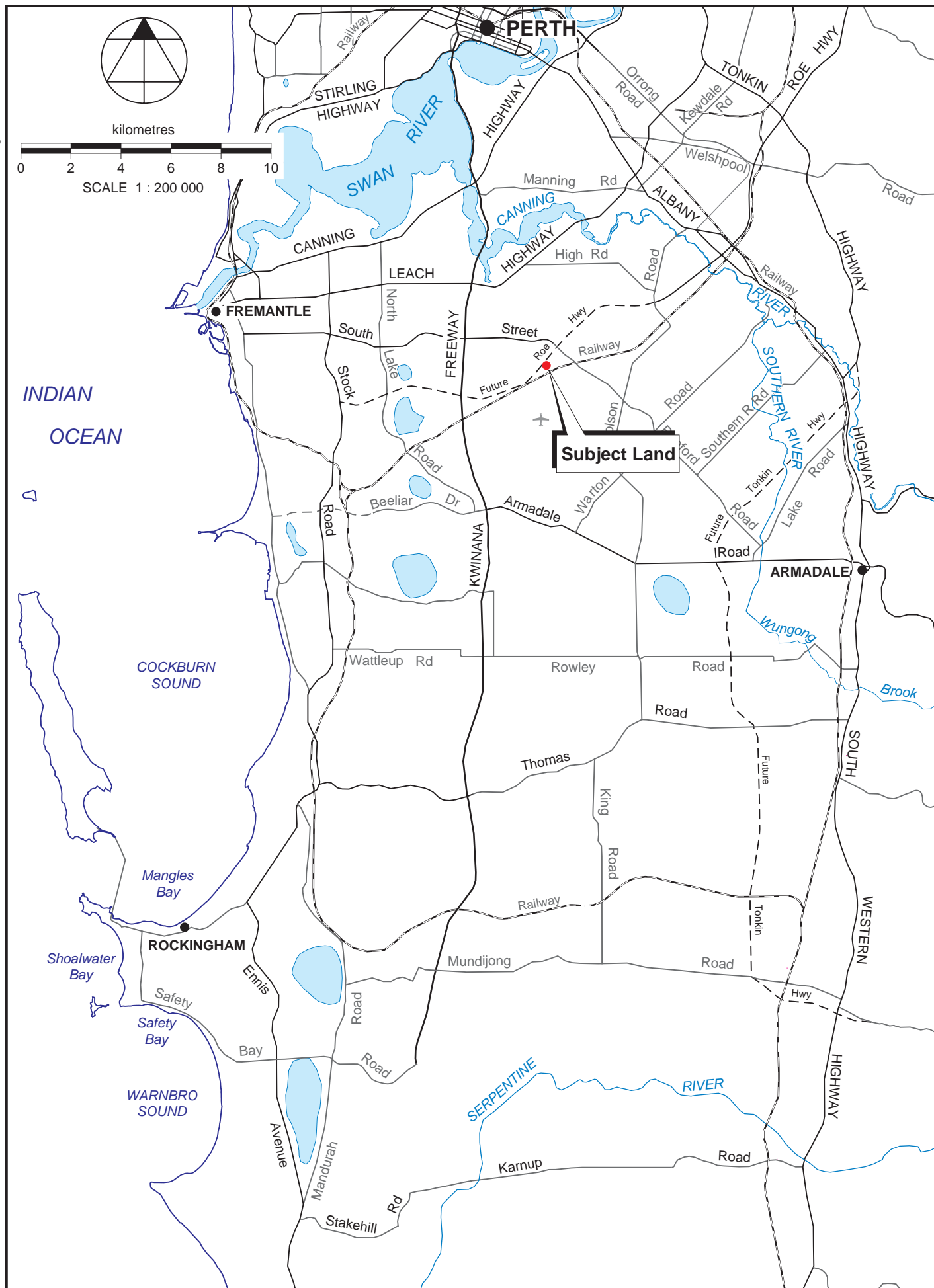
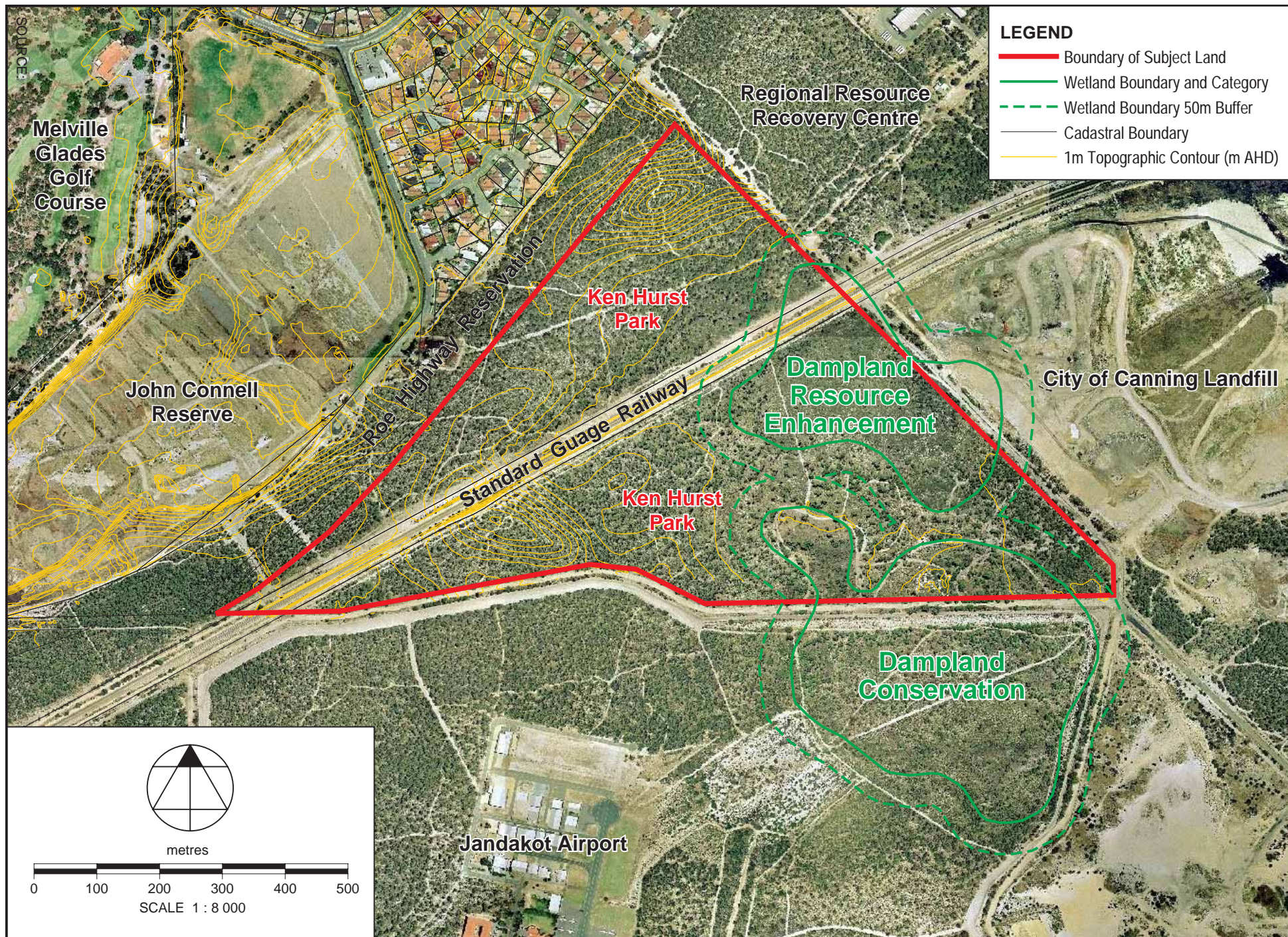


FIGURES



LEGEND

- Boundary of Subject Land
- Wetland Boundary and Category
- - - Wetland Boundary 50m Buffer
- Cadastral Boundary
- 1m Topographic Contour (m AHD)

