

PROJECT: SANBI
 CONTRACT: PNBG CHILDREN'S EDU-TAINMENT GARDEN
 DATE: 2023/05/31
 REVISION: 1

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LANDCAPE BILL OF QUANTITIES

PART.	DESCRIPTION.	ESTIMATED TOTAL						
PART A:	PNBG CHILDREN'S EDU-TAINMENT GARDEN (Hard and Soft Landscaping - Phase 1)							
	PART: 1.1 - PRELIMINARIES AND GENERAL	0	0	R	-	R	-	
	PART: 1.2 - Miscellaneous Items					R	5 000,00	
	PART: 2 - Earth Works & Soil Preparation					R	-	
	PART: 3 - Planting					R	-	
	PART: 4 - Hard Landscaping					R	375 000,00	
	PART: 5 - Irrigation					R	-	
	PART: 6 - Maintenance						R0,00	
Sub-Total				R				380 000,00
				Excluding VAT				
VAT @ 15%				R				57 000,00
Grand Total				R				437 000,00
				VAT Inclusive				

EXCLUSIONS

Professional fees
 Electrical reticulation, Water reticulation and storm water piping
 Bulk shaping

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PART: 1.1 - PRELIMINARIES AND GENERAL

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
1.1.1	Site establishment				
	An area will be allocated to the contractor to establish the site camp. Allow for the fencing of the site camp with 2,1 m high 50% plastic shade netting supported with standards and wires. Maintain the fence for the duration of the contract and demolish afterwards. Remove all remaining rubble and rehabilitate the site with appropriate grass seeding	item	1		
1.1.2	Construction site				
	Note that the PNBG site is currently used by visitors and their safety must at all times be considered. Fence off the construction area as indicated with 2.1m high 50% shade netting supported on standards and wires. Maintaint the fence for the duaration of the contract and demolish at the end thereof. Repair any damages caused to paving, services and lawn.	item	1		
1.1.3	Access to the site				
	An access route to the construction site will be indicated by the Employer. Use this route only. Speed limit for all construction vehicles is 15km/h. At all times consider visitors' safety at the PNBG	item	1		
1.1.4	Construction site ablutions and meeting place				
	Supply and maintain temporary ablution facilities for contractor's staff. At no stage may existing ablution facilities at the PNBG be used by contractor's staff. Supply and maintain a site office large enough with furniture to seat 10 people at a table.	item	1		
1.1.5	Damage to existing site facilities, services and vegetation				
	Any damages caused by the contractor to existing site facilities, services and vegetation mst be repaired to the satisfaction of the Principal Agent	item	1		
1.1.6	Form of Contract and contractual clauses				
	The JBCC Principal Building Ageement/Minor Works Agreement will used for this project. The following Contract Data will apply:				
1.1.6.1	Start date and competion dates: to be confirmed by the Client/ in the procurement document. All days referred to in the Contract will mean calendar day and include weekends, public holidays and builder's holidays	item	1		
1.1.6.2	Contractor's program: A Program that indicates work flow and critical milestones to be submitted for approval within 7 days of site handover and subsequently updated and reported on at progress meetings	item	1		
1.1.6.3	Construction guarantee required.	item	1		
1.1.6.4	Payment guarantee will not be applicable	item	1		
1.1.6.5	Penalties for late completion	item	1		
1.1.6.6	Public liability insurance required	item	1		

1.1.6.7	Provisional sum for play equipment: allowance has been indicated for a provisional sum amount in the contract for the delivered and installed children's play equipment. Contractor to add subcontract management and support if required.	item	sum		
1.1.6.8	Provisional sum for signage: allow for the sum of RXXXX as a provisional amount in the contract for the delivered and installed signage. Add subcontract management and support if required	item	sum		
1.1.6.9	Payment by the Employer: payment certificates will be paid by the Employer 30 days from the date of the certificates unless otherwise stated by the Client	item	1		
1.1.6.10	Maintenance during the 90-days defects liability period: The Contractor to allow for the horticultural maintenance of plant material during the 90-days defects liability period. Payment hereof will be certified at the end of the 90-days by the PA	item	1		
1.1.7	Contract management				
	The contract will be administered and the works inspected by the Principal Agent (PA) The PA will valuate progress and issue monthly payment certificates for payment by the Employer. Bi-weekly site inspections and progress meetings will be held on site. The contractor to attend the inspections and meetings an be represented by an authorised Site Manager who can receive instructions from PA.	item	1		
1.1.8	Existing potable and irrigation water				
	Available on site, Contractor to allow for connections into such water supplies. Connection positions are indicated on the drawings	item	1		
1.1.9	Existing electrical supply				
	Available on site, Contractor to allow for connections into such electrical supply. Connection positions are indicated on the drawings	item	1		
1.1.10	Samples and workmanship				
	Samples of materials and workmanship must be provided at no cost for approval by the PA where requested	item	1		
1.1.11	Plants supplied by employer				
	Note that some plants will be supplied by the Employer, allow for the receiving and storage on site The installation of such plants are covered under Part 3 of the BoQ	item	1		

