter Service, TIS) pod numerem 131 450 i poprosić tam o skontaktowanie się w Pana/i/imieniu z Radą Miejską pod numerem 9369-8000. Postaramy się odpowiedzieć za pośrednictwem tłumacza na wszystkie Pana/i/pytania

ITALIAN

Se non riuscite a comprendere questa corrispondenza, siete pregati di venire al Comune o rivolgervi al Servizio telefonico interpreti (TIS) al numero 131 450 chiedendo a quest'ultimo di mettervi in contatto con il Comune al numero telefonico 9369-8000. Cercheremo di dare una risposta alle vostre domande usando un interprete.

RUSSIAN

Если эта корреспонденция вам непонятна, вы можете зайти в помещение Совета (Council) или связаться по телефону 131 450 е Телефонной переводческой службой (TIS) и попросить вас с мупиципальным советом соединить по телефону 9369-8000. Мы постараемся ответить на ваши вопросы через переводчика.

GREEK

Αν δεν καταλαβαίνετε την επιστολή αυτή, παρακαλείστε να έρθετε στο Δημαρχείο (Council) ή επικοινωνήστε με την τηλεφωνική Υπηρεσία Διερμηνέων (Telephone Interpreter Service ή TIS) στον αριθμό 131 450 και ζητήστε να σάς συνδέσουν με το Δημαρχείο, στον αριθμό 9369-8000. Θα προσπαθήσουμε να απαντήσουμε σε ό,τι μάς ρωτήσετε, χρησιμοποιώντας διερμηνέα.

3. The applicant is to confirm that the proposed joint management committee will be responsible for developing a transport and parking policy for the entire College complex. The policy is to include measures that will

   (a) maximise the College's capacity to provide bus transport to and from the College for its entire student population This is to include, if sufficient State Transit Authority school special buses are not available to the College and if Council considers it to be necessary, the acquisition of buses by the College;

   (b) ensure the elimination of parking by students in the adjoining residential area (being the area bounded by Queens Park, York Road, the northern side of Birrell Street and the eastern side of Bourke Street); and

   (c) allow for consideration to be given to the opening of the College's car park on weekends to reduce parking problems for local residents associated with the use of Queens Park by sporting clubs;

   (d) ensure the Queens Park Road entrance to the College is not available for pedestrian access on school days between 8.00am – 10.00am and 2.00pm – 4.00pm (other than for security or emergency purposes).

   The draft Plan of Management is to be amended so that it is consistent with this requirement.

4. The applicant is to confirm that, prior to commencing any works associated with this consent, it will enter into a Memorandum of Understanding (MOU) with the Centennial Park and Moore Park Trust (CPMPT) which will include:

   (a) a condition to ensure that the Eastern Suburbs Banksia Scrub (ESBS) on Lots 1, 22 and 23 is fully rehabilitated and, if removed as a result of the College activating this development consent, fully restored and regenerated to the satisfaction of the proposed management group;

   (b) a condition that requires the College to cover the capital cost of rehabilitating the ESBS on Lot 23 (which is to be not less than $300,000) and fully restoring and regenerating any ESBS removed as a result of the College activating this or any future development consent affecting Lots 1 or 22,

   (c) a condition to ensure that when the development is complete, the newly rehabilitated and restored ESBS is protected from adverse impacts associated with the operation of the College (such as litter, stormwater run-off and the like). This condition is not intended to restrict access to Lot 23 for educational purposes by the College or any other educational establishment (subject to the approval of the CPMPT); and

(d) a commitment to ensure that the proposed management group will consist of representatives of the College, Waverley Council, the CPMPT, the Queens Park Precinct Committee and, if appropriate, the National Parks and Wildlife Service."

Upon satisfying Council as to the above matters, the following conditions will apply:

---

1. Compliance in all respects with Plan Nos. DA03 to DA16, inclusive, C100 and L01, tables and documentation prepared by Rice Duabney, MPN Group P/L and Site Image, received by Council 5 May 2000, except where amended by the following conditions of consent.
2. The existing intersection controls at the York Road/Baronga Avenue intersection are to be retained after the completion of the Stage I redevelopment of the site. The operation of this intersection is to be monitored and is to be the subject of a review by Council and the Waverley Traffic Committee 12 months after completion of the works for Stage I. If, following this review, it is determined that the intersection needs to be upgraded, then all costs associated with the upgrade are to be borne by the applicant.
3. That the submitted draft Plan of Management be implemented and that a joint management committee be established, represented by Moriah College, Waverley Council and Queens Park Precinct Committee.
4. A deposit of guarantee satisfactory to Council for the amount of $10,000 must be provided as security for the payment of the cost of any one or more of the following:

a) making good any damage caused to any property of Council as a consequence of the doing of anything which the consent relates;

b) completing any public works (such as roadwork, kerbing and guttering, footway construction, stormwater drainage and environmental controls) required in connection with the consent;

c) remedying any defects in such public work that arise within six months after the work is completed

5 A standard A or B-Class hoarding designed and constructed in accordance with the requirements of the Work Cover Authority being erected on the street alignments of the property, prior to the commencement of building operations, and such hoardings to be maintained during the course of building operations.

Where the hoarding is proposed to be erected over the footpath or any public place, the permission of Council must be obtained prior to the erection of the hoarding.

6. The building and demolition work must only be done between the hours of 7am and 5pm on Mondays to Saturdays and building work must not be carried out on Sundays and public holidays.

7. Excavation works involving the use of heavy earth movement equipment including rock breakers and the like must only be done between the hours of 7am and 5pm on Mondays to Fridays. Work must not be carried out on Saturday, Sundays or public holidays.

8. The building work must not be commenced until:

a) a Construction Certificate has been obtained from Council or an Accredited Certifier in accordance with Section 81A(2) of the Environmental Planning & Assessment Act, 1979, and

b) a Principal Certifying Authority has been appointed and Council has been notified of the appointment in accordance with Section 81A(2)(b) of the Environmental Planning & Assessment Act, 1979 and Form 7 of the Schedule 1 of the Regulations; and

c) Council is given at least two days notice in writing of intention to commence the building works.

The owner/applicant may make application to Council or an Accredited Certifier for the issue of a Construction Certificate and to be the Principal Certifying Authority.

Should Council be appointed the Principal Certifying Authority, the applicant/owner is to pay an inspection fee of $14,150 in accordance with Council's Pricing Policy prior to commencement of any works

9. All building work must be carried out in accordance with the provisions of the Building Code of Australia.

10. All building work must be carried out in accordance with the provisions of the Building Code of Australia.

11. The Principal Certifying Authority must be informed in writing before any site works, building or demolition commences of:

a) the name and contractor licence number of the licencee who has contracted to do, or intends to do, work ; or

b) the name and permit number of the owner/builder who intends to do the work; and

c) any change to these arrangements for doing of the work.

12. The payment of a long service levy as required under Section 34 of the *Building and Construction Industry Long Service Payments Act, 1986,* in respect to this building work, and in this regard, proof that the levy has been paid is to be submitted to Council prior to the issue of a Construction Certificate.

Note: Council acts as an agent for the Long Services Payment Corporation and the levy may be paid at Council's office. The levy rate is 0 2% of building work costing $25,000 or more.

13. All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with the appropriate professional standards and must be properly guarded and protected to prevent them from being dangerous to life or property

14. If the soil requires it:

a) retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil must be provided; and

b) adequate provision must be made for drainage.

15 If an excavation associated with the erection or demolition of a building extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made, at their own expense, must:

a) preserve and protect the building from damage; and

b) if necessary, must underpin and support the building in an approved manner; and

c) must, at least seven days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished.

