Landscaping Plan 55 Martin Road, Badgerys Creek

By Ecological Consultants Australia Pty Ltd TA

Kingfisher Urban Ecology and Wetlands

February 2018 updated December 2018

Landscape Report

The western end will be managed for weed management and bush regeneration in accordance with the Flora and Fauna Report Recommendations (see Figure 2 below), and the remaining of the lot towards the east for landscaping and native planting. Selected flora will depend on local nursery availability. Plants will be in the form of tube stock for native planting rather than larger pot sizes, grasses may be supplied as native grass mix for revegetation grass areas.

Figure 1. Site location. Source SixMaps 2018.

Figure 2a. Proposed weed management, bush regeneration and landscaping zones. Source SixMaps 2018.

The bush regeneration and weed management/removal is to take place prior to commencement of Landscaping works and is to be conducted by experienced bush regenerators with a minimum of Certificate 3 in bush regeneration. It will consist of hand removal techniques, manual/mechanical

removal using bush regenerator and winter thermal (flame) weeding. This approach will reduce the amount of herbicide used and reduce the amount of off-target damage through spot on application.

Woody perennial weeds less than 2 metres in height will require cut and paint or scrape and paint bush regenerator techniques based on the germinating/epicormic behaviour of the plant (especially plants that tend to coppice or sucker).

It is recommended that seed heads are removed prior to commencement of primary works. This would be best performed carefully by hand with secateurs with the aim of avoiding the spread flowers or seeds into planting zones.

See 'Flora and Fauna Report' Appendix III for further details. For key weed photo guide see Appendix VIII.

An effluent disposal zone is proposed covering 648m2 – see SDS report (December 2018) for details. This has been located away from existing trees. Tree planting proposed close by (see Landscape layout below) will not be impacted by the disposal zone. Trees selected are species that are locally native and typical of floodplain environments and occasionally saturated soils. The key species to plant closest are: *Eucalyptus tereticornis* and *Meleluca decora.* Most tree planting is on the south and western side so not directly shading the disposal area.