TOTAL FOR PART1.1:

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	PART: 1.2 - Miscellaneous Items				
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	DESCRIPTION	UNIT	QTY.	RATE	TOTAL
1.2 Site Clearance					
a.	Provision to lift and cart off site existing paving/ rubble/ flower bed edging	m ²	200		-
b.	Provision for thinning out of existing vegetation and removal of unwanted vegetation in existing soft landscaped areas including planted zones to be rehabilitated	m ²	1365		-
c.	Removal of existing large trees that are old/unstable or within the construction footprint	no	10		-
d.	Re-positioning of existing benches and sculptures in site area				5 000,00

1.3 Boulders					
a.	Allowance to relocate small to medium size boulders from elsewhere on the property, to be placed by landscape architect on site	no	12		-
TOTAL FOR PART 1:					5 000

	Part 2: Earth works and Soil preparation				
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	DESCRIPTION	UNIT	QTY.	RATE	TOTAL
2.1 Provision for topsoil					
a	The contractor to provide all necessary equipment, labor and machinery for import and spread of topsoil.				
b	The topsoil to be free of any building rubble, rocks or plant materials.				
c	Inclusive of all handwork where required.				
d	Compact soils where required, and prevent erosion at all times.				
a	100 mm layer over existing planting areas to be rehabilitated	m ³	151		
b	200 mm layer over new planting areas	m ³	113		
c	100mm over new lawn areas	m ³	18		
d	0.45m³ per tree hole	m ³	10		
e	Total topsoil import and spread on site	m ³	291		-

2.2 Scarifying					
a	Supply all the necessary equipment, tools and labor for scarifying of all areas.				
b	Rip soil in all areas.				
c	Depth -- 250 mm.				
d	Rip in two directions.				
e	Use hand labour to scarify under trees to ensure that tree roots do not get damaged.				
f	Contractor to ensure that no services, existing paving or concrete haunching behind curbs, are damaged.				
g	Remove all unwanted debris and medium to large sized rocks from the scarified soils and use suitable materials for soil berm filling.				
h	All inclusive rate per square meter.				
i	Provision for scarifying of planting areas	m ²	2070		-

	DESCRIPTION	UNIT	QTY.	RATE	TOTAL
2.3 Fine grading					
a	Supply all necessary labor, machinery and equipment for the fine trimming of the planting soils of all areas.				
b	The contractor must ensure that all areas to be planted are compacted sufficiently to avoid any subsidence later on. Soil surface to be planted should not exceed a tolerance of 30mm in height when measured from the basic topographical line.				
c	Cultivate fertilizers and compost as supplied elsewhere.				
d	Provision must be made for proper and effective storm water drainage.				
e	Soil erosion should be avoided at all times.				
f	Stones larger than 40mm in diameter and all foreign material must be removed and used for fill.				
g	Final surface must be shaped to desired profiles as to flow into levels of roadways and structures.				
h	No irrigation or storm water should be allowed to puddle anywhere behind the retaining walls or in any of the allocated plant bed areas.				
i	Provision for planting areas	m²	565		-
2.4 Provision for Compost import and spreading in plant beds					
a	The contractor to provide all necessary equipment, labor and machinery for import and spread of compost.				
b	Sample of compost must comply with specification and be approved by the Landscape Architect prior to delivery on site.				
c	All compost shall consist of well-decomposed organic material, free of detrimental salts, glass, debris, weeds and other toxic impurities.				
d	The pH shall not exceed 7.0.				
e	Compost shall be protected against excessive rain, wind and dissipation.				
f	Payment after planting.				
g	Application rate				
a	30 mm deep over planting areas	m³	17		
b	0.35m³ per tree hole	m³	8		
c	Total compost import and spread	m³	25		-
2.5 Provision for Fertilizers					
2.5.1 Superphosphate over planting					
a	100 g/m ² in planting areas	kg	57		
b	375 g/per tree hole	kg	8		
c	Total Super phosphate	kg	65		-
2.5.2 Mixture 2:3:2 over planting					
a	50 g/m ² in planting areas	kg	28		
b	100 g/per tree hole	kg	2		
c	Total 3:2:3	kg	30		-
2.5.3 Planting tablets for trees					
a	Supply, deliver and apply as per supplier specification AGRIFORM PLANTING TABLETS (or similar product)				
b	21gm: 2 year release				
c	Application rate:				
d	8 tablets per tree out of 100liter container or larger	tablets	176		-
2.6	Provision for Mulching for planted areas (30mm good quality bark chip mulch layer to be approved by Landscape Architect)	m³	62		R -
TOTAL FOR PART 2:					-

