



Appendix A

Plant list for the Faerie Glen Nature Reserve

- Trees

<i>Acaia caffra</i>	<i>Maytenus undata</i>
<i>Acacia karroo</i>	<i>Mimusops zeyheri</i>
<i>Acokanthera oppositifolia</i>	<i>Mundulea sericea</i>
<i>Aloe marlothii</i> subsp. <i>Marlothii</i>	<i>Nuxia congesta</i>
<i>Ancylobortys capensis</i>	<i>Ochna pulchra</i>
<i>Berchemia zeyheri</i>	<i>Ochna pretoriensis</i>
<i>Brachylaena rotundata</i>	<i>Osyris quadripartite</i> (<i>O. lanceolata</i>)
<i>Buddleja saligna</i>	<i>Pappea capensis</i>
<i>Buddleja salvifolia</i>	<i>Pavetta gardeniifolia</i>
<i>Burkea Africana</i>	<i>Pittosporum viridiflorum</i>
<i>Canthium gilfillanii</i>	<i>Psyrax livida</i>
<i>Canthium mundianum</i>	<i>Protea caffra</i> subsp. <i>caffra</i>
<i>Carissa bispinosa</i>	<i>Rhus leptodictya</i>
<i>Cassinopsis ilicifolia</i>	<i>Rhus pyroides</i>
<i>Cassine burkeana</i>	<i>Rhus zeyheri</i>
<i>Celtis africana</i>	<i>Rhamnus prinoides</i>
<i>Combretum erythrophyllum</i>	<i>Rhoicissus tridentate</i>
<i>Combretum molle</i>	<i>Rothmannia capensis</i>
<i>Cussonia paniculata</i>	<i>Salix mucronata</i>
<i>Diospyros lycioides</i>	<i>Strychnos pungens</i>
<i>Dyospyros whyteana</i>	<i>Tapophyllum parvifolium</i>
<i>Dodonea angustifolia</i>	<i>Vangueria infausta</i>
<i>Dombeya rotundifolia</i>	<i>Zantoxylum capense</i>
<i>Dovyalis zeyheri</i>	<i>Zimania caffra</i>
<i>Ehretia rigida</i>	<i>Ziziphus mucronata</i>
<i>Elephantorrhiza burkei</i>	
<i>Englerophytum magalismsontanum</i>	- Flowering plants and bulbs
<i>Euclea crispa</i>	<i>Acalypha angustata</i>
<i>Grewia occidentalis</i>	<i>Aloe greatheadii</i> var. <i>davyana</i>
<i>Gymnosporia heterophylla</i>	<i>Anacampseros subnuda</i>
<i>Gymnosporia polyancantha</i>	<i>Asparagus laricinus</i>
<i>Halleria lucida</i>	<i>Asparagus setaceus</i>
<i>Heteropomorpha trofoliata</i>	<i>Asparagus virgatus</i>
<i>Kiggelaria africana</i>	<i>Athrixia elata</i>
<i>Lannea discolour</i>	<i>Berkheya radula</i>
<i>Maerua cafra</i>	<i>Bonatea speciosa</i>
<i>Maytenus tenuispina</i>	



Boophane disticha
Chironia palustris
Convolvulus sagittatus
Crinum bulbispermum
Cryptolepis oblongifolia
Dichapetalum cymosum
Elephantorrhiza elephantine
Eucomis autumnalis
Eulophia welwitschii
Eulophia ovalis subsp. *Bainesii*
Gerbera ambigua
Gerbera pillesiloides
Gladiolus crassifolius
Gnidia capitata
Graderia subintegra
Helichrysum kraussii
Helichrysum nudifolium
Helichrysum coriaceum
Hermannia depressa
Hypoxis acuminata
Hypoxis rigidula
Indigofera hiliaris
Ipomoea bathycolpos
Landolphia capensis
Lippia javanica
Nolettia rarifolia
Perinaria capensis
Pearsonia sissilifolia
Pelargonium luridum
Pellaea calomelanos
Pentarrhinum insipidum
Pentanisia angustifolia
Plantago lanceolata
Polygala hottentotta
Ruellia cordata
Rhynchosia nitens
Scabiosa columbaria
Scadoxus puniceus
Senecio isatideus
Sphenochilus angustifolia
Stoebe vulgaris

Tephrosia enlongata
Tritonia nelsonii
Verbena bonariensis
Verbena tenuisecta
Vernonia galpinii
Vernonia natalensis
Vellozia retinervis
Ziziphus zeyheriana

- Grasses

Aristida congesta subsp. *barbicolis*
Aristida junciformis
Brachiaria serrata
Choris pycnotrix
Cymbopogon excavates
Cymbopogon plurinoides
Cynodon dactylon
Digitaria eriantha
Diheteropogon amplexens
Eloinurus muticus
Eragrostis biflora
Eragrostis chloromelas
Eragrostis curvula
Heteropogon contortus
Hyparrhenia hirta
Ishaemum fasciculatum
Loudelia simplex
Melinis nerviglumis
Melinis repens
Panicum maximum
Panicum natalensis
Setaria lindenberghiana
Setaria sphaelata
Sorgum bicolor
Themeda triandra
Tristachya leucothrix
Tristachya rehmannii

Appendix B



Stormwater and Irrigation Calculations Summary

Stormwater collected (m³)	
Parking and entrance plaza	5147.23
Pause junction, concert lawn and stage	1874.50
Restaurant area and concert lawn	1258.74
Total	8280.47

