Proposed New 4 Classrooms at Lesedi Secondary School, Donkerhoek, Tshwane
Bill of Quantities
Description: Complete Construction of New 4 Classrooms

			BILL OF QUANTITIES		
	DESCRIPTION	**UNIT**	**QUANTITY**	**RATE**	**AMOUNT**
	BILL NO 1				
	EARTHWORKS				
	Excavation in earth not exceeding 2m deep				
1	Trenches	m³	82		
	Extra over trench and hole excavations in earth for excavation in				
2	Soft rock	m³	3		
3	Hard rock	m³	1		
	Extra over all excavations for carting away				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m³	25		
	Risk of collapse of excavations				
5	Sides of trench and hole excavations not exceeding 1,5m deep	m²	180		
	Keeping excavations free of water				
6	Keeping excavations free of all water other than subterranean water	Item	1		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density in 150mm thick layers				
7	Backfilling to trenches, holes, etc	m³	28		
	Earth filling of G5 material supplied by the contractor and compacted in 150mm thick layers				
8	Under floors etc	m³	196		
9	Under ramps	m³	35		
	Coarse river sand filling supplied by the contractor				
10	Under floors.	m³	21		
	Compaction of surfaces				
11	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m²	420		
	SOIL POISONING				
	Soil insecticide				
12	Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m²	420		
13	To bottoms and sides of trenches etc.	m²	115		
	TOTAL CARRIED FORWARD				

	BILL NO 2 **CONCRETE, FORMWORK AND REINFORCEMENT**				
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
1	Strip footings	m^3	21		
2	Bases	m^3	3		
	REINFORCED CONCRETE				
	30MPa/19mm concrete				
3	Surface beds on waterproofing	m^3	59		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a power float				
4	Surface beds, slabs, etc	m^2	420		
	MOVEMENT JOINTS ETC				
	Saw-cut joints				
5	35 x 3mm Saw cut joints on top of concrete	m	84		
	REINFORCEMENT				
	Fabric reinforcement				
6	Type R93 fabric reinforcement in concrete surface beds, slabs, etc	m^2	392		
	TOTAL CARRIED FORWARD				

	BILL NO 3 **MASONRY**				
	FOUNDATIONS				
	Brickwork of NFX Bricks in class II mortar				
1	220mmm wall in foundations	m²	59		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement in foundations				
2	150mm Wide reinforcement built in horizontally	m	805		
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
3	220mm Thick brick walls	m²	490		
4	Ditto to Gable ends	m²	42		
	BRICKWORK SUNDRIES				
	Joint forming material in movement joints				
5	10mm Flexcell softboard built in vertically between concrete and brick surfaces	m²	175		
	Brickwork reinforcement				
6	150mm Wide reinforcement built in horizontally	m	1050		
	Concrete prestressed fabricated lintels				
7	110 x 75mm Lintels in lengths not exceeding 3m	m	98		
	TOTAL CARRIED FORWARD				

	BILL NO 4 **WATERPROOFING**				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course				
1	Under surface beds	m²	275		
	One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
2	Under surface beds	m²	420		
	TOTAL CARRIED FORWARD				

	BILL NO 5 **ROOF COVERINGS**				
	Factory color coated. IBR roofsheeting on 50x50 c-channel purlin at 600 centres on sasilation on 75 x 152mm c-channel,sitting on 900 centres rafters. As per engineer specification				
1	Roof covering with 30 degrees pitch	m^2	512		
	TOTAL CARRIED FORWARD				

	BILL NO 6 **CARPENTRY AND JOINERY**				
	DOORS, ETC				
	Semi-Soild core masonite door				
1	Semi solid door 900 x 2100mm high	No	4		
	FRAMED FRAMES, ETC				
	Wrought meranti				
2	Heavy solid. 44 x 100mm Rebated timber frames to single door size 900 x 2100mm	No	4		
3	100mm High tile skirting including cutting tile	m	152		
	Plate nailed timber roof truss construction				
4	Roof construction pitched one block classroom size 33.720 x 10.150mm and 25.290 x 10.150 average on plan and 3.255mm high overall including roof ventilators, wall plates, trusses, permanent bracing, purlins, tilting purlin at eaves with all purlins fixed to rafters with approved hurricane clips and trusses fixed to wall plates with approved roof ties. Rafter end overhang is 1200mm and all exposed timbers at eaves are to be wrot, all as indicated on Architect's drawing.	m^2	512		
	TOTAL CARRIED FORWARD				

	BILL NO 7 **CEILINGS PARTITIONS AND ACCESS FLOORING**				
	NAILED UP CEILINGS				
	9,5mm "Rhino" gypsum plasterboard with taped and skimmed joints				
1	Ceilings including 38 x 38mm sawn softwood brandering at 450mm centres or Similar approved	m²	294		
	Everite gypsum plasterboard cornices				
2	75mm Coved nu-cornices	m	152		
3	Extra over ceiling for 400 x 400mm trap door of wrought softwood rebated framing with sawn softwood cross brander covered with ceiling board and fitted flush in opening.	No	4		
	Cement board finish, etc.				
4	12mm thick nutec fascia board	m	84		
5	12mm thick nutec barge board	m	35		
	TOTAL CARRIED FORWARD				