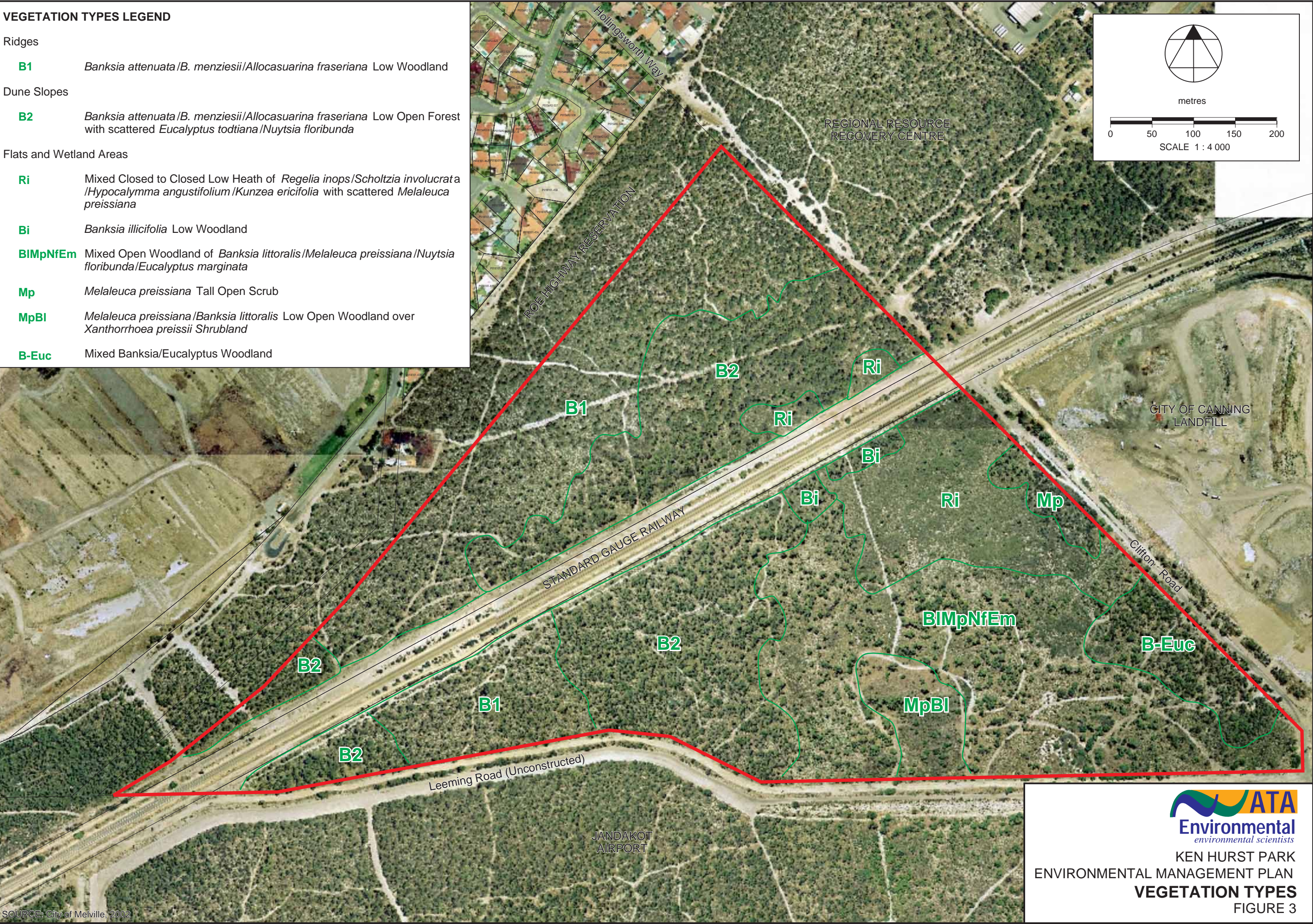


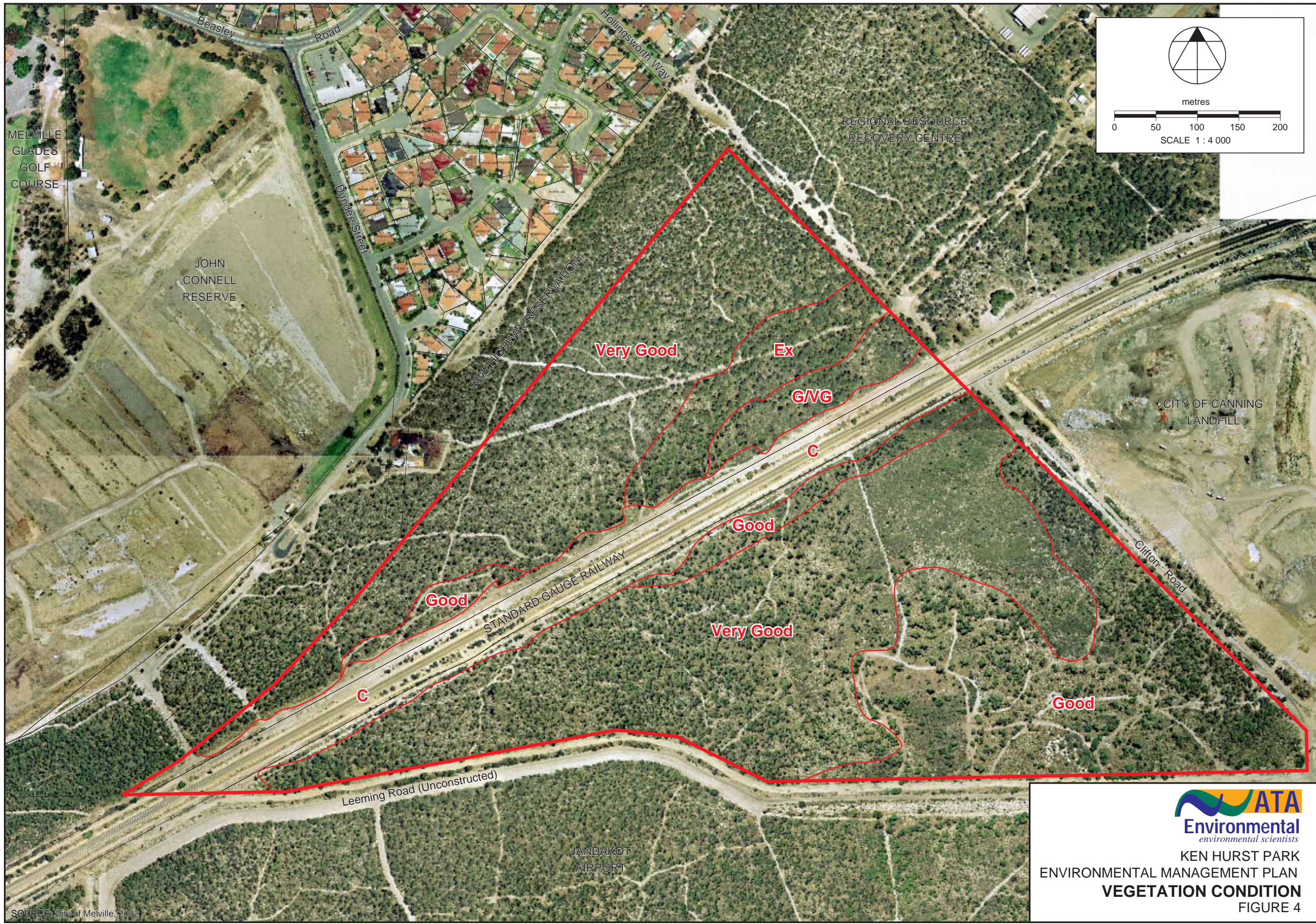
KEN HURST PARK - ENVIRONMENTAL MANAGEMENT PLAN
TOPOGRAPHY AND WETLAND MAPPING
FIGURE 2

22067/22_84f3.dgn DATUM: MGA DRAWN: TE/EDS 03-01-03 CHECKED: SM 24-3-03 PRINTED: Tue 19 Aug 03

VEGETATION TYPES LEGEND

- Ridges
- B1** *Banksia attenuata* / *B. menziesii* / *Allocasuarina fraseriana* Low Woodland
- Dune Slopes
- B2** *Banksia attenuata* / *B. menziesii* / *Allocasuarina fraseriana* Low Open Forest with scattered *Eucalyptus tottiana* / *Nuytsia floribunda*
- Flats and Wetland Areas
- Ri** Mixed Closed to Closed Low Heath of *Regelia inops* / *Scholtzia involucrata* / *Hypocalymma angustifolium* / *Kunzea ericifolia* with scattered *Melaleuca preissiana*
- Bi** *Banksia illicifolia* Low Woodland
- BIMpNfEm** Mixed Open Woodland of *Banksia littoralis* / *Melaleuca preissiana* / *Nuytsia floribunda* / *Eucalyptus marginata*
- Mp** *Melaleuca preissiana* Tall Open Scrub
- MpBI** *Melaleuca preissiana* / *Banksia littoralis* Low Open Woodland over *Xanthorrhoea preissii* Shrubland
- B-Euc** Mixed *Banksia* / *Eucalyptus* Woodland





SOURCE: City of Melville, 2002


KEN HURST PARK
ENVIRONMENTAL MANAGEMENT PLAN
VEGETATION CONDITION
FIGURE 4

LEGEND

Access Management Works

- Formalise existing access paths with crushed limestone
- Closure of paths - revegetate
- Fencing - Option 1 (perimeter fencing)
- Fencing - Option 2 (utilisation of existing fencing of adjacent land uses)

