

# APPENDICES



# CONTENTS

## Appendices

### APPENDIX A

**DEFINITIONS**.....A-1

### APPENDIX B

#### LODGING A DEVELOPMENT APPLICATION

GENERAL .....B-1  
 STATEMENT OF ENVIRONMENTAL EFFECTS.....B-1  
 PLAN OF SITE .....B-3  
 SUITABLE MEASURES FOR A SOIL AND WATER MANAGEMENT PLAN (SWMP) .....B-5  
 LANDFILL APPLICATIONS.....B-7

### APPENDIX C

#### DEVELOPMENT APPLICATION FEES

REFER TO COUNCIL'S MANAGEMENT PLAN -  
 REVENUE PRICING POLICY, FEES AND CHARGES.....C-1

### APPENDIX D

#### LANDSCAPING SPECIES

SPECIES SUITABILITY.....D-1  
     Trees .....D-1  
     Shrubs .....D-5  
     Palms, Cycads & Palm Lillies .....D-8  
     Ferns .....D-9  
     Ground Covers .....D-10  
 VEGETATION PLANTING FOR ABSORPTION AREAS.....D-12  
     Plants Suitable for Wet Soils .....D-12



Appendix A

# DEFINITIONS



## Definition

<b>Access Ramp</b>	a continuous slope joining two different levels of land or different floor levels allowing people with disabilities to gain access to a building or area.
<b>Accessway</b>	means any internal street or driveway providing local access for shared traffic, pedestrian and/or recreation use, but with pedestrian priority within the development.
<b>Acid Sulphate Soil</b>	means acid sulphate soil, potential acid sulphate soil, sulphidic clay or sulphidic sand with soil profiles or layers (within the material to be disturbed or impacted by the development) with more than 0.1 percent sulphide and a net acid generation potential of more than zero.
<b>Adjoining Land</b>	means land which abuts an Application Site or is separated from it only by a road, lane, pathway, right of way, river or stream or similar thoroughfare.
<b>Advertising</b>	means the placement of public notice in a newspaper circulating at least once a week in the locality.
<b>Alteration Of Land</b>	means filling, reshaping or otherwise changing the natural existing land surface.
<b>Application Site</b>	means the land to which an application relates and includes any easement or right of way appertaining to the site.
<b>Approval Body</b>	means a State Agency which may grant an approval in respect of Integrated Development as identified by Section 91 of the Environmental Planning and Assessment (Amendment) Act 1997.
<b>Attached Dual Occupancy</b>	means a single building containing two dwellings under a single main roof line on one allotment of land and is also commonly known as a duplex. These dwellings are to share a common wall or be up to 6m apart.
<b>Bedroom</b>	means a room that is primarily used for sleeping or that in the opinion of Council may be so used.
<b>Building</b>	includes part of a building and any structure or part of a structure, and includes a swimming pool.

## Definition

<b>Building Height Plane</b>	means, in the case of single dwellings and multi unit housing, a three dimensional space in which all buildings are to be sited and is defined by planes that are projected at 45 degrees from a height of 1.8m or 3.5m (dependent on type of development) above natural ground level at the boundaries.
<b>Carnival</b>	a festival or community event including parades, stalls, amusement devices, public entertainment and includes fairs and fund raising events carried out for charitable and non-profit organisations, for a maximum of 14 days in any calendar year on land in public ownership.
<b>Carport</b>	a roof open sided shelter for a car.
<b>Clean Fill</b>	means the filling of land by soil and/or other extractive material that is not contaminated by demolition material, trees or vegetation wastes, waste building material, or any leachate, chemical residue, chemical product or putrescent matter.
<b>Common Open Space</b>	means usable open space for recreation and relaxation of residents of a multi-unit housing development and which is under the control of a body corporate or equivalent.
<b>Compaction</b>	means the process of reducing the volume of a material by inducing the closer packing of its particles by rolling, or other mechanical means.
<b>Contaminated Soil</b>	means soil that contains a concentration of chemical substances (including substances listed in the Australian Dangerous Goods Code) that are likely to pose an immediate or long term hazard to human health or the environment. Soil is considered to be a hazard if it is: <ul style="list-style-type: none"><li>▪ unsafe or unfit for habitation or occupation by people or animals;</li><li>▪ degraded in its capacity to support plant life; or</li><li>▪ otherwise environmentally degraded.</li></ul>
<b>Council</b>	means Hawkesbury City Council. References in this plan to the Council may include Council staff properly exercising authority delegated by the Council.
<b>Deck</b>	a low level horizontal platform.



## Definition

<b>Demolition Fill</b>	means fill material containing demolition material, building material or non-putrescent garbage matter other than trade waste, and effluent, but excluding asbestos and other toxic materials.
<b>Designated Development Dwelling</b>	is development described in Schedule 3 of the EP&A Regulation 1994.  means a room/suite of rooms occupied, used or so constructed or adopted as to be capable of being occupied or used as a separate domicile.
<b>Effluent</b>	includes treated or partially treated wastewater from processes such as sewage treatment plants or from treatment plants associated with intensive livestock industries, aquaculture or agricultural, livestock, wood, paper or food processing industries.
<b>Environmentally Sensitive Area</b>	means: <ul style="list-style-type: none"><li>▪ land identified in an environmental planning instrument as an environment protection zone such as for the protection or preservation of habitat, plant communities, escarpments, wetlands or foreshore or land protected or preserved under State Environmental Planning Policy No. 14 - Coastal Wetlands or State Environmental Planning Policy No. 26 - Littoral Rainforests; or</li><li>▪ land reserved as national parks or historic sites or dedicated as nature reserves or declared as wilderness under the National Parks and Wildlife Act 1974; or</li><li>▪ land reserved as an aquatic reserve under the Fisheries and Oyster Farms Act 1935; or</li><li>▪ land reserved or dedicated within the meaning of the Crown Lands Act 1989 for the preservation of flora, fauna, geological formations or for other environmental protection purposes; or</li><li>▪ land declared as wilderness under the Wilderness Act 1987.</li></ul>
<b>Fence</b>	a structure erected along the boundary between two lots or a road providing a physical barrier.
<b>Flag Pole</b>	a pole on which a flag may be hoisted.
<b>Floodplain</b>	means the floodplain level nominated in a LEP or those areas below the 1 in 100 flood event if no level has been nominated.