16. If a public place or pedestrian vehicular traffic may be obstructed because of the carrying out of work involved in the erection or demolition of a building; or a public place is required to be enclosed in connection with the erection or demolition of a building; then:

a) a hoarding fence must be erected between the building site and the public place of the proposed building and the public place. If necessary, an awning sufficient to prevent any substance from, or in connection with, the work falling onto the public place, is also to be erected;

b) the work is to be kept lit during the time between sunset and sunrise if the work may be of a sort of danger to persons using the public place;

d) a hoarding, fence or awning is to be removed when it is no longer required for the purpose for which it was provided.

17. A sign is to be erected at the street frontage of the site stating the following:

a) unauthorised entry to the work site is prohibited; and

b) the name of the person in charge of the work site and a telephone number at which that person can be contacted outside working hours.

18 Toilet facilities being provided on the work site in accordance with the requirements of Sydney Water.

19 A final Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of Section 109H of the *Environmental Planning and Assessment Act, 1979* have been satisfied.

20. A Certificate of Adequacy prepared by a practicing Structural Engineer, certifying the adequacy of existing building structures to carry the extra load of proposed additions are to be provided to Council or the Accredited Certifier prior to the issue of a construction certificate.

21. A smoke alarm system is to be installed within the building in accordance with the requirements of the Building Code of Australia.

22. Erosion, sediment and pollution control measures are to be implemented on this site. These measures are to be in accordance with Council's Soil and Water Management Policy and are to be implemented prior to commencement of any work or activities on or around the site. Details of these measures are to be submitted to Council prior to the issuing of a Construction Certificate.

23. The building works are to be inspected during construction by the Council or by an Accredited Certifier or other suitably qualified person and documentary evidence of compliance with the relevant terms of the approval/standards of construction detailed in the Building Code of Australia, is to be obtained prior to proceeding to the subsequent stages of construction. Inspections are to include the following:

a) sediment control measures;
b) foundation material;
c) footings, slabs and structural beams and columns;
d) floor, wall and roof frame;
e) storm water drains prior to covering.

24. In accordance with the requirements of Council's Stormwater Management Policy, provision is to be made for on-site stormwater detention (OSD). The applicant is advised that the on-site stormwater detention systems must be designed and constructed in accordance with the requirements of Council's OSD Technical Specification and relevant information can be obtained from Council's Planning & Environmental Services Department. Full details of OSD must be submitted prior to the issue of a Construction Certificate.

25. The submission of a Compliance Certificate under Section 73 of the Sydney Water Act 1994. Sydney Water may require you to construct works and/or pay developer charges. Accordingly, you should make immediate application to Sydney Water (call 132092) to avoid problems in servicing your development.

26. The applicant to confer with Sydney Electricity to obtain that authority's needs for the location of a kiosk type distribution centre on the subject land, and if deemed necessary, the applicant to make available land to that Authority for the siting of such kiosk/sub-station. Documentary evidence of compliance is to be provided to the satisfaction of the Principle Certifying Authority.

27. The method of collection and disposal of garbage and refuse arising from the usage of the building being in accordance with Waverley Development Control Plan No. 19 - Controls for Site Minimisation and Management In this regard, a site waste management plan is to be prepared and approved by the Principle Certifying Authority prior to the issue of a Construction Certificate.

28. The applicant is advised that Council policy prohibits the use of organochlorin pesticides as termite barriers in new development. Rather, in accordance with Australian Standard 3660: Protection of building from subterranean termites - Prevention, detection and treatment of infestation, physical barriers are to be used.

29. Hazardous or intractable wastes arising from the demolition process shall be removed and disposed of in accordance with the requirements of WorkCover and the EPA and with the provisions of:

- *New South Wales Occupational Health and Safety Act, 1983*;
- *New South Wales Construction Safety Act, 1912; Regulation 84A-J Construction Work Involving Asbestos or Asbestos Cement 1983,*
- *The Occupational Health & Safety (Hazardous Substances) Regulation 1996*;
- *The Occupational Health & Safety (Asbestos Removal Work) Regulation 1996*; and
- *Environmental Offences and Penalties Act, 1997.*

31. Open parking areas with greater than 10 spaces, or in the case of commercial/industrial premises, 20 movements per day, must drain to a stormwater treatment device capable of removing litter, oil, grease and sediment prior to discharge to the stormwater system. This shall be carried out in accordance with:

1. Waverley Council Stormwater policy
2. EPA *Environmental Protection Manual for Authorised Officers: Technical Section (Stormwater first Flush Pollution)*
3 EPA *Managing Urban Stormwater: treatment techniques.*

32. A Soil and Water Management Plan (also known as an Erosion and Sediment Control Plan) shall be prepared according to SSROC's *Soil and Water Management Brochure* and the EPA's *Managing Urban Stormwater: Construction Activities.* This Plan shall be implemented prior to commencement of any works or activities. All controls in the Plan shall be maintained at all time. A copy of the Soil and Water Management Plan must be kept on site at all times and made available to Council officers on request.

33. Site water disposed to Council's stormwater system must have a suspended solid level of less than 50 mg/L. This may require treatment such as transfer to settling ponds, use of approved chemicals to settle out sediment or passing the contaminated water through a treatment device. Site water may also be disposed of through the services of a licensed liquid waste transporter.

34. Stockpiles of topsoil, sand, aggregate, soil or other material shall not be located on any drainage line or easement, natural watercourse, footpath or roadway and shall be protected with adequate sediment controls.

35 A vehicle wheel wash, cattle grid, wheel shaker or other appropriate device, shall be installed in accordance with the approved site Soil and Water Management Plan prior to commencement of any site works or activities.

36. Liquid and solid wastes generated on the site shall be collected, transported and disposed of in accordance with the *Protection of the Environment Operations Act, 1997*. Records shall be kept of all waste disposal from the site.

37. The to undertake dilapidation reports for potentially affected properties, at the applicant's expense. This is to be carried out prior to any commencement of any work.

Should you have any further enquiries with regard to the above resolution of Council, please do not hesitate to contact me on 9369 8044.

Yours faithfully

MICHAEL BUCKLEY
MANAGER STATUTORY PLANNING
\\WOMBAT\STORAGE\HOME\PES\determinations\deferrals\Moriah College - Expansion, lot 3 and Lot 22-deferred commencement.doc

COLIN GING & PARTNERS

Moriah College בית ספר הר המוריה

College Principal
R A STEINMAN
Sydney, NSW, 2030

STAGE 1 MASTERPLAN
DA No. LD 282/00

PLAN OF MANAGEMENT

1.0 PREAMBLE

1.1 Relationship to Statutory Approvals

- This Plan of Management relates to Waverley Council DA Consent No. LD 282/00 (deferred commencement) for the Masterplan Stage 1 development of Moriah College.

2.0 COMMUNICATION

2.1 Joint Management Committee

- This Moriah College Plan of Management and all associated communications will be monitored by and directed to the Moriah College Communication Committee. (MCCC)

2.2 Stakeholders

- The MCCC will be represented by the following :
- Moriah College : 2 representatives. (1 Board Member and 1 Management Office)
- Waverley Council : 2 representatives. (1 Councillor and 1 Planning Dept. Officer).
- Queens Park Precinct : 2 representatives from the Executive Committee.

2.3 Meeting Cycle

- The MCCC will meet once each 3 month period, commencing at the issue by Council of the final DA Consent.

2.4 Meeting Location

- The MCCC will meet at the offices of Waverley Council.

2.5 Meeting Agenda

- The MCCC will review the Council and relevant community interests in the College operations.

2.6 Meeting Administration

- The MCCC will minute all meetings and distribute to attendees.

3.0 STATUTORY COMPLIANCE

3.1 Requirement

- Moriah College is to comply with all statutory approvals relating to the College operations and development.