Rehabilitation Works

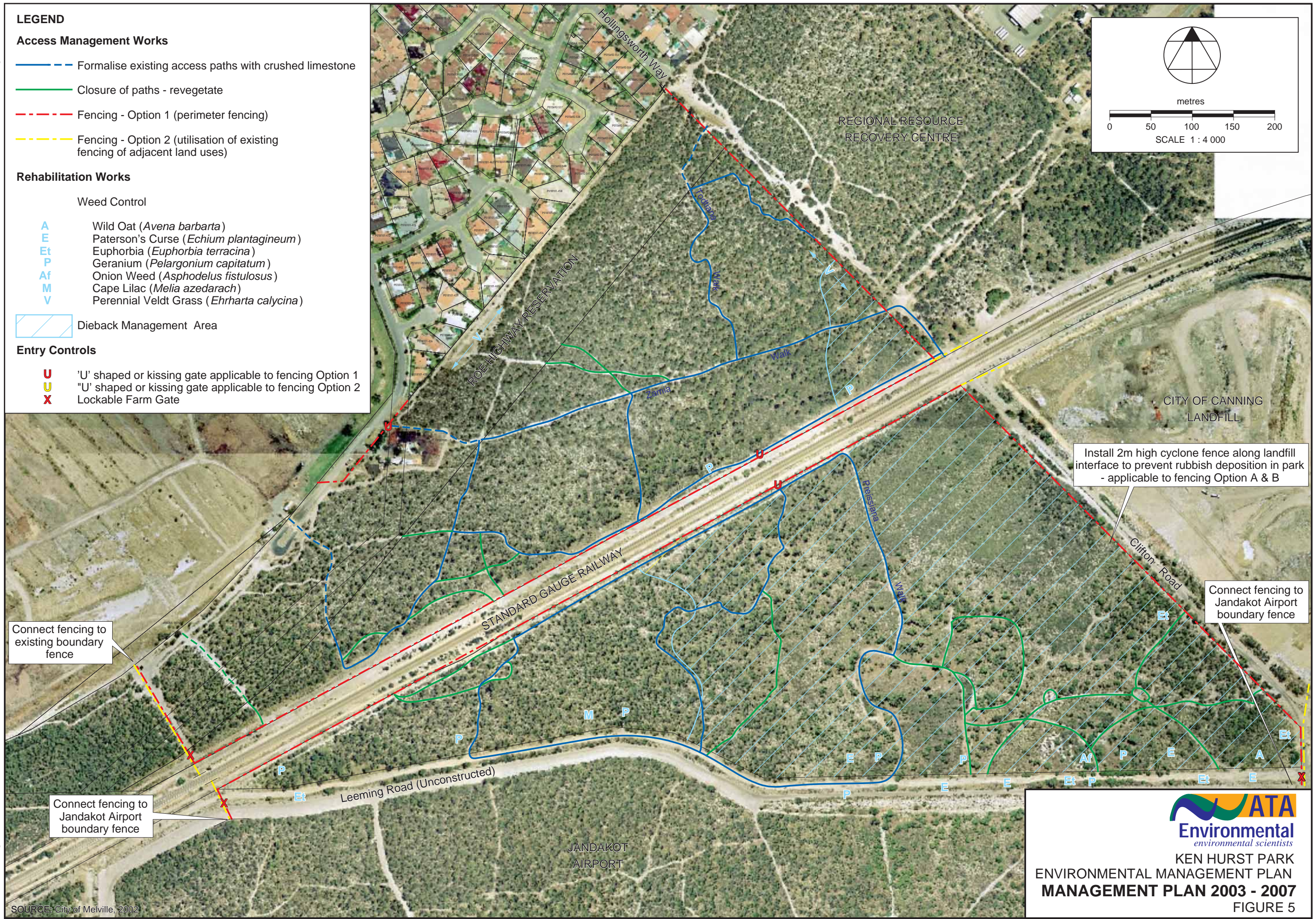
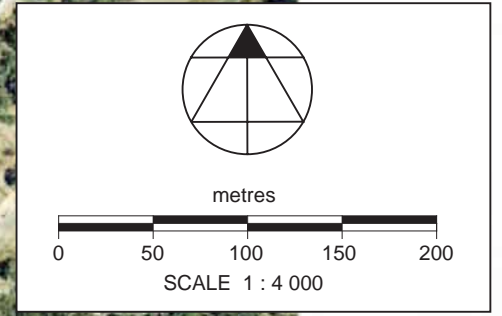
Weed Control

- A Wild Oat (*Avena barbarta*)
- E Paterson's Curse (*Echium plantagineum*)
- P Euphorbia (*Euphorbia terracina*)
- Af Geranium (*Pelargonium capitatum*)
- M Onion Weed (*Asphodelus fistulosus*)
- V Cape Lilac (*Melia azedarach*)
- Perennial Veldt Grass (*Ehrharta calycina*)

- Dieback Management Area

Entry Controls

- U 'U' shaped or kissing gate applicable to fencing Option 1
- U "U" shaped or kissing gate applicable to fencing Option 2
- X Lockable Farm Gate



APPENDICES

APPENDIX 1

KEN HURST PARK FLORA LIST

APPENDIX 1
KEN HURST PARK FLORA LIST

* denotes introduced species
** denotes Declared Rare Flora species

Family	Genus / Species	Recorded by the Wildflower Society (Dec, 1992)	Recorded by ATA Environmental (September, 2002)
ZAMIACEAE	Macrozamia fraseri	✓	✓
AIZOACEAE	*Carpobrotus edulis	✓	✓
ANTHERICACEAE	Arnocrinum preissii	✓	
	Chamaescilla corymbosa var. corymbosa	✓	
	Hensmannia turbinata	✓	
	Johnsonia acaulis	✓	✓
	Laxmannia ramosa	✓	✓
	Laxmannia squarrosa	✓	✓
	Sowerbaea laxiflora		✓
	Thysanotus manglesianus	✓	✓
	Thysanotus multiflorus	✓	✓
	Thysanotus patersonii	✓	✓
	Thysanotus thyrsoideus	✓	✓
	Thysanotus triandrus	✓	✓
	Tricoryne elatior	✓	✓
	Tricoryne tenella	✓	✓
APIACEAE	Actinotus glomeratus	✓	
	*Foeniculum vulgare	✓	✓
	Homalosciadium homalocarpum	✓	
	Platysace compressa	✓	✓
	Trachymene pilosa	✓	
	Xanthosia huegelii	✓	✓
APOCYANCEAE	*Nerium oleander	✓	
ASPHODELACEAE	*Asphodelus fistulosus	✓	
ASTERACEAE	*Actotheca calendula	✓	✓
	Asteridea pulverulenta	✓	
	*Conyza bonariensis	✓	✓
	*Gazania tomentosa	✓	
	Gnaphalium sphaericum	✓	✓
	*Hedypnois rhagadioloides	✓	
	Helipterum cotula		✓
	*Hypochaeris glabra	✓	✓
	Lagenifera glabra	✓	
	Millotia myosotidifolia	✓	
	Millotia tenuifolia	✓	
	*Olearia axillaris	✓	✓
	*Osteospermum fruticosum	✓	
	Pithocarpa pulchella	✓	
	Podotheca angustifolia	✓	✓

Family	Genus / Species	Recorded by the Wildflower Society (Dec, 1992)	Recorded by ATA Environmental (September, 2002)
	<i>Podotheca gnaphaloides</i>	✓	
	<i>Quinetia urvillei</i>	✓	
	<i>Rhodanthe citrina</i>	✓	
	<i>Senecio quadridentatus</i>	✓	
	<i>Siloxerus humifusus</i>	✓	
	* <i>Sonchus asper</i>		✓
	* <i>Sonchus oleraceus</i>	✓	✓
	* <i>Ursinia anthemoides</i>	✓	✓
	<i>Waitzia suaveolens</i> var. <i>suaveolens</i>	✓	✓
BORAGINACEAE	* <i>Echium plantagineum</i>	✓	✓
BRASSICACEAE	* <i>Brassica</i> sp.	✓	✓
	* <i>Lobularia maritima</i>	✓	
CAMPANULACEAE	* <i>Wahlenbergia capensis</i>	✓	
	<i>Wahlenbergia</i> ? <i>gracilentia</i>	✓	✓
	<i>Wahlenbergia preissii</i>	✓	
CARYOPHYLLACEAE	* <i>Cerastium glomeratum</i>	✓	
	* <i>Petrorhagia velutina</i>	✓	
	* <i>Polycarpon tetraphyllum</i>	✓	
	* <i>Silene gallica</i>	✓	
CASUARINACEAE	<i>Allocasuarina fraseriana</i>	✓	✓
	<i>Allocasuarina humilis</i>	✓	✓
CENTROLEPIDACEAE	<i>Centrolepis aristata</i>	✓	✓
	<i>Centrolepis drummondiana</i>	✓	
COLCHICACEAE	<i>Burchardia umbellata</i>	✓	✓
CRASSULACEAE	<i>Crassula colorata</i>	✓	✓
CYPERACEAE	<i>Cyathochaeta avenacea</i>	✓	
	* <i>Cyperus</i> sp.		✓
	<i>Isolepis marginata</i>	✓	✓
	<i>Lepidosperma angustatum</i>	✓	✓
	<i>Lepidosperma longitudinale</i>	✓	✓
	<i>Lepidosperma squamatum</i>		✓
	<i>Lepidosperma</i> sp. E	✓	
	<i>Mesomelaena pseudostygia</i>	✓	✓
	<i>Mesomelaena tetragona</i>		✓
	<i>Schoenus brevisatis</i>	✓	✓
	<i>Schoenus curvifolius</i>	✓	✓
DASYPOGONACEAE	<i>Acanthocarpus preissii</i>		✓
	<i>Calectasia cyanea</i>	✓	✓
	<i>Dasypogon bromeliifolius</i>	✓	✓
	<i>Lomandra caespitosa</i>	✓	✓
	<i>Lomandra hermaphrodita</i>	✓	
	<i>Lomandra nigricans</i>	✓	✓
	<i>Lomandra odora</i>	✓	