**Definition**

<b>Floodway</b>	means flood liable land where a significant volume of water flows during floods and if even partially blocked may cause a significant redistribution of flood flows.
<b>Garage</b>	fully enclosed building for housing a car.
<b>Ground Level</b>	the actual physical level of land prior to the erection of any structures on the land.
<b>Habitable Room</b>	means a room used for normal domestic activities and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom and sunroom. It excludes a bathroom, laundry, water closet, food-storage pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature that are occupied only infrequently.
<b>Heritage Item</b>	means a building, structure, place, relic or other work or historical, aesthetic, social, technical/research or natural heritage significance identified in a regional environmental plan or HLEP 1989.
<b>High Watertable</b>	means those areas where the groundwater depth is less than 3 metres below the surface at its highest seasonal level.
<b>Home Occupation</b>	an occupation carried on in a dwelling by the permanent residents of the dwelling.
<b>Integrated Development</b>	means development (not being complying development) that, in order for it to be carried out, requires development consent and one or more of the approvals set out in Section 91 of the Environmental Planning and Assessment (Amendment) Act 1997.
<b>Landfill</b>	the filling of land with clean fill and/or demolition fill which alters the natural ground surface level or affects pre-existing drainage. This fill may be imported or obtained from the site but does not include top dressing.
<b>Living Area</b>	means a room used for normal domestic activities excluding non habitable rooms and bedrooms.

## Definition

<b>Major Alteration And Addition</b>	any alteration or addition where the area of the building — the subject of the application — equals or exceeds 40% of the floor area of the existing building when measured to the outside surface of the building walls. This includes areas of the existing building such as kitchens and bathrooms when these are included in the works within the application.
<b>Multi Unit Housing</b>	multi unit housing includes all forms of residential development aside from detached dwellings on a single parcel of land. It includes villas, townhouses, dual occupancies, walk up flats and the like.
<b>NatHERS</b>	NatHERS is a computer simulation tool for rating the thermal performance of houses across Australia. The Energy Management Task Force is responsible for delivering a NatHERS compliance protocol.
<b>North Point</b>	in any discussion relating to orientation of a dwelling or part thereof, a reference to 'north' is a reference to true solar north and not magnetic, or compass north. True solar north varies from magnetic north depending upon the location. In Hawkesbury magnetic north is approximately 12.5 degrees east of true solar north.
<b>Notification</b>	means giving written notice in accordance with this plan.
<b>Owner</b>	means the name and address of the proprietor as registered in Council's property record.
<b>Passive Solar Energy Systems</b>	systems which combine the sun's energy with local climate characteristics, to achieve thermal comfort inside buildings without the use of mechanical devices. In a passive system, the building itself is a solar collector, as well as a heat storage and transfer medium.
<b>Real Estate Sign</b>	temporary sign used to indicate that land or any other immovable property is for sale.
<b>Retaining Wall</b>	a wall supporting and confining earth and soil.
<b>Saline Soil</b>	means soil profiles or layers (within the upper 2 metres of soil) with an electrical conductivity of saturated extracts (Ece) value of more than 4 decisiemens per metre (Ds/m).
<b>Satellite Dish</b>	dish or aerial for receiving satellite television.

## Definition

<b>Setback</b>	means the distance between the boundaries of a site and the external wall of a building erected or proposed to be erected.
<b>Shop Fitout</b>	internal non-structural alterations to a shop.
<b>Site Area</b>	means that area contained within the title boundaries of the site or the area of land to which an application for consent relates. The site area excludes any land where development to which the application relates is not permitted under the LEP, as well as the area of any access handle in the case of hatchet shaped allotments.
<b>Sodic Soil</b>	means soil profiles or layers (within the upper 2 metres of soil) with an exchangeable sodium percentage (ESP) of more than 5 percent.
<b>Solar Collectors</b>	any building element or appliance specifically designed to capture or collect the sun's rays for the benefit of the occupants eg. windows including clerestory (or highlight) windows, solar hot water collector panels, photovoltaic (solar-electricity) cells/panels.
<b>Solar Setback Line</b>	an imaginary line drawn on a lot, indicating the minimum setback from that lot's northern boundary, behind which the northern wall of a (new) dwelling may be located so as to allow its compliance with the Energy Efficiency provisions of this DCP.
<b>Stabilisation</b>	means providing adequate measures (vegetative and/or structural) to prevent erosion from occurring.
<b>Top Soil</b>	means uncontaminated nursery standard soil, potting mix, or any other growing medium capable of supporting sustained shrub and tree growth and used only for the purpose of facilitating plant growth.
<b>Tyre Landfill</b>	means the placement or layering of shredded rubber, nylon and similar motor vehicle tyres in excavated trenches with the excavated material being placed above trenches. The trenches are in turn backfilled with finished clean fill.
<b>Usable Private Open Space</b>	means an area of land for the private outdoor living activities of the occupants of one dwelling which has a minimum depth and width of 4 metres.

## Definition

- Verandah** a low level platform projecting a maximum of 1.8 metres from the wall of a building, supported by posts and containing a roof structure contiguous with the building.
- Waste** means:
- effluent, being matter or thing, whether solid or liquid or a combination of solids or liquids, which is of a kind that may be removed from a septic tank, septic closet, chemical closet, sullage pit or grease trap, or from any holding tank or other container forming part of or used in conjunction with a septic tank, septic closet, chemical closet, sullage pit or grease trap; or
  - trade waste, being any matter or thing, whether solid, gaseous or liquid or a combination of solids, gases and liquids (or any of them), which is of a kind that comprises refuse from any industrial, chemical, trade or business process or operation; or
  - putrescent waste; or
  - contaminated asbestos or toxic wastes; or
  - garden refuse including vegetation, grass cuttings and tree stumps.
- Waste Storage Container** means a container used for the storage of waste prior to disposal.
- Waterbody** means:
- "a natural waterbody", including:
    - a lake or lagoon either naturally formed or artificially modified; or
    - a river or stream, whether perennial or intermittent, flowing in a natural channel with an established bed or in a natural channel artificially modifying the course of the stream; or
    - waters including any bay, estuary or inlet; or
  - "an artificial waterbody", including any constructed waterway, canal, inlet, bay, channel, dam, pond or lake, but does not include a dry detention basin or other construction that is only intended to hold water intermittently.