PART: 3 - Planting

	PLANTING (supply, deliver, plant, stake)
a	Plants
	Purchase plants at registered nurseries, transport to the site and hold in site nursery until instructed to plant by the Landscape Architect:
i	The contractor must provide for sourcing of plant species countrywide to locally planting requirements. Plants should preferably be sourced
ii	The landscape architect retains the right to effect any adjustments of specific species if plants are not available or are in the opinion of the landscape architect of poor quality;
iii	The contractor must before tendering ascertain that plant species are available as specified per the programme and submit proof to this effect;
iv	All plants must be transported to the site in trucks with closed canopies. Plants in transit may not be exposed to wind or any other harmful elements.
v	All plants are to be viewed and approved by the Landscape Architect before planting.
vi	The contractors attention is drawn to the special condition relating to plant procurement and plant inspection as set out under General Conditions of this document. Please read the abovementioned Items carefully prior to pricing of this section of the bill of quantities;
	Payment after planting.
vii	Plant species are to be as specified below:
b	Planting:
i	Refer to planting plan.
ii	Supply all equipment and labour for planting of trees, shrubs and groundcovers and seeding.
iii	Backfill with soil, compost and fertilizer to specification and tramp down firmly.
iv	Remove all surplus soil.
v	Provide all necessary stakes for trees and secure each tree firmly. Use 2 tree stakes placed opposite sides of the trees and attach to tree with approved tree tie. Tree stakes to be a minimum of 50mm dia. 500 mm into solid / firm soil.
vi	Form pond around trees and shrubs and water well after planting.
vii	Keep all plants moist.
viii	Plant sizes and plant densities will be strictly enforced.
	Specimen Trees out of 400L, 200L, 100L & 50L containers.
a	Trees: 2500-2800mm stem height and 1600mm wide crown after planting with stem diameter of 50-60mm measured 300mm above soil level.
b	Contractor to meet the landscape architect to select trees to be used. Colour photo's of the proposed trees must also be supplied to the landscape architect.
c	Contractor to provide three stakes, anchor wires, and ties per tree.
d	Contractor to guarantee each tree for a 12 month period.
e	Supply, plant and maintain.

	DESCRIPTION	UNIT	QTY.	RATE	TOTAL
3.1	Provision for New Large Shrubs				
	Plumbago auriculata (20L)	no	28		
	Freylinia tropica (10L)	no	26		
	Buddleja salviifolia (10L)	no	7		
	Provision for New Trees				
	Albizia adianthifolia (200L)	no	3		
	Ekerbergia capensis (100L)	no	5		
	Heteropyxis natalensis (50L)	no	11		
	Rothmannia globosa (100L)	no	3		

3.2	Provision for New Planting	UNIT	QTY.	RATE	TOTAL
	Shrubs and groundcovers				
a	Plants from 10 ltr containers should be minimum 400 mm high and be well established and full within the containers.				
b	Plants from 4 ltr containers should be minimum 250 mm high and be well established and full within the containers.				
c	Plants from 2 ltr containers should be minimum 150 mm high and be well established and full within the containers.				
d	Supply, plant and maintain.				
e	NOTE: THAT NO PLANT SIZE SUBSTITUTIONS ARE ALLOWED				
f	Contractor to guarantee planting for a 3 month period.				
g	Supply, plant and maintain.				