	BILL NO 8 **METALWORK**				
	STAINLESS STEEL WINDOWS, SHOP FRONTS, DOORS, ETC				
	Stainless steel windows approved Client or architect frame sections, including all necessary fittings, ironmongery, etc and plugged to brickwork or concrete and sealing all round with approved silicone sealant (elsewhere),must include required glazing.				
1	1143 x 2100mm window(W1)	No	45		
	Sundries,etc				
2	2500 x 1200mm chalkboard	No	4		
3	1200 x 900mm Pinboard	No	4		
	TOTAL CARRIED FORWARD				

	BILL NO 9 **PLASTERING**				
	SCREEDS				
	Screeds on concrete				
1	25mm Thick on floors and landings	m²	379		
	INTERNAL PLASTER				
	Cement plaster on brickwork or concrete				
2	On walls	m²	393		
3	On narrow widths	m²	72		
	TOTAL CARRIED FORWARD				

	BILL NO 10 **TILING**				
	FLOOR TILING				
	300X300X10mm 'vinly' tiles with adhesive to sreed. Or similar approved(elsewhere measured)				
1	On floors and landings	m²	294		
2	On narrow widths	m²	30		
	TOTAL CARRIED FORWARD				

	BILL NO 11 **PAINTWORK**				
	PAINTWORK, ETC TO NEW WORK ON				
	FLOATED PLASTER SURFACES WITH				
	Prepare and apply one alkali resistant primer to SABS 1414 and three finishing coats 'Plascon Double Velvet' acrylic emulsion paint to SABS 1586 Grade 1 or similarly or equally approved by Architect's or Client's specifications				
1	On internal walls	m²	393		
2	On ceilings and beams internally	m²	294		
	Prepare and apply one coat masonary primer to SABS 1414 and three finishing coats 'Plascon Double Velvet' acrylic emulsion paint to SABS 1586 Grade 1 or similarly or equally approved by Architects or Client specifications				
3	On external walls	m²	110		
	WOOD SURFACES WITH				
	One coat oil wood primer, one coat universal undercoat and three coats super universal enamel paint on				
4	Doors	m²	18		
5	On door frames	m²	11		
	TOTAL CARRIED FORWARD				

	BILL NO 12 **PLUMBING AND DRAINAGE**				
	Rain Water Goods,etc				
1	150 x 250mm rainwater eaves gutter fixed to steel or timber trusses	m	86		
2	Extra over 150 x 250mm eaves gutter for stopped ends	No	8		
3	Extra over 150 x 250mm eaves gutter for out lets	No	8		
4	110mm diameter rainwater downpipes fixed to brickwall	m	35		
5	Extra over 150 x 250mm eaves gutter for bend	No	9		
6	Extra over 150 x 250mm eaves gutter for shoe	No	3		
	TOTAL CARRIED FORWARD				

BILL NO 13 **PROVISIONAL SUMS ETC**				
STEEL REINFORCEMENT				
Provide the sum of R250,000 (Two Hundred And Fifty Thousand Rand Only) for Installation Steel reinforcement as per appointed Structural Enginner.	Item	1		
EXTERNAL WORKS				
Provide the sum of R150,000 (One Hundred And Fifty Thousand Rand Only) for External works	Item	1		
ELECTRICAL INSTALLATION				
Provide the sum of R300,000 (Three Hundred Thousand Rand Only) for Electrical Installation	Item	1		
IRONMONGERY				
Provide the sum of R10 000.00(Fifty Thousand Rand Only) for Installation of Ironmongery	Item	1		
JOJO TANKS				
Provide the sum of R30 000.00(Thirty Thousand Rand Only) for Installation of Two 5000L JOJO Tanks.	Item	1		

	FINAL SUMMARY				
1	EARTHWORKS	PG1			
2	CONCRETE, FORMWORK AND REINFORCEMENT	PG2			
3	MASONRY	PG3			
4	WATERPROOFING	PG4			
5	ROOF COVERINGS	PG5			
6	CARPENTRY AND JOINERY	PG6			
7	CEILINGS, PARTITIONS AND ACCESS FLOORING	PG7			
8	METALWORK	PG8			
9	PLASTERING	PG9			
10	TILING	PG10			
11	PAINTWORK	PG11			
12	PLUMBING AND DRAINAGE	PG12			
13	PROVISIONAL SUMS	PG13			
14	PRELIMINARIES				
15	CONTINGENCIES				
	Sub Total				
	Sub Total excluding VAT				
	VAT (15%)				
	Total including VAT				