## Definition

### Wetlands

means:

- "natural wetlands" including marshes, mangroves, backwaters, billabongs, swamps, sedgelands, wet meadows or wet heathlands that form a shallow waterbody (up to 2 metres in depth) when inundated cyclically, intermittently or permanently with fresh, brackish or salt water, and where the inundation determines the type and productivity of the soils and the plant and animal communities; or
- "artificial wetlands", including marshes, swamps, wet meadows, sedgelands or wet heathlands that form a shallow water body (up to 2 metres in depth) when inundated cyclically, intermittently or permanently with water, and are constructed and vegetated with wetland plant communities.

Appendix B

# LOGGING A DEVELOPMENT APPLICATION





## GENERAL

The amount of information required to accompany a DA will vary depending upon the location, scale and complexity of the proposal. The guidelines contained in this appendix are intended to provide basic advice as to the type of information that Council will require to assess a DA. In some circumstances additional information will be required and in other circumstances not all of the issues mentioned below will be relevant.

It is highly recommended that consultation occur with neighbours and council officers before submitting a DA for subdivision so that the design responds to community concerns as far as practicable and all relevant issues are addressed in a Statement of Environmental Effects and the design of the development.

This Appendix has been structured to indicate the type of information required in a written statement (Statement of Environmental Effects) as well as the information required on the DA plans.

## STATEMENT OF ENVIRONMENTAL EFFECTS

This is a written statement which demonstrates that the applicant has considered the impact of the proposed development on the natural and built environment. The statement should also contain information as to any proposed methods to mitigate any adverse effect that may arise from the proposal.

The aim of the Statement of Environmental Effects is to appraise the suitability of the land for the development and should detail, (where applicable) the following issues:

- Compliance with Statutory and Council Code requirements.
- Suitability of the land for development. Consider flooding, drainage, tidal inundation, land slip, soil erosion, mine subsidence, bushfire and similar risks.
- Proposed vehicle access and egress. Adequacy for any loading, unloading, turning or parking.
- Proposed landscaping of the site and whether any existing trees should be preserved.
- The physical character, location, siting, bulk, scale, shape, size, height, density, design or external appearance of the development.
- The siting of any building or works on the land and their relation to development on neighbouring land (especially consider overlooking and over shadowing).
- Impact on the landscape, streetscape or scenic quality of the locality.
- The existing and likely future amenity of the neighbourhood.

- The amount of traffic likely to be generated, particularly in relation to the adequacy of existing roads and present volumes of traffic carried.
- Whether public transport will be necessary to serve the development, and present availability and adequacy of public transport.
- Whether existing utility services are adequate to serve the development (ie, water, sewerage, power, stormwater drainage, telephone) or, in rural areas, whether services are available on site.
- The impact on the natural environments.
- The impact on the built environment or items of natural heritage.
- Social and economic effects of the development.
- Any special heads of consideration specified in an environmental planning instrument (eg, relating to heritage and conservation, scenic protection, wetlands, water catchment areas, escarpments, etc).
- Any special circumstances relating to the site or the locality.

## PLAN OF SITE

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<input type="checkbox"/>	The existing subdivision pattern of the subject land as well as that of the adjoining land.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The location and use of any existing buildings on the land.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Contours, relative height levels or Australian Height Datum levels as required (the level of adjoining roads should also be shown).	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The location of all vegetation, watercourses, dams, rock outcrops and escarpments on the subject land.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The location of services including water, sewerage, electricity and telephone.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Points of entry and exit.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The proposed method of stormwater disposal.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The position of north.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Relationship of the development proposal to adjoining land uses.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Lot size and shape including location of proposed building envelopes.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Adequacy of the existing road layout to accommodate the proposed. Amount of traffic generated by the proposal, particularly in the relation to the adequacy of the existing roads and current volumes traffic carried by these roads. Car access, parking and public transport availability.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The adequacy of the internal accessway design both in terms of amenity and function for the proposed use of the land.	<input type="checkbox"/>	<input type="checkbox"/>

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<input type="checkbox"/>	A risk analysis of the proposed development including reference to flooding, drainage, landslip, erosion, mine subsistence, bush fire and any other risks.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The method of stormwater disposal and sewage effluent disposal.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The effect on the landscape, streetscape, national park or scenic quality of the locality.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The impact on the existing and future amenity of the locality.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	For rural land, the impact on the agricultural productivity of the land.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The availability of services including power, telephone, water and sewerage.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Effect on flora and fauna with special reference to the Threatened Species Conservation Act and SEPP44 Koala Habitat Protection.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The social and economic effect of the proposed development.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The effect on any items of Aboriginal or European heritage.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Any past usage of the site, which may cause it to be potentially contaminated (eg. old factory site, past agricultural uses). Where this is the case, soil and groundwater testing may need to be provided. For rural areas a site history report is required of any agricultural practices carried out on the property. This report should include reference to all activities that have the potential to contaminate the site (eg. Cattle dips). The report should be signed by the person who prepared it as a true account of the history of the property.	<input type="checkbox"/>	<input type="checkbox"/>