Family	Genus / Species	Recorded by the Wildflower Society (Dec, 1992)	Recorded by ATA Environmental (September, 2002)
	Lomandra preissii	✓	✓
DILLENIACEAE	Hibbertia huegelii	✓	✓
	Hibbertia hypericoides	✓	✓
	Hibbertia racemosa	✓	✓
	Hibbertia stellaris		✓
	Hibbertia subvaginata	✓	✓
DROSERACEAE	Drosera erythrorhiza ssp. erythrorhiza	✓	✓
	Drosera glanduligera	✓	✓
	Drosera macrantha ssp. macrantha	✓	✓
	Drosera menziesii ssp. penicillaris	✓	✓
	Drosera paleacea ssp. paleacea	✓	✓
	Drosera pallida	✓	✓
	Drosera parvula	✓	✓
	Drosera zonaria	✓	
EPACRIDACEAE	Astroloma xerophyllum	✓	✓
	Conostephium pendulum	✓	✓
	Conostephium preissii	✓	✓
	Leucopogon conostephioides	✓	✓
	Leucopogon oxycedrus	✓	✓
	Leucopogon polymorphus	✓	✓
	Leucopogon propinquus	✓	✓
	Leucopogon pulchellus		✓
	Leucopogon racemulosus	✓	✓
	Leucopogon squarrosus	✓	✓
	Lysinema ciliatum	✓	✓
	Lysinema elegans	✓	✓
EUPHORBIACEAE	*Euphorbia peplus	✓	
	*Euphorbia terracina	✓	✓
	Monotaxis occidentalis	✓	
	Phyllanthus calycinus		✓
	Poranthera microphylla	✓	
GENTIANACEAE	*Centaurium erythraea	✓	
GERANIACEAE	*Erodium sp.	✓	✓
	*Pelargonium capitatum	✓	✓
	*Pelargonium littorale	✓	
GOODENIACEAE	Dampiera linearis	✓	✓
	Lechenaultia expansa	✓	
	Lechenaultia floribunda	✓	✓
	Scaevola canescens		✓
	Scaevola repens	✓	✓
HALORAGACEAE	Gonocarpus pithyoides	✓	✓
HAEMODORACEAE	Anigozanthus humilis	✓	✓
	Anigozanthus manglesii	✓	✓

Family	Genus / Species	Recorded by the Wildflower Society (Dec, 1992)	Recorded by ATA Environmental (September, 2002)
	Anigozanthus manglesii x humilis	✓	✓
	Conostylis aculeata	✓	✓
	Conostylis aurea	✓	✓
	Conostylis juncea	✓	✓
	Conostylis setigera	✓	✓
	Haemodorum spicatum	✓	✓
	Phlebocarya ciliatum	✓	✓
	Phlebocarya filifolia	✓	
IRIDACEAE	*Freesia leichtlinii	✓	✓
	*Gladiolus angustus	✓	
	*Gladiolus caryophyllaceus	✓	✓
	Patersonia occidentalis	✓	✓
	*Romulea rosea	✓	✓
	*Watsonia bulbifera		✓
LAMIACEAE	Hemiandra pungens	✓	✓
LOBELIACEAE	Mitrasacme paradoxa	✓	
LORANTHACEAE	Nuytsia floribunda	✓	✓
MELIACEAE	*Melia azedarach	✓	
MIMOSACEAE	Acacia huegelii	✓	✓
	*Acacia podalyrifolia	✓	✓
	Acacia pulchella	✓	✓
	Acacia saligna	✓	✓
	Acacia stenoptera	✓	✓
MYRTACEAE	Astartea fascicularis	✓	✓
	Baeckea camphorosmae		✓
	Beaufortia elegans	✓	✓
	Calothamnus lateralis	✓	✓
	Calytrix angulata	✓	✓
	Calytrix flavescens	✓	✓
	Calytrix fraseri	✓	✓
	Corymbia calophylla	✓	✓
	Eremaea pauciflora	✓	✓
	Eucalyptus marginata	✓	✓
	Eucalyptus tottiana	✓	✓
	Hypocalymma angustifolium	✓	✓
	Hypocalymma robustum	✓	✓
	*Leptospermum laevigatum	✓	✓
	Kunzea ericifolia	✓	✓
	Melaleuca lateritia	✓	✓
	Melaleuca preissiana	✓	✓
	Melaleuca scabra	✓	✓
	Melaleuca seriata	✓	
	Melaleuca thymoides	✓	✓
	Pericalymma ellipticum	✓	✓
	Regelia ciliata	✓	✓
	Regelia inops	✓	✓

Family	Genus / Species	Recorded by the Wildflower Society (Dec, 1992)	Recorded by ATA Environmental (September, 2002)
	Scholtzia involucrata	✓	✓
	Verticordia drummondii	✓	
ORCHIDACEAE	Caladenia arenicola	✓	✓
	Caladenia discoidea	✓	✓
	Caladenia falcata		✓
	Caladenia flava	✓	✓
	**Caladenia huegelii	✓	✓
	Caladenia latifolia		✓
	Caladenia longicauda ssp. longicauda	✓	✓
	Caladenia longicauda ssp. calcigena		✓
	Caladenia macrostylis		✓
	Caladenia paludosa	✓	✓
	Cyanicula paludosa	✓	✓
	Cyanicula gemmata	✓	✓
	Diuris corymbosa	✓	✓
	Diuris magnifica		✓
	Elythranthera brunonis	✓	✓
	Eriochilus dilatatus		✓
	Microtis media ssp. media	✓	✓
	*Monadenia bracteata	✓	
	Prasophyllum ovale		✓
	Prasophyllum parvifolium		✓
	Pterostylis recurva		✓
	Pterostylis sanguinea		✓
	Pterostylis vittata	✓	✓
	Pyrorchis nigricans	✓	
	Thelymitra campanulata		✓
	Thelymitra crinita	✓	✓
OROBANCHACEAE	*Orobanche minor	✓	✓
OXALIDACEAE	*Oxalis pes-caprae	✓	✓
	*Oxalis purpurea	✓	
PAPILIONACEAE	Aotus procumbens	✓	✓
	Bossiaea eriocarpa	✓	✓
	Daviesia decurrens		✓
	Daviesia nudiflora		✓
	Daviesia physodes	✓	✓
	Daviesia triflora	✓	✓
	Euchilopsis linearis	✓	
	Eutaxia virgata	✓	✓
	Gompholobium confertum	✓	✓
	Gompholobium scabra	✓	✓
	Gompholobium tomentosum	✓	✓
	Hardenbergia comptoniana		✓
	Hovea trisperma	✓	✓
	Isotropis cuneifolia	✓	
	Jacksonia furcellata	✓	✓
	Jacksonia sternbergiana	✓	✓
	Kennedia prostrata	✓	✓
	*Lotus suaveolens	✓	

Family	Genus / Species	Recorded by the Wildflower Society (Dec, 1992)	Recorded by ATA Environmental (September, 2002)
	*Lupinus cosentinii	✓	✓
	*Medicago polymorpha	✓	✓
	*Melilotus indica	✓	
	Nemcia capitatum	✓	✓
	Nemcia reticulatum	✓	✓
	Pultenaea reticulata	✓	✓
	Sphaerolobium vimineum	✓	
	*Trifolium angustifolium	✓	✓
	*Trifolium campestre	✓	✓
	*Trifolium dubium	✓	✓
	*Trifolium tomentosum	✓	✓
PHORMIACEAE	Dianella divaricata	✓	✓
POACEAE	Agrostis avenacea	✓	✓
	*Aira caryophyllea	✓	✓
	*Aira praecox	✓	
	Amphipogon turbinatus	✓	✓
	*Arundo donax	✓	✓
	*Avena barbata	✓	✓
	*Avena fatua		✓
	*Briza maxima	✓	
	*Briza minor	✓	✓
	*Bromus diandrus	✓	✓
	*Cortaderia selloana	✓	✓
	*Cynadon dactylon	✓	✓
	Danthonia occidentalis	✓	
	Deyeuxia quadriseta	✓	
	*Ehrharta calycina	✓	✓
	*Ehrharta longiflora	✓	✓
	*Eragrostis curvula	✓	✓
	*Hordeum leporinum	✓	
	*Lagurus ovatus	✓	✓
	Neurachne alopecuroidea		✓
	*Lolium rigidum	✓	✓
	*Pentaschistus airoides	✓	
	*Poa annua		✓
	*Stenotaphrum secundatum	✓	
	Austrostipa compressa	✓	✓
	Austrostipa af. campylachnes	✓	
	*Trachynia distachya	✓	
	*Vulpia bromoides	✓	
	*Vulpia myuros	✓	
POLYGALACEAE	Comesperma calymega	✓	✓
PORTULACACEAE	Calandrinia corrigioloides	✓	✓
PRIMULACEAE	*Anagallis arvensis	✓	✓
PROTEACEAE	Adenanthos cygnorum	✓	✓
	Adenanthos obovatus	✓	✓
	Banksia attenuata	✓	✓