3.2 Monitoring

- The MCCC will review any statutory approvals and conditions for compliance.

3.3 Non Compliances

- The MCCC will establish any necessary actions and time frames to rectify any identified non-compliances.

4.0 ALLOWABLE SITE USE

4.1 Educational

- All uses necessary to provide a comprehensive educational service for Year 2 through to Year 12.
- Uses to include both passive and active either indoors or outdoors to the facility.

4.2 School Community

- All school community uses necessary within the facility for educational, social, religious or sporting reasons.

4.3 Commercial

- All commercial uses necessary within the facility to meet educational or school community needs.

4.4 General Public Use

- The Swimming Pool, Gymnasium and Auditorium are to be maintained for general public use in accordance with Waverley Council DA Consent 86/193.

4.5 Major Uses

- Major Use is deemed to be any use of the facility, other than as outlined in Clause 4.1, 4.2, 4.3 and 4.4, which by its size, attendance or nature will significantly impact on the surrounding residential areas.
- All Major Uses are required to be submitted by Moriah College to the MCCC for information and review.

4.6 Minor Uses

- Minor Use is deemed to be any other use of the facility which by its size, attendance or nature will not significantly impact on the surrounding residential areas.

5.0 HOURS OF USE

5.1 Educational

- 6am to 6pm Monday to Friday throughout the year.
- Generally, at any other times necessary for Minor Use.

5.2 School Community

- Generally, at any times necessary for Minor Use.

5.3 Major Uses

- Major Uses will be restricted between 12 midnight and 6am every day of the year.

6.0 SITE POPULATION

6.1 Students

- The student population is to be limited to the approved numbers provided in the DA Consents as issued by Waverley Council.
- The enrolled student numbers for each year are to be submitted to the MCCC for information.

6.2 Teaching Staff

- The staff population is to be maintained at reasonable numbers of full time or part time staff necessary to implement the Moriah College educational curriculum.
- The anticipated numbers of teaching staff for each year are to be submitted to the MCCC for information.

6.3 Administration & Maintenance Staff

- The administration and maintenance staff population is to be maintained at reasonable numbers of full time or part time staff necessary to implement the Moriah College educational administration.
- The anticipated numbers of administration and maintenance staff for each year are to be submitted to the MCCC for information.

7.0 TRAFFIC MANAGEMENT

7.1 Traffic Policy

- Moriah College is to prepare and endorse a Traffic Policy covering the following issues:
    - Pedestrian access.
    - Maximise the use of public transport.
    - Maximise the use of bus transport for all students.
    - Staff parking.
    - Student parking to an approved location away from the area bounded by Queens Park Road, York Road, Birrell Street North and Bourke Street east.
    - Parent conduct.
    - General public use, including weekend use of the proposed Moriah College carpark.
    - Major Uses.
    - Site access, including the closure of the Queens Park Road entrance gate from 8am – 10am and 2pm – 4pm on school days, except for security or emergency purposes.

7.2 Traffic Management Plan

- Moriah College is to prepare and endorse a Traffic Management Plan which provides management strategies to implement each aspect of the Traffic Policy.

7.3 Approval

- Moriah College is to submit the Traffic Management Plan, and any proposed alteration to the Plan, for review and concurrence by the MCCC.

7.4 Monitoring

- Moriah College is to regularly review the effectiveness of the Traffic Management Plan initiatives with the MCCC.

8.0 PLAN OF MANAGEMENT

8.1 Proposed Amendments

- This Plan of Management will be reviewed and monitored by the MCCC.
- Any amendments to this Plan, may be proposed to the MCCC for consideration.

8.2 Amendments

- Authority to amend this Plan is only vested in the MCCC.

END

A.2. (ii) EPBC 2002/575 issued by the Commonwealth Government on 25 October 2002

[Consent conditions provided over leaf]

VARIATION OF CONDITIONS OF APPROVAL

COMMONWEALTH OF AUSTRALIA

ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

Pursuant to section 143 of the *Environment Protection and Biodiversity Conservation Act 1999*, I, GERARD PATRICK EARLY, First Assistant Secretary of the Approvals and Wildlife Division, a delegate of the Minister for the Environment and Heritage, hereby vary the conditions attached to the approval granted on 25 October 2002 for the taking of the following action by the Moriah War Memorial College:

> To remove vegetation and undertake associated works on Lot 22 of the York Road bushland, Sydney, to facilitate the expansion of the Moriah War Memorial College, and to rehabilitate bushland on Lot 23 (EPBC 2002/575).

The variation is:

Delete paragraph 6 of Annexure 1 to the approval and substitute the following:

6. No structures are to be erected on Lot 22 that will cast shadow onto Lot 23 and fencing of Lot 23 must be of at least 1800mm in height.

Add paragraph 10 to Annexure 1:

10. Within one month of receipt from the Centennial Park Moore Park Trust, Moriah War Memorial College must provide to Environment Australia an annual report, as described in the vegetation management plan, on works completed during the previous year on Lot 23.

