

SUMMARY OF SECTIONS

Bill No.	Description	Amount
1	PRELIMINARY & GENERAL	
2	CONSTRUCTION OF BLOCK G TYPE 2 CRU UNITS (72 UNITS)	
3	EXTERNAL WORKS	
7	TOTAL CARRIED FORWARD TO COMPOSITE SUMMARY	

BILL	PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1	1		BILL NO. 1				
1	1		PRELIMINARIES				
			BUILDING AGREEMENT AND PRELIMINARIES				
1	1		The JBCC Series 2000 Principal Building Agreement (March 2014 edition) prepared by the Joint Building Contract Committee shall be the applicable building agreement, ammended as hereinafter described.				
			The ASAQS Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities.				
			Contractors are referred to the abovementioned documents for the full intent and meaning of each clause thereof.				
			These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the abovementioned documents.				
			Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"				
1	1		PREAMBLES FOR TRADES				
1	1		The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained				
			Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles.				
			The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles				
1	1		PRICING OF PRELIMINARIES				
1	1		Should the contractor select Option A in terms of subclause 3.2.1 in the Contract Data - Contractor to Employer (CE) for the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed(F), Value Related(V) and Time Related(T).				
1	1		SECTION A - PRINCIPAL BUILDING AGREEMENT				
1	1		Definitions				
1	1	1	Clause 1.0 Definitions and interpretation F:..... V:..... T:.....	Item	1		
1	1	2	Clause 2.0 - Compliance with laws and regulations F:.....V.....T.....	Item	1		
1	1		Objective and Preparation				
1	1	3	Clause 3.0 - Offer acceptance and performance F:..... V:..... T:.....	Item	1		
			Total Carried Forward				

BILL	PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
			Brought Forward				
1	1	4	Clause 5.0- Documents F:..... V:..... T:.....	Item	1		
1	1	5	Clause 6.0- Employer's Agent F:..... V:..... T:.....	Item	1		
1	1	6	Clause 7.0 - Design responsibility F:..... V:..... T:.....	Item	1		
1	2		Without limiting the generality of the provisions of Clause 7.0, the contractor's attention is drawn to the provisions of the Construction Regulations, 2003 issued in terms of the Occupational Health and Safety Act, 1993. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specifications.				
1	2	7	Clause 8.0 Works Risks F:..... V:..... T:.....	Item	1		
1	2	8	Clause 9.0 - Indemnities F:..... V:..... T:.....	Item	1		
1	2	9	Clause 10.0 - Insurances F:..... V:..... T:.....	Item	1		
1	2	10	Clause 11.0 - Security F:..... V:..... T:.....	Item	1		
1	2		Execution				
1	2	11	Clause 12.0 - Preparation for and execution of the works F:..... V:..... T:.....	Item	1		
1	2	12	Clause 13.0 Setting out of the works The contractor shall notify the Principal Agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments. F:..... V:..... T:.....	Item	1		
1	2	13	Clause 14.0 - Nominated subcontractors F:..... V:..... T:.....	Item	1		
1	3	14	Clause 15.0 - Selected contractors F:..... V:..... T:.....	Item	1		
1	2	15	Clause 16.0 - Direct contractors F:..... V:..... T:.....	Item	1		
1	2	16	Clause 17.0 - Contract instructions F:..... V:..... T:.....	Item	1		
1	2	17	(S1) - Management of the works	Months	36		
1	2	18	(S2)- Site security	Months	36		
			(2) Contractor's Handling cost and profit on (S2) F:..... V:..... T:.....	%			
			Total Carried Forward				