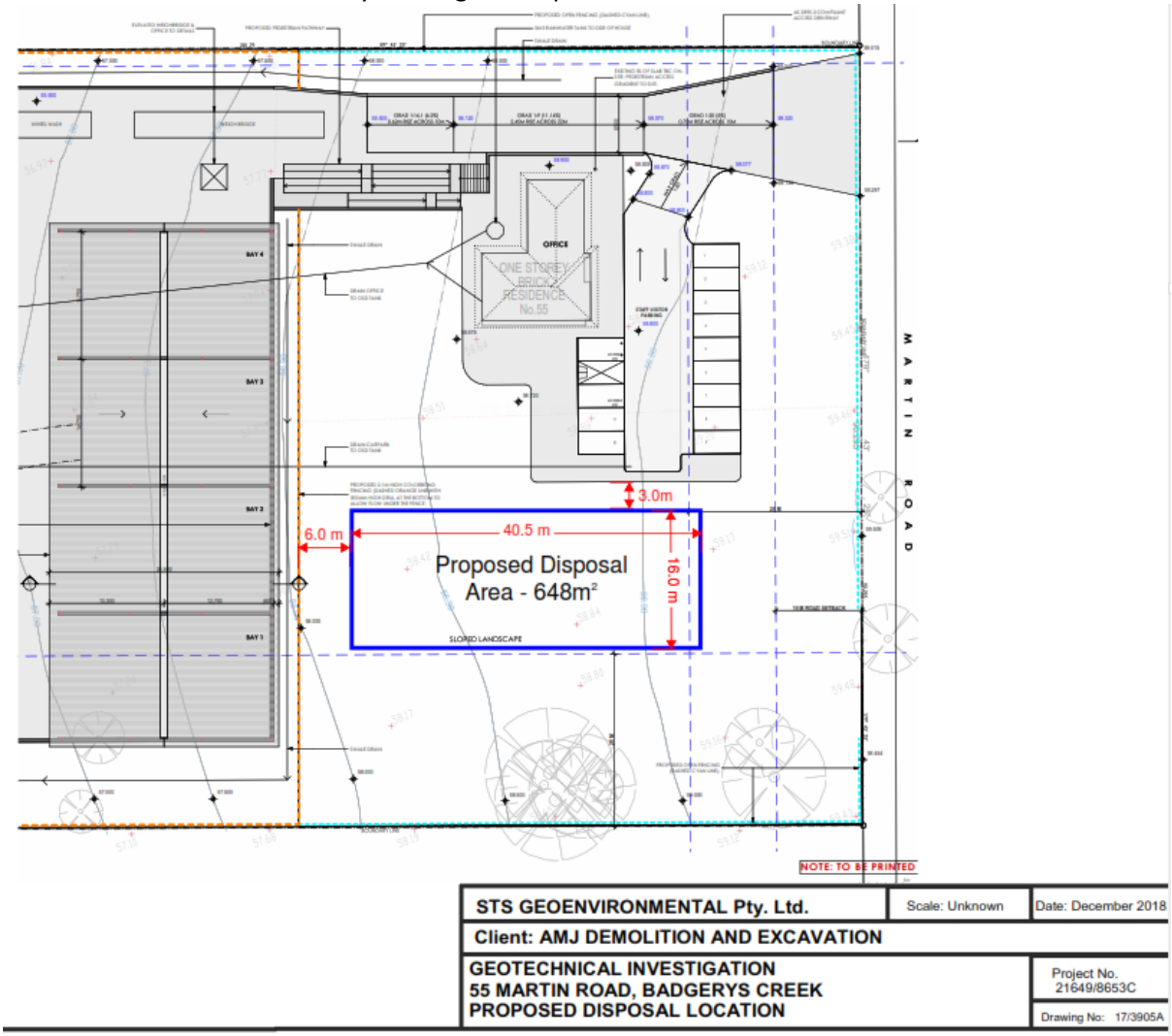


Figure 2b. Proposed disposal area. Source SDS 2018

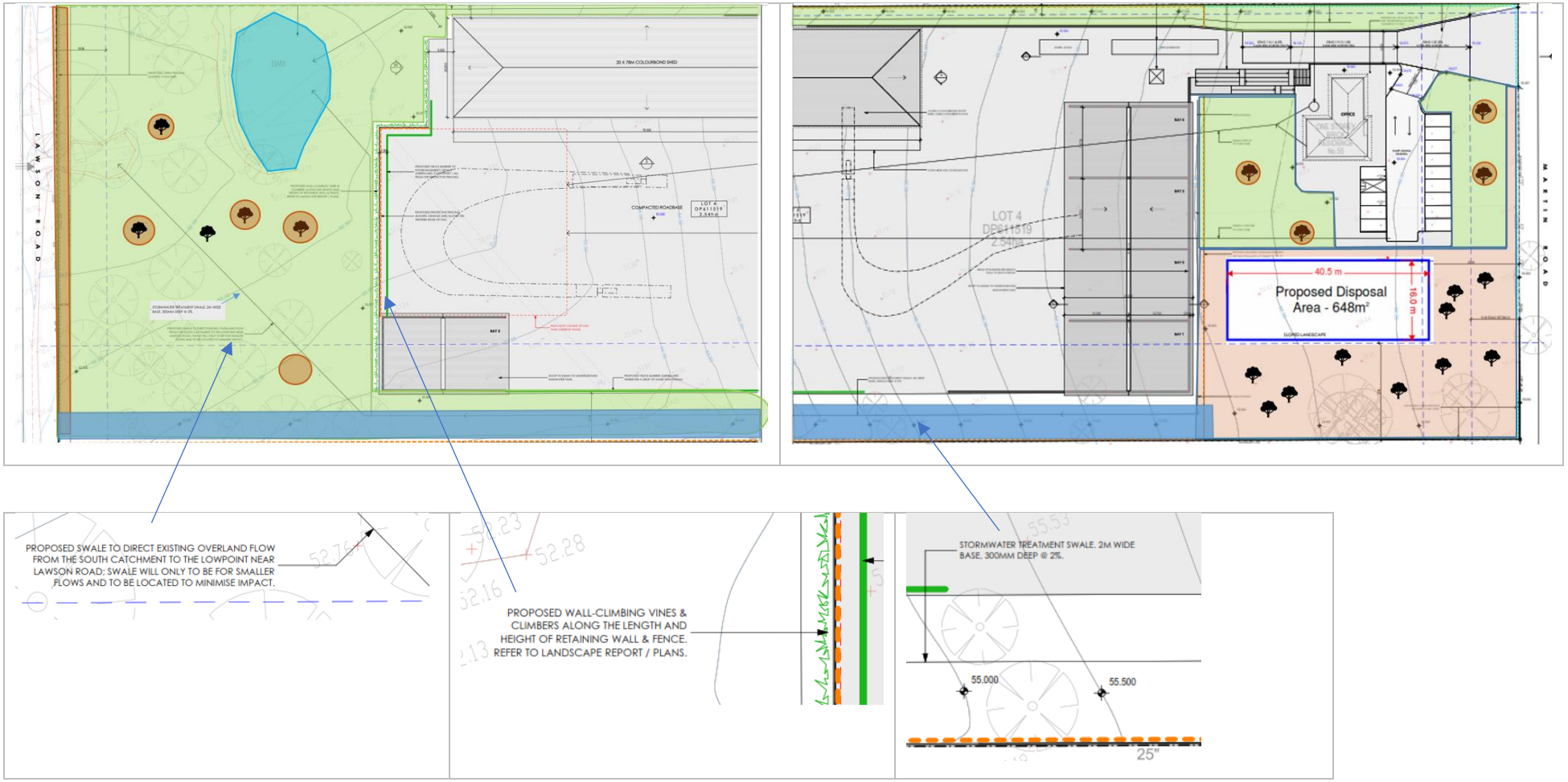


Figure 2. Bush regeneration and landscape map. Source of base plan provided by the client by pti ref A PDA 05 D. 2018.
Note: twenty (20) trees to be planted, at least fifteen (15) expected to reach maturity.

Table 2. Bush regeneration and native planting zones.

Zone	Zone Mix	Area m2 (approx.)	Number of plants (~4/m2)
Orange	Mixed shrubs	5,258	21,032
Light green	Ground covers	8,250	33,000*
Light blue	Damp vegetation	1,330	5,320
Red outline	Bush regeneration	5,500	
Green line	Retaining wall	228	912
	Trees to be planted NB: shrub planting at tree base reduce maintenance and protect tree trunks		20

*Native grass seed mix may be used instead of tube stock.

The area to be bush regenerated is 1,140 m^2. After the bush regeneration has occurred, a minimum of 4 plants per square metre should be planted and no grey areas of 2x2m, should be present. All areas have been estimated by using the scale provided on the site plan of the development application.

The twenty trees that will be planted are to be tube stock size with the aim to reach maturity. These will be distributed with a 5-metre centre, this meaning at least a five-metre radius between each planting spot. Five trees are to be planted on the western side of the lot near Lawson Road, and fifteen on the eastern side of the lot near Martin Road. Underneath the trees 2 to 2.5 metres of shrubs are to be planted.

In the dam/stormwater area, there is to be a 20x20 metre planting of sedges and rushes. It is to be located depending on the direction of the water and the final direction of water soak.

On the Lawson Road side of the retaining wall, vines can grow up a trellis fence to screen the wall. Native species have been selected for this purpose, which are known to be robust and provide fast growing cover. The wall will also be screened by the shrubs and trees planted on the western side of the lot.

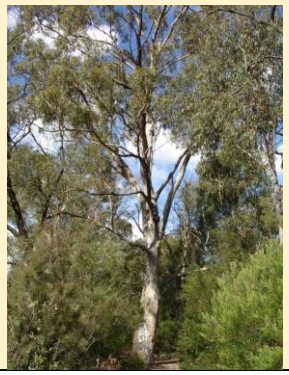
For the southern boundary (see Figure 2) wet-tollerant vegetation will be planted. *Juncus* sp. and *Carex appressa* are recommended for this area.