Dated this first day of August 2003

Gerard Early

GERARD EARLY

Annexure 2

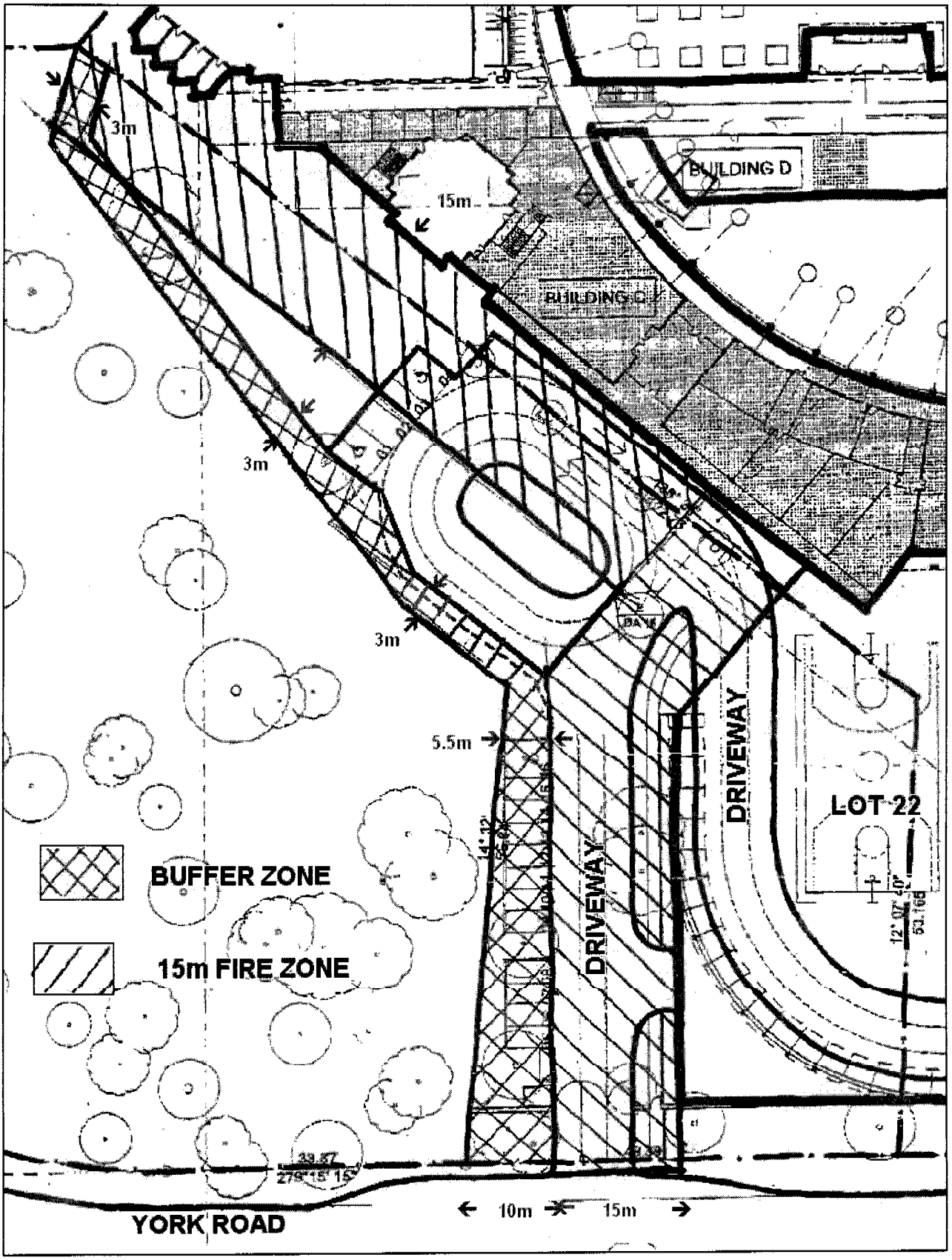

Figure 8. Location of Fire Management and Buffer Zones

URBAN BUSHLAND
MANAGEMENT CONSULTANTS PTY LTD

Map\data\Adele\Consultancy\Moriah\VMP October 2002\Figure8.FireZones.WOR

COMMONWEALTH OF AUSTRALIA

ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

DECISION TO APPROVE THE TAKING OF AN ACTION

Pursuant to section 133 of the *Environment Protection and Biodiversity Conservation Act 1999*, I, GERARD PATRICK EARLY, First Assistant Secretary, Approvals and Legislation Division, approve the taking of the following action:

> To remove vegetation and undertake associated works on Lot 22 of the York Road bushland, Sydney, to facilitate the expansion of the Moriah War Memorial College, and to rehabilitate bushland on Lot 23 (EPBC 2002/575)

by Moriah War Memorial College subject to the conditions set out in annexure 1.

This approval has effect for:

> sections 18 and 18A of the *Environment Protection and Biodiversity Conservation Act 1999*.

This approval has effect until 28 October 2052.

Dated this 25th day of October 2002

Gerard Early

GERARD EARLY

ANNEXURE 1

1. Moriah War Memorial College must rehabilitate the Eastern Suburbs Banksia Scrub community on Lot 23, or, if this is not possible, an area of equivalent size and condition of Eastern Suburbs Banksia Scrub.
2. Moriah War Memorial College must prepare and submit to the Minister for approval a vegetation management plan prior to undertaking any construction or clearance. The plan must address compensatory rehabilitation works on Lot 23, or, if this is not possible, an area of equivalent size and condition as required by Condition 1. The plan must include site preparation, removal of exotic species, fencing, weeding and regeneration. The approved plan must be implemented and the implementation of the plan must commence before the clearing of any Eastern Suburbs Banksia Scrub species on Lot 22.
3. A buffer zone must be maintained on Lot 22 along the shared boundary with Lot 23 as shown at Annexure 2. No portion of the buffer zone can be less than 3 metres in width.
4. Any component plant species of the Eastern Suburbs Banksia Scrub community to be used in the buffer zone must be sourced from the local area.
5. Any grassed areas on Lot 22 must be planted with a non-seeding hybrid grass species. A deep root barrier not less than 300mm must be established between the buffer zone and adjoining grassed areas on Lot 22. No grass from Lot 22 is to be allowed to intrude into the buffer zone.
6. No structures are to be erected on Lot 22 that will cast shadow onto Lot 23 and fencing of Lot 23 must be of at least 2100mm in height.
7. During construction of the boundary fence between Lot 22 and Lot 23, no mature shrubs or trees of species characteristic of the Eastern Suburbs Banksia Scrub community are to be removed from Lot 23, with the exception of *Leptospermum laevigatum*, which may be removed if necessary.
8. Where mature shrubs or trees of the Eastern Suburbs Banksia Scrub community are located on the boundary between Lot 22 and Lot 23, sufficient to impact on the boundary fence alignment, the boundary fence is to be diverted into the Lot 22 buffer zone to avoid any impact on the identified shrubs or trees.
9. Where mature shrubs or trees of the Eastern Suburbs Banksia Scrub community are located within the Lot 22 buffer zone but do not impact on the boundary fence alignment, the boundary fence is to remain on the boundary between Lot 22 and Lot 23.

Definitions

Lot 22 is the area of land as described in the Preliminary Documentation.

Lot 23 is the area of land as described in the Preliminary Documentation.

Mature shrubs or trees are those which have reached the stage of development at which they have flowered or are flowering.

A.3. (iii) EPBC 2004/1676 issued by the Commonwealth Government on 20 August 2004

[Consent conditions provided over leaf]

COMMONWEALTH OF AUSTRALIA

ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

DECISION THAT ACTION IS NOT A CONTROLLED ACTION

I, MARK FLANIGAN, Assistant Secretary, Policy and Compliance Branch, Department of the Environment and Heritage, a delegate of the Minister for the Environment and Heritage for the purposes of section 75 of the *Environment Protection and Biodiversity Conservation Act 1999*, decide that the proposed action, set out in the Schedule, is not a controlled action. Provided that the proposed action is taken in the manner described in the Schedule, the provisions of Part 3 of the EPBC Act set out in the Schedule are not controlling provisions.

SCHEDULE

The proposed action by the Moriah War Memorial College Association to develop the Moriah Primary School on Lot 1 DP 701512, Queens Park, New South Wales and as described in the referral received under the Act on 23 July 2004 (EPBC 2004/1676).

Provisions of Part 3

The relevant provisions of Part 3 are:

- sections 18 and 18A (Listed threatened species and communities).

Manner in which the proposed action is to be taken:

- The proposal will be implemented in accordance with the conditions specified in the letter of 20 May 2004 from Mr Robert Humphries, NSW Department of Environment and Conservation to Ms Evelyn Hendieh, NSW Department of Infrastructure Planning and Natural Resources, for the protection and rehabilitation of Eastern Suburbs Banksia Scrub endangered ecological community.

Dated this 20 day of August 2004

.....

ASSISTANT SECRETARY
POLICY AND COMPLIANCE BRANCH
DEPARTMENT OF THE ENVIRONMENT AND HERITAGE

Attach 4

Evelyn Hendieh
Environmental Planner
Urban Assessments Branch
Dept of Infrastructure Planning and Natural Resources
20 Lee Street
SYDNEY 2000

Our ref:cppd/mhb/00/1

NSW
NATIONAL
PARKS AND
WILDLIFE
SERVICE

ABN 30 841 387 271

Dear Ms Hendieh

Moriah Primary School, Lot 1 DP 701512, Queens Park

I refer to the above proposed development ('the proposal') and its potential impact on the Eastern Suburbs Banksia Scrub endangered ecological community. It is understood that the Department of Infrastructure Planning and Natural Resources (DIPNR) is currently considering a development application (DA 446-10-2003) for the site.

The Department of Environment and Conservation (DEC) issued the Director-General's requirements for a species impact statement (SIS) for the proposal on 9 January 2004 following a determination by the DIPNR that, in its original form, the proposal was likely to have a significant effect on ESBS. The DEC has subsequently met with representatives of the proponent on site to discuss various means of modifying the development footprint to avoid or minimise impacts on ESBS.

Following this meeting and subsequent discussions with the proponent's representatives, and after consideration of the socio-economic benefits of the proposal, the DEC advises that it will not recommend against development consent being granted, provided that the original proposal is modified according to the following conditions. These conditions have been discussed with and accepted by the proponent.