BILL	PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
			Brought Forward				
1	2	19	(S3) - Plant,equipment,sheds and offices	Item	1		
1	2	20	(S4) - Notice boards F;.....V;.....T;.....	No	2		
1	3		Completion				
1	3	21	Clause 18.0 - Interim Completion F;.....V;.....T;.....	Item	1		
1	3	22	Clause 19.0 - Practical Completion The contractor shall not recieve any mark-up for overheads and profit on any omission of tenant installation work or tenant installation work by others. Claims of loss of profit shall not be entertained. F;.....V;.....T;.....	Item	1		
1	3	23	Clause 20.0 - Sectional Completion F;.....V;.....T;.....	Item	1		
1	3	24	Clause 21.0 - Defects liability period and Final Completion F;.....V;.....T;.....	Item	1		
1	3	25	Clause 22.0 - Latent defects liability period F;.....V;.....T;.....	Item	1		
1	3	26	Clause 23.0 Revision of date for practical completion The removal and replacement of materials and/or workmanship which do not conform to specification or drawing shall not constitute grounds for the extension of the construction period nor the adjustment of contract value (Clause 29.3) F;.....V;.....T;.....	Item	1		
1	3	27	Clause 24.0 - Penalty for late or non-completion F;.....V;.....T;.....	Item	1		
1	3	28	Clause 25.0 - Payment F;.....V;.....T;.....	Item	1		
1	3	29	Clause 26.0 - Adjustment to the contract value and Final Account All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor. F;.....V;.....T;.....	Item	1		
1	3	30	Clause 27.0 - Recovery of expense and loss F;.....V;.....T;.....	Item	1		
1	3	31	Clause 28.0 - Suspension and Termination F;.....V;.....T;.....	Item	1		
1	3		Termination				
1	3	32.1	Clause 29.1 - Termination by employer F;.....V;.....T;.....	Item	1		
1	3	32.2	Clause 29.14 - Termination by contractor F;.....V;.....T;.....	Item	1		
1	3	32.3	Clause 29.20 - Termination by either party F;.....V;.....T;.....	Item	1		
			Total Carried Forward				

BILL PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
1	4	Dispute				
1	4	33 Clause 30.0 - Settlement of disputes F:..... V:..... T:.....	Item	1		
1	4	Contract Agreement				
1	4	34.1 (S5) - Post Tender Provisions The required post tender information shall be inserted in the post tender provisions after consultation with the contractor	Item	1		
1	4	34.2 (S6) - Contractual Agreement The required information of the contracting parties and the amount of the accepted contract sum shall be inserted in the contractual agreement for signature of the agreement by the contracting parties	Item	1		
1	4	SECTION B: PRELIMINARIES				
1	4	Definition and interpretation				
1	4	35 Clause 1.0 - Definition and interpretation F:..... V:..... T:.....	Item	1		
1	4	Documents				
1	4	36.1 (S7.1) - Checking of documents F:..... V:..... T:.....	Item	1		
1	4	36.2 (S7.2) - Provisional bills of quantities F:..... V:..... T:.....	Item	1		
1	4	36.3 (S7.3) - Availability of construction documentation F:..... V:..... T:.....	Item	1		
1	4	Previous work and adjoining properties				
1	4	37.1 (S8.1) - Previous work - dimensional accuracy F:..... V:..... T:.....	Item	1		
1	4	37.2 (S8.2) - Previous Work - defects F:..... V:..... T:.....	Item	1		
1	4	37.3 (S8.3) - Inspection of adjoining properties F:..... V:..... T:.....	Item	1		
1	4	Deposits and fees				
1	4	38 (S9) - Deposits and fees F:..... V:..... T:.....	Item	1		
1	4	Temporary services				
1	4	39.1 (S10) - Water F:..... V:..... T:.....	Month	36		
1	4	39.2 (S11) - Electricity F:..... V:..... T:.....	Month	36		
1	4	39.3 (S12) - Telecommunication facilities F:..... V:..... T:.....	Month	36		
		Total Carried Forward				

