



Offices: 102 North Road  
Postal Address: PO Box 484, ALBANY WA 6331  
Phone: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: [staff@albany.wa.gov.au](mailto:staff@albany.wa.gov.au)  
Synergy Reference No: NG072580

---

# **ENVIRONMENTAL CODE OF CONDUCT**

## **GUIDELINES FOR WORKS ON COUNCIL CONTROLLED LAND**

### **INCLUDING:**

**ROAD CONSTRUCTION & MAINTENANCE  
PARK CONSTRUCTION & MAINTENANCE  
GRAVEL & LIME PIT CONSTRUCTION & REHABILITATION  
FIRE ACCESS TRACKS & FIRE MANAGEMENT  
REFUSE DISPOSAL SITE MANAGEMENT & REHABILITATION  
BUSHCARE  
OTHER WORKS  
OTHER ACTIVITIES ON CROWN OR FREEHOLD LAND**

**SEPTEMBER 2006**

### **\*\* DISCLAIMER \*\***

This information sheet is a guide only. Verification with original Local Laws, Acts, Planning Schemes, and other relevant documents is recommended for detailed references. The City of Albany accepts no responsibility for errors or omissions.

**© City of Albany 2006**

# TABLE OF CONTENTS

<b>INTRODUCTION</b>		<b>Page #</b>
1	OBJECTIVE OF CODE OF CONDUCT_____	1
2	STRATEGIES_____	1
3	HOW TO USE THE CODE OF CONDUCT_____	1
4	ENVIRONMENTAL COMPLIANCE PROCESS_____	1
	Environmental Compliance Process_____	1
	4.1.1 Environmental Impact Assessment_____	2
	4.1.2 Statement of Compliance_____	2
5	ENVIRONMENTALLY SENSITIVE AREAS_____	2
	5.1 Areas Registered on the Register of National Estate for Natural Values_____	3
	5.2 Defined Wetlands_____	3
	5.3 Declared Rare or Priority Flora_____	3
	5.4 Public Drinking Water Source Areas_____	4
	5.5 Phytophthora Dieback-Free Areas_____	4
	5.6 Conservation Estate_____	4
	5.7 Known or Potential Habitat of Threatened Fauna_____	4
	5.8 Significant Aboriginal Sites_____	4
<b>OPERATING PROCEDURES</b>		
1	ROAD CONSTRUCTION AND MAINTENANCE_____	5
	Planning_____	5
	Removal of Native Vegetation_____	5
	Clearing_____	5
	Pruning and Chipping_____	6
	Vegetation Canopy Clearance_____	6
	Regrowth Mulching_____	6
	Verge Mowing_____	7
	Weed Management_____	7
	Dieback Management_____	8
	Water Quality, Wetland and Waterway Management_____	9
	1.5.1 Public Drinking Water Source Areas_____	9
	1.5.2 Acid Sulphate Soil_____	9
	1.5.3 General_____	9
	Soil Management_____	9
	Soil Erosion_____	9
	Bringing in Materials_____	10
	Disposal of Soil_____	10
	Vehicle and Machinery Management_____	10
	Drainage Management_____	11
	Native Vegetation Rehabilitation_____	11
	Unplanned disturbance to Vegetation_____	11
	Planned Disturbance to Native Vegetation_____	11
	Staff and Contractor Management_____	12
	Staff_____	12
	Contractors_____	12
2	PARK CONSTRUCTION_____	12
	Planning_____	12
	Clearing of Native Vegetation_____	13
	Weed Management_____	13
	Dieback Management_____	13
	Water Quality, Wetland and Waterway Management_____	13
	2.5.1 Public Drinking Water Source Areas_____	13
	2.5.2 Acid Sulphate Soil_____	13

	Soil Management_____	14
	Strip and Stockpile Topsoil_____	14
	Disposal of Soil_____	14
	Vehicle and Machinery Management_____	14
	Native Vegetation Rehabilitation_____	14
	Contractor Management_____	14
	Planted Vegetation_____	14
3	PARK MAINTENANCE_____	15
	Weed Management_____	15
	Mowing_____	15
	Plantings_____	15
4	NEW GRAVEL AND LIME PIT CONSTRUCTION AND REHABILITATION_____	15
	Planning_____	15
	Removal of Native Vegetation_____	15
	Weed Management_____	16
	Dieback Management_____	16
	Water Quality, Wetland and Waterway Management_____	16
	4.5.1 Public Drinking Water Source Area_____	16
	4.5.2 Acid Sulphate Soil_____	16
	Soil Management_____	16
	Vehicle and Machinery Management_____	16
	Drainage Management_____	17
	Native Vegetation Rehabilitation_____	17
	Contractor Management_____	17
5	OLD GRAVEL AND LIME PIT REHABILITATION_____	17
	Planning_____	17
	Weed Management_____	18
	Dieback Management_____	18
6	FIRE ACCESS TRACKS_____	18
	Planning_____	18
	Removal of Native Vegetation_____	18
	Weed Management_____	19
	Dieback Management_____	19
	Soil Management_____	20
	Drainage Management_____	20
	Control Public Access_____	20
	Native Vegetation Rehabilitation_____	20
	Contractor Management_____	20
7	FIRE MANAGEMENT_____	20
	Prescribed Burns_____	20
	Wildfires_____	20
8	REFUSE DISPOSAL SITE MANAGEMENT_____	21
	Clearing of Native Vegetation_____	21
	Weed Management_____	21
	Native Vegetation Rehabilitation_____	21
9	REFUSE DISPOSAL SITE REHABILITATION_____	21
	Planning_____	21
	Weed Management_____	21
	Dieback Management_____	22
10	BUSHCARE_____	22
	10.1 Dieback Management_____	22
11	OTHER WORKS_____	22

12	OTHER ACTIVITIES ON CROWN OR FREEHOLD LAND_____	22
	Utility Services_____	22
	Installation of Utilities_____	22
	Maintaining Utility Services_____	23
	Crossover Approval Process_____	23
	Requests Clear Vegetation on Council Controlled Land_____	23
	Firebreaks_____	23
	Fencelines_____	24
	Requests to Burn Vegetation on Council Controlled_____	24
	Requests to Collect Firewood_____	24
	Requests to Harvest Wildflowers_____	25
	Requests to Harvest Timber_____	25
	Requests to Plant or Sow Seeds_____	25
	 LIST OF SUPPORTING DOCUMENTATION_____	 26
	 BIBLIOGRAPHY_____	 27
	 GLOSSARY OF TERMS_____	 28
	 LEGISLATIVE CONTEXT_____	 29
	 APPENDIX 1 ENVIRONMENTAL IMPACT ASSESSMENT CHECKLIST	
	 APPENDIX 2 STATEMENT OF COMPLIANCE	

# INTRODUCTION

## 1 OBJECTIVE OF CODE OF CONDUCT

The objective of the City of Albany's "*Environmental Code of Conduct*" is to minimise the environmental impacts that could be caused by works carried out on Council controlled land.

## 2 STRATEGIES

The City of Albany will minimise the environmental impacts that could be caused by works carried out on Council controlled land, by:

- 1 ensuring that all proposals for works or undertakings comply with the "*Environmental Code of Conduct*";
- 2 requiring that all works are subject to an environmental compliance process;
- 3 ensuring that works are conducted in compliance with legislative and statutory requirements (including Federal and State Government legislation and policies) and that any approvals required are in place prior to the commencement of works;
- 4 increasing the knowledge of staff and contractors of environmental operating procedures through appropriate training; and
- 5 monitoring compliance with Environmental Code of Conduct and conditions set in Purpose Permits.

## 3 HOW TO USE THE CODE OF CONDUCT

- This Document is separated into the major work areas within the City of Albany. Best practice procedures to minimise impacts on the environment by each work area are then listed under specific issue headings.
- All works carried out on Council Controlled land should adhere to the operating procedures contained in this document.
- As part of the process to design/plan a project, the Environmental Compliance Process will identify any additional environmental procedures to be followed.
- In using this document, due regard should also be given to other policies and strategies.

## 4 ENVIRONMENTAL COMPLIANCE PROCESS

The environmental compliance process applies to all new projects and all maintenance works on Council controlled land.

### 4.1 ENVIRONMENTAL COMPLIANCE PROCESS

The below described compliance process is to be undertaken during the planning stage of any new or maintenance works undertaken by the City of Albany or it's contractors.

#### **4.1.1 ENVIRONMENTAL IMPACT ASSESSMENT**

The Environmental Impact Assessment Checklist (see Appendix 1) is part of the environmental compliance and approval process.

All projects will be screened to identify those works that are low impact (i.e. that will have a low impact on the environment and that can be adequately management through the procedures outlined in this document) and those projects that require further assessment and specific management procedures developed to address specific issue/values.