(a) A strip of ESBS between 12 and 12.5 metres will be retained along the southern boundary of Lot 1 (Area X in Attachment A). This strip of ESBS will be protected from impacts from the development (direct and indirect) both by fencing and by the avoidance of stormwater discharges, increased surface water run-off, weed invasion, overshadowing[1] and other impacts.

(b) An area of ESBS (Area Y in Attachment A) will be retained on the embankment near the south-eastern boundary of Lot 1. Area Y will also include a minimum one metre strip along the top of the embankment.

[1] The DEC understands that shadow diagrams prepared for the proponent indicate that, at worst, the shadows created by the southern building will extend to 12 metres from the Lot 1 - Lot 23 boundary. The extent of potential overshadowing in Area X that this represents is considered by the DEC to be acceptable.

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(c) Appropriate permanent fencing for the protection of bushland will be constructed by the proponent outside the boundary of the vegetation that is to be retained under conditions (a) and (b) prior to any construction or demolition work being undertaken at the site. The fence that is to be constructed along the Lot 1 – Lot 23 boundary will be a security fence of similar design to the permanent Lot 23 perimeter fence. The internal fence will be of a design that permits access for conservation and educational purposes, while preventing vehicle access, rubbish dumping and the encroachment of adjacent landuses.

(d) PVC pipe will be used to encase the footings of the fences that are to be constructed under condition (c) where necessary to prevent nutrients from leaching into the retained bushland areas.

(e) The stormwater irrigation pipes that are to be installed on the Area Y embankment will be designed in a manner which ensures that the discharged water does not create erosion problems. The pipes will also be designed in a manner that ensures that no discharged water enters Area X. The pipes will be constructed from materials that will not modify the nutrient or pH level of the embankment and will be installed in a manner that is sympathetic to the conservation value of the retained bushland and the erosion prone nature of the site.

(f) All native vegetation, including ESBS, that is retained on Lot 1 (Area X and Area Y) will be actively managed by the proponent for conservation purposes for the period that the proponent occupies the site. A vegetation management plan for this area, which addresses management issues (including weed control, access, fire management, herbivory, rubbish dumping, and soil erosion), will be prepared by the proponent to the satisfaction of the DEC within six months of any development consent being granted. An opportunity exists for students to be involved in the implementation of conservation works in this area, if appropriately supervised.

(g) ESBS plant material and intact sand in the area identified for development will be salvaged, where appropriate, prior to clearing. The salvaged material will be used in the restoration of the retained Lot 1 bushland where required. Any surplus salvaged material will be made available for use in the landscaping of Lot 1 or in the restoration of the Lot 23 bushland.

(h) Wherever possible, locally indigenous species will be used in the landscaping of areas along or near the bushland interface to assist in maintaining ecological processes such as pollination in the remnant ESBS. To protect the genetic integrity of the remnant however, these species will only be used where propagules can be sourced from the York Road remnant. It is envisaged that such seed collection will be limited to a few of the relatively abundant ESBS species within the remnant (including *Leptospermum laevigatum, Acacia longifolia* and *Monotoca elliptica).*

(i) No landscaping will occur in areas, or of species, that have the potential to overshadow the retained bushland areas.

(h) Exotic or non-locally indigenous species that are likely to exhibit invasive characteristics at the site will not to be used in the landscaping of Lot 1.

Whilst in this instance the DEC is not a concurrence authority, had a modified proposal consistent with the conditions detailed above been referred to the DEC, I advise that the DEC's concurrence could have been assumed pursuant to Section 64 of the *Environment Planning and Assessment Regulation 2000*. The DEC understands that the Minister for Infrastructure Planning and Natural Resources is the consent authority in this matter. Accordingly, should the Minister decide that a modified proposal consistent with the conditions above is no longer likely to have a significant effect on ESBS, the DEC will not object to any consent being granted.

Should you require any additional information please contact Martin Bremner, Threatened Species Officer, Metropolitan Region on 02 9585 6826 or martin.bremner@npws.nsw.gov.au.

Yours sincerely

20/5/04

Robert Humphries
Manager Threatened Species Unit
Environment Protection and Regulation Division

cc Martin Moore, Morgan Moore & Associates
Dr Joe Johnson, Department of Environment and Heritage
Marlene Krasovitsky, Centennial Park & Moore Park Trust

MORIAH K-2 PARKING
OPTION SK 04
1:500 SCALE DW.

APPENDIX B :
Flora Survey Data

Table 4 List of Flora Species Within Subject Land

Family	Scientific Name	Common Name	Exotic	ESBS (BAM Plot)
Fabaceae (Mimosoideae)	*Acacia falcata*			
Fabaceae (Mimosoideae)	*Acacia longifolia*			
Fabaceae (Mimosoideae)	*Acacia longifolia var. sophorae*	Coastal Wattle		Yes
Fabaceae (Mimosoideae)	*Acacia suaveolens*	Sweet Wattle		Yes
Fabaceae (Mimosoideae)	*Acacia ulicifolia*	Prickly Moses		Yes
Polygonaceae	*Acetosa sagittata*	Rambling Dock	*	
Alliaceae	*Agapanthus praecox subsp. orientalis*		*	
Apiaceae	*Apium graveolens*	Celery	*	
Asparagaceae	*Asparagus aethiopicus*	Asparagus Fern	*	
Ericaceae	*Astroloma pinifolium*	Pine Heath		Yes
Poaceae	*Austrostipa pubescens*			Yes
Proteaceae	*Banksia aemula*	Wallum Banksia		
Poaceae	*Austrostipa pubescens*			
Proteaceae	*Banksia integrifolia*	Coast Banksia		
Asteraceae	*Bidens pilosa*	Cobbler's Pegs	*	
Fabaceae (Faboideae)	*Bossiaea heterophylla*	Variable Bossiaea		Yes
Poaceae	*Bromus catharticus*	Praire Grass	*	
Buxaceae	*Buxus microphylla*		*	
Brassicaceae	*Cardamine hirsuta*	Common Bittercress	*	
Casuarinaceae	*Casuarina glauca*	Swamp Oak		
Ulmaceae	*Celtis sinensis*	Japanese Hackberry	*	
Poaceae	*Cenchrus clandestinus*	Kikuyu Grass	*	
Poaceae	*Cenchrus setaceus*	Fountain Grass	*	
Caryophyllaceae	*Cerastium glomeratum*	Mouse-ear Chickweed	*	
Solanaceae	*Cestrum parqui*	Green Cestrum	*	
Lauraceae	*Cinnamomum camphora*	Camphor Laurel	*	
Asteraceae	*Conyza bonariensis*	Flaxleaf Fleabane	*	Yes
Asteraceae	*Conyza sumatrensis*	Tall fleabane	*	
Sapindaceae	*Cupaniopsis anacardioides*	Tuckeroo		
Lythraceae	*Cuphea hyssopifolia*		*	
Apiaceae	*Cyclospermum leptophyllum*	Slender Celery	*	