Family	Genus / Species	Recorded by the Wildflower Society (Dec, 1992)	Recorded by ATA Environmental (September, 2002)
	<i>Banksia ilicifolia</i>	✓	✓
	<i>Banksia littoralis</i>	✓	✓
	<i>Banksia menziesii</i>	✓	✓
	<i>Dryandra lindleyana</i>	✓	✓
	<i>Grevillea obtusifolia</i>		✓
	<i>Hakea trifurcata</i>		✓
	<i>Persoonia saccata</i>	✓	
	<i>Petrophile linearis</i>	✓	✓
	<i>Petrophile striata</i>		✓
	<i>Stirlingia latifolia</i>	✓	✓
	<i>Synaphea spinulosa</i>		✓
RANUNCULACEAE	* <i>Clematis microphylla</i>	✓	✓
RESTIONACEAE	<i>Hypolaena exsulca</i>	✓	✓
	<i>Lepyrodia</i> sp.	✓	
	<i>Desmocladius cinerea</i>	✓	✓
	<i>Desmocladius flexuosus</i>	✓	✓
	<i>Lyginia barbata</i>	✓	✓
RUBIACEAE	<i>Opercularia hispidula</i>		✓
	<i>Opercularia vaginata</i>	✓	✓
RUTACEAE	<i>Boronia crenulata</i>	✓	✓
	<i>Boronia dichotoma</i>	✓	✓
	<i>Boronia ramosa</i>	✓	✓
	<i>Philotheca spicatum</i>	✓	✓
SANTALACEAE	<i>Leptomeria empetrifomis</i>	✓	
	<i>Leptomeria spinosa</i>	✓	✓
SCROPHULARIACEAE	* <i>Verbascum virgatum</i>	✓	
	* <i>Veronica arvensis</i>	✓	
SOLANACEAE	* <i>Solanum nigrum</i>	✓	
STACKHOUSIACEAE	<i>Stackhousia huegelii</i>	✓	
	<i>Tripterococcus brunonis</i>	✓	✓
STYLIDIACEAE	<i>Levenhookia stipitata</i>	✓	✓
	<i>Stylidium brunonianum</i>	✓	✓
	<i>Stylidium carnosum</i>	✓	
	<i>Stylidium divaricatum</i>	✓	✓
	<i>Stylidium junceum</i>	✓	✓
	<i>Stylidium piliferum</i>	✓	
	<i>Stylidium preissii</i>	✓	✓
	<i>Stylidium repens</i>	✓	✓
	<i>Stylidium schoenoides</i>	✓	✓
	<i>Stylidium squamellosum</i>	✓	
THYMELEACEAE	<i>Pimelea imbricata</i> var. <i>imbricata</i>	✓	✓
	<i>Pimelea rosea</i>	✓	✓
	<i>Pimelea sulphurea</i>	✓	

Family	Genus / Species	Recorded by the Wildflower Society (Dec, 1992)	Recorded by ATA Environmental (September, 2002)
TREMANDRACEAE	Platytheca galioides	✓	✓
TROPAEOLACEAE	*Tropaeolum majus	✓	
VIOLACEAE	Hybanthus calycinus		✓
XANTHORRHOEACEAE	Xanthorrhoea gracilis		✓
	Xanthorrhoea preissii	✓	✓
Total Species		280	240
Native Species		209	197
Introduced / Naturalised		71	43

APPENDIX 2

KEN HURST PARK VERTEBRATE FAUNA LIST

APPENDIX 2
VERTEBRATE FAUNA RECORDED AT KEN HURST PARK OR NEARBY

Species Name	Common Name	Cons	All	1992 Survey Sites						
		Status	Data	1	2	3	4	5	6	Other
AMPHIBIANS										
MYOBATRACHIDAE										
Crinia insignifera	Sandplain Froglet		✱							
Heleioporus eyrei	Moaning Frog		✓	✓	✓	✓	✓	✓	✓	
Limnodynastes dorsalis	Western Banjo Frog/Pobblebonk		✓	✓	✓		✓	✓	✓	
Myobatrachus gouldii	Turtle Frog		✓	✓		✓	✓			
Pseudophryne guentheri	Guenther's Toadlet		✓							✓
REPTILES										
GEKKONIDAE										
Phyllodactylus marmoratus	Marbled Gecko		✱							
PYGOPODIDAE										
Aprasia repens	South-western Sandplain Worm Lizard		✓			✓				
Delma fraseri	Fraser's Legless Lizard		✓	✓			✓	✓	✓	
Delma grayii	Gray's Legless Lizard		✓	✓					✓	✓
Lialis burtonis	Burton's Legless Lizard		✓	✓			✓	✓		
Pletholax gracilis	Keeled Legless Lizard		✱							
Pygopus lepidopodus	Common Scaly Foot		✱							
AGAMIDAE										
Pogona minor	Western Bearded Dragon		✓			✓				
Rankinia adelaidensis	Western Heath Dragon		✓	✓						
VARANIDAE										
Varanus gouldii	Gould's Sand Goanna		✱							
SCINCIDAE										
Acritoscincus trilineatus	South-western Cool Skink		✓	✓						
Cryptoblepharus plagiocephalus	Snake-eyed, Fence or Sun Skink		✓		✓	✓	✓	✓		
Ctenotus australis	Western Limestone Ctenotus		✓		✓	✓	✓	✓		
Egernia napoleonis	South-west Crevice Egernia		✱							
Hemiergis quadrilineata	Two-toed Earless Skink		✱							
Lerista elegans	West coast Four-toed Lerista		✓	✓	✓					
Lerista lineata	Perth Lined Lerista		✓		✓					
Menetia greyii	Common Dwarf Skink		✓	✓	✓	✓	✓	✓	✓	✓
Morethia lineoocellata	Western Pale-flecked Morethia		✱							
Tiliqua occipitalis	Western Bluetongue		✓			✓				
Tiliqua rugosa	Bobtail		✓	✓	✓	✓	✓	✓	✓	✓
TYPHLOPIDAE										
Ramphotyphlops australis	Southern Blind Snake		✱							
ELAPIDAE										
Demansia psammophis	Yellow-faced Whip Snake		✱							
Neelaps bimaculatus	Black-naped Snake		✓					✓		
Neelaps calonotos	Black-striped Snake		✱							
Pseudonaja affinis	Dugite		✓		✓	✓		✓		
Parasuta (Rhinoplocephalus) gou	Gould's Hooded Snake		✓	✓				✓		✓
BIRDS										
ANATIDAE										
Anas superciliosa	Pacific Black Duck		✓							

Malurus splendens	Splendid Fairy-wren	SB3	✓	✓	✓					
PARDALOTIDAE										
Pardalotus striatus	Striated Pardalote		✓	✓	✓	✓				
Smicrornis brevirostris	Weebill	SB3	✓							
Gerygone fusca	Western Gerygone		✓							
Acanthiza apicalis	Inland Thornbill	SB3	✓							
Acanthiza inornata	Western Thornbill	SB3	✓							
Acanthiza chrysorrhoa	Yellow-rumped Thornbill	SB3	✓*		✓			✓	✓	
MELIPHAGIDAE										
Anthochaera carunculata	Red Wattlebird		✓*	✓	✓	✓	✓	✓	✓	
Anthochaera lunulata	Western Wattlebird	SB4	✓							
Lichenostomus virescens	Singing Honeyeater		✓*	✓	✓	✓	✓	✓	✓	✓
Lichmera indistincta	Brown Honeyeater		✓*	✓	✓	✓	✓	✓	✓	
Phylidonyris novaehollandiae	New Holland Honeyeater	SB4	✓							
Phylidonyris nigra	White-cheeked Honeyeater	SB4	✓*	✓	✓	✓	✓	✓	✓	✓
Acanthorhynchus superciliosus	Western Spinebill		✓			✓	✓	✓		
PETROICIDAE										
Petroica multicolor	Scarlet Robin	SB3	✓							
Melanodryas cucullata	Hooded Robin	SB3	✱							
NEOSITTIDAE										
Daphoenositta chrysoptera	Varied Sitella	SB3	✓							
PACHYCEPHALIDAE										
Pachycephala rufiventris	Rufous Whistler		✓*	✓	✓	✓		✓	✓	
Colluricincla harmonica	Grey Shrike-thrush	SB3	✓	✓	✓	✓		✓		
DICRURIDAE										
Grallina cyanoleuca	Magpie-Lark		✓			✓				✓
Rhipidura fuliginosa	Grey Fantail		✓	✓					✓	
Rhipidura leucophrys	Willie Wagtail		✓	✓						
CAMPEPHAGIDAE										
Coracina novaehollandiae	Black-faced Cuckoo-Shrike		✓	✓	✓	✓		✓	✓	
Lalage sueurii	White-winged Triller		✱							
ARTAMIDAE										
Artamus cinereus	Black-faced Woodswallow	SB4	✓	✓						✓
Cracticus torquatus	Grey Butcherbird		✓	✓		✓			✓	
Gymnorhina tibicen	Australian Magpie		✓*	✓		✓	✓		✓	✓
CORVIDAE										
Corvus coronoides	Australian Raven		✓*	✓	✓	✓	✓	✓	✓	✓
MOTACILLIDAE										
Anthus novaeseelandiae	Richard's Pipit		✓							
DICAEIDAE										
Dicaeum hirundinaceum	Misltoebird		✱							
HIRUNDINIDAE										
Hirundo neoxena	Welcome Swallow		✓		✓					
Hirundo nigricans	Tree Martin		✓							✓
ZOSTEROPIDAE										
Zosterops lateralis	Silvereye		✓						✓	
MAMMALS										
PERAMELIDAE										
Isodon obesulus	Southern Brown Bandicoot (Quenda)	P4	✓	✓	✓			✓	✓	✓
TARSIPEDIDAE										
Tarsipes rostratus	Honey Possum		✱							