## SUITABLE MEASURES FOR A SOIL AND WATER MANAGEMENT PLAN (SWMP)

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<input type="checkbox"/>	Construction of a perimeter or diversion bank to manage water movement.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Construction of sediment traps and sediment basins and filter fences to collect sediment, nutrients and trash prior to site disturbance.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Minimisation and prompt stabilisation of disturbed areas.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Staggered site works (with progressive landscaping).	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Drainage control measures to control water movement and quality.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The sowing of a cover crop on disturbed areas to minimise the time and period disturbances are exposed and to reduce erosion.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The collection of silts and clays through flocculation where soils are known to be dispersible.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Soil and water management measures should be designed for the 1 in 5 year storm event.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Council should be notified 48 hours prior to the commencement of site works so as to enable a site inspection of the control measures.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Polluted and nutrient rich runoff from the site should not contaminate receiving waters or ground waters.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Development of slopes greater than 20 percent should be avoided.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Any development on land with slopes greater than 20 percent will require an evaluation of the site's stability by means of a geotechnical report. In such areas cut and fill should not exceed depths of 1 metre.	<input type="checkbox"/>	<input type="checkbox"/>

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<input type="checkbox"/>	A soil contamination assessment should accompany all subdivision applications on properties where there is the likelihood of contamination due to past activities such as; mining, agriculture, industry, tanneries, or where there is evidence of extensive introduced landfill. If any soil contamination is found a report should be prepared detailing the extent and levels of contamination and any appropriate mediation measures.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The discharge of water through adjoining lands should reflect the pre existing or natural situation. Concentration flows of unpolluted water, should be channelled to natural drainage systems or absorbed into the ground water in an appropriate manner.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Energy dissipaters should be used to reduce the velocity of stormwater into watercourses, foreshore areas and tidal zones.	<input type="checkbox"/>	<input type="checkbox"/>

## LANDFILL APPLICATIONS

Plans detailing the work, not larger than "A1" size, are to be presented showing:

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<input type="checkbox"/>	Extent in plan, elevation and sections of earthworks involved - including volumes of cut and fill, quantities and balances of materials to be imported/exported, and the need for and location of stockpiles. All finished levels to be shown to Australian Height Datum.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Depth and quantity of existing topsoil to be removed is to be specified. The topsoil is to be stockpiled prior to landfill and respread after earthworks/landfill.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Details to include cross-sections on the x-x, y-y axis indicating finished height of material above natural ground level.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Geotechnical stabilisation works proposed - retaining walls, embankments, drainage (surface and subsoil), surface treatments, sub-grade preparation, keying and benching.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Stormwater and Waterway Management Proposals - treatment and protection of creeks and watercourses, artificial open channels, pipes, dams and ponds.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Soil Erosion Control Measures - both temporary and permanent including stormwater management, cut off drains, silt traps and ponds, rock filled wire mattress, siltation fences, staging proposals and fencing of areas to be protected.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Control of water pollution from surface and sub-surface sources.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Site stabilisation works incorporating a revegetation plan, including a species list for all revegetative plantings.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Extent and quality of any fill already placed, including presence of compressible and putrescent materials, builders' waste and materials that are toxic.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Method of placement and extent of compaction of existing fill (if any).	<input type="checkbox"/>	<input type="checkbox"/>

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<input type="checkbox"/>	Existing ground preparation - whether the topsoil was stripped, benching and keying, etc.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Source of material to be imported and type of material to be imported.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Survey</b>			
<input type="checkbox"/>	In the case of major landfill/earthworks applications lodged with Council, a survey of the site by a Registered Surveyor, illustrating the following information:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Plans, Contours and Sections in 1:100, 1:200 or 1:500 metric scales on plan forms not larger than "A1" size.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Lot boundaries.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Existing/natural ground levels (all shall be to Australian Height Datum).</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Topographic features such as rock formations, drainage lines, ponds and springs.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Trees - individuals, groups, mass vegetation showing location, height, trunk diameter and canopy spread, and condition.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Tracks, trails, driveways, buildings, drains, septic tanks, dams and other improvements.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ All services, ie. Sewer lines, power, telecom, etc.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Details of any buildings on adjoining land likely to be affected.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Easements, restrictions as to user, and other burdens on the title, if any.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Minor works, where considered necessary by the Branch Manager Building and Development, may also require a survey to be submitted.	<input type="checkbox"/>	<input type="checkbox"/>



APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
	<b><i>Geotechnical Reports and Certifications</i></b>		
<input type="checkbox"/>	In the case of major landfill/earthworks applications lodged with Council, a report from a Geotechnical Engineer, including the following information (where appropriate) is required to accompany the application:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Details of site investigation/laboratory reports.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Details of the proposed future use of the area to be filled and if building works are proposed, then a report is required from a Geotechnical Engineer specifying type of fill, depth of layers and method of compaction.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Geotechnical stability risk assessment, and justification of stabilisation methods proposed.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Requirements and proposals for site supervision and quality control, including control of the type of fill placed, treatment of existing ground surfaces, methods of fill placement, compaction and testing.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Need to rework and/or remove from the site any unsound or hazardous material.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Stabilisation and maintenance of surface treatments (vegetation cover, etc).</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Source, quantity and quality and type of material/fill to be imported (if any), and methods of maintaining the source, quantity and quality of the type of fill.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Plans and specifications of any retaining wall structures required as a result of the work.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Certifications as appropriate by qualified Geotechnical/Structural Engineers.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Program of completion of Engineering works and, where the subject land adjoins a public reserve, lodgement of a bond to ensure compliance with the conditions of development consent.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<b><i>Waterway Management Engineering Reports</i></b>			
<input type="checkbox"/>	<p>In the case of major landfill/earthworks applications where watercourses are located onsite, a waterway management report is required. Such a report is to incorporate:</p> <ul style="list-style-type: none"> <li>▪ Hydraulic calculations, waterway capacities and flood levels, flow velocities and controls, channel protection/energy dissipation requirements, detention and storage calculations, spillways, overflows and fail-safe waterways, maintenance of water resources, sediment and pollution control.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Soil Conservation Details and Drawings</i></b>			
<input type="checkbox"/>	An Erosion and Sediment Control Plan is to be submitted with all DAs. This Plan is to detail the steps necessary to prevent soil erosion and sedimentation arising from the flow of stormwater from the land, or from the disturbance of the land surface during construction and subsequent use of the land.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The following principles should be addressed and where appropriate incorporated into the design of individual proposals:-	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Prevention of erosion by wind action.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Prevention of cartage of soil etc from the site on the tyres or bodies of vehicles.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Erosion Control Measures must be in place prior to the commencement of work.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Methods used to divert stormwater around the site of land fillings, and away from any batters. These methods need to be employed both during the construction phase and following completion of any works.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Methods to be used to prevent erosion of soil from the site and subsequent sedimentation of adjacent watercourses. This should include information on preventing erosion of the site from any existing overland flow path and on providing sufficient access for maintenance of any proposed sediment traps and nutrient removal ponds.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Methods employed to prevent any deleterious leachate or nutrient enriched drainage from leaving the site and entering surrounding bushland or adjacent watercourses.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Methods used to stabilise the site with vegetation following completion of any works. Information should include revegetation techniques, ie depth of soil, mulch, sowing seeds, planting and type of vegetation to be used.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Revegetation Techniques</i></b>			
<input type="checkbox"/>	Revegetation techniques may not be required to accompany all applications, such will depend upon site considerations, however, details and documentation must accompany major landfill/earthworks applications.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Specifically, documentation should include the following:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>The source and composition of proposed fill material, with details of a soil rehabilitation program to facilitate plant growth. A soil analysis is to be provided for fill material.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Soil erosion protection measures to be employed during and after the operation.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Subgrade preparation details prior to the placement of fill are to be provided and should address existing vegetation, including grass which is required to be removed. Such should be stockpiled for reuse if appropriate.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