Family	Scientific Name	Common Name	Exotic	ESBS (BAM Plot)
Poaceae	*Cynodon dactylon*	Common Couch		
Cyperaceae	*Cyperus gracilis*	Slender Flat-sedge		
Phormiaceae	*Dianella caerulea*	Blue Flax-lily		Yes
Phormiaceae	*Dianella caerulea var. producta*			
Phormiaceae	*Dianella revoluta*	Blueberry Lily		Yes
Poaceae	*Dichelachne crinita*	Longhair Plumegrass		Yes
Poaceae	*Ehrharta erecta*	Panic Veldtgrass	*	
Poaceae	*Eragrostis tenuifolia*	Elastic Grass	*	
Fabaceae (Faboideae)	*Erythrina x sykesii*	Coral tree	*	
Myrtaceae	*Eucalyptus robusta*	Swamp Mahogany		
Myrtaceae	*Eucalyptus scoparia*	Wallangarra White Gum		
Asteraceae	*Euchiton sphaericus*	Star Cudweed		Yes
Poaceae	*Festuca spp.*			
Cyperaceae	*Ficinia nodosa*	Knobby Club-rush		
Moraceae	*Ficus benjamina*	Weeping Fig	*	
Moraceae	*Ficus rubiginosa*	Port Jackson Fig		
Oleaceae	*Fraxinus spp.*		*	
Asteraceae	*Gamochaeta americana*	Purple Cudweed	*	
Asteraceae	*Gamochaeta pensylvanica*	Cudweed	*	Yes
Proteaceae	*Grevillea spp.*			
Asteraceae	*Hypochoeris radicata*	Catsear	*	
Bignoniaceae	*Jacaranda mimosifolia*	Jacaranda	*	
Myrtaceae	*Kunzea ambigua*	Tick Bush		Yes
Verbenaceae	*Lantana camara*	Lantana	*	
Myrtaceae	*Leptospermum laevigatum*	Coast Teatree		Yes
Ericaceae	*Leucopogon juniperinus*	Prickly Beard-heath		Yes
Poaceae	*Lolium perenne*	Perennial Ryegrass	*	
Lomandraceae	*Lomandra hystrix*			
Lomandraceae	*Lomandra longifolia*	Spiny-headed Mat-rush		Yes
Primulaceae	*Lysimachia arvensis*	Scarlet Pimpernel	*	
Fabaceae (Faboideae)	*Medicago polymorpha*	Burr Medic	*	

Family	Scientific Name	Common Name	Exotic	ESBS (BAM Plot)
Myrtaceae	*Melaleuca quinquenervia*	Broad-leaved Paperbark		
Myrtaceae	*Melaleuca styphelioides*	Prickly-leaved Tea Tree		
Meliaceae	*Melia azedarach*	White Cedar		
Poaceae	*Microlaena stipoides*	Weeping Grass		Yes
Ericaceae	*Monotoca elliptica*	Tree Broom-heath		Yes
Ericaceae	*Monotoca elliptica*	Tree Broom-heath		
Oleaceae	*Olea europaea*	Common Olive	*	
Convallariaceae	*Ophiopogon japonicus*	Dwarf lilyturf	*	
Oxalidaceae	*Oxalis corniculata*	Creeping Oxalis	*	
Urticaceae	*Parietaria judaica*	Pellitory	*	
Caryophyllaceae	*Paronychia brasiliana*	Chilean Whitlow Wort, Brazilian Whitlow	*	
Passifloraceae	*Passiflora edulis*	Common Passionfruit	*	
Proteaceae	*Persoonia lanceolata*	Lance Leaf Geebung		Yes
Arecaceae	*Phoenix canariensis*	Canary Island Date Palm	*	
Pinaceae	*Pinus radiata*	Radiata Pine	*	
Pittosporaceae	*Pittosporum undulatum*	Sweet Pittosporum		
Plantaginaceae	*Plantago lanceolata*	Lamb's Tongues	*	
Plumbaginaceae	*Plumbago auriculata*	Cape leadwot	*	
Poaceae	*Poa annua*	Winter Grass	*	
Caryophyllaceae	*Polycarpon tetraphyllum*	Four-leaved Allseed	*	
Amygdalaceae	*Prunus spp.*		*	
Asteraceae	*Soliva sessilis*	Bindyi	*	
Asteraceae	*Sonchus asper*	Prickly Sowthistle	*	
Asteraceae	*Sonchus oleraceus*	Common Sowthistle	*	
Asteraceae	*Sonchus spp.*	Sowthistle		
Poaceae	*Sporobolus africanus*	Parramatta Grass	*	
Caryophyllaceae	*Stellaria media*	Common Chickweed	*	
Poaceae	*Stenotaphrum secundatum*	Buffalo Grass	*	
Asteraceae	*Taraxacum officinale*	Dandelion	*	Yes

Family	Scientific Name	Common Name	Exotic	ESBS (BAM Plot)
Fabaceae (Faboideae)	*Trifolium repens*	White Clover	*	
Myrtaceae	*Tristaniopsis laurina*	Kanooka		
Campanulaceae	*Wahlenbergia gracilis*	Sprawling Bluebell		Yes
Lamiaceae	*Westringia fruticosa*	Coastal Rosemary		
Apiaceae	*Xanthosia pilosa*	Woolly Xanthosia		Yes
Agavaceae	*Yucca aloifolia*	Spanish Bayonet	*	

APPENDIX C :
Weed Control Methods

Table 5 Weed Control Treatment Methods

Family	Scientific Name	Common Name	Status	Control Method
Agavaceae	*Yucca aloifolia*		No Status	- Wear thick protective clothing and gloves and eye protection to protect against sharp leaf spines - Cut plant at base with hand saw and apply undiluted glyphosphate to cut stume
Alliaceae	*Agapanthus praecox subsp. orientalis*	Agapanthus	Other Weed of Regional Concern	- Plant is resistant to herbicide - Needs to be dug out with a mattock, or hand mattock, with care taken to remove all rhizomes (rhizomes should be bagged and removed from site)
Rosaceae	*Prunus spp.*		No Status	- Hand weed or if not possible cut-back to stump and paint stem with undiluted Glyphosate
Apiaceae	*Apium graveolens*	Celery	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Apiaceae	*Cyclospermum leptophyllum*	Slender Celery	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Arecaceae	*Phoenix canariensis*	Phoenix palm, Canary Island date palm	Other Weed of Regional Concern	- Large trees require an arborist to safely remove - PPE including thick leather gloves and eye protection should be used when handling small individuals due to dangerous spines at leaf bases - Cut all leaves off at base with long handles loppers - Remove leaves from site for safety of other site users (handle with caution due to spines) - Cut tree below crown and leave stump to rot - Use hand tools such as a trowel or knife to dig up seedlings
Asparagaceae	*Asparagus aethiopicus*	Asparagus weed	State Priority - Asset Protection ; WONS	- Any branches profuse with fruit should be cut with secateurs and bagged to prevent further spread of species by birds - Juvenile plants can be eased out of soil with a trowel or knife - care should be taken to remove below ground plant material

Family	Scientific Name	Common Name	Status	Control Method
				- For large, mature plants the woody crown at the base can be cut around with a sharp knife, or hacked out with a mattock or peter lever and removed - it is easiest to cut all branches off near the base with secateurs prior to removing crown - plant will not resprout from water storing tubers or roots below ground so these can be left to rot to reduce soil disturbance. - Spray mature and juvenile plants with metsulfuron methyl 6g/100mL + surfactant
Asteraceae	*Bidens pilosa*	Cobbler's Pegs	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Asteraceae	*Conyza bonariensis*	Flaxleaf Fleabane	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Asteraceae	*Conyza sumatrensis*	Tall Fleabane	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L - On-going grubbing (all year)
Asteraceae	*Gamochaeta americana*	Cudweed	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Asteraceae	*Gamochaeta pensylvanica*	Cudweed	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Asteraceae	*Hypochoeris radicata*	Catsear	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Asteraceae	*Soliva sessilis*	Bindyi	No Status	- Blanket-spray all the affected lawn with herbicides containing bromoxynil plus MCPA
Asteraceae	*Sonchus asper*	Sow Thistle	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Asteraceae	*Sonchus oleraceus*	Milk Thistle	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Asteraceae	*Taraxacum officinale*	Dandelion	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Bignoniaceae	*Jacaranda mimosifolia*	Jacaranda	No Status	- Hand weed seedlings or spray with glyphosate 10mL/1L - Cut larger individuals/trees to ground level with hand saw or chainsaw and apply undiluted