Projects that have “no” or “N/A” against every item in the checklist are considered to have a low impact on the environment.

Projects that have “yes” to any item in the checklist are considered to have the potential to have medium to high impact on the environment.

Staff of the City of Albany, that have been trained to answer the questions in the checklist, will be responsible for undertaking the environmental impact assessment.

#### **4.1.2 STATEMENT OF COMPLIANCE**

Following the completion of the Environmental Impact Assessment Checklist, a Statement of Compliance must be completed and approved (Appendix 2).

Projects identified as having low impact on the environment can simply be approved once the details of the project have been inserted into the appropriate sections of the form.

Projects identified as having the potential of having medium to high impact on the environment, may be approved only once further environmental assessment has been carried out and specific management procedures have been developed and adopted.

City of Albany staff suitably trained in environmental management, or an external organisation will be responsible for completing the Statement of Compliance.

### **5 ENVIRONMENTALLY SENSITIVE AREAS**

Under the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, the following areas are declared to be environmentally sensitive areas within the City of Albany:

- (a) a declared World Heritage property as defined in section 13 of the *Environment Protection and Biodiversity Conservation Act 1999* of the Commonwealth;
- (b) an area that is registered on the Register of the National Estate, because of its natural values, under the Australian Heritage Commission Act 1975 of the Commonwealth;
- (c) a defined wetland and the area within 50 m of the wetland;
- (d) the area covered by vegetation within 50 m of rare flora, to the extent to which the vegetation is continuous with the vegetation in which the rare flora is located;
- (e) the area covered by a threatened ecological community;
- (f) – (j) *not applicable to the Albany Area.*

Subclause (4) of the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005* also states that “An area that would otherwise be an environmentally sensitive area because of this clause is not an environmentally sensitive area to the extent to which the area is within the maintenance area of a stretch of road or railway”.

At the time of preparing this report, there were no declared World Heritage areas or Threatened Ecological Communities occurring within the City of Albany. However, there were three Priority Ecological Communities, but all three are located on private property.

Additional areas will be taken into consideration as they appear on the Register.

In accordance with the definition above, Environmentally Sensitive Areas within the City of Albany include:

- areas registered on the Register of National Estate for natural values;
- Defined Wetlands; and
- Declared Rare Flora sites.

The City of Albany also considers the following areas to be Environmentally Sensitive Areas:

- Public Drinking Water Source Areas;
- Phytosphthora dieback-free areas;
- conservation estate (e.g. Nature Reserves, National Parks);
- known or potential habitat of threatened fauna; and
- significant Aboriginal sites.

## **5.1 AREAS REGISTERED ON THE REGISTER OF NATIONAL ESTATE FOR NATURAL VALUES**

Within the City of Albany, the following areas are registered on the Register of National Estate for their natural values at the time of preparing this document:

- Betty's Beach / Boulder Hill Natural Area, Betty's Beach Rd, Manypeaks;
- Millbrook Nature Reserve. Millbrook Rd, Bakers Junction;
- Two People's Bay Nature Reserve, Two Peoples Bay Rd, Nanarup; and
- Torndirrup National Park, Frenchman Bay Rd, Albany.

Additional areas will be taken into consideration as they appear on the Register.

## **5.2 DEFINED WETLANDS**

A "defined wetland", under the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, means:

- (a) a wetland included in the List of Wetlands of International Importance kept under the Ramsar Convention;
- (b) a nationally important wetland as defined in "A Directory of Important Wetlands in Australia" (2001), 3<sup>rd</sup> edition, published by the Commonwealth Department of the Environment and Heritage, Canberra;
- (c) – (e) *not applicable to the City of Albany area.*

At the time of preparing these procedures, there are no RAMSAR listed wetlands within the City of Albany. The following three wetlands are listed in "A Directory of Important Wetlands in Australia".

- Lake Pleasant View System, within Lake Pleasant View Nature Reserve;
- Moates Lake System, within Two Peoples Bay Nature Reserve; and
- Oyster Harbour.

Additional areas will be taken into consideration as they appear on the Register.

Although the above wetlands are highlighted as being of particular importance, all wetlands and waterways that are likely to be affected by proposed works will be identified during the Environmental Compliance Process.

## **5.3 DECLARED RARE OR PRIORITY FLORA**

As a first step, a database search for locations of Declared and Priority Flora in the vicinity (within 50 m) of proposed works must be undertaken. However, given the database available to the City of Albany from the Department of Environment and Conservation is not always up to date, the database should not be relied upon solely to determine the presence or absence of flora of significance. Also, flora surveys have not

been undertaken everywhere, so there may be locations of DRF that have not yet been recorded. Therefore, further action is required before works can be approved.

Maps of all proposed clearing works (maintenance and construction) must be provided to the Department of Environment and Conservation in order to receive advice on whether the database search was adequate or whether a flora survey is also required for particular areas. Wherever possible, these maps should be provided to DEC collectively, rather than one at a time.

If any works have the potential to impact on Declared Rare or Priority Flora, works will be undertaken in consultation with and under the guidance of the Department of Environment and Conservation.

#### **5.4 PUBLIC DRINKING WATER SOURCE AREA**

Within the City of Albany there are four gazetted Public Drinking Water Source Areas (PDWSAs), including:

- Angove Creek Catchment Area;
- Limeburners Creek Catchment Area;
- Marbelup Water Reserve; and
- South Coast Water Reserve.

The location of proposed works within a PDWSA will be picked up during the planning stage of proposed works through the Environmental Compliance Process. Reference will be made to the "Water Quality Protection Notes" prepared by the Department of Water, to determine compatibility of proposed works in PDWSA, and what mitigations procedures will need to be implemented.

#### **5.5 PHYTOPHTHORA DIEBACK - FREE AREAS**

The City of Albany does not currently have information on where Phytophthora dieback-free areas exist. Therefore, the City of Albany needs to arrange for mapping to be undertaken before Dieback-free Areas can be specifically protected. However, staff responsible for completing the Environmental Assessment Checklist will be trained adequately to be able to identify the potential presence of Phytophthora dieback and to implement the necessary procedures to prevent the spread of the disease.

#### **5.6 CONSERVATION ESTATE**

The City of Albany will consider the potential threats of proposed works on adjacent conservation estate, by developing appropriate operating procedures to avoid adversely affecting these areas, if necessary.

#### **5.7 KNOWN OR POTENTIAL HABITAT OF THREATENED FAUNA**

Maps of all proposed clearing works (maintenance and construction) must be provided to the Department of Environment and Conservation in order to receive advice on whether the vegetation to be cleared is known or potential habitat for threatened fauna. Wherever possible, these maps should be provided to DEC collectively, rather than one at a time. Advice will also be sought on whether a survey is recommended to determine the presence or absence of threatened fauna species.

If any works have the potential to impact on known or potential threatened fauna habitat, works will be undertaken in consultation with and under the guidance of the Department of Environment and Conservation.

#### **5.8 SIGNIFICANT ABORIGINAL SITES**

The City will consult with the Department of Indigenous Affairs to determine if there are any significant Aboriginal sites in the vicinity of any proposed works.



# OPERATING PROCEDURES

## 1 ROAD CONSTRUCTION AND MAINTENANCE

### 1.1 PLANNING

- Implement the City of Albany's Environmental Compliance Process, for both road construction and road maintenance works.
- Design road construction projects in a manner to have the least impact on native vegetation and to minimize vegetation loss. For example, site roadside stops in existing disturbed areas, rather than in areas of intact native vegetation.
- Prior to any works being undertaken, ensure that all necessary environmental permits have been obtained, and that any conditions specified on the permits have been incorporated into the works program.

### 1.2 REMOVAL OF NATIVE VEGETATION

#### 1.2.1 CLEARING (construction)

- Remove only the vegetation required for construction and for safety. All other native vegetation should not be disturbed. Tape is to be used to mark the limit of all construction activities (the "Construction Zone").
- Works on sections of road marked with rare flora markers will be undertaken in consultation with and under the guidance of the Department of Environment and Conservation.
- If additional vegetation needs to be removed to complete the works than originally marked, the appropriate City of Albany Officer must be consulted prior to undertaking the additional works.
- Vegetation to be removed should be felled in a direction to minimize damage to surrounding vegetation, preferably onto the road formation or into cleared or disturbed areas.
- Dead trees should be retained on the roadside, unless they pose a significant hazard, to provide habitat for wildlife.
- Limbs on dead trees that pose a significant hazard will be removed. The rest of the tree should be retained on the road reserve to provide habitat for wildlife.
- Leave logs and branches that have fallen within areas of intact native vegetation. Removal of these items will cause more damage than if they are left in situ.
- If possible, cleared native vegetation can be chipped for mulch and spread on exposed areas to assist with the rehabilitation of these areas. Ensure weeds with the potential of spreading (this can be dependent on species and on the time of year) are not used for this purpose.
- Vegetation not used for rehabilitation purposes is to be removed from the site and disposed at Vancouver Waste Services, George St disposal site or Bakers Junction Refuse Disposal Site. Vegetation can also be disposed of on private property with permission from the owner. Ensure weeds with the potential of spreading (this can be dependent on species and on the time of year) are not disposed on private property.
- Cleared vegetation must not be pushed up or dumped on vegetation to be retained in the "Roadside Zone".