BILL	PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
			Brought Forward				
1	4	39.4	(S13) - Ablution facilities F:..... V:..... T:.....	Item	36		
1	4		Prime cost amounts				
1	4	39.5	(S14) - Responsibility for prime cost amounts F:..... V:..... T:.....	Item	1		
1	4		Special attendance on N/S Subcontractors				
1	4	39.6	(S15) - Special attendance F:..... V:..... T:.....	Item	1		
1	5		General				
1	5	40.1	(S16) - Protection of works F:..... V:..... T:.....	Item	1		
1	5	40.2	(S17) - Protection / isolation of existing/ sectionally occupied works F:..... V:..... T:.....	Item	1		
1	5	40.3	(S18) - Security of the works F:..... V:..... T:.....	Item	1		
1	5	40.4	(S19) - Notice before covering work F:..... V:..... T:.....	Item	1		
1	5	40.5	(S20) - Disturbance F:..... V:..... T:.....	Item	1		
1	5	40.6	(S21) - Environmental disturbance F:..... V:..... T:.....	Item	1		
1	5		The employer has prepared an Environmental Management Plan, and is included in this document. The contractor shall price opposite this item for compliance with all requirements as detailed in the plan and as will be directed by the Principal Agent.				
1	5	40.7	(S22) - Works cleaning and clearing F:..... V:..... T:.....	Item	1		
1	5	40.8	(S23) - Vermin F:..... V:..... T:.....	Item	1		
1	5	40.9	(S24) - Overhand work F:..... V:..... T:.....	Item	1		
1	5		Schedule of variables				
1	5		Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that either no details or specific requirements are available or that the clause is not relevant to this contract	Item	1		
			10.1 Provisional bills of quantities The quantities are provisional Yes				
			10.2 Availability of construction documentation Construction documentation is not complete No				
			Total Carried Forward				

BILL	PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
			Brought Forward				
			10.3 Previous work - dimensional accuracy				
			10.4 Previous work - defects				
			10.5 Inspection of adjoining properties				
			10.6 water [clause 7.2]				
			Option A (by contractor)				
			10.7 Electricity				
			Option A (by contractor)				
			10.8 Telecommunications				
			Option A				
			10.9 Ablution facilities				
			Option A (by contractor)				
			10.10 Protection of the works				
			Option A (by contractor)				
			10.11 Protection/ Isolation of existing / sectionally occupied works				
			Option A (by contractor)				
			10.12 Disturbance				
			10.13 Environmental disturbance				
1	6		SECTION C: SPECIFIC PRELIMINARIES				
1	6		Contract Price Adjustment Provisions				
1	6	41	Bidders are advised that this Contract shall NOT be subject to the Contract Price Adjustment Provisions (CPAP) or any other escalation formula and therefore a bidder has to allow for any increases.	Item	1		
1	6		Site Instructions				
1	6	42	Site Instructions issued on site are to be recorded in triplicate in a site instruction book which is maintained on site by the contractor. F:..... V:..... T:.....	Item	1		
1	6		Warranties for material and workmanship				
1	6		Where warranties for materials and/or workmanship are called for , the contractor shall obtain a written warranty, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent on certified completion of contract. The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor. F:..... V:..... T:.....	Item	1		
1	6		Co-operation of contractor for cost management				
1	6	43	It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/ reports to enable the proper procedure to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors F:..... V:..... T:.....	Item	1		
			Total Carried Forward				

BILL PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
1	6	Propping of floors below				
1	6	44 The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding etc. The location of these areas and any necessary propping shall be approved by the Principal Agent and the cost thereof shall be borne by the contractor. F:.....V:.....T:.....	Item	1		
1	6	Testing of windows for watertightness				
1	6	45 Each window shall be tested for watertightness with water sprayed on using adequate pressure. If in the opinion of the principal agent, the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means. F:.....V:.....T:.....	Item	1		
1	6	Testing of flat roof waterproofing for watertightness				
1	6	46 Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing. F:.....V:.....T:.....	Item	1		
1	7	Overtime				
1	7	47 Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the Project Manager has specifically authorized in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer. F:..... V:..... T:.....	Item	1		
1	7	As built drawings				
1	7	48 The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the Project Manager and the structural engineer for their records. F:..... V:..... T:.....	Item	1		
1	7	Labour record				
1	7	49 At the end of each week the contractor shall provide the project manager with a written record, in schedule form, reflecting the number and description of tradesman and labourers employed by him/her and all subcontractors on the works each day. F:..... V:..... T:.....	Item	1		
1	7	Plant Record				
1	7	50 At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity. F:..... V:..... T:.....	Item	1		
1	7	Non Cession of Monies				
1	7	51 The contractor shall not cede or assign his/her rights or claims to any monies due or to become due under this contract. F:..... V:..... T:