Irrigation requirement(m³)	
Parking and entrance plaza	1420.80
Pause junction, concert lawn and stage	4608.00
Restaurant area and concert lawn	2088.00
Total	8116.80



Parking and Entrance Plaza

Stormwater

	Ave. Rainfall (mm)	Ave. Rainfall (m)	Evap./ month (mm)	Evap./ month (m)
January	254.5	0.25	140.00	0.014
February	103.5	0.10	140.00	0.014
March	101.5	0.10	140.00	0.014
April	48.5	0.05	140.00	0.014
May	31.5	0.03	140.00	0.014
June	42	0.04	140.00	0.014
July	13	0.01	140.00	0.014
August	14.5	0.01	140.00	0.014
September	41.5	0.04	140.00	0.014
October	93.5	0.09	140.00	0.014
November	142	0.14	140.00	0.014
December	132.5	0.13	140.00	0.014

less: Runoff co-efficient

Irrigation requirement

	Irrigation/ month (m)	Area to be irrigated (m²)
Intensive landscaping	0.16	200
Extensive landscaping	0.06	1000
Lawned areas	0.088	300



Hard Area (m ²)	Runoff (m ³)	Soft Area (m ²)	Runoff (m ³)	Total catchable runoff (m ³)
5100	1226.55	6800	1635.4	
5100	456.45	6800	608.6	
5100	446.25	6800	595	
5100	175.95	6800	234.6	
5100	89.25	6800	119	
5100	142.8	6800	190.4	
5100	-5.1	6800	-6.8	
5100	2.55	6800	3.4	
5100	140.25	6800	187	
5100	405.45	6800	540.6	
5100	652.8	6800	870.4	
5100	604.35	6800	805.8	
	4337.55		5783.4	
0.08	347.00	0.8	4626.72	
	3990.55		1156.68	5147.23

Irrigation/ month (m ³)	Irrigation/ year (m ³)	Total irrigation Required (m ³)
32	384	
60	720	
26.4	316.8	
	1420.80	1420.80



Pause Junction, Concert Lawn and Stage

Stormwater				
	Ave. Rainfall (mm)	Ave. Rainfall (m)	Evap./ month (mm)	Evap/ month (m)
January	254.5	0.25	140.00	0.014
February	103.5	0.10	140.00	0.014
March	101.5	0.10	140.00	0.014
April	48.5	0.05	140.00	0.014
May	31.5	0.03	140.00	0.014
June	42	0.04	140.00	0.014
July	13	0.01	140.00	0.014
August	14.5	0.01	140.00	0.014
September	41.5	0.04	140.00	0.014
October	93.5	0.09	140.00	0.014
November	142	0.14	140.00	0.014
December	132.5	0.13	140.00	0.014
			less:	Runoff co-efficient

Irrigation requirement		
	Irrigation/ month (m)	Area to be irrigated (m²)
Intensive landscaping	0.16	100
Extensive landscaping	0.06	1000
Lawned areas	0.088	3500



Hard Area (m ²)	Runoff (m ³)	Soft Area (m ²)	Runoff (m ³)	Total catchable runoff (m ³)
1200	288.6	5500	1322.75	
1200	107.4	5500	492.25	
1200	105	5500	481.25	
1200	41.4	5500	189.75	
1200	21	5500	96.25	
1200	33.6	5500	154	
1200	-1.2	5500	-5.5	
1200	0.6	5500	2.75	
1200	33	5500	151.25	
1200	95.4	5500	437.25	
1200	153.6	5500	704	
1200	142.2	5500	651.75	
	1020.6		4677.75	
0.08	81.65	0.8	3742.2	
	938.95		935.55	1874.50

Irrigation/ month (m ³)	Irrigation/ year (m ³)	Total irrigation Required (m ³)
16	192	
60	720	
308	3696	
	4608.00	4608.00



Restaurant Area and Picnic Lawn

Stormwater				
	Ave. Rainfall (mm)	Ave. Rainfall (m)	Evap./ month (mm)	Evap/ month (m)
January	254.5	0.25	140.00	0.014
February	103.5	0.10	140.00	0.014
March	101.5	0.10	140.00	0.014
April	48.5	0.05	140.00	0.014
May	31.5	0.03	140.00	0.014
June	42	0.04	140.00	0.014
July	13	0.01	140.00	0.014
August	14.5	0.01	140.00	0.014
September	41.5	0.04	140.00	0.014
October	93.5	0.09	140.00	0.014
November	142	0.14	140.00	0.014
December	132.5	0.13	140.00	0.014
			less:	Runoff co-efficient

Irrigation requirement		
	Irrigation/ month (m)	Area to be irrigated (m²)
Intensive landscaping	0.16	200
Extensive landscaping	0.06	900
Lawned areas	0.088	1000



Hard Area (m ²)	Runoff (m ³)	Soft Area (m ²)	Runoff (m ³)	Total catchable runoff (m ³)
1000	240.5	2800	673.4	
1000	89.5	2800	250.6	
1000	87.5	2800	245	
1000	34.5	2800	96.6	
1000	17.5	2800	49	
1000	28	2800	78.4	
1000	-1	2800	-2.8	
1000	0.5	2800	1.4	
1000	27.5	2800	77	
1000	79.5	2800	222.6	
1000	128	2800	358.4	
1000	118.5	2800	331.8	
	850.5		2381.4	
0.08	68.04	0.8	1905.12	
	782.46		476.28	1258.74

Irrigation/ month (m ³)	Irrigation/ year (m ³)	Total irrigation Required (m ³)
32	384	
54	648	
88	1056	
	2088.00	2088.00