- Large logs that cannot be chipped or left on site will be transported to Bakers Junction and made available at an appropriate time for sale to the public. A Commercial Purpose Licence (log timber) from the Department of Environment and Conservation is required.
- Do not burn cleared vegetation, unless there is no alternative (e.g. due to location of material).
- If cleared vegetation is to be burnt, pile vegetation well away from retained vegetation to reduce the risk of the fire spreading and to prevent fire damage to vegetation.

#### **1.2.2 PRUNING AND CHIPPING (maintenance)**

- All works to occur within the “Maintenance Zone” only.
- Pruning works will be carried out so as to minimise the extent of wounding and enhancing callus formation. All branches over 750 mm are to be pruned to Australian Standard 4373-1996.
- If possible, cleared native vegetation can be chipped for mulch and spread on exposed areas to assist with the rehabilitation of these areas. Ensure weeds with the potential of spreading (this can be dependent on species and on the time of year) are not used for this purpose.
- Vegetation not used for rehabilitation purposes is to be removed from the site and disposed at Vancouver Waste Services, George St disposal site or Bakers Junction Refuse Disposal Site. Vegetation can also be disposed of on private property with permission from the owner. Ensure weeds with the potential of spreading (this can be dependent on species and on the time of year) are not disposed on private property.
- Works on sections of road marked with Declared Rare Flora markers will be undertaken in consultation with and under the guidance of the Department of Environment and Conservation.
- Pruning near power lines to be done to Western Power specifications and after consultation with the appropriate City of Albany Officer.
- Trees removed from the “Roadside Zone” for safety purposes must be felled by cutting off at ground level to minimize disturbance to the surrounding vegetation. Removal of trees complete with root systems causes unnecessary soil and vegetation disturbance.
- Leave logs and branches that have fallen within areas of intact native vegetation. Removal of these items will cause more damage than if they are left in situ.

#### **1.2.3 VEGETATION CANOPY CLEARANCE (maintenance)**

- All works to occur within the “Maintenance Zone” only.
- Retain a minimum height clearance of 6 metres from the established road formation (road surface and shoulders) to the vegetation overhang. Limbs higher up may be removed if necessary.
- Works on sections of road marked with rare flora markers will be undertaken in consultation with, and under the guidance of the Department of Environment and Conservation.
- Vegetation to be removed with minimal disturbance to the vegetation in the “Roadside Zone”.
- Pruning works will be carried out so as to minimise the extent of wounding and enhancing callus formation. All branch and stump cuts are to be pruned to Australian Standard 4373-1996.

#### **1.2.4 REGROWTH MULCHING (i.e. excavator/reach mower) (maintenance)**

- All works to occur within the “Maintenance Zone” only.
- Only regrowth vegetation to be cut.

- Avoid larger branches, as branches will split causing damage to remainder of the tree. All branches over 750 mm are to be pruned to Australian Standard 4373-1996.
- Works on sections of road marked with Declared Rare Flora markers will be undertaken in consultation with, and under the guidance of the Department of Environment and Conservation.
- All branch and stump cuts up to 3 m height are to be pruned to AUSTRALIAN STANDARD 4373-1996. Cuts between 3 – 6 m in height will be undertaken as cleanly as possible. If this cannot be achieved with the mulcher, the tree pruning will be completed with a chainsaw within the same day as the mulching was carried out.
- All mulched material that exceeds a chip size of 50 – 150 mm are to be removed from site to George Street, Hanrahan Road or Vancouver waste facilities as directed by appropriate City of Albany Officer.

#### **1.2.5 VERGE MOWING (i.e. slasher or mower) (maintenance)**

- All works to occur within the “Maintenance Zone” only.
- Mow only what is necessary for road safety (excluding built up areas).
- Avoid mowing in native vegetation and ensure mowing does not gradually encroach on adjacent native vegetation, or rehabilitation areas.
- Install bollards or other barriers in areas where encroachment is an ongoing problem.
- Edges of slashed areas may need to be sprayed to stop grasses spreading into adjacent native vegetation.

### **1.3 WEED MANAGEMENT**

- Ensure weed management is incorporated into works programs. Weed control will be partly undertaken during the clearing of native vegetation, but may also occur following clearing activities.

To reduce the risk of spreading weeds:

- Ensure vehicles used for carting spoil and weeds are cleaned of all soil and plant debris prior to carting clean material (e.g. gravel), to reduce the risk of spreading weeds.
- Avoid placing stockpile sites next to seeding weeds. Monitor stockpile/dump sites for weed growth and implement necessary controls to remove weed growth before flowering and seeding.
- Weed infested material (e.g. drain spoil containing pasture grasses) should not be stockpiled on, or next to land which has native vegetation.
- Manage the weeds surrounding gravel and lime pits, to reduce the risk of introducing weeds to new sites.
- Where weeds containing seeds must be removed from the site, they will be transported to a designated disposal site, as specified by the appropriate City of Albany Officer.
- Use tarpaulins to cover truckloads containing weed seeds to prevent seeds blowing onto the roadside and colonising further areas.
- Weeds are to be disposed of at the Vancouver Waste Services or the City of Albany’s George St disposal site or Bakers Junction refuse disposal site.
- Manage weeds at the George St disposal site to prevent them spreading to other areas (see Supporting Documentation).

- Control run-off and drainage around stockpiles of material and stored topsoil, to prevent the spread of weeds.
- Where possible, work from weed free (clean) areas into weed affected areas of the work sites.
- Where possible, materials used for construction and maintenance works should be free from weed seed.
- Topsoil containing weed seed should only be used in areas that will be maintained and monitored (e.g. built up areas).
- Blades on slashers to be set no lower than 100mm above the ground.

#### Herbicide Use

- Consider and implement alternatives to herbicide where appropriate.
- Use only approved products, and at the manufacturers recommended application rates.
- Herbicides should only be used in the following situations:
  - to control declared or environmental weeds;
  - when rehabilitation programs are undertaken; and
  - to control exotic grasses and weed growth on road shoulders, around road furniture and road signs.
- Design and implement herbicide programs to be effective and minimise adverse effects.
- Trained staff only to use herbicides.
- Where possible, use only herbicides with the active ingredient glyphosate to control weeds on roadsides. Other chemicals will be used on occasion if required to achieve adequate control.
- If herbicides are to be used in wet areas, use only Roundup Biactive.
- Use of other herbicides to control specific noxious and environmental weeds (which includes exotic grass species invading native vegetation) is permitted only after seeking advice from the appropriate City of Albany Officer.
- Avoid herbicide runoff into watercourses, wetlands or drinking water catchment areas.
- Care must be taken to avoid drift onto non-target plants and waterways especially in areas of high conservation or adjacent agricultural land.
- Maintain records of herbicide application.

## 1.4 DIEBACK MANAGEMENT

- Areas that appear to be dieback-free, that require hygienic work practices will be identified during the Environmental Assessment Process. Operating procedures that address dieback management in detail will be developed for these sites. Reference will be made to “*Managing Phytophthora Dieback – Guidelines for Local Government*”.
- Ensure vehicles used for carting spoil and weeds are cleaned of all soil and plant material prior to carting clean material (e.g. gravel), to reduce the risk of spreading soil pathogens.

## **1.5 WATER QUALITY, WETLAND AND WATERWAY MANAGEMENT**

### **1.5.1 PUBLIC DRINKING WATER SOURCE AREAS**

- Roads in Public Drinking Water Source Areas will be identified during the Environmental Assessment Process. Operating procedures that address water quality in detail will be developed for these sites. Reference will be made to the relevant Department of Water's *Water Quality Protection Notes* (see Supporting Documentation).

### **1.5.2 ACID SULPHATE SOIL**

- Sites with Actual or Potential Acid Sulphate Soils will be identified during the Environmental Assessment Process. Management Plans that address the acid sulphate soils will be developed for these sites. Reference will be made to the Department of Environment's *Acid Sulphate Soils Guidelines Series*, and the "*Queensland Acid Sulphate Soil Technical Manual*" (see Supporting Documentation).