APPLICANT TO TICK	REQUIREMENTS	OFFICE USE	
		Supplied	Required
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Arboricultural assessment of all existing trees on the site, with specific details of protection measures for trees to be retained should be carried out. The plot of existing vegetation should show tree height, canopy spread and trunk location to scale and each species should be identified by botanical name with a note regarding removal or retention. The location of protective fencing around trees to be retained should be located one (1) metre beyond the drip line of these trees.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Details of fill compaction rates and layers. Details of density or the number of passes for a particular machine and layer thickness are to be certified by a Civil Engineer. Supervision of works shall be carried out by an Engineer, with Certificates of Compliance provided to Council.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Existing and finished surface levels.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Where landfill or earthworks abut natural bushland, revegetation should be carried out only with native species, including grasses and understorey plants, which are a component of the adjacent natural vegetation plant community.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Proposed planting details showing the location, size at planting, and number of plants to be used. A planting plan showing location of species, and planting schedule detailing size of stock is the minimum requirement. Bed treatment should be specifically addressed.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>Drainage details, including dispersal methods, and facilities for discharge from the site. The use of "swales" or "soak pits", remote from any cut batters on fill embankment are recommended, as these encourage water into the ground which in turn facilitates plant growth.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	These details should be provided in the form of plan, cross sections and detailed sketches.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	The operation should be supervised by a Landscape Architect and Civil Engineer (as appropriate), who should certify to Council that the works are in accordance with the documentation at sub-grade, bulk earthworks, planting bed preparation, completion stages.	<input type="checkbox"/>	<input type="checkbox"/>

Appendix C

# DEVELOPMENT APPLICATION FEES



REFER TO COUNCIL'S MANAGEMENT PLAN -  
REVENUE PRICING POLICY, FEES AND CHARGES.





Appendix D

# LANDSCAPING SPECIES



## SPECIES SUITABILITY

## Trees

		Height X = 10m or over	E = exposed sites S = semi-exposed	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
Acacia concurrens		5	S		✓			✓	✓	
Acacia decurrens	Green wattle	X			✓			✓	✓	
Acacia longifolia	Golden wattle	5	E		✓	✓		✓	✓	
Acacia melanoxylon	Sally wattle	X	S	✓	✓			✓	✓	
Acacia saligna	Golden wreath wattle	6	S	✓	✓			✓	✓	
Acmena hemilampra	Broad leaved lilly pilly	5		✓			✓	✓	✓	
Acmena smithii	Lilly pilly	5	S	✓	✓	✓		✓	✓	
Allocasuarina distyla	Scrub she-oak	6	S	✓				✓		
Allocasuarina littoralis	Black she-oak	6	S	✓	✓			✓		
Allocasuarina torulosa	Forest oak	X		✓	✓			✓		
Alphitonia excelsa	Red ash	6	S	✓	✓			✓	✓	
Araucaria bidwillii	Bunya pine	X		✓				✓		
Araucaria cunninghamii	Hoop pine	X	S	✓				✓		
Araucaria heterophylla	Norfolk Island pine	X	E	✓	✓			✓		
Banksia aemula	Old Man banksia	5	S		✓			✓	✓	
Banksia integrifolia	Coastal banksia	6	E	✓	✓			✓	✓	
Barklya syringifolia	Golden barklya	6		✓					✓	

		Height X = 10m or over	E = exposed sites S = semi-exposed	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
<i>Brachychiton acerifolium</i>	Flame tree	X		✓					✓	✓
<i>Brachychiton discolor</i>	Lacebark	X		✓	✓				✓	✓
<i>Bridelia exaltata</i>	Brush ironbark	6	S	✓	✓			✓		
<i>Callicoma serratifolia</i>	Callicoma	6		✓			✓	✓	✓	
<i>Callistemon salignus</i>	Willow bottlebrush	6	S	✓	✓	✓		✓	✓	
<i>Callistemon viminalis</i>	Weeping bottlebrush	6	S	✓	✓	✓		✓	✓	
<i>Callitris columellaris</i>	Coastal cypress pine	X	S		✓			✓		
<i>Castanospermum australe</i>	Black bean	X		✓		✓		✓	✓	
<i>Casuarina cunninghamii</i>	River oak	X		✓		✓		✓		
<i>Casuarina glauca</i>	Swamp oak	X		✓	✓	✓		✓		
<i>Diploglottis cunninghamii</i>	Native tamarind	X		✓					✓	
<i>Duboisia myoporoides</i>	Soft corkwood	6		✓	✓				✓	
<i>Eleocharpus grandis</i>	Blue fig	X		✓		✓			✓	
<i>Eleocharpus reticulatus</i>	Blueberry ash	5	S	✓		✓			✓	
<i>Eucalyptus ficifolia</i>	Red flowering gum	8		✓					✓	
<i>Eucalyptus grandis</i>	Flooded gum	X	S	✓				✓	✓	
<i>Eucalyptus gummifera</i>	Red Bloodwood	X	S	✓	✓			✓	✓	
<i>Eucalyptus intermedia</i>	Pink bloodwood	X	S		✓			✓	✓	
<i>Eucalyptus microcorys</i>	Tallowwood	X	X	✓				✓	✓	
<i>Eucalyptus pilularis</i>	Blackbutt	X	S	✓	✓			✓	✓	
<i>Eucalyptus robusta</i>	Swamp mahogany	X	S	✓	✓	✓		✓	✓	