MACROPODIDAE										
Macropus fuliginosus	Western Grey Kangaroo		✓	✓	✓	✓	✓	✓	✓	✓
Macropus irma	Western Brush Wallaby	P4	✓			✓	✓	✓	✓	✓
MOLLOSIDAE										
Tadarida australis	White-striped Bat		✱							
VESPERTILIONIDAE										
Chalinolobus gouldii	Gould's Wattled Bat		✱							
Chalinolobus morio	Chocolate Wattled Bat		✱							
Falistrellus mackenziei	Western False Pipistrelle	P4	✱ un							
Vespadelus regulus	Southern Forest Bat		✱							
Nyctophilus geoffroyi	Lesser Long-eared Bat		✱ un							
Nyctophilus gouldii	Gould's Long-eared Bat		✱ un							
Nyctophilus major	Greater Long-eared Bat		✱ un							
MURIDAE										
Mus musculus	House Mouse		✓	✓	✓		✓	✓	✓	✓
Rattus Rattus	Black Rat		✱							
Rattus fuscipes	Bush Rat		✱							
CANIDAE										
Vulpes vulpes	Fox		✓	✓	✓	✓				
Canis familiaris	Dog		✓	✓	✓	✓	✓			
FELIDAE										
Felis catus	Cat		✓	✓	✓	✓	✓			
LEPORIDAE										
Oryctolagus cuniculus	Rabbit		✓	✓	✓	✓	✓	✓	✓	✓

Data Sources:

Dell & Cooper (1992) Vertebrate Fauna of Ken Hurst Park, City of Melville

Birds of the City of Melville (2002) - based on records of Birds Australia WA Inc

Vertebrate Fauna List for Jandakot Airport supplied by S Miller, Jandakot Airport 9/12/02

Key:

✓ recorded at KHP (including tracks, scats and diggings)

* breeding record at KHP

✱ additional species recorded at Jandakot Airport

un: unconfirmed

Conservation Status:

EN: Endangered, Commonwealth *Environment Protection & Biodiversity Act 1999*

S1: Schedule 1, *Wildlife Conservation Act 1950*

S4: Schedule 1, *Wildlife Conservation Act 1950*

P4: Priority 4 taxa, CALM Sept 2002

SB3: Significant Bird Category 3, Bush Forever (2000)

SB4: Significant Bird Category 4, Bush Forever (2000)

1992 Survey Sites

1: *Regelia* spp. shrubland with scattered *Melaleuca preissiana* trees on lowland

2: *Regelia* spp. shrubland with scattered *Melaleuca preissiana*, *Banksia littoralis* and *B. ilicifolia* trees on lowland

3: *Banksia attenuata*, *B. menziesii* woodland with scattered *B. ilicifolia* and *Eucalyptus marginata* over low heath on dune top

4: *Banksia attenuata*, *B. menziesii* woodland with scattered *B. ilicifolia* and *Eucalyptus marginata* over low heath on dune top

5: *Banksia attenuata*, *B. menziesii* and *Allocasuarina fraseriana* woodland with scattered *B. ilicifolia* and *Eucalyptus marginata* over low heath on interdunal swale

6: *Melaleuca preissiana* woodland with scattered *Banksia littoralis* over dense sedgeland on lowland

APPENDIX 3

VEGETATION CONDITION RATING

APPENDIX 3
VEGETATION CONDITION RATING

Vegetation Condition Rating Scale Bush Forever (Government of WA, 2000)	
Pristine	Pristine or nearly so, no obvious signs of disturbance
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non aggressive species
Very Good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as ‘parkland cleared’ with the flora composing weed or crop species with isolated native trees or shrubs.

APPENDIX 4

MINUTES OF COMMUNITY WORKSHOP 17 OCTOBER 2002

Appendix 4 Ken Hurst Park Management Plan Community Workshop

17 October 2002 – 6.30pm

Piney Lakes Environmental Education Centre

Attendance Register

Diane Matthews	Friends of Ken Hurst Park; Wildflower Society
Neil Goldsborough	Friends of Ken Hurst Park; Wildflower Society
Olive Langham	Friends of Ken Hurst Park; Melville Conservation Group
Andrew Thompson	Urban Bushland Council; Friends of Ken Hurst Park; Environmental Weeds Action Network
Lesleigh Curnow	Friends of Ken Hurst Park; Wildflower Society
Diana Corbyn	Friends of Ken Hurst Park; Wildflower Society; Challenger TAFE
Jane Hilton	Friends of Ken Hurst Park
Eddy Wajon	Friends of Ken Hurst Park
Rod Petterson	Leeming Resident
Sharon Miller	Environmental Officer Jandakot Airport
Dinky Goble-Garratt	MRWA
Russell Aubrey	City of Melville Councillor
Rasa Subramarian	City of Melville Councillor
Ian Davis	City of Melville
Philip Gale	City of Melville
Paul van der Moezel	ATA Environmental
Sarah Maxwell	ATA Environmental

Agenda

Start Time	Item	Speaker
6.30	Welcome and Purpose	City of Melville
6.35	Background Information	ATA Environmental
6.50	Development of Management Options	Groups
7.50	Group Feedback	Groups
8.50	Workshop Summary	ATA Environmental
9.00	Close	

Phillip Gale – City of Melville

- Gave brief introduction.

Sarah Maxwell – ATA Environmental

- Gave an overview of the objectives of the workshop and objective and of the Management Plan:

Objective of Workshop: To identify issues and obtain community and stakeholder input regarding the appropriate environmental management of the Park.

Objectives of the Management Plan:

1. Ensure the long-term conservation of the remnant bushland, develop wildlife corridors and significant habitat;

2. Liaise with all stakeholders regarding the appropriate environmental management for the area;
 3. Restore and rehabilitate vegetation communities to ensure long-term viability of native flora; and
 4. Establish a baseline environment data set and overall vegetation inventory to act as a tool for environmental planning and management, and will also provide important information on the conservation status of vegetation communities in the Park.
- Sarah gave a description of the site: topography, vegetation, Bush Forever, management issues including - access, car parking, revegetation, DRF, dieback, weeds, wetlands, vertebrate fauna, fire, signage, rubbish, aboriginal heritage, education, Roe Highway interface, monitoring/maintenance of information. Identified that management issues need to be prioritised.

Items discussed:

Flora List - community group has an updated flora list with more than 214 native species now known.

Feral Animals - esp. cats predate Quendas.

Eddie - About 353 *Caladenia huegelii* in the region.

Issues relevant to the management plan:

- Future use of Jandakot airport land.
- Plans for Leeming Rd and Clifton Rd.
- Fauna crossing of railway.
- Kangaroos moving offsite eg. to Melville Golf Course.
- Dieback - where is it (most of Banksia Woodland)
Spread could jeopardise the whole vision for the Park.
- Fire
- Hard limestone tracks for fire vehicle access.
- Hydrants/water supply (bore) perhaps sharing with Airport.
- Fence along railway line - what type has WAGR agreed to.
- Services along railway line - what does WAGR need to maintain as far as access goes?

GROUP FEEDBACK

Group 1 - Russell Aubrey, Rod Petterson, Eddy Wajon, Rasa Subramarian

Recommendations (in order of priority):

Fencing (focusing mostly on N perimeter)

- tie into existing barriers eg. housing (until Roe Hwy goes ahead).
- tie into Jandakot Airport fencing (Sharon Miller - Jandakot appeared to agree with this).
- not sure about fencing along rail.
- 4WDs easier to control than bikes.
- ranger presence should be there regularly at first and sparingly later.
- also signage.

Rubbish Removal

- Have a major cleanup on Clean up Australia Day.

Access Parks

- Currently lots of paths, some difficult to walk on.
- Close down unnecessary tracks and limestone ones that are for people use.

Weeds/Revegetation esp. closed paths.

Fauna (Native and Feral)

- Feral proof fencing may be contrary to movement of native animals.
- Fences should allow fauna movement but not vehicle.
- Cat curfews.
- Baiting for foxes, rabbits if fencing inadequate.

Fire Management

- No fixed ideas within group.
- Do not want fire trucks in Park but control from perimeters.
- Possibly controlled burns need to be considered.

Signage

- Possibly at RRRC site access area where environmental education already exists.
- Leaflet.

Wish List - 3 - 5 years financial commitment. Dieback control by Uni (eg. Murdoch Horticultural college).

Group 2 – Diane Matthews, Neil Goldsborough, Olive Langham, Andrew Thompson, Lesleigh Curnow

Major issue

- Getting across railway line.
- Names for tracks.

Weeds

- Weed mapping a priority.
- Employ a bushland officer.

Fire

- Need fire hydrants

- One main fire access track.
- Urban Bushland Council has no fire policy. Best way to control fire is to control weeds and quick response.

Security

- Ranger patrols.

Signage

- Involve local school groups to design signs eg. Leeming Senior High School. West Leeming Primary School.
(However, remote site from schools and therefore maybe little interest).