### **1.5.3 GENERAL**

- Roads that cross over waterways or wetlands will be identified during the Environmental Assessment Process, and appropriate operating procedures will be developed and implemented.
- If possible, avoid clearing riparian or wetland vegetation.
- Ensure hazardous materials are stored, transported and used in a way that protects the environment.
- Store hazardous materials in an area that will adequately contain spills, and avoid runoff washing material into watercourses.
- Dispose of wastes appropriately.
- Minimise surplus wastewater from activities such as brick and pavement cutting, and avoid runoff to environmentally sensitive areas.
- Prepare for emergencies involving hazardous materials.
- Take special precautions to avoid spills when working over or next to watercourses or wetlands, or in Public Drinking Water Source Areas.
- Report any spills.
- Clean up spills and dispose of material at approved disposal sites as directed by the appropriate City of Albany Officer.

## **1.6 SOIL MANAGEMENT**

### **1.6.1 SOIL EROSION**

- Soil erosion and sedimentation control procedures must be included in the Planning and Design stage of any proposed road.
- Soil erosion can be minimised by:
  - protecting existing vegetation;
  - minimising soil disturbance; and
  - stabilising disturbed areas as works proceed.
- Implement actions where necessary to control erosion and runoff from construction sites.

### **1.6.2 BRINGING IN MATERIALS**

- Pits for gravel, soil or other materials must not be dug from the roadside.
- Designated stockpile/dump sites are to be used for the stockpiling of materials when carrying out any works on road reserves. In no circumstances must vegetation be removed to provide for stockpiles or the storage of materials (including dumpsites for excess soils/materials). Avoid storing materials under trees.
- Use minimum space necessary to store materials and to gain access to the stockpile/dump site.
- Stockpile/dump site boundaries to be clearly defined e.g. fencing, fallen logs from “Construction zone”.

### **1.6.3 DISPOSAL OF SOIL**

- All spoil from road construction and maintenance operations will be removed to a designated disposal site as specified by the appropriate City of Albany Officer.
- Do not dump any soil on top of vegetation in “Roadside Zone”.
- Where there is contaminated soil to be disposed of, contact must be made with the Waste Management section of Council to determine an acceptable (as required by any regulations) method of disposal for that material.

### **1.6.4 GRADING OF ROAD SURFACE OR SHOULDERS (maintenance)**

- Road shoulders will be graded to the minimum area required to maintain the road formation and the condition of the road according to the type of road.
- Vegetation on the road reserve beyond the “Maintenance Zone” should not be disturbed during grading operations, except where drain offshoots require cleaning. In this situation, disturbance to vegetation must be kept to a minimum.

## **1.7 VEHICLE AND MACHINERY MANAGEMENT**

- Select the type and size of machinery appropriate for the task to minimize disturbance to vegetation.
- Confine machinery to the existing road formation (including table drains), proposed alignment, access tracks or designated construction zone unless otherwise directed by the site supervisor.
- Site machinery compounds in a designated roadside stop, car park or on private land (where permission has been granted) clear of native trees, shrubs and groundcovers. In no circumstances should vegetation be removed to provide for the siting of machinery compounds.
- Vehicles and machinery should not be serviced on roadsides, unless it is not possible to move to a more appropriate site. Great care must be taken to ensure that no spillage results from any refuelling or servicing operation.
- Turn vehicles and machinery within the road formation or “Construction Zone”.
- Work (e.g. cutting and fill) outside the drip line of a tree to reduce damage to the roots, trunk and limbs where possible.
- Fence off areas where identified native vegetation is threatened by vehicular activity or the storage of materials or equipment.

## **1.8 DRAINAGE MANAGEMENT**

- Make provision for stormwater runoff at the beginning of the job.
- Keep excavations for pipes open for minimum time periods.
- Where appropriate, avoid extra reshaping or increasing the size of drains. Exposed earth and drain spoil is ideal for weed establishment.
- Direct the spoil from works towards the designated road pavement and remove to a designated dumpsite (i.e. George St) as specified by the appropriate City of Albany Officer.
- Windrowing drain material onto the “Roadside Zone” must not occur.
- Design, construct and maintain table drains and cut-off mitre drains:
  - to follow natural drainage lines;
  - to reduce water velocity and runoff;
  - to prevent water from flooding the road and roadside (except at times of flash downpours);
  - to cause minimum disturbance to surrounding vegetation; and
  - to minimize siltation.
- Grassed roadside table drains should be slashed, not treated with herbicide as this exposes the soil to ongoing erosion.
- Remove vegetation growing within the effective part of a table drain (from edge of road shoulder to the top of bank on the outer edge of the drain), which interferes with the working of the drain or is a safety hazard and is not likely to lead to erosion.
- Control discharge flows and sedimentation caused by dewatering operations.
- Clean out sediment from detention basins as appropriate and dispose at approved disposal site.

## **1.9 NATIVE VEGETATION REHABILITATION**

### **1.9.1 UNPLANNED DISTURBANCE TO VEGETATION**

- Rehabilitation should not be required as a direct result of road construction or maintenance works if the best practice guidelines in this document are followed.
- However, in the event that vegetation will be or has been damaged on roads, then a rehabilitation plan to reflect the original composition of the vegetation will be developed and implemented. See 1.9.2 for the principles and practices to be applied to revegetation and rehabilitation works.

### **1.9.2 PLANNED DISTURBANCE TO NATIVE VEGETATION**

- Plan site rehabilitation works well in advance, at the design stage of the project, to allow for vegetation identification, seed collection, propagation of plants and proper planning to achieve successful rehabilitation of the site.
- If revegetating near powerlines, local provenance native species are to be selected that will not grow into powerlines and require continual pruning.
- Follow up surveys of the rehabilitated sites will be carried out by suitably qualified persons every 12 months, in the spring, to determine if more seeding is required and to control any weed infestations.

Some of the principles and practices to be applied to revegetation and rehabilitation works include:

- Encouraging natural regeneration as much as possible. Utilise stockpiled topsoil and mulched vegetation to promote regrowth of species that are native to the area.
- Topsoil (100-200mm) should be removed prior to works commencing and stock piled in a cleared area (away from weeds), for a period of no longer than 12 months, to be spread over the site at completion of works.
- Seed and other plant material for rehabilitation works to be collected as close as possible to the site (within 5km of site if possible) and from a similar vegetation type.
- Sub soil in the works area should be ripped at completion of works to avoid compaction, before topsoil is spread over the site.

## **1.10 STAFF AND CONTRACTOR MANAGEMENT**

### **1.10.1 STAFF**

- All existing staff (i.e. planners, designers, supervisors and road construction personnel) involved in road construction works must be briefed on the relevant procedures contained in this document.
- All new staff will be briefed on the relevant procedures contained in this document as part of the induction process.
- Supervisors and works staff to “walk the route” of construction works to be undertaken to ensure that there are no misunderstandings.

### **1.10.2 CONTRACTORS**

- Include vegetation protection conditions on contracts.
- Provide written guidelines to contractors that must be followed.
- Go through the guidelines with the contractor to make sure the guidelines are understood.
- If necessary, “walk the route” of the works to be undertaken with the contractor to ensure there are no misunderstandings.
- Ensure contractors are following guidelines e.g. inspect machinery prior to works commencing to ensure machinery is clean of dirt and plant material.

## **2 PARK CONSTRUCTION**

### **2.1 PLANNING**

- Implement the City of Albany's Environmental Compliance Process.
- Carry out comprehensive flora surveys to determine what species and vegetation communities are present, the significance of the vegetation in a local and regional context and to identify any Declared Rare Flora or other special environmental area.
- Where possible, incorporate environmental features (e.g. native vegetation, wetlands and rock outcrops) into the design of new parks.
- Prior to commencing any works, ensure appropriate permits have been obtained, and that any conditions specified on the permits have been incorporated into the design of the park and works program.



- Ensure protection is provided for retained natural areas from park users and future maintenance works such as adequate pathways and bollards.
- Prepare a bushland management plan, for retained native vegetation.
- Minimise the impact of water draining from the site on retained vegetation and areas further down in the catchment.

## **2.2 CLEARING OF NATIVE VEGETATION**

- Remove only the vegetation required for construction and for safety. All other native vegetation should not be disturbed. Tape is to be used to mark the limit of all construction activities.
- Vegetation to be removed should be felled in the direction that minimizes damage to surrounding vegetation, preferably onto areas cleared or to be cleared.
- Determine if any native vegetative material (e.g. seed, wood chips or brushing) can be used on site or on a nearby reserve, before disposal.
- Dispose of unwanted vegetation to Vancouver Waste Services, George Street or Bakers Junction as directed by appropriate City of Albany Officer.

## **2.3 WEED MANAGEMENT**

- Control environmental weeds in areas of native vegetation to be retained on an ongoing basis.
- If site is weed infested, ensure that machinery leaving the site has been brushed down to minimise the risk of spreading weeds to other areas.
- Cover truckloads of material that contains weeds, if weeds contain seeds that could blow off truck on route to disposal site.
- Dispose of unwanted vegetation to Vancouver Waste Services, George Street or Bakers Junction as directed by appropriate City of Albany Officer.