		Height X = 10m or over	E = exposed sites S = semi-exposed	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
<i>Eucalyptus siderophloia</i>	North Coast grey ironbark	X		✓	✓			✓	✓	
<i>Ficus benjamina</i>	Weeping fig	X	S	✓	✓	✓		✓		
<i>Ficus fraseri</i>	Sandpaper fig	5	S	✓				✓	✓	
<i>Ficus obliqua</i>	Small-leaved fig	X	S	✓	✓	✓		✓	✓	
<i>Grevillea robusta</i>	Silky oak	X		✓	✓			✓	✓	
<i>Haemastoma</i>		8			✓				✓	
<i>Lophostemon confertus</i>	Brush box	X	S	✓	✓			✓	✓	
<i>Lophostemon suaveolens</i>	Swamp box	6	S	✓	✓	✓		✓		
<i>Melaleuca leucadendron</i>	Weeping paperbark	6	S	✓	✓	✓		✓	✓	
<i>Melaleuca linearifolia</i>	Fine-leaved paperbark	6		✓		✓		✓	✓	
<i>Melaleuca quinquenervia</i>	Broad-leaved paperbark	8	S	✓	✓	✓		✓	✓	
<i>Melia azedarach</i>	White cedar	8	S	✓	✓			✓	✓	✓
<i>Notolea longifolia</i>	Large mock olive	6	S	✓	✓				✓	
<i>Pandanus pendunculatus</i>	Pandanus palm	5	E	✓	✓			✓		
<i>Phebalium squameum</i>	Silver leaf bush	6		✓	✓				✓	
<i>Pittosporum revolutum</i>	Hairy pittosporum	5	S	✓	✓				✓	
<i>Pittosporum rhombifolium</i>	Coastal daphne	6		✓					✓	
<i>Pittosporum undulatum</i>	Native daphne	8	S	✓	✓			✓	✓	
<i>Podocarpus elatus</i>	Brown pine	X	S	✓	✓			✓		
<i>Polyscias murrayi</i>	Pencil cedar	X		✓	✓				✓	

		Height X = 10m or over	E = exposed sites S = semi-exposed	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
<i>Rhodomyrtus psidioides</i>	Native guava	5	E	✓	✓				✓	
<i>Stenocarpus sinuatus</i>	Fire wheel tree	X		✓					✓	
<i>Sterculia quadrifida</i>	Peanut tree	8		✓	✓				✓	
<i>Syncarpia glomulifera</i>	Turpentine	X	S	✓		✓		✓	✓	
<i>Synoum glandulosum</i>	Scentless rosewood	6		✓	✓			✓	✓	
<i>Syzygium australe</i>	Brush cherry	6	E	✓	✓			✓	✓	
<i>Syzygium hodgkinsoniae</i> #	Red lilly pilly	5		✓				✓	✓	
<i>Syzygium leuhmanii</i>	Riberry	8	E	✓	✓			✓	✓	
<i>Syzygium moorei</i>	Coolamon	X		✓					✓	
<i>Syzygium oleosum</i>	Blue lilly pilly	6	E	✓	✓			✓	✓	
<i>Toona ciliata</i>	Red cedar	X		✓					✓	✓
<i>Tristaniopsis laurina</i>	Water gum	6		✓		✓		✓	✓	
<i>Eucalyptus Cebra</i>	Narrow leaf iron bark									
<i>Eucalyptus Saligna</i>	Sydney blue gum									
<i>Eucalyptus Tereticornis</i>	Forest red gum									
<i>Eucalyptus punctata</i>	Grey gum									
<i>Eucalyptus moluccane</i>	Grey box									
<i>Brachychiton Populneus</i>	Kurrajong									
<i>Schirus mollee</i>	Peppercorn tree									
<i>Schirus terebinfolia</i>										

Notes: # Indicates rare or endangered

## Shrubs

		Height X = 10m or over	E = exposed sites S = semi-exposed sites	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
Acacia elongata		2				✓	✓		✓	
Acacia floribunda										
Acacia podalyrifolia	Queensland silver wattle	3		✓	✓			✓	✓	
Acacia suaveolens	Scented wattle	1	E	✓	✓				✓	
Alchornea ilicifolia	Native holly	3		✓	✓		✓		✓	
Alyxia ruscifolia	Prickly alyxia	2		✓			✓			
Aphananthe philippensis	Rough-leaved elm	3		✓			✓			
Baeckia citriodora	Lemon-scented baeckea	3	S		✓				✓	
Banksia ericifolia	Heath banksia	3	S		✓	✓			✓	
Banksia oblongifolia	Rusty banksia	1.5	E	✓	✓	✓			✓	
Banksia robur	Large-leaved banksia	2			✓	✓			✓	
Banksia spinulosa	Hairpin banksia	2		✓	✓				✓	
Boronia falcifolia	Wallum boronia	1			✓	✓			✓	
Boronia parviflora	Swamp boronia	2	S		✓	✓			✓	
Buckingham cellsissima	Ivory curl flower	4	S	✓	✓				✓	
Callistemon citrinus	Crimson bottlebrush	2	S	✓		✓		✓	✓	
Callistemon pachyphyllus	Wallum bottlebrush	2	S	✓		✓			✓	