- * **Note: Sizes of plants to be given by Pretoria National Botanical Gardens based on availability (to be confirmed)**
- * **Note: Prices for planting to be INSTALL ONLY. PNBG to provide all planting unless otherwise stated.**

3.2.1	REHABILITATED FOREST GARDEN PLANTING:				
a.	Large shrubs to be thinned out.				
b.	Shrubs and trees to be trimmed to achieve a clearance of 2m from floor height.				
c.	Dead or dying existing plant material to be removed.				
d.	Existing groundcovers and shrubs in a healthy condition to be retained. New plants to be planted between the existing.				
e.	The following species to be added to area evenly (confirmed placement of plants with landscape architect on site):				
3.2.1.1	REHABILITATED FOREST ZONE 1 (730m²):				
	Dracaena aletriformis	no	50		
	Eucomis autumnalis	no	50		
	Asparagus densiflorus meyersii	no	50		
	Scadoxus paniculatus	no	50		
	Crinum moorei	no	50		
	Agapanthus inapertus	no	100		
	Scabiosa africana	no	50		
	Chlorophytum bowkeri	no	50		

	DESCRIPTION	UNIT	QTY.	RATE	TOTAL
3.2.1.2	REHABILITATED FOREST ZONE 2 (500m²):				
	Bareleria obtusa	no	50		
	Plectranthus ecklonii	no	10		
	Ocimum labiatum	no	50		
	Crocosmia aurea	no	100		
	Aristea ecklonii	no	100		
	Asystasia gangetica	no	50		
3.2.1.2	REHABILITATED FOREST ZONE 3 (275m²):				
	Eucomis autumnalis	no	50		
	Asparagus densiflorus meyersii	no	50		
	Crinum moorei	no	50		
	Agapanthus inapertus	no	50		
	Scabiosa africana	no	50		
	Chlorophytum bowkeri	no	50		
	Aristea ecklonii	no	50		
	Setaria megaphylla	no	50		
3.2.2	PLAY AREAS PLANTING:				
3.2.2.1	PLANT MIX 1 (92m²):				
	Portulacaria afra prostrata	no	92		
	Felicia amelloides	no	184		
	Pelargonium acetosum	no	184		
3.2.2.2	PLANT MIX 2 (186m²):				
	Juncus krausii	no	93		
	Dietes bicolor	no	186		
	Agapanthus nana blue	no	372		
	Crocosmia aurea	no	372		
	Bulbine frutescens	no	372		
3.2.2.3	PLANT MIX 3 (285m²):				
	Setaria megaphylla	no	142		
	Aloe ecklonis	no	570		
	Agapanthus nana white	no	570		
	Plectranthus ecklonii	no	20		
	Asparagus densiflorus Myersii	no	570		
3.2.3	NEW LAWN AREAS				
	Supply and install new <i>Kikuyu</i> lawn as indicated on landscape plan	m ²	180		

TOTAL FOR PART 3:

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	DESCRIPTION	UNIT	QTY.	RATE	TOTAL
PART: 4 - Hard Landscaping					
4.1 PAVING					
PAVING & HARD SURFACES					
a	The contractor to provide all necessary machinery, labour, transport and materials for the supply and installation of paving.				
b	Test sample edge: The contractor needs to install 2Lm on a concrete footing for approval. All aspects as specified need to be included into the test panel sample.				
c	Setting out of pavers:				
-	All areas to be enclosed with the hard edge should be shaped to the desired slope and final soil levels for approval by the Landscape Architect, prior to the setting out of the edges for approval.				
-	All edges to be set out by the contractor for approval by the Landscape Architect prior to the soil preparations for the footings.				
-	Landscape architect to indicate all desired final levels, prior to installation.				
d	Soil preparation:				
-	Excavate to allow for a 220mm wide (with 220 x 108,5 x 50mm concrete edge units) excavation to install the walkway dges. Structural engineer to confirm.				
-	Base of the excavation should be compacted to 95% MOD AASHTO.				
-	Where the surrounding area (enclosed area) sub-base needs to be compacted the excavation for the footing should only commence on completion of the compaction of the larger area.				
-	No cracked, chipped, pavers with unwanted markings will be accepted.				
-	All areas showing subsidence on the final product will mean that the larger area will be redone, re-compacted and repaired to meet the specifications.				
-	All levels need to accommodate a minimum fall to allow for sufficient water run off				
-	Install all the pavers top finishing levels 35 mm above the surrounding planting soil levels but level connecting to pathway heights or pathway kerbing.				
-	Install whole pavers on all ends				
-	Install 10mm recessed, smooth mortar joints.				
-	Rate to include all mechanical cutting of paver units.				
-	Concrete to allow for breakage				
4.1.1	NEW PAVING				
	Supply, deliver & install (200 x 100 x 50mm) Corobrik De Hoop Multiblend Modular 50mm thick Paver, herringbone. Allow for compaction, 25mm compacted sand and agreed final levels.	m ²	576		0,00
4.1.2	GRAVEL				
a	Supply, deliver & install 60mm thick gravel layer on bidum geotextile and gravel fix (to later detail) Bidum to be included in price	m ³	10		0,00
b	Supply, deliver & install Bera Gravel fix for gravel areas as per supplier's instruction	m ²	10		0,00
4.1.3	HARD BARK CHIP MULCH:				
	60mm thick hard bark chip mulch layer on bidum geotextile (to later detail) Bidum to be included in price.	m ³	0		0,00
4.1.4	RUBBERISED SURFACES FOR PLAY AREAS:				
	Supply, deliver and install 50mm thick EPDM rubber surface in various colours:				
a.	Colour: light blue 50mm thickness	m ²	113		
b.	Colour: Light brown 50mm thickness	m ²	225		
c.	Colour: Mustard yellow 50mm thickness	m ²	220		
4.1.5	PERMA-EDGE				
	Provision to deliver, supply and install 1000 x 125 x 1.6mm Perma-edge galvanized steel edging, dark brown, or similar approved, between planted areas and gravel areas as indicated on plan	Lm	648		0,00
4.1.6	COMPOSITE DECKING				
	Provision to deliver, supply and install Composite decking for boardwalk and wetland deck, to later specification	m ²	76		0,00
4.1.7.	SANDPIT				
	Provision to deliver, supply and install 400mm average depth of sand for sandpit, including concrete base and structure to engineer's later specification.	m ³	15		0,00
4.1.8.	STEEL EDGE FOR RUBBER SURFACES				
	Provision to deliver, supply and install 50mm x 50mm x 4mm mild steel edge bolted into concrete base, with 2 x coats of black etch primer	Lm	220		0,00

	DESCRIPTION	UNIT	QTY.	RATE	TOTAL
4.2	BRICK SEATING & RETAINING WALL				
	Provision for 405mm, high, 455mm wide, seating walls with facebrick finish. Corobrik Tambotie facebrick finish. Stack bond. Foundations and compacted soil layers to engineer's detail with brick on edge coping.	Lm	75		0,00
4.3	EXTERNAL LIGHTING:				
	AS PER ELECTRICAL ENGINEER'S LATER SPECIFICATION AND BOQ				
	Sum allowance for external lighting (Post-top lights to later specification)	no	10		0,00
4.4	STREET FURNITURE AND PLAY EQUIPMENT:				
4.4.1	PRE-CAST CONCRETE BENCH				
	2000 x 900 x 450mm Pre-cast concrete Wilson Stone Turin Quartz bench, Colour Grey or similar approved (with indigenous games detail)	no	5		0,00
4.4.2	PRE-CAST CONCRETE LITTER BINS				
	600mm x 600mm pre-cast concrete litter bin to later specification	no	7		0,00
4.4.3	PRE-CAST CONCRETE DRINKING FOUNTAIN				
	Pre-cast concrete drinking fountain to later specification, including installation and all fixing and foundation work.	no	2		0,00
4.4.4	PRE-CAST CONCRETE CULVERTS				
	Pre-cast concrete culvert to later specification, including installation and all fixing and foundation work.	no	6		0,00
4.5	PLAY EQUIPMENT				
	The rate for gym and play equipment must allow for the purchase, transport, off loading, storage on site and installation. All equipment is to be of an Architectural standard and will be subject to the closet scrutiny for blemishes and imperfections. Installation must strictly be according to manufactures specifications. The contractor will be hereby deemed to have taken this into account in his prices.				
4.5.1	Supply, deliver and install Calisthenics equipment TXJ JM 02 by <i>Green outdoor gyms</i> or similar approved	No	2		-
4.5.2	Supply, deliver and install Calisthenics equipment TXJ JM 05 by <i>Green outdoor gyms</i>	No	1		-
4.5.3	Supply, deliver and install custom older children play structure (composite timber decking and steel components)	provisional sum			150 000,00
4.5.4	Supply, deliver and install custom toddler play structure (composite timber decking and steel components)	provisional sum			110 000,00
4.5.5	Supply, deliver and install slides for lawn mounds	provisional sum			15 000,00
4.6	SIGNAGE				
	Sum allowance for signage (to later specification)	provisional sum			40 000,00
4.7	CONCRETE ELEMENTS				
4.7.1	Sum allowance for concrete sports and games tables (to later specification)	provisional sum			60 000,00
4.7.3	Allowance for supply and install Vanstone pre-cast concrete circular tree ring (minimum 1200mm dia.) (to be filled with gravel and Bidum geotextile)	No	3		-
TOTAL FOR PART 4:					375 000,00