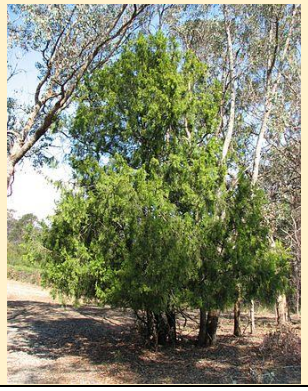
All ground surfaces are to be vegetated, if there is a discrepancy between landscaping plan and final on-ground location, for example of wetland or swale, planting to be modified complying with the actual site conditions.

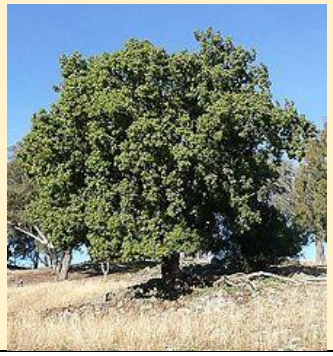
The plants proposed for planting are listed below.

Table 1. Plants proposed for planting.

Note: species in red are highly recommended and are to be prioritized for ordering. **Source of images: Wikipedia.**

Scientific Name	Common Name	Type	Purpose	Image
TREES				
Angophora costata For planting in higher drier parts of the site. Some present on-site already.	Smooth-bark Apple	Tree	Habitat and canopy renewal	
Eucalyptus moluccana	Grey Box	Tree	Habitat and canopy renewal	
Melaleuca decora Plant closest to effluent disposal area	Paperbark	Tree	Habitat and canopy renewal Plant closest to effluent disposal area	
Corymbia gummifera	Red Bloodwood	Tree	Canopy renewal	
Acacia decurrens	Green Wattle	Tree	Canopy renewal	

Scientific Name	Common Name	Type	Purpose	Image
Exocarpos cupressiformis	Cherry Ballart	Small Tree	Screening	
Eucalyptus crebra	Narrow-leaved Ironbark	Tree	Habitat and canopy renewal	
Allocasuarina littoralis	Black She-oak	Small Tree	Canopy renewal	
Eucalyptus tereticornis Plant closest to effluent disposal area	Forest Red Gum	Tree	Habitat and canopy renewal Plant closest to effluent disposal area	

Scientific Name	Common Name	Type	Purpose	Image
Brachychiton populneus	Kurrajong	Tree	Habitat and canopy renewal	
Pittosporum undulatum	Sweet Pittosporum	Small Tree	Canopy renewal	
Acacia implexa	Hickory Wattle	Small Tree	Canopy and mid-story renewal	
DAMP VEGETATION				
Carex appressa	Tall Sedge	Sedge	Water plant	
Juncus pallidus	Great-soft Rush	Rush	Water plant	

Scientific Name	Common Name	Type	Purpose	Image
Juncus usitatus	Common Rush/Mat Rush	Rush	Water plant	
Gahnia sieberiania	Red-fruit Saw-sedge	Sedge	Water plant	
SHRUBS				
Bursaria spinosa	Native Blackthorn		Mid-story planting	
Jacksonia scoparia	Dogwood		Mid-story planting	

Scientific Name	Common Name	Type	Purpose	Image
Indigofera australis	Native Indigo		Mid-story planting and native butterfly habitat	
Acacia pubescens	Downy Wattle		Mid-story planting	
Polyscias sambuciflora	Elderberry Panax		Mid-story planting	
Olearia viscidula	Wallaby Bush		Mid-story planting and butterfly habitat	
Acacia falcata	Sickle Wattle		Mid-story planting	

Scientific Name	Common Name	Type	Purpose	Image
Eremophilia debilis	Winter Apple		Mid-story planting and butterfly habitat	
Pomaderris prunifolia	Plum-leaf Pomaderris		Mid-story planting	
Plectranthus parviflorus	Cockspur Flower		Mid-story and habitat	
Astroloma humifusum	Native Cranberry		Mid-story planting	
Cryptandra spinescens	Spiny Cryptandra		Mid-story planting and habitat	
Hibbertia diffusa	Spreading Guinea Flower		Ground to mid-story planting	