Family	Scientific Name	Common Name	Status	Control Method
				glyphosate to cut stump - Large trees need to be felled by an arborist
Brassicaceae	*Cardamine hirsuta*	Common Bittercress	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Buxaceae	*Buxus microphylla*		No Status	-Hand Weed - Spot Spray - Glyphosate 10mL/1L
Caryophyllaceae	*Cerastium glomeratum*	Mouse-ear Chickweed	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Caryophyllaceae	*Paronychia brasiliana*	Chilean Whitlow Wort	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Caryophyllaceae	*Polycarpon tetraphyllum*		No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Caryophyllaceae	*Stellaria media*	Common Chickweed	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Convallariaceae	*Ophiopogon japonicus*		No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Fabaceae (Faboideae)	*Erythrina x sykesii*	Coral tree, Common coral tree	Other Weed of Regional Concern	- Cut and paint mature individuals with undiluted glyphosate (will require an arborist for removal of large trees) - Inject stem with undiluted glyphosate - All vegetative material from removed tree/shrub needs to be contained and disposed of carefully (burnt or taken to landfill); the species will regrow vegetatively from twigs, branches, logs, and on occasion, woodchipped material
Fabaceae (Faboideae)	*Medicago polymorpha*	Burr Medic	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Fabaceae (Faboideae)	*Trifolium repens*	White Clover	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Lauraceae	*Cinnamomum camphora*	Camphor laurel	Other Weed of Regional Concern	- Hand weed seedlings - Spray seedlings and coppice regrowth with glyphosate 10mL/1L - Drill and inject stem with, or chisel and apply, undiluted glyphosate - Cut and paint stump with undiluted glyphosate (will require an arborist for large trees)

Family	Scientific Name	Common Name	Status	Control Method
				- Cut and grind stump of large trees (arborist)
Lythraceae	*Cuphea hyssopifolia*		No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Moraceae	*Ficus benjamina*	Weeping fig	No Status	- Hand weed seedlings or spray with glyphosate 10mL/1L - Cut larger individuals/trees to ground level with hand saw or chainsaw and apply undiluted glyphosate to cut stump
Oleaceae	*Fraxinus spp.*		No Status	- Spray juveniles with glyphosate 10mL/1L - Cut mature individuals with saw or loppers near ground level and paint stump with undiluted glyphosate or Triclopyr (600g/L formulation)/diesel at 4L/60L concentration (as per Garlon 600 label)
Oleaceae	*Olea europaea*	Olive (subspecies required)	Regional Priority	- Spray juveniles with glyphosate 10mL/1L - Cut mature individuals with saw or loppers near ground level and paint stump with undiluted glyphosate or Triclopyr (600g/L formulation)/diesel at 4L/60L concentration (as per Garlon 600 label) - Use a power drill (9mm drill bit with dowelling tip) to drill holes less than 20 mm apart throughout lignotuber of mature trees and fill holes with glyphosate a 1:5 mixture with water. After all holes have been filled with herbicide mixture refill holes with herbicide mixture a second time (plant will have absorbed herbicide by this time). Check trees monthly for regrowth and repeat treatment if resprouting foliage is observed
Oxalidaceae	*Oxalis corniculata*	Yellow Wood Sorrel	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Passifloraceae	*Passiflora edulis*	Passionfruit	No Status	- Hand weed Juveniles - Dig roots out of ground for larger individuals or use secateurs to cut the

Family	Scientific Name	Common Name	Status	Control Method
				vine near the base and treat cut surface with undiluted glyphosate
Pinaceae	*Pinus radiata*	Radiata pine, Pine wildings	Other Weed of Regional Concern	- Drill and inject medium and small trees with herbicide - Hand weed seedlings or spray with glyphosate 10mL/1L - Glyphosate 75% v/v for stem injections. Undiluted for cut stump treatments. - Cut larger individuals/trees to ground level with hand saw or chainsaw and apply undiluted glyphosate to cut stump - Large trees need to be felled by an arborist
Plantaginaceae	*Plantago lanceolata*	Lamb's Tongues	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Plumbaginaceae	*Plumbago auriculata*	Blue Plumbago	No Status	- Cut shrub at base with loppers or secateurs and apply undiluted glyphosphate to cut stump - Dig shrub out with mattock or other hand tools
Poaceae	*Bromus catharticus*	Brome Grass	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Poaceae	*Cenchrus clandestinus*	Kikuyu	Other Weed of Regional Concern	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Poaceae	*Cenchrus setaceus*	Fountain grass	Other Weed of Regional Concern	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Poaceae	*Ehrharta erecta*	Panic Veldtgrass	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Poaceae	*Eragrostis tenuifolia*	Elastic Grass	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Poaceae	*Lolium perenne*	Perennial Ryegrass	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Poaceae	*Poa annua*	Winter Grass	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Poaceae	*Sporobolus africanus*	Parramatta Grass	No Status	- Dispose of waste carefully, as smallest cutting can regrow.

Family	Scientific Name	Common Name	Status	Control Method
Poaceae	*Stenotaphrum secundatum*	Buffalo Grass	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Polygonaceae	*Acetosa sagittata*	Turkey rhubarb	Other Weed of Regional Concern	- Bag and remove seed present on mature plants - Cut vines close to the ground and dig out as much as of root system and tubers as possible - Juvenile plants growing from seed can be dug out or hand pulled - Tuber at base of plant needs to be removed - On individuals with deep and difficult to remove tubers, stems can be scraped on one side with a blade for a length of 45cm and scraped area painted with undiluted glyphosate - This treatment may need to be repeated on subsequent site visits - On plants with difficult and deep to remove tubers the tubers close to the surface can also be scraped and painted with undiluted glyphosate
Primulaceae	*Lysimachia arvensis*	Scarlet Pimpernel	No Status	- Hand Weed - Spot Spray - Glyphosate 10mL/1L
Solanaceae	*Cestrum parqui*	Green cestrum	Regional Priority	- Hand weed juveniles - Scrape stem and paint with undiluted glyphosate - Cut all above ground suckering individuals with loppers or saw and paint stumps with undiluted glyphosate - Spray regrowth foliage with glyphosate 10mL/1L
Cannabaceae	*Celtis sinensis*	Chinese celtis/ Chinese hackberry	Other Weed of Regional Concern	- Hand weed seedlings - Spray seedlings and coppice regrowth with glyphosate 10mL/1L - Drill and inject stem with, or chisel and apply, undiluted glyphosate - Cut and paint stump with undiluted glyphosate (will require an arborist for large trees) - Cut and grind stump of large trees (arborist)

Family	Scientific Name	Common Name	Status	Control Method
Urticaceae	*Parietaria judaica*	Pellitory, Asthma weed	Other Weed of Regional Concern	- Spray large areas of weed with glyphosate 10ml/L and follow up by removing or spraying any seedlings for several months at least.
Verbenaceae	*Lantana camara*	Lantana	State Priority - Asset Protection ; WONS	- Hand weed juveniles and regrowth from small pieces - Spot spray with glyphosate 10mL/1L - Slash using brushcutter, or hand cut with loppers, and spray regrowth foliage with glyphosate 10mL/1L - Cut near ground level and paint with undiluted glyphosate - Some individuals will have stumps which will still regrow foliage, spray regrowth foliage with glyphosate 10mL/1L