		Height X = 10m or over	E = exposed sites S = semi-exposed sites	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
Claoxylon australe	Brittlewood	2		✓	✓				✓	
Clerodendrum tomentosum	Hairy clerodendrum	3		✓						
Dillwynia glaberrima	Heathy parrot pea	1	S	✓					✓	
Dodonea triquetra	Hop bush	4			✓					
Epacris microphylla	Coral heath	1			✓	✓			✓	
Epacris obtusifolia	Blunt-leaf heath	1			✓	✓			✓	
Epacris pulchella	Wallum heath	1	S	✓	✓	✓			✓	
Eriostemon australasius	Pink wax flower	2	S		✓				✓	
Grevillea banksii	Banks grevillea	3	S	✓	✓				✓	
Grevillea "Robyn Gordon"		1		✓	✓				✓	
Hakea sericea	Hakea	2	S	✓	✓				✓	
Ozothamnus diosmifolium	White dogwood	1	S	✓	✓				✓	
Hovea acutifolia	Hovea	2	S	✓	✓				✓	
Leptospermum polygafolium	Common tea tree (lemon scented)	3	S	✓		✓		✓	✓	
Leptospermum liversidgei	Lemon-scented tea tree	2	S	✓	✓	✓		✓	✓	
Leptospermum rotundifolium	Round-leaf tea tree	3	S		✓			✓	✓	
Leptospermum semibaccatum	Soft-fruited tea tree	2	S		✓	✓		✓	✓	
Leptospermum squarrosum	Peach-flowered tea tree	2	S					✓	✓	
Leptospermum whiteii #	White's tea tree	3	S		✓	✓		✓	✓	



		Height X = 10m or over	E = exposed sites S = semi-exposed sites	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
Leucopogon ericoides	Pink beard heath (Bearded Heath)	2	S		✓			✓	✓	
Leucopogon lanceolatus	Wallum beard (Lanee Beard) heath	2	S		✓			✓	✓	
Leucopogon magarodes	Pearl beard heath	2	S		✓			✓	✓	
Melaleuca nodosa	Noddy myrtle	3	S	✓	✓				✓	
Melaleuca thymifolia	Thyme honey myrtle	1.5	S	✓	✓	✓			✓	
Monotoca elliptica	Tall broom heath	4	S		✓		✓	✓		
Pultanaea Myrtoides	Silvery bush pea	1	S	✓					✓	
Pultanaea villosa	Hairy bush pea	1	S		✓			✓	✓	
Vitex purpurea	Vitex	2	E	✓	✓			✓	✓	
Westringia fruticosa	Native rosemary	1.5	E	✓	✓				✓	
Xanthorrhoea johnsonii	Grass tree	2			✓				✓	
Xanthorrhoea macronema	Bottle brush grass tree	2			✓	✓			✓	
Xanthorrhoea resinosa	Spear grass tree	1		✓		✓			✓	

Note. # Indicates rare or endangered

## Palms, Cycads & Palm Lillies

		Height X = 10m or over	E = exposed sites S = semi-exposed	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
<i>Achontopheonix alexandrae</i>	Alexander palm	X		✓		✓			✓	
<i>Achontopheonix cunninghamiana</i>	Bangalow palm	X		✓		✓			✓	
<i>Cordyline congesta</i>	Palm lily	2		✓	✓	✓	✓		✓	
<i>Cordyline petiolaris</i>	Broad-leaved palm lily	4		✓		✓	✓		✓	
<i>Cordyline rubra</i>	Red-fruited palm	2		✓	✓		✓		✓	
<i>Cordyline stricta</i>	Narrow-leaved palm lily	2		✓		✓	✓		✓	
<i>Lepidozamia proffskyana</i>	Shining burrawong	2		✓					✓	
<i>Linospadix monostrachys</i>	Walking stick palm	2		✓			✓		✓	
<i>Livistona australis</i>	Cabbage tree palm	X		✓	✓	✓			✓	

Notes: # Indicates rare or endangered

## Ferns

		Height X = 10m or over	E = exposed sites S = semi-exposed	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
<i>Adiantum hispidulum</i>	Rough maidenhair fern	0.5		✓			✓			
<i>Asplenium nidus</i>	Birds nest fern	1		✓			✓			
<i>Cheilanthes tenuifolia</i>	Rock fern	0.5	S	✓						
<i>Cyathea australis</i>	Rough tree fern	5		✓						
<i>Cyathea cooperii</i>	Straw tree fern	5		✓	✓					
<i>Doodia aspera</i>	Rasp fern	0.5		✓			✓			
<i>Hypolepsis muelleri</i>	Harsh ground fern	1	S	✓		✓				
<i>Lastreopisi acuminata</i>	Shiny sheild fern	1	S	✓		✓				
<i>Todea barbara</i>	King fern	1.5		✓	✓	✓	✓			

Notes: # Indicates rare or endangered

## Ground Covers

		Height X = 10m or over	E = exposed sites S = semi-exposed	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
<i>Alpinia caerulea</i>	Native ginger	1		✓	✓		✓	✓	✓	
<i>Bossiaea ensata</i>	Sword bossiaea	1	S		✓			✓		
<i>Brachycombe multifida</i>	Hawkesbury daisy	1	S	✓	✓			✓		✓
<i>Cissus Antarctica</i>	Water vine	C		✓	✓	✓	✓	✓		
<i>Cissus hypoglauca</i>	Five-leaf water vine	C	S	✓	✓	✓	✓	✓		
<i>Dampiera diversifolia</i>	(herb)	1	S		✓			✓		✓
<i>Dampiera stricta</i>	Blue Dampiera	1	S		✓			✓	✓	
<i>Grevillea juniperina</i>		0.5		✓	✓			✓		✓
<i>Grevillea poorinda</i>	Royal mantle	0.5		✓				✓		✓
<i>Hardenbergia violacea</i>	Purple coral pea	1		✓	✓			✓		✓
<i>Hibbertia dentata obtusifolia</i>	Trailing guinea flower	C		✓	✓		✓	✓		
<i>Hibbertia scandens</i>	Golden guinea flower	C	E	✓	✓			✓		
<i>Hibbertia bestita</i>	Hairy guinea flower	1	S	✓	✓			✓		
<i>Hoya australis</i>	Native hoyo	C		✓	✓		✓	✓		
<i>Kennedia rubicunda</i>	Dusky coral pea	C	S	✓	✓			✓		
<i>Lomandra longifolia</i>	Mat rush	1		✓	✓	✓			✓	
<i>Lycopodium cernuum</i>	Club moss	0.5		✓		✓	✓			✓
<i>Pandorea pandorana</i>	Wonga vine	C	S	✓	✓			✓		