## **2.4 DIEBACK MANAGEMENT**

- Areas that appear to be Phytophthora dieback-free, that require hygienic work practices will be identified during the Environmental Assessment Process. Management Plan that address dieback management in detail will be developed for these sites. Reference will be made to "*Managing Phytophthora Dieback – Guidelines for Local Government*".

## **2.5 WATER QUALITY, WETLAND AND WATERWAY MANAGEMENT**

### **2.5.1 PUBLIC DRINKING WATER SOURCE AREAS**

- Works proposed in Public Drinking Water Source Areas will be identified during the Environmental Assessment Process. Operating procedures that address water quality in detail will be developed for these sites. Reference will be made to the relevant Department of Water's *Water Quality Protection Notes*.

### **2.5.2 ACID SULPHATE SOIL**

- Sites with Actual or Potential Acid Sulphate Soils will be identified during the Environmental Assessment Process. Operating procedures that address the acid sulphate soils will be developed for these sites. Reference will be made to the Department of Environment's *Acid Sulphate Soils Guidelines Series*.

## **2.6 SOIL MANAGEMENT**

### **2.6.1 STRIP AND STOCKPILE TOPSOIL**

- Determine if any topsoil can be used on site or in a nearby reserve, before disposal, burying or mixing with other soil.
- Remove any weeds before stockpiling topsoil by spraying or scalping. Otherwise, avoid stockpiling weed-infected soil.
- Strip and stockpile the topsoil before starting any works.
- Locate soil stockpiles in cleared areas, away from existing drainage lines, trees, shrubs and native grasses.
- Topsoil should ideally be stockpiled for less than 12 months to make sure that the native plant seed in the soil remains viable.
- Imported topsoil only to be used if authorized by appropriate City of Albany Officer.

### **2.6.2 DISPOSAL OF SOIL**

- Dispose of unwanted soil to Hanrahan or Bakers Junction refuse disposal sites, or George St disposal site.

## **2.7 VEHICLE AND MACHINERY MANAGEMENT**

- Select the type and size of machinery appropriate for the task to minimize disturbance to vegetation.
- Work (e.g. cutting and fill) outside the drip line of a tree to reduce damage to the roots, trunk and limbs where possible.
- Fence off areas where identified native vegetation is threatened by vehicular activity or the storage of materials or equipment.

## **2.8 NATIVE VEGETATION REHABILITATION**

- If revegetation or rehabilitation works are required, then follow the principles outlined in Section 1.9.2.

## **2.9 CONTRACTOR MANAGEMENT**

- Include vegetation protection conditions on contracts.
- Provide written guidelines to contractors that must be followed.
- Go through the guidelines with the contractor to make sure the guidelines are understood.
- If necessary, “walk the route” of the works to be undertaken with the contractor to ensure there are no misunderstandings.

## **2.10 PLANTED VEGETATION**

- The use of local native plant species for tree plantings and garden plantings should be encouraged where possible.
- Under no circumstances should known or potential environmental weed species be planted in parks or gardens.

### **3 PARK MAINTENANCE**

#### **3.1 WEED MANAGEMENT**

- Include the control of environmental and declared weeds in park maintenance programs (see *Environmental Weeds Strategy for City of Albany Reserves*).

#### **3.2 MOWING**

- Mow only what is necessary in accordance with the specifications for the particular works.
- Minimise disturbance to native vegetation.
- Identify obvious regenerating areas and mark them with stakes where mowing or other activities are likely to occur, or where there is an ongoing problem.

#### **3.3 PLANTINGS**

- The use of local native plant species for tree plantings and garden plantings should be encouraged where possible.
- Under no circumstances should known or potential environmental weed species be planted in parks or gardens.
- Where potential weeds species are already established in gardens, ensure that they are maintained appropriately to reduce the risk of spread (e.g. cut the seed heads off *Agapanthus* after flowering), if in close proximity to bushland.
- Endeavour to replace existing potential weed species in garden beds with species that are unlikely to become environmental weeds.

### **4 NEW GRAVEL & LIME PIT CONSTRUCTION & REHABILITATION**

Refer to *Establishment & Rehabilitation of Pit on Reserves* (see supporting documentation).

#### **4.1 PLANNING**

- Implement the City of Albany's Environmental Compliance Process.
- Comprehensive flora surveys to be undertaken by qualified consultants to determine what species and vegetation communities are present, the significance of the vegetation in a local and regional context and to identify any Declared Rare Flora or other special environmental area.
- Prepare a pit management, operation and rehabilitation plan. Pit rehabilitation plan to include site preparation, plant species and density desired, seed collecting and storage, weed control, monitoring plant growth and follow up re-seed program details.
- Ensure that works are conducted in compliance with legislative and statutory requirements (including Federal and State Government legislation and Policies) and that any approvals required are in place prior to the commencement of works.

#### **4.2 REMOVAL OF NATIVE VEGETATION**

- Organise the collection of seed, including rare and priority species, from the site by suitably qualified persons, prior to clearing, for rehabilitation at a later date.

- All vegetation (apart from timber to be sold) will be wind rowed for rehabilitation purposes at a later date.
- In some cases, timber on the construction site will be sold rather than just pushed up and/or burnt. A Commercial Purposes Licence from Department of Environment and Conservation will be required.

### **4.3 WEED MANAGEMENT**

- Spray and/or remove any weed infestations prior to clearing or disturbing the area.
- Ensure vehicles clearing vegetation have been brushed/washed down thoroughly before entering the site, to avoid introducing new weed species to the reserve.
- Ensure vehicles used for clearing are washed down before leaving sites affected by weeds (in area already affect by weeds). This is to reduce the risk of spreading weeds to other areas.

### **4.4 DIEBACK MANAGEMENT**

- Areas that appear to be Phytophthora dieback-free, that require hygienic work practices will be identified during the Environmental Assessment Process. Management Plan that address dieback management in detail will be developed for these sites. Reference will be made to "*Managing Phytophthora Dieback – Guidelines for Local Government*".
- Ensure vehicles clearing vegetation have been washed down thoroughly before entering the site, to avoid introducing Phytophthora dieback to the reserve.
- Ensure vehicles used for clearing are washed down before existing the sites affected by Phytophthora dieback (washed down in area already affected by dieback). This will also reduce the risk of reading weeds to other areas.

### **4.5 WATER QUALITY, WETLAND AND WATERWAY MANAGEMENT**

#### **4.5.1 PUBLIC DRINKING WATER SOURCE AREA**

- Works proposed in Public Drinking Water Source Areas will be identified during the Environmental Impact Assessment. Operating procedures that address water quality in detail will be developed for these sites. Reference will be made to the relevant Department of Water's *Water Quality Protection Notes*.

#### **4.5.2 ACID SULPHATE SOIL**

- Sites with Actual or Potential Acid Sulphate Soils will be identified during the Environmental Assessment Process. Operating procedures that address the acid sulphate soils will be developed for these sites. Reference will be made to the Department of Environment's *Acid Sulphate Soils Guidelines Series*.

### **4.6 SOIL MANAGEMENT**

- All topsoil will be stockpiled ready for rehabilitation purposes at a later date.
- If possible, weeds and associated top soil to be stored separate from main stockpiled vegetation and soil. This material will not be used in rehabilitation works if not required.

### **4.7 VEHICLE AND MACHINERY MANAGEMENT**

- Select the type and size of machinery appropriate for the task to minimize disturbance to vegetation.

- Work (e.g. cutting and fill) outside the drip line of a tree to reduce damage to the roots, trunk and limbs where possible.
- Fence off areas where identified native vegetation is threatened by vehicular activity or the storage of materials or equipment.

#### **4.8 DRAINAGE MANAGEMENT**

- Make provision for stormwater runoff at the beginning of the job.
- Do not direct stormwater from excavation sites into areas supporting high quality native vegetation, if possible.

#### **4.9 NATIVE VEGETATION REHABILITATION**

- Upon completion of removing material (gravel and lime) from the site, the pit floor will be contoured in a way as to control water runoff and erosion.
- The pit floor will then be ripped on the contour at 2 m intervals and .5m deep.
- The stockpiled topsoil will be evenly spread over the ripped floor, only using the stockpiled topsoil for each particular area.
- The windrowed vegetation from each particular area will be spread evenly over the topsoil, to protect the new regrowth of native vegetation, and create habitats for insects and animals.
- Spread collected seed over the site at the appropriate time of the year (i.e. July - August) to assist in the rehabilitation of the site.
- Follow up surveys of the rehabilitated sites will be carried out by suitably qualified persons every 12 months, in the spring, to determine if more seeding is required and to control any weed infestations.