PART: 5 - Irrigation					
ITEM CODE	ITEM DESCRIPTION		QUANTITY	RATE	TOTAL
SITEES	SITE ESTABLISHMENT		1,00		R -
	Water Connection Point				
GN32	NIPPLE BARREL GALV 32MM		2,00		R -
H-GV32	BRASS GATE VALVE 1.1/4"		1,00		R -
CPRV-11/4	32MM BSP P.R.VALVE		1,00		R -
RBVB430	RAINBIRD 430MM RECTANGULAR VALVEBOX WITH LID		1,00		R -
Mainline Materials					
CMA32X11/4	SAB MALE ADAPTER 32MM x 1.1/4"		1,00		R -
CT50	SAB 50MM COMPRESSION TEE		1,00		R -
HD050PN08	50MM PN06 X P/M HDPE PIPE SANS PE100		400,00		R -
CE50	SAB ELBOW 50MM		12,00		R -
CC50	SAB COUPLING 50MM		4,00		R -
CT50	SAB 50MM COMPRESSION TEE		7,00		R -
Sprayline Materials					
HPS50X1	SAB 50MM X 1" HP SADDLE PN16		9,00		R -
CFE50X11/2	SAB FEMALE ELBOW 50MM x 1.1/2"		3,00		R -
CMA32X11/2	SAB MALE ADAPTER 32MM x 1.1/2"		3,00		R -
CMA32X1	SAB MALE ADAPTER 32MM x 1"		9,00		R -
HD032PN10	32MM PN10 X P/M HDPE PIPE SANS PE100		12,00		R -
CME32X1	SAB MALE ELBOW 32MM x 1"		12,00		R -
H-V202100	COMPACT BALL VALVE FEM/THR 1"		12,00		R -
RBVB250	RAINBIRD 250MM ROUND VALVEBOX WITH LID		12,00		R -
LD25C3	25 CLASS 3 LDPE PIPE		700,00		R -
LD20C3	20 CLASS 3 LDPE PIPE		12,00		R -
LD15C3	15 CLASS 3 LDPE		140,00		R -
RB1804	1804 R/BIRD POP-UP 100mm		116,00		R -
RB3504	RAINBIRD GEAR DRIVE POP UP FR/PC		22,00		R -
MBP651	EMJAY PP SOCKET 1/2" (15MM) BSP		22,00		R -
PR15X0.75	15MM X 0.75M GREEN PVC RISER		22,00		R -
RB5004PC	RAINBIRD GEAR DRIVE POP-UP P/C		9,00		R -
RB5000SPC	RAINBIRD PC SHRUB ROTOR - SAM		3,00		R -
MBP652	EMJAY PP SOCKET 3/4" (20MM) BSP		3,00		R -
PR20X0.75	20MM X 0.75M GREEN PVC RISER		3,00		R -
RB1401	RAINBIRD PREE.COMP BUBBLER0.25GPM		6,00		R -
MBP651	EMJAY PP SOCKET 1/2" (15MM) BSP		6,00		R -
PR15X0.40	15MM X 0.40M GREEN PVC RISER		6,00		R -
RB15H	R-BIRD 15' H-CIRCLE NOZZLE 180° (3.4 - 4.6M)		87,00		R -
RB15VAN	R-BIRD 15' VAN NOZZLE ADJ ARC 0° - 360°		30,00		R -
FF1350	FULL FLOW MALE ELBOW 25MM X 1"		11,00		R -
FF1050	FULL FLOW TEE 25MM		11,00		R -
FFF	FULL FLOW FITTINGS		88,00		R -
FF1050	FULL FLOW TEE 25MM		44,00		R -
FF1060	FULL FLOW ELBOW 25MM		37,00		R -
FF1040	FULL FLOW CONNECTOR 25MM		10,00		R -
FF1070	FULL FLOW REDUCING TEE 25MM X 15MM		105,00		R -
FF1110	FULL FLOW REDUCER 25MM X 15MM		36,00		R -
FF1013	FULL FLOW ELBOW 15MM		116,00		R -
FF1021	FULL FLOW MALE ADAPTOR 15MM X 1/2"		116,00		R -
FF1015	FULL FLOW MALE ELBOW 15MM X 1/2"		28,00		R -
FF1105	FULL FLOW REDUCING TEE 25MM X 20MM		9,00		R -
FF1045	FULL FLOW REDUCER 25MM X 20MM		3,00		R -
FF1014	FULL FLOW ELBOW 20MM		9,00		R -
FF1022	FULL FLOW MALE ADAPTER 20MM X 3/4"		9,00		R -
FF1016	FULL FLOW MALE ELBOW 20MM X 3/4"		3,00		R -