Phillip Gale - Site's remoteness

Group 3 – Diana Corbyn, Dinky Goble-Garratt, Jane Hilton

- Access - control important.
- Fencing - needed, concerned about animal movement.
- Car Parking - minimal and located outside the Park. Like idea of RRRC site.
- Weeds - weed management plan and implementation.
- Revegetation - Local provenance material. Revegetation unwanted paths.
- Wetlands - monitor watertable.
- Feral Animals - Cat control important.
- Dieback - check previous report (may be dubious results).
- Fire - like limestone tracks, don't like ploughing up sand. Fire Management Plan
- Rubbish - rubbish from tipsite needs to be controlled. Need to do something about car bodies.
- Signage - nice sign at entrance, like pegs at Shenton Park (Lemnos St). Group 2 also mentioned this.
- Assistance - need to take on 2 CLM staff.
- Roe Hwy - not wanted (general support).
- Visitors survey.
- Birds survey.

FESA like to have a contact person from Friends Group, as well as Council. Moveable signs for plant identification.

Group 4 – Sharon Miller, Ian Davis, Philip Gale

- Priorities:
1. Fencing
 2. Rubbish - one major clean up day.
 3. Weeds
 4. Dieback - aerial spraying (Sharon Miller identified Murdoch Uni looking at phosphite aerial spraying (effective in heath type vegetation, now looking at woodland).

Control vehicle access.

Utilise RRRC site educational opportunities.

No car parks in Park – car park in RRRC site.

Revegetation

- Direct seeding.
- DRF - manage weeds and access and orchids will look after themselves.

Fire

- Rationale tracks.
- Limestone base.
- Compartmentalise areas.

Signage

- No interpretation in park but just at access points.

Roe Hwy interface

- Treat bush area of sad reserve as part of park ie. no fence on southern side of road.

Monitoring

- Plan needs to have performance indicators.

APPENDIX 5

WEED CONTROL METHODS

APPENDIX 5
CONTROL GUIDELINES FOR WEEDS AT KEN HURST PARK

	Control Priority	Species	Common Name	Treatment Method				Control Notes
				Manual removal	Herbicide wipe, stem injection, cut stump	Spot Spray	Blanket Spray	
Trees		<i>Melia azedarach</i>	Cape Lilac					
Shrubs		<i>Leptospermum laevigatum</i>	Victorian Tea-tree	✓	✓	✓		Hand pull small seedlings. Spot spray small plants. Paint cut stump with Roundup/Glyphosate straight after cutting. Remove tops which may have seeds still attached. Check following years for new seedlings. Can use Garlon, Grazon or Velpar with care.
Herbs		<i>Asphodelus fistulosus</i>	Onion Weed					
		<i>Echium plantagineum</i>	Paterson's Curse					
		<i>Pelargonium capitatum</i>	Geranium		✓	✓		Difficult to control. Pull plants in autumn / winter when soil is damp. Plant will reshoot if stem is broken at or below ground level. Secondary weeding is important but good control can be achieved.
Grasses		<i>Avena barbata</i>	Wild Oat			✓	✓	Easy to control. Use 2L of Fusilade per hectare for blanket and spot spraying.
	High	<i>Ehrharta calycina</i>	Perennial Veldt Grass	✓		✓		Easy to control with Fusilade at 4L per hectare or with similar herbicides such as Sertin, Targa. Spot spray at 2L per hectare. Heavy infestation may require follow-up spray the next year. Remove small infestation by hand.
		<i>Euphorbia terracina</i>	Geraldton Carnation Weed	✓	✓	✓		Sprayseed 200, 10-15mL in 10L of water in early winter.

Note: Control Priorities: **High** **Immediately (ie 0 – 2 years)**
 Medium Within 2 – 5 years
 Low Within 5 – 10 years

APPENDIX 6

GENERIC DIEBACK HYGIENE GUIDELINES

**FROM: *MANAGING PHYTOPHTHORA DIEBACK -
GUIDELINES FOR LOCAL GOVERNMENT*
BY DIEBACK WORKING GROUP, 2000**

Bushland Management

Phytophthora cinnamomi should be taken into consideration when planning the management of a bushland reserve, and when planning specific management activities. Adequate planning will ensure the risk of spreading *P. cinnamomi* is reduced at minimal cost and inconvenience.

Dieback Control Measures

1. Where practical, schedule activities that involve soil disturbance for dry summer months (November – March). These activities should only occur when the soil is dry.
2. Minimise the number of tracks that pass through the bushland, and ensure the tracks are well drained.
3. Ensure that the bushland is well drained (dieback impact is greatest in wet sites). No drainage water should be discharged into bushland.
4. Minimise soil disturbance – consider mowing, slashing or using herbicide, rather than ploughing, or grading, whenever possible or practical.

If you know the location of the infestation:

5. Plan activities so they are completed in the uninfested parts of the bushland first, then move to the infested parts of the bushland.
6. Plan or alter track location so they do not pass through the uninfested parts of the bushland.
7. Mark the infection boundary with bright marking tape when undertaking works or activities, so the dieback free area is visible.

Bush Restoration Activities

Bush restoration involves weeding, revegetation, fencing, rubbish removal. Most restoration activities can introduce or spread *P. cinnamomi*, in particular revegetation. Revegetation has the greatest risk of spreading *P. cinnamomi*, as it involves the introduction of plants and soil.

Dieback Control Measures

Weeding

1. Complete weeding when the bushland is dry (when possible/practical).
2. If manually removing weeds, immediately place them in a bag (or similar) to prevent soil falling into other parts of the bushland.
3. Ensure all tools, equipment and footwear are free of mud and soil when entering bushland.

If you know the location of the infestation:

4. Complete weeding in the uninfested part of the bushland first.
5. Vehicles, tools, equipment and footwear to be free of all mud and soil upon entry to the uninfested parts of the bushland.

Revegetation

Revegetation should not be necessary in bushland. If weeds and other disturbances are controlled, natural regeneration will ensure the bushland is well vegetated. Revegetation also has a high risk of introducing *P. cinnamomi* into bushland; therefore it should be avoided whenever possible. However if revegetation is required:

1. Consider direct seeding, or purchase the plants from a nursery with excellent hygiene practises (Nurseries with Nursery Industry Association Wholesale Accreditation maintain very high standards of hygiene).
2. Only use mulch if it has been well composted (the heating part of the composting process kills *P. cinnamomi*).
3. Complete revegetation when the soil is moist but not wet.
4. Avoid vehicle access. If vehicle access is required, make sure the vehicle is free of mud and soil, and is restricted to a hard, dry surface.
5. Vehicles, tools and equipment to be free of all mud and soil upon entry and exit.
6. Footwear to be free of mud and soil upon entry and exit.

If you know the location of the infestation:

7. Vehicles, tools, equipment and footwear to be free of all mud and soil upon entry to the uninfested parts of the bushland.
8. Complete revegetation in the uninfested part of the bushland, before moving to the infested part of the bushland.

Suggested plants for revegetation:

- Infested areas – the majority of plants should be resistant to *P. cinnamomi*.
- Uninfested areas – the usual selection of locally indigenous plants should be used. Seedlings should be sprayed with phosphite once planted.
- Unsure – use a mixture of susceptible and resistant locally indigenous plants.

Fencing / Rubbish Collection / Other

1. All equipment, tools and footwear to be free of mud and soil when entering the bushland.

If you know the location of the infestation:

2. Vehicles, tools, equipment and footwear to be free of all mud and soil upon entry to the uninfested parts of the bushland.

Earthworks / Maintenance / Vehicles

Activities such as track construction and maintenance, and road and verge maintenance, vehicle movement etc. can involve the movement of soil, water or plant material. Therefore these activities have a very high risk of spreading *P. cinnamomi* into bushland.

Dieback Control Measures

1. Where practical schedule activities that involve soil disturbance for dry summer months (November – March) and when the soil is dry (includes activities on the adjacent road verges).
2. Minimise soil disturbance – consider mowing, slashing or use herbicide, rather than ploughing and grading, whenever possible or practical.
3. Complete activities in the uninfested part of the bushland, before moving to the infested part of the bushland.
4. In the uninfested parts of the bushland, or, if you are unsure of the infection status of the bushland:
 - Do not bring in soil/sand/gravel. If they must be bought in, they should be tested for the presence of *P. cinnamomi*, or from a supplier who provides dieback free materials, and transports and stores the materials hygienically (soil suppliers accredited by the Nursery Industry Association maintain high standards of hygiene).
 - Do not move soil/sand/gravel in from the infested part of the bushland.
 - Prevent vehicles and machinery entering. If they must enter, they must be free of soil and mud, and restricted to a hard, dry surface.
 - Footwear to be free of mud and soil when entering bushland.
 - Any water used in earthworks etc. should be from Mains supply or sterilised.
5. In the infested parts of the bushland
 - There is no restriction on the source of gravel/sand/soil.
 - Prevent vehicles and machinery entering. If they must enter, restrict them to hard, dry surfaces and they must be free of soil and mud when exiting the bushland (it is acceptable for these to be taken directly to a cleaning facility on sealed roads for cleaning).
 - Do not remove soil/sand/gravel from the infested part of the bushland. If it must be removed, it should be placed at a site that is also infested with *P. cinnamomi*.
 - Footwear to be free of mud and soil when exiting the bushland.