#### **4.10 CONTRACTOR MANAGEMENT**

- Include vegetation protection conditions on contracts.
- Provide written guidelines to contractors that must be followed.
- Go through the guidelines with the contractor to make sure the guidelines are understood.
- If necessary, “walk the route” of the works to be undertaken with the contractor to ensure there are no misunderstandings.

### **5 OLD GRAVEL AND LIME PIT REHABILITATION**

#### **5.1 PLANNING**

- Map all disused gravel and lime pits and prioritise them based on their conservation value, to determine the order in which they will be rehabilitated.
- Develop pit rehabilitation plans to include details on site preparation, plant species and density desired, seed collecting and storage, weed control, monitoring plant growth and possible follow up re-seed program.
- Use topsoil in rehabilitation works if available and suitable for the situation.

- Try to incorporate regrowth native vegetation into proposed rehabilitation works. In some cases, sites have not been touched for many years and there is already substantial regrowth.
- Seed and other plant material for rehabilitation works to be collected as close as possible to the site, and preferably within 5km of site.

## **5.2 WEED MANAGEMENT**

- Develop weed control programs for each pit.
- Ensure machinery have been washed down prior to leaving the site, to prevent the introduction of weeds.
- Ensure machinery has been washed down prior to entering the site, to reduce the risk of spreading weeds to other areas.

## **5.3 DIEBACK MANAGEMENT**

- If phytophthora is present at the site, do not remove infected soil into areas not affect by phytophthora.
- Earthworks should be undertaken in autumn when the risk of spreading phytophthora is reduced.
- Ensure machinery have been washed down prior to entering the site, to prevent the introduction of phytophthora.
- Ensure machinery have been washed down prior to leaving the site, to reduce the risk of spreading phytophthora to other areas.

# **6 FIRE ACCESS TRACKS**

See *Fire Access Tracks Standards in City of Albany Reserves* (See Supporting Documentation).

## **6.1 PLANNING**

- Implement the City of Albany's Environmental Compliance Process.
- Plan or identify strategic fire access tracks for all bushland reserves to be constructed and/or maintained.
- Undertake field surveys and database searches for Declared Rare Flora and phytophthora in the vicinity of proposed tracks.
- Consult any community groups working in the reserve, so that the group are aware of what is proposed and have the opportunity to have input into the planning process.
- Be aware and considerate of any Bushcare works (e.g. weed control, rehabilitation projects), either by the community or the City of Albany, in the reserve.
- Necessary approvals should be completed at least 6 months prior to any proposed operations commencing, and a details prescription must be prepared for the work.

## **6.2 REMOVAL OF NATIVE VEGETATION**

- Remove only the vegetation required for construction and safety.
- Ensure trees, large clumps of mid-storey vegetation (e.g. peppermints) and grass trees (Xanthorrhoea) are retained if possible. Tape is to be used to mark areas not to be disturbed.

- Trees that are likely to pose a safety hazard to road-users (i.e. have substantial butt or bole damage, or have completely dead crowns or large limbs) should be felled in the direction that minimises damage to surrounding vegetation, preferably onto the track to be mulched.
- Leave trees and branches that have fallen within areas of intact native vegetation. Removal of these items will cause more damage than if they are left in situ.
- Ideally, construction of tracks that are 'no through' should be avoided. Where this is not possible, the safe and suitable turnaround points must be provided to accommodate heavy-duty fire appliances. This will assist with the unnecessary crushing of vegetation.
- Scrub control for track user visibility and safety may be required as regular maintenance or prior to prescribed burning operations. Ensure contractors have clear instructions on the limit of works to be undertaken. All other vegetation should not be disturbed.
- Slashing or mulching is the preferred methods of scrub control, but chemical scrub control may be used in specific circumstances.
- Some relocation or realignment of tracks may need to be considered to avoid environmental sensitive areas such as swamps and steep slopes. Careful and detailed consideration of the proposed track alignment to avoid a repetition of existing track problems, and identify potential additional problems is necessary prior to any track relocation work commencing.

### **6.3 WEED MANAGEMENT**

- Machinery must be washed down to remove all soil and vegetative material prior to entering a site. This is to avoid introducing weeds to a new area.
- Machinery must be brushed/washed down to remove all soil and vegetative material prior to leaving a site that is weed infested. This is to avoid spreading weeds to other areas.
- Work from areas without weeds and/or phytophthora towards areas that have weeds or phytophthora, to minimize spread within the reserve.
- Report weed infestations along tracks to the appropriate City of Albany Officer, so control can be arranged to minimize the risk of spread. Weeds are to be controlled accordance to the principles in the Environmental Weeds Strategy for City of Albany Reserves.

### **6.4 DIEBACK MANAGEMENT**

- Areas that appear to be Phytophthora dieback-free, that require hygienic work practices will be identified during the Environmental Assessment Process. Management Plan that address dieback management in detail will be developed for these sites. Reference will be made to "*Managing Phytophthora Dieback – Guidelines for Local Government*".
- In most situations, work will be programmed and conducted in autumn to minimise the risk of dieback spread, improve machine flotation, reduce additional track surface disturbance, and allow the consolidation of the track over the winter months.
- Machinery must be washed down to remove all soil and vegetative material prior to entering a site. This is to avoid introducing dieback to a new area.
- Ensure machinery have been washed down prior to leaving the site, to reduce the risk of spreading phytophthora to other areas.
- Material brought in to stabilise tracks or other eroded sites must be free from soil pathogens.

## **6.5 SOIL MANAGEMENT**

- Access tracks should, where possible, be located to minimise soil disturbance and to retain sufficient vegetation cover to reduce erosion. Track design should include appropriate erosion control measures.

## **6.6 DRAINAGE MANAGEMENT**

- Offshoot drains are generally not required in deep sandy coastal sites, but may be required in low lying or heavier soil type areas. Creation of semi-permanent pools, which may favour the development or spread of phytophthora are to be avoided. Culvert pipes to remove runoff and seepage water should be installed at low points and on long runs, where required.

## **6.7 CONTROL PUBLIC ACCESS**

- “Fire Management Only” tracks are to be re-closed securely after the management operation is completed.
- Maintain tracks on a regular basis to avoid users diverting off tracks.

## **6.8 NATIVE VEGETATION REHABILITATION**

- Duplicate tracks or degraded areas should be closed and rehabilitated preferably whilst machinery is working nearby. Any vegetative material produced as a result of track clearing or upgrading operations should be used for erosion control, revegetation of degraded sites, or brushing of these tracks.

## **6.9 CONTRACTOR MANAGEMENT**

- Include vegetation protection conditions on contracts.
- Provide written guidelines to contractors that must be followed.
- Go through the guidelines with the contractor to make sure the guidelines are understood.
- If necessary, “walk the route” of the works to be undertaken with the contractor to ensure there are no misunderstandings.

# **7 FIRE MANAGEMENT**

## **7.1 PRESCRIBED BURNS**

- Implement the City of Albany's Environmental Compliance Process.
- Consult community groups.
- If necessary, discourage access by the public to recently burnt areas.
- Where possible and where required, monitor and control weeds in recently burnt areas.

## **7.2 WILDFIRES**

- Consideration for the environment (e.g. special environmental areas and the vegetation) will be undertaken during wildfires. For example, avoid bulldozing around fires and allow sections of bush to burn rather than disturbing vegetation with machinery.



- Where bushland has been disturbed by machinery during wildfire suppression, assess whether assisted rehabilitation is required.
- If necessary, discourage access by the public to recently burnt areas.
- Where possible and where required, monitor and control weeds in recently burnt areas.

## **8 REFUSE DISPOSAL SITE MANAGEMENT**

### **8.1 CLEARING OF NATIVE VEGETATION**

- Protect areas of native vegetation to be retained from vehicle and machinery movement, and from rubbish blowing into bushland areas.

### **8.2 WEED MANAGEMENT**

- Weed management plans to be developed and implemented for Council controlled refuse disposal sites (i.e. Hanrahan, Bakers Junction and South Stirling).

### **8.3 NATIVE VEGETATION REHABILITATION**

- If the future purpose of the land is to rehabilitate the site, and it is Council controlled land, then revegetate areas that have been capped, with local provenance plants.

## **9 REFUSE DISPOSAL SITE REHABILITATION**

### **9.1 PLANNING**

- Map all disused refuse disposal sites and prioritise them based on their conservation value, to determine the order in which they will be rehabilitated.
- Develop rehabilitation plans to include details on site preparation, plant species and density desired, seed collecting and storage, weed control, monitoring plant growth and possible follow up re-seed program.
- Use topsoil in rehabilitation works if available and suitable for the situation.
- Try to incorporate regrowth native vegetation into proposed rehabilitation works. In some cases, sites have not been touched for many years and there is already substantial regrowth.
- Seed for rehabilitation works to be collected as close as possible to the site, and preferably within 5km of site.