		Height X = 10m or over	E = exposed sites S = semi-exposed	Clay Soils	Sandy Soils	Wet Sites	Shade required	Suitable for Windbreak	Blossoms or Berries	Deciduous
Botanical Name	Common Name									
Parsonsia straminea	Common silkpod	C	S	✓	✓		✓	✓		
Pimelia linifolia	Rice flower	1.5	S	✓	✓			✓		
Restio tetraphyllis		0.5	S		✓	✓			✓	
Smilax glyciphylla	Sweet sarsparilla	C	S		✓		✓	✓		
Stephanica japonica	Snake vine	C	S	✓			✓			
Tertathea thymifolia	Black-eyed susan	0.5	S		✓			✓		

Notes: # Indicates rare or endangered

## VEGETATION PLANTING FOR ABSORPTION AREAS

### Plants Suitable for Wet Soils

#### **Trees**

Acmena smithii	Lillypilly	(E)(N)(BF)
Alphitonia excelsa	Red Ash	(E/D)(N)
Angophora floribunda	Rough-barked apple	(E)(N)(BF)
Angophora subvelutina	Broad-leaved Apple	(E)(N)(BF)
Casuarina cunninghamiana	River Oak	(E)(N)(BF)
Casuarina glauca	Swamp Oak	(E)(N)(BF)
Eucalyptus amplifolia	Cabbage Gum	(E)(N)(BF)
Eucalyptus elata	River Peppermint	(E)(N)(BF)
Eucalyptus parramattensis	Drooping Redgum	(E)(N)(BF)
Eucalyptus robusta	Swamp Mahogany	(E)(N)(BF)
Eucalyptus tereticornis	Forest Redgum	(E)(N)(BF)
Ficus coronata	Sandpaper Fig	(E)(N)(BF)
Ficus rubiginosa	Rusty Fig	(E)(N)(BF)
Melaleuca decora	Honeymyrtle	(E)(N)(BF)
Melaleuca linariifolia	Honeymyrtle	(E)(N)(BF)
Melaleuca squarrosus	Scented Paperbark	(E)(N)(BF)
Melaleuca styphelioides	Prickly-leaved Paperbark	(E)(N)(BF)
Melia azedarach	White Cedar	(D)(N)(BF)
Syzigium species	Brush Cherry	(E)(N)(BF)
Toona ciliata	Red Cedar	(E/D)(N)
Alnus glutinosa	Alder	(D)(I)
Alnus cordata	Italian Alder	(D)(I)
Citrus species	(good drainage is required)	(E)(I)
Liquidambar styraciflua	Liquidamber	(D)(I)

#### **Large Shrubs**

Acacia floribunda	Sally Wattle	(E)(N)(BF)
Acacia implexa	Hickory	(E)(N)(BF)
Acacia melanoxylon	Blackwood	(E)(N)(BF)
Acacia parramattensis	Parramatta Wattle	(E)(N)(BF)
Backhousia myrtifolia	Lancewood	(E)(N)(BF)
Callistemon salignus	Willow bottlebrush	(E)(N)(BF)
Glochidion ferdinandi	Cheese Tree	(E)(N)
Rapanea howittiana	Brush Muttonwood	(E)(N)
Trema aspera	Native Peach	(E/D)(N)(BF)
Tristanopsis laurina	Water Gum	(E)(N)(BF)

**Medium And Small Shrubs**

Abrophyllum ornans	-	(E)(N)
Acacia elongata	Swamp Wattle	(E)(N)(BF)
Acacia longifolia	Sydney Golden Wattle	(E)(N)(BF)
Banksia robur	Swamp Banksia	(E)(N)(BF)
Bauera rubioides	Dog Rose	(E)(N)(BF)
Callistemon citrinus	Lemon-scented Bottlebrush	(E)(N)(BF)
Callistemon rigidus	Bottlebrush	(E)(N)(BF)
Hybiscus heterophyllus	Native Rosella	(E)(N)(BF)
Leptospermum juniperinum	Ti Tree	(E)(N)(BF)
Leptospermum polygalifolium	Ti Tree	(E)(N)(BF)
Melaleuca ericifolia	Swamp Paperbark	(E)(N)(BF)
Melaleuca nodosa	-	(E)(N)(BF)
Melaleuca thymifolia	Thyme Honeymyrtle	(E)(N)(BF)
Viminaria juncea	Native Broom	(E)(N)(BF)

**Climbers**

Aphanopetalum resinatum	Gum Vine	(E)(N)
Kennedia species	Running Postman	(E)(N)
Morinda jasminoides	Morinda	(E)(N)
Clematis species	Old Man's Beard	(E)(N)
Ground Covers		
Centella asiatica	Swamp Pennywort	(E)(N)
Dichondra repens	Kidney Weed	(E)(N)
Viola hederacea	Native Violet	(E)(N)

**NOTE**

Most ferns are also appropriate, however, Fishbone Fern (*Nephrolepis cordifolia*) should not be grown as it is a bushland weed.

In addition to these species, a large number of sedges, rushes and native grasses are available. Species include *Scirpus*, *Cyperus*, *Juncus*, *Eleocharis*, *Microlaena*, *Entolasia*, *Oplismenus*, and *Typha*. These species can provide a very effective means of absorbing sewage nutrients and water whilst creating an attractive and low maintenance swamp or grassland feature.

**CODES**

(E)	=	Evergreen
(D)	=	Deciduous
(E/D)	=	Either partially deciduous or variable depending on habitat
(N)	=	Native species (indigenous to the Sydney Basin)
(I)	=	Introduced species (not native)
(BF)	=	Bird, wildlife friendly