APPENDIX D :
ESBS Planting List

Table 6 ESBS Plant List

Family	Scientific Name	Common Name
Small Trees		
Casuarinaceae	*Allocasuarina distyla*	Scrub She-Oak
Elaeocarpaceae	*Elaeocarpus reticulatus*	
Ericaceae	*Monotoca elliptica*	Tree Broom Heath
Fabaceae (Mimosoideae)	*Acacia suaveolens*	Sweet Wattle
Myrtaceae	*Kunzea ambigua*	Tick Bush
Myrtaceae	*Leptospermum laevigatum*	Coast Tea Tree
Myrtaceae	*Melaleuca nodosa*	Prickly-leaved Paperbark
Proteaceae	*Banksia ericifolia*	Heath Leaved-Banksia
Proteaceae	*Banksia integrifolia*	Coast Banksia
Shrubs		
Apiaceae	*Platysace stephensonii*	
Casuarinaceae	*Allocasuarina distyla*	Scrub She-Oak
Elaeocarpaceae	*Elaeocarpus reticulatus*	
Ericaceae (Epacridoideae)	*Astroloma pinifolium*	
Ericaceae (Epacridoideae)	*Epacris longiflora*	
Ericaceae (Epacridoideae)	*Epacris microphylla*	Coast Coral Heath
Ericaceae (Epacridoideae)	*Leucopogon ericoides*	Pink Beard-Heath
Ericaceae (Epacridoideae)	*Monotoca elliptica*	Tree Broom Heath
Ericaceae (Epacridoideae)	*Woollsia pungens*	
Euphorbiaceae	*Amperea xiphoclada var. xiphoclada*	
Euphorbiaceae	*Homalanthus populifolius*	
Euphorbiaceae	*Ricinocarpos pinifolius*	Wedding Bush
Fabaceae (Epacridoideae)	*Brachyloma daphnoides subsp. daphnoides*	
Fabaceae (Faboideae)	*Bossiaea heterophylla*	
Fabaceae (Faboideae)	*Bossiaea prostrata*	
Fabaceae (Faboideae)	*Bossiaea scolopendria*	
Fabaceae (Faboideae)	*Dillwynia retorta*	
Fabaceae (Faboideae)	*Pultenaea daphnoides*	Large-leaf Bush-pea
Fabaceae (Mimosoideae)	*Acacia suaveolens*	Sweet Wattle
Myrtaceae	*Callistemon citrinus*	Crimson Bottlebrush
Myrtaceae	*Darwinia fascicularis*	
Myrtaceae	*Kunzea ambigua*	Tick Bush

Family	Scientific Name	Common Name
Myrtaceae	*Leptospermum laevigatum*	
Myrtaceae	*Melaleuca armillaris*	Bracelet Honey Myrtle
Myrtaceae	*Melaleuca nodosa*	Prickly-leaved Paperbark
Proteaceae	*Banksia aemula*	Wallum Banksia
Proteaceae	*Banksia ericifolia*	Heath Leaved-Banksia
Proteaceae	*Banksia integrifolia*	Coast Banksia
Proteaceae	*Hakea gibbosa*	Needlebush
Proteaceae	*Hakea teretifolia*	Dagger Hakea
Proteaceae	*Lambertia formosa*	Mountain Devil
Proteaceae	*Persoonia lanceolata*	Lance Leaf Geebung
Proteaceae	*Persoonia levis*	Broad-leaved Geebung
Proteaceae	*Petrophile pulchella*	
Rutaceae	*Eriostemon australasius*	
Rutaceae	*Philotheca buxifolia subsp. buxifolia*	Box-Leaf Waxflower
Rutaceae	*Philotheca salsolifolia*	
Rutaceae	*Zieria laevigata*	Smooth Zieria
Herbs - Ferns and Allies		
Dennstaedtiaceae	*Pteridium esculentum*	Bracken Fern
Herbs - Dicots		
Apiaceae	*Xanthosia pilosa*	Woolly Xanthosia
Fabaceae (Faboideae)	*Dillwynia retorta*	
Goodeniaceae	*Goodenia paniculata*	Branched Goodenia
Haloragaceae	*Gonocarpus micranthus subsp. micranthus*	Creeping Raspwort
Haloragaceae	*Gonocarpus teucrioides*	Raspwort
Proteaceae	*Banksia ericifolia*	Heath Leaved-Banksia
Proteaceae	*Persoonia levis*	Broad-leaved Geebung
Restionaceae	*Hypolaena fastigiata*	
Rubiaceae	*Opercularia aspera*	Coarse Stinkweed
Rubiaceae	*Pomax umbellata*	
Stylidiaceae	*Stylidium lineare*	Narrow-leaved Trigger Plant
Herbs - Monocots (Grasses)		
Poaceae	*Austrostipa sp.*	
Poaceae	*Eragrostis brownii*	Brown's Lovegrass

Family	Scientific Name	Common Name
Poaceae	*Imperata cylindrica*	Blady Grass
Poaceae	*Microlaena stipoides*	Weeping Grass
Poaceae	*Paspalidium distans*	
Poaceae	*Rytidosperma tenuius*	
Herbs - Monocots (Other)		
Cyperaceae	*Cyathochaeta diandra*	
Cyperaceae	*Lepidosperma forsythii*	
Cyperaceae	*Lepidosperma laterale*	
Cyperaceae	*Baumea acuta*	
Cyperaceae	*Schoenus brevifolius*	Zig-Zag Bog-rush
Haemodoraceae	*Haemodorum planifolium*	
Juncaceae	*Juncus continuus*	
Juncaceae	*Juncus kraussii subsp. kraussii*	Sea Rush
Lomandraceae	*Lomandra glauca*	Pale Mat-rush
Lomandraceae	*Lomandra longifolia*	Spiny Mat-rush
Orchidaceae	*Cryptostylis subulata*	Large Tongue Orchid
Phormiaceae	*Dianella caerulea var. producta*	
Phormiaceae	*Dianella revoluta*	Blueberry Lily
Restionaceae	*Lepyrodia scariosa*	
Restionaceae	*Leptocarpus tenax*	
Typhaceae	*Entolasia stricta*	
Xanthorrhoeaceae	*Xanthorrhoea resinosa*	Grass Tree
Herbs - Climbers		
Dilleniaceae	*Hibbertia obtusifolia*	Hoary Guinea Flower
Dilleniaceae	*Hibbertia scandens*	Climbing Guinea Flower
Lauraceae	*Cassytha glabella*	Slender Devil's Twine
Lauraceae	*Cassytha pubescens*	
Oleaceae	*Jasminum volubile*	Stiff Jasmine
Pittosporaceae	*Billardiera scandens*	Hairy Apple Berry
Smilacaceae	*Smilax glyciphylla*	Sweet Sarsaparilla

FIGURES

Legend

- VMP Area
- Subject Land
- Development Site

Image Source:
Image © Nearmap (2024)
Dated: 25/2/2024

Data Source:
Spatial Services
NSW Department of Finance and Services

Coordinate System: MGA Zone 56 (GDA 94)

cumberland ecology

0 10 20 30 40 m

I:\...\19139\Figures\RP3\20240502\Figure 1. Location of subject land_development site_VMP area

Figure 1. Location of subject land, development site and VMP area

Legend

- VMP Area
- Subject Land
- Development Site
- Existing Palisade Fence

Monitoring Locations

- Monitoring Plots (2 x 10 m)
- Photopoints

Management Zone

- Zone 1
- Zone 2

Image Source:
Image © Nearmap (2024)
Dated: 25/2/2024

Data Source:
Spatial Services
NSW Department of Finance and Services

Coordinate System: MGA Zone 56 (GDA 94)

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0 10 20 30 40 m

I:\...\19139\Figures\RP3\20241125\Figure 2. Location of management zones_monitoring plots

Figure 2. Location of management zones and monitoring plots