Fire

Fire management can contribute to the introduction and spread of *P. cinnamomi*. Fire prevention activities such as firebreak construction, can spread infested soil. The following procedures can be implemented into fire management activities without detracting from the priority of protecting life and property.

Dieback Control Procedures

1. Schedule firebreak maintenance for dry summer months (November – March) and complete maintenance when the soil is dry.
 2. Vehicles, tools and equipment used in fire break maintenance to be free of all mud and soil (particularly on tyres and mudflaps) when entering and exiting the bushland.
 3. Footwear to be free of mud and soil when entering and exiting the bushland.
 4. Minimise soil disturbance whenever possible – consider mowing, slashing or use herbicide to create fire breaks, rather than ploughing or grading.
 5. Construct firebreaks to shed water and dry quickly.
 6. Water used in mopping up activities to be from Mains supply.
 7. Rationalise firebreaks so the number of firebreaks is minimised.
- If you know the location of the infestation:
8. Commence firebreak maintenance and construction in the uninfested parts of the bushland, and then move into the infested parts.
 9. Vehicles, tools and equipment used in fire break maintenance to be free of all mud and soil (particularly on tyres and mudflaps) when entering the dieback free parts of the bushland, or when exiting the infested parts of the Park.
 10. Footwear to be free of mud and soil when entering the uninfested parts of the bushland, and when exiting the bushland.

Protecting Vegetation

Although there is presently no cure for *P. cinnamomi* infection, a chemical is available that can protect susceptible plants. Phosphite, also known as Phosphonate, is a biodegradable fungicide that protects plants against *P. cinnamomi* by boosting their natural defences. Phosphite controls most species of *Phytophthora*, including *P. cinnamomi*.

Phosphite should be applied to all susceptible vegetation in bushland if there is a risk of *P. cinnamomi* arriving. However phosphite application is quite time consuming and labour intensive, so treatment should be prioritised.

If the location of infestation is known:

Priority 1 – Treatment of DRF listed susceptible flora, or flora of significance to the reserve.

Priority 2 – Treatment of all vegetation within 5 metres downslope of the infestation edge.

Priority 3 – Treatment of all vegetation within 5 metres of the infestation edge.

Priority 4 – Treatment of significant susceptible vegetation.

Priority 5 – Treatment of susceptible vegetation located 5 metres either side of all access tracks located in the uninfested part of the bushland.

Priority 6 – Treatment of all vegetation in the uninfested part of the bushland.

Priority 7 – Treatment of susceptible vegetation in the infested part of the bushland.

If the location of infestation is unknown:

Priority 1 – Treatment of DRF listed susceptible flora, or flora of significance to the reserve.

Priority 2 – Treatment of all vegetation within 5 metres downslope of any dead/dying vegetation.

Priority 3 – Treatment of all vegetation within 5 metres of any dead/dying vegetation.

Priority 4 – Treatment of vegetation within 5 metres of the bushland boundary.

Priority 5 – Treatment of all susceptible vegetation located 5 metres either side of all access tracks.

Priority 6 – Treatment of vegetation within 5 metres of tracks/paths which pass through the bushland.

Priority 7 – Treatment of all susceptible vegetation in the bushland.

Spraying will provide 2-3 years protection and injection will provide 3-5 years protection.

Control Measures

1. Treat susceptible vegetation in bushland with Phosphite as per the above priorities and the length of protection.
2. Monitor plant and tree health to determine the time for reapplying treatment. If there is no tree or plant death re-spray plants every 3 years, and re-inject trees every 5 years.

If you know the location of the infestation:

3. Re-survey the bushland every 3 years (using qualified or experienced interpreters) to determine the success of treatment procedures, and identify new infections.

Access

Bushland reserves usually have unrestricted access and are often traversed by numerous tracks and paths. This greatly increase the likelihood of *P. cinnamomi* being introduced or spread in bushland.

Control Procedures

1. Prevent vehicle, motorcycle, bicycle and horse riding access to the bushland.
2. Encourage visitors to avoid visiting the bushland when it is wet, and to keep to existing tracks.
3. Tracks to be maintained in a good condition and kept well drained.
4. Minimise/rationalise the number of tracks that pass through the bushland.
5. Interpretive signs to be placed at entrances to the bushland, explaining the *P. cinnamomi* status of the bushland, and how visitors can help to stop its spread.
6. Footwear to be free of mud and soil when entering and exiting bushland.

If you know the location of the infestation:

7. Realign existing tracks, to stop them passing from the infested to the uninfested parts of the bushland.
8. Avoid constructing new tracks that pass through the uninfested parts of the bushland.
9. Avoid walking between the infested and uninfested part of the bushland when the soil is wet.
10. Interpretive signs to be placed at entrances to the bushland, explaining the *P. cinnamomi* status of the bushland, and how visitors can help to stop its spread.
11. Footwear to be free of mud and soil when moving into the uninfested parts of the bushland.

Communication

It is essential that all groups and organisations involved with a bushland are made aware of the dieback status of the bushland. If the bushland is infested, stakeholders must be made aware of the location of the infestation.

Control Measures

1. Observe activities occurring in or adjacent to the bushland that could introduce or spread *P. cinnamomi*. Find out if the activity had *P. cinnamomi* 'Control Procedures' in place. If not, contact the Environment Officer at the local Council, or the relevant authority.
2. Erect signs at entrances to the bushland explaining that the bushland is under threat from *P. cinnamomi* (See Appendix 2).

If you know the location of the infestation:

3. Erect signs at the entrances to the bushland explaining the dieback status of the bushland (See Appendix 2).
4. Discuss the dieback status of the bushland with neighbouring landholders.
5. In public reserves - prepare and distribute a brochure to surrounding landholders explaining the dieback status of the bushland (See Appendix 3).
6. In public reserves - hold a 'wildflower' walk in spring and highlight the disease impact, its potential impact, and how visitors can prevent it spreading.
7. In public reserves - place signs along walk tracks next to live susceptible plants and dead plants that have been killed by the fungus.

Horses / Livestock / Animals

Hard hooved animals such as horses and cattle can contribute to the spread of dieback by picking up soil in their hooves. Soft footed animals such as native fauna and dogs have a much lower risk of spreading dieback.

Dieback Control Measure

- Hard hooved animals should be excluded from bushland.
- If hard hooved animals must enter bushland, their hooves should be free of mud and soil when entering and exiting, and they should be kept on hard, well drained tracks.

Off Road Vehicles and Motorcycles

Off Road Vehicles and motorcycles can contribute to the spread of dieback by picking up soil in tyres.

Dieback Control Measure

- Off Road Vehicles and motorcycles should be excluded from bushland.

SUGGESTED SIGNS FOR RESERVE ENTRANCES

The wording, content and style of the signs can be changed if *P. cinnamomi* is known to be present at the site. It should also be changed to compliment the style of other signs at the reserve, and to accommodate budget restrictions.

Option A (Suited to a detailed display board / information board / poster etc)

Dieback in (name of reserve)

Dieback is a disease caused by the fungus *Phytophthora cinnamomi* (Pc). Pc kills thousands of native plants, including many wildflowers. Pc creeps through the soil and rots the roots of plants.

Steps have been taken to stop the spread of Pc and protect the plants in (name of reserve). Plants in this bushland have been treated with an 'environmentally friendly' fungicide (phosphite) to give them 3 years protection from Pc.

To stop the spread of Pc, visitors to are asked:

1. **Not to enter when wet.**
2. **To remain on tracks.**
3. **To ensure that footwear and bike tyres are free of mud and soil when entering and leaving the bushland.**
4. **Not to remove soil or plant material.**

For more information contact the Shire/City of *****

Option B

Dieback In (name of reserve)

(name of reserve) contains the fungus *Phytophthora cinnamomi* (Dieback) which kills many native plants.

To stop the spread of *Phytophthora cinnamomi*, visitors are asked:

1. **Not to enter when wet.**
2. **To remain on tracks.**
3. **To ensure that footwear and bike tyres are free of mud and soil when entering and leaving the bushland.**
4. **Not to remove soil or plant material.**

For more information contact the Shire/City of *****

Option C

Save our Wildflowers

(name of reserve) contains dieback

For more information contact the Shire/City of *****

Option D (Suited to a site that is free of *P. cinnamomi*)

Beware of Dieback

Dieback kills hundreds of native plant species and is present in many bushland reserves around Perth. Fortunately (name of reserve) is dieback free.

To keep (name of reserve) free of dieback, visitors are asked:

1. **Not to enter when wet.**
2. **To remain on tracks.**
3. **To ensure that footwear is free of mud and soil when entering and leaving the bushland.**
4. **Not to introduce soil or plant material.**

For more information contact the Shire/City of *****

Option E (Suited to a site that is free of *P. cinnamomi*)

Save our Wildflowers

(name of reserve) is in a high risk dieback area.

For more information contact the Shire/City of *****

Option E

Please Keep Out

**This area is infested with
Dieback.**

SUGGESTED SIGNS FOR WALK TRACKS

This plant (name) has been killed by
Phytophthora cinnamomi (Dieback)

This plant (name) is susceptible to
Phytophthora cinnamomi (Dieback).

Keep on the track to avoid spreading
Phytophthora cinnamomi (Dieback).

APPENDIX 7

GATE SPECIFICATIONS

Appendix 7 **Gate Specifications** **(Rod Martyn, pers comm, CALM, 2002)**