ITEM CODE	ITEM DESCRIPTION		QUANTITY	RATE	TOTAL
Turf Valve Materials					
CMA50X1	SAB MALE ADAPTER 50MM x 1"		4,00	R	-
MBP813	EMJAY PP FEMALE ELBOW 1" (25MM) BSP		4,00	R	-
MBP756	EMJAY PP MALE/FEMALE ELBOW 1" (25MM) BSP		12,00	R	-
PR25X0.30	25MM X 0.30M GREEN PVC RISER		4,00	R	-
H-V202100	COMPACT BALL VALVE FEM/THR 1"		4,00	R	-
RBVB250	RAINBIRD 250MM ROUND VALVEBOX WITH LID		4,00	R	-
AQ71PM	AQUA 25 PLASTIC TURF VALVE		4,00	R	-
AQ70PMK	AQUA PLASTIC TURF VALVE KEY		3,00	R	-
MB734	EMJAY COMB. FEMALE ELBOW 20MM X 3/4"		3,00	R	-
THC8	TORK 19-26MM HOSE CLAMP PERFORATED (20MM PIPE)		6,00	R	-
DL20X30	20MM X 30M DRAGLINE M-DUTY BLACK		3,00	R	-
SB225	3/4in SNAP ON HOSE CONNECTOR		1,00	R	-
SB500	SNAP ON SPRAY NOZZLE		1,00	R	-
DS20X.6	20MM X .6M DRAGLINE STAND		3,00	R	-
AQ20PC-4.36X2.38	AQUA BRASS SPRINKLER P/C 3/4" - 4.36MM X 2.38MM		3,00	R	-
Labour					
LABMAINSTD	M-LINE LAB,TRENCH, INST.&BACKFILL UP TO 500MM DEEP		400,00	R	-
LABSPRAY	SPRAYLINE LABOUR TRENCH & BACKFILL UP TO 450MM		400,00	R	-
Contingencies					
MISC WCP FITT	CONN. TO EXIST. MAINS,PTFE,HEMP,ADD. FITTINGS ETC.		1,00	R	-
MISC PIPE FITT	DANGERTAPE,IT,ADD PIPE FITTING-COUPILING,ELBOWS ETC		1,00	R	-
MISC SPRAY FIT	FLAGS,PTFE,INS TAPE,REP COUPLING,ADD FF FITTINGS		1,00	R	-
MISC AUTO FITT	CONDUIT,FASTENERS,GLANDS, INS. TAPE, JUNCTION BOX		1,00	R	-
MISC TV FITT	PTFE, STABALISING RODS, HOSE REP COUPLINGS ETC		1,00	R	-

TOTAL FOR PART 5:

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PART: 6 - Maintenance					
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	DESCRIPTION	UNIT	QTY.	RATE	TOTAL
6.1	AFTER COMPLETION MAINTENANCE FOR 3 MONTHS				
a	Allow for the complete maintenance and establishment of all planted areas, inclusive of:				
b	Application of fertilizers, etc. upon instruction, replacement of plants, all according to the specifications and as may be instructed by the Landscape Architect.				
c	Provision of water car for watering of trees, planting and lawn if needed.				
d	The maintenance period will commence upon issue of the Certificate of Practical Completion				
e	Rate to be all inclusive				
f	Provision for 3 month landscape maintenance on trees and planting	Months	3		0,00

TOTAL FOR PART 6: -