Scientific Name	Common Name	Type	Purpose	Image
Grevillea juniperina	Prickly-leaved Spider-flower		Mid-story planting and habitat	
Hakea sericea	Silky Hakea		Mid-story planting and habitat	
Daviesia ulicifolia	Spiky Daviesia		Mid-story planting and habitat	
Dodonaea viscosa	Wedge-leaf Hop Bush		Mid-story planting	
Lissanthe strigose	Peach Heart		Mid-story planting and habitat	
Melaleuca nodosa			Mid-story planting and habitat	

Scientific Name	Common Name	Type	Purpose	Image
Dillwynia tenuifolia		Small Shrub	Mid-story planting and habitat	
Chorizema parviflorum		Small Shrub	Mid-story planting and habitat	
Einadia nutans	Climbing Saltbush		Mid-story planting and habitat	
Hovea linearis	Narrow-leaved Hovea		Herbaceous	
Kunzea ambigua	Tick Bush		Small Shrub	

Scientific Name	Common Name	Type	Purpose	Image
Ozothamnus diosmifolius	White Dogwood		Weak Shrub	
Pimelea spicata	Spiked Rice-flower		Small Shrub	
Pultenea penduculata	Matted Pea-bush		Small Shrub	
Pultenea parviflora			Small Shrub	
GROUND COVER				
Microlaena stipoides	Weeping Grass	Grass	Ground Surfaces	

Scientific Name	Common Name	Type	Purpose	Image
Dichondra repens	Kidney Weed	Creeper	Ground Surfaces	
Dianella longifolia	Blue Flax-lily	Perennial Herb	Ground Surfaces	
Dianella revoluta	Blue Flax Lily	Perennial Herb	Ground Surfaces	
Entolasia marginata	Bordered Panic	Grass	Ground Surfaces	
Eragrostis brownii	Brown's Love-grass	Grass	Ground Surfaces	
Lomandra longifolia	Spiny Mat Rush	Grass	Ground Surfaces	

Scientific Name	Common Name	Type	Purpose	Image
Centella asiatica	Asiatic Pennywort	Creeper	Ground Surfaces	
Panicum effusum	Hairy Panic	Grass	Ground Surfaces	
Scleria mackaviensis		Perennial herb	Ground Surfaces	
Bulbine bulbosa	Native Leek	Perennial herb	Ground Surfaces	
Commelina cyanea	Trad	Ascending Herb	Ground Surfaces	

Scientific Name	Common Name	Type	Purpose	Image
Caesia parviflora	Pale Grass-lily	Perennial Herb	Ground Surfaces	
Wurmbea dioica	Early Nancy		Ground Surfaces	
Themeda triandra	Kangaroo Grass	Grass	Ground Surfaces	
Bossiaea prostrata			Ground Surfaces	
VINES and CLIMBERS				
Cayratia clematidea	Slender Grape	Climber	Retaining Wall	
Clematis glycinoides	Headache Vine/Old Man's Beard	Woody Climber	Retaining Wall	

Scientific Name	Common Name	Type	Purpose	Image
Convolvulus erubescens	Pink Bindweed	Twiner	Retaining Wall	
Cynanchum elegans	White-flowered Wax Plant	Woody Climber	Retaining Wall	
Glycine clandestina		Scrambler	Retaining Wall	
Glycine microphylla		Scrambler	Retaining Wall	
Glycine tabacina		Scrambler	Retaining Wall	
Hardenbergia violacea	False Sarsaparilla	Twiner	Retaining Wall	

Scientific Name	Common Name	Type	Purpose	Image
Kennedia rubicunda	Red Kennedy Pea	Twining Herb	Retaining Wall	
Marsdenia viridiflora	Native Pear	Woody Twining Shrub	Retaining Wall	
Pandorea pandorana	Wonga Wonga Vine	Woody Climber	Retaining Wall	
Parsonsia straminea	Common Silkpod	Woody Vine	Retaining Wall	
Rubus parvifolius	Native Raspberry	Scrambling Shrub	Retaining Wall	

Note: species in red are highly recommended. **Source of images: Wikipedia.**