### **9.2 WEED MANAGEMENT**

- Develop weed control programs for each site.
- Ensure machinery have been washed down prior to entering the site, to prevent the introduction of weeds.
- Ensure machinery have been washed down prior to leaving the site, to reduce the risk of spreading weeds to other areas.

### **9.3 DIEBACK MANAGEMENT**

- If phytophthora is present at the site, avoid moving infected soil into areas not affected by phytophthora.
- Earthworks should be undertaken in autumn when the risk of spreading phytophthora is reduced.
- Ensure machinery have been washed down prior to entering the site, to prevent the introduction of phytophthora.
- Ensure machinery have been washed down prior to leaving the site, to reduce the risk of spreading phytophthora to other areas.

## **10 BUSHCARE**

- Refer to the *Environmental Weeds Strategy for City of Albany Reserves* (see Supporting documentation).

### **10.1 DIEBACK MANAGEMENT**

- If phytophthora is present at the site, do not move infected soil into areas not affected by phytophthora.
- Ensure machinery and vehicles have been adequately washed/brushed down prior to entering the site, to prevent the introduction of phytophthora.
- Ensure machinery and vehicles have been brushed clean prior to leaving the site, to reduce the risk of spreading phytophthora to other areas.

## **11 OTHER WORKS (e.g. car parks, pathways, buildings)**

- Implement the City of Albany's Environmental Compliance Process.
- Develop a set of procedures to be followed based on those already in this document.

## **12 OTHER ACTIVITIES ON CROWN OR FREEHOLD LAND**

### **12.1 UTILITY SERVICES (i.e. power, communications, water, sewerage and gas)**

#### **12.1.1 INSTALLATION OF UTILITIES**

- Western Power has an exemption to clear under Schedule 6 of the *Environmental Protection Act*, as they have authorisation under the *Energy Operators Act*.
- All other utility service providers require a clearing permit.
- Arrange an on-site inspection with the relevant utility service provider at the planning and design stage of the project, to inspect the route of proposed works.
- Provide advice on how to minimize the impact of proposed works on native vegetation. Where appropriate and possible, encourage services to be located on low conservation value roadsides or cleared land adjacent to roadsides. Consideration should also be given to locating the services within the road pavement, road shoulder or table drain.

- When services are positioned on the road reserve, it is essential to ensure that the vegetation disturbed is as little as possible during construction and maintenance works by identifying and marking with stakes, tape or webbing:
  - the limits of vegetation removal (tape is to be used to mark trees for removal);
  - significant or protected vegetation, habitat areas and sensitive areas that should be protected from disturbance;
  - the presence of weeds indicated in the City of Albany Environmental Weed Strategy; and
  - the exact location of proposed stockpiles, plant compounds and access roads.
- In the event that major works are required that modify existing native vegetation on roadsides rehabilitation of the site will be encouraged.

### **12.1.2 MAINTAINING UTILITY SERVICES**

- All maintenance works by a utility service provider should adhere to the procedures detailed in their own Environmental Codes of Practice.
- Where Environmental Codes of Practice do not exist, or are not considered adequate to the City of Albany, Memorandums of Understanding or Agreements between the service provider and the City of Albany must be developed and adopted.

## **12.2 CROSSOVER APPROVAL PROCESS**

Please see “*Application for Vehicle Crossover Construction*” (See Supporting Documentation). Also see “*Activities in Thoroughfares and Public Places and Trading Local Law 2001*”.

- No crossover shall be installed without the issue of a Crossover Permit by the City of Albany.
- The City of Albany does not support the removal of vegetation for crossovers unless there are no uncleared areas along the property boundaries that could be used for this purpose.
- Where native vegetation must be removed to accommodate a crossover, disturbance of the vegetation should be kept to a minimum.
- Sight lines that involve the removal of native vegetation should be slashed and trees trimmed in preference to disturbance of soil and tree removal. This allows for retention of vegetation and prevents weed invasion. Clearing for sign lines needs to be kept to a safe minimum.
- A database search will be undertaken by the City of Albany to determine the presence of any Declared Rare Flora in the proposed crossover site. If any DRF are located in the vicinity of the proposed site, the DEC will be consulted.
- No more than two crossings per lot (according to Thoroughfares Local Law), unless otherwise negotiated with the City of Albany.

## **12.3 REQUESTS TO CLEAR VEGETATION ON COUNCIL CONTROLLED LAND**

### **12.3.1 FIREBREAKS**

- Firebreaks for private property must be located around the inside of the property (*Firebreak Notice 2006/07*).
- Firebreaks for private land will not be approved for construction of Council Controlled Land.
- The siting of firebreaks on City of Albany reserves will be considered where private land and a bushland reserve share a common boundary, and the bushland on the reserve is in close proximity to houses.
- Firebreaks on Council controlled land should not be used as an extension of the adjoining landholders land for storage or access.

### **12.3.2 FENCELINES**

- Clearing will be approved along, and not more than 1.5 metres from, a fence line to provide access to construct or maintain a fence (*Environmental Protection (Clearing of Native Vegetation) Regulations 2004*).

### **12.4 REQUESTS TO BURN VEGETATION ON COUNCIL CONTROLLED LAND**

- A person shall not burn part of a thoroughfare without first obtaining a permit or unless acting under the authority of any other written law (See "*Activities in Thoroughfares and Public Places and Trading Local Law 2001*").
- In assessing an application for a permit, the City of Albany undertakes a site inspection, and considers a number of biological (e.g. presence of Declared Rare Flora, condition and extent of vegetation and fire history) and property/life values.
- Approval of applications to burn will only be granted if burning will:
  - (a) reduce a fire hazard and alternate means of reducing that hazard, such as slashing or the use of herbicide, are considered by the City of Albany to be not feasible or more detrimental to native flora and fauna than burning; or
  - (b) in the opinion of the City of Albany, be beneficial for the preservation and conservation of native flora and fauna.
- An application for a permit to burn is not approved by the City of Albany:
  - (a) for burning between 31 August and 1 May of the following year where the intensity of the burn could damage native flora and fauna; or
  - (b) in any year to any person for any part of a thoroughfare which is on the opposite side of the carriageway to that portion of the thoroughfare for which a permit to burn has been approved in the same year.

### **12.5 REQUESTS TO COLLECT SEED OR OTHER PLANT MATERIAL**

See "*Activities in Thoroughfares and Public Places and Trading Local Law 2001*"

- A person shall not collect seed or other plant material from native flora on Council controlled land without first obtaining a permit.
- The City of Albany may approve an application for a permit only where the seed or plant material is required for a revegetation project in any part of the City, or for scientific purposes.
- If approval for a permit is granted, it is to be taken to be approved subject to:
  - (a) the collection of the seed or plant material is to be carried out so as not to endanger the long time survival of the native flora; and
  - (b) any licence or approval that may be required under any other written law is to be obtained by the applicant.

### **12.6 REQUESTS TO COLLECT FIREWOOD**

See "*Activities in Thoroughfares and Public Places and Trading Local Law 2001*"

- The collection of firewood on Council controlled land is prohibited.
- Wood resulting from approved clearing operations may be made available for sale to the public by the City of Albany.

## **12.7 REQUESTS TO HARVEST WILDFLOWERS**

See “*Activities in Thoroughfares and Public Places and Trading Local Law 2001*”

- The harvesting of native flora on Council Controlled land is prohibited.

## **12.8 REQUESTS TO HARVEST TIMBER**

See “*Activities in Thoroughfares and Public Places and Trading Local Law 2001*”

- The harvesting of timber on Council controlled land by private individuals is prohibited.
- Timber resulting from approved clearing operations may be made available for sale to the public by the City of Albany.

## **12.9 REQUESTS TO PLANT OR SOW SEEDS**

See “*Activities in Thoroughfares and Public Places and Trading Local Law 2001*”

- A person shall not plant any plant or sow any seeds on Council controlled land without first obtaining a permit.
- In determining an application for permit to plant or sow seeds, the City of Albany is to have regard for:
  - (a) existing vegetation in the area in which the planting is to take place; and
  - (b) the diversity of species and the prevalence of the species that are to be planted or sown.

## **SUPPORTING DOCUMENTATION**

### **CITY OF ALBANY DOCUMENTS**

- Environmental Weeds Strategy of City of Albany Reserves (2005).
- Activities in Thoroughfares and Public Places and Trading Local Law 2001
- Application for a Prescribed Council Road Verge Burn
- Application to Clear Fence Line
- Procedure for Undertaking Maintenance and Upgrading Works and Public Use within Aboriginal Heritage Sites
- Establishment and Rehabilitation of Pits on Reserves
- Fire Access Track Standards in City of Albany Reserves
- Weed Management of George St Reserve
- Application for Vehicle Crossover Construction

### **OTHER DOCUMENTS**

- Acid Sulphate Soil Guideline Series – Department of Environment:
  - Preparation of acid sulphate soil management plans
  - Treatment and management of disturbed acid sulphate soils
- Queensland Acid Sulphate Soil Technical Manual – Department of Natural Resources and Mines
- Managing Phytophthora Dieback: Guidelines for Local Government – Dieback Working Group
- Water Quality Protection Notes – Department of Water:
  - Land Use compatibility in Public Drinking Water Source Areas (2004)
  - Land Use planning in Public Drinking Water Source Areas (2006)
  - Mechanical Equipment Washdown (2006)
  - Tracks and Trails near Sensitive Water Resources (2006)
  - Extractive Industries within Public Drinking Water Source Areas (2000)
  - Roads in Sensitive Environments (2004)
  - Contaminant spills – emergency response (2006)
  - Landfilling with inert materials (2006)

## **BIBLIOGRAPHY**

- Greenskills. 2001. Report for the Rainbow Coast Regional Council on Local Agenda 21 Issues. Report 1 – Road Design, Construction and Maintenance.
- Opus. 2006. Environmental Management Plan. Frenchman Bay Road Upgrade: Quaranup Road to Frenchman Bay.
- Roadside Conservation Committee. 1998. Western Australian Roadside Handbook.
- Roadside Conservation Committee. 1999. A Survey of the Roadside Conservation Values in the Shire of Jerramungup.
- Roadside Conservation Committee. 2000. Guidelines for Managing Special Environmental Areas in Transport Corridors.
- Roadside Conservation Committee. 2005. Handbook of Environmental Practice for Road Construction and Maintenance Works.
- Roadside Conservation Committee. A Generic Code of Practice for Roadside Conservation During Road Construction and Road Maintenance Operations By Local Government.
- Kristy Oliver. 2001. Code of Practice for Roadside Conservation in Road Construction and Road Maintenance. Shire of Chittering.
- Kristy Oliver. 2001. Roadside Vegetation Management Plan. Shire of Chittering.
- Draft Vegetation Management Plan for Shire of Esperance.
- Shire of Yarra Ranges. Code of Environmental Practice for Works on Council Controlled Land (including roadsides).
- Utility Providers Services Committee. 2002. Utility Providers Code of Practice for Western Australia. Main Roads.
- Water Corporation. 2005. Marbelup Water Reserve Drinking Water Source Protection Assessment.
- Water and Rivers Commission. 2001. South Coast Water Reserve and Limeburners Creek Catchment Area Water Source Protection Plan.
- Water Corporation. 2004. Angove Creek Catchment Area Drinking Water Source Protection Assessment.

## GLOSSARY OF TERMS

<b>CLEARING</b>	Any activity that kills or damages native vegetation.
<b>DISPOSAL SITES</b>	Those areas for the disposal of non re-usable materials as specified by Council.
<b>CONSTRUCTION ZONE</b>	Is the area clearly marked where all construction activities take place (such as the area stripped for road construction, stockpile areas, compounds, access routes).
<b>ENVIRONMENTAL WEED</b>	Any plant that invades natural vegetation, usually adversely affecting regeneration and the survival of native flora and fauna.
<b>GROUND COVER</b>	Includes creepers, grasses and herbs.
<b>HABITAT</b>	The home of a plant or animal.
<b>MAINTENANCE ZONE</b>	Is the area within the outside of the drain or top of batter on each side of the road. This generally correlates to the limits of any routine maintenance works. There are some exceptions e.g. cut-off drains.
<b>NATIVE VEGETATION</b>	Native vegetation, which occurs naturally in the City of Albany.
<b>NOXIOUS WEED</b>	Any plant declared under the Agriculture and Related Resources Protection Act (1976) as noxious to the State of Western Australia. Noxious weeds degrade agricultural land but may also be environmental weeds.
<b>PROJECT</b>	Includes any matter which will involve a physical change to the environment.
<b>ROADSIDE ZONE</b>	Is the area from the edge of the construction or maintenance area to the fence line on each side of the road. This zone is where the habitat value occurs.
<b>REGENERATION</b>	Naturally occurring growth of grasses, shrubs and trees from root stock or soil borne seeds.
<b>REVEGETATION</b>	Vegetation established by hand planting tube stock or by direct seeding.
<b>STOCKPILE</b>	A site for storage of short-term re-usable materials only as specified by Council.
<b>FAUNA</b>	Animal species native to Australia and native to the City of Albany.
<b>WORKS</b>	Includes the actions of conceptual development, planning, design, construction and maintenance of any project.



## LEGISLATIVE CONTEXT

Many Acts of Parliament and Government Policies impact on land management, with some being a valuable tool for enforcement of this Code of Practice. They include:

Local Government Act 1995	Gives Local Government responsibility for management of undeclared roads. Council power to create certain Local Laws relating to roadsides.
Town Planning & Development Act (1928)	Controls the removal of native vegetation from roadsides under local section planning provisions and the Native Vegetation Retention Controls, and seeks to encourage the retention of native vegetation on private and public land. Prior to removing, destroying or lopping an area of native vegetation on any roadside for works not exempt under the controls, the responsible authority must issue a permit. In certain circumstances, applications for permits to remove native vegetation on roadsides must be referred to the Department of Natural Resources and Environment.
Agriculture & Related Resources Protection Act 1983	Identifies responsibility for the control of noxious weeds from municipal-controlled roadsides. The Department of Natural Resources and Environment is responsible for State Prohibited and Regionally Prohibited species.
Wildlife Act 1950	Prior to works being undertaken which may disturb critical habitat a plan of works must be submitted to Department of Conservation and Land Management.
Country fire Authority Act 1958	Municipalities are responsible for managing roadside vegetation for fire prevention.
Land Administration Act 1997	Gives Crown ownerships rights over all vegetation on roadsides.
Environmental Protection Act 1986	Provides the control of polluted runoff from disturbed roads and the clearing of native vegetation.
CALM Act 1984    Land Act 1958	Allows prosecution for removal of timber from roadsides.
Litter Act 1964	Makes it an offence to litter roadsides and other specified public places.
Main Roads Act 1930	Department of Main Roads is responsible for management of major highways and nominated roads.
'Servicing Authority' Acts	Permits servicing authorities to locate assets on roadsides and gives them rights of access form maintenance works.

## APPENDIX 1 ENVIRONMENTAL IMPACT ASSESSMENT CHECKLIST

Aim: To determine which projects are low impact and can be adequately addressed through the procedures outlined in this document.

Projects that have “yes” to any item will require further assessment and specific management procedure developed to address the issues/values identified.

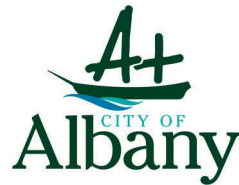
ITEM NO.	ITEM	NO	YES	N/A	COMMENTS
1	New infrastructure: Will any native vegetation be cleared or altered (i.e. pruned, mulched, damaged)?				
2	Existing infrastructure: Will any native vegetation be cleared or altered beyond the maintenance zone?				
3	Is there any Declared Rare Flora within 50 m of the site?				
4	Does the site support known or potential habitat for threatened fauna species?				
5	Is the site registered on the Register of National Estate for natural values?				
6	Is there a “define wetland” within 50 m of the site?				
7	Does the work site pass over, adjoin or drain into a wetland, watercourse or harbour?				
8	Is the site within or immediately adjacent to a Public Drinking Water Source Area?				
9	Is the site or any part of the site Dieback-free, or is it immediately adjacent to a dieback free area?				
10	Is the site immediately adjacent to a National Park or Nature Reserve?				
11	Is the site within or immediately adjacent to a Significant Aboriginal Site?				
12	Are Acid Sulphate Soils present on the site?				

Completed by: Signature \_\_\_\_\_

Date \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_



## STATEMENT OF COMPLIANCE

### ENVIRONMENTAL IMPACT ASSESSMENT OF PROPOSED WORKS OR ACTIVITIES ON COUNCIL CONTROLLED LAND

**PROJECT DETAILS**

Project Name:	
Date of Statement:	
Responsible Officer:	

Description of Proposed Works or Undertakings:

Location of Proposed Works:

Background to Proposed Works – Reasons/Need:

**IDENTIFICATION OF ENVIRONMENTAL IMPACTS AND RESPONSES**

Has an Environmental Impact Assessment been carried out?	Yes	No	By Whom?
Environmental Impact Assessment Checklist Attached	Yes		No

Referrals to other Agencies	Yes	No
Summary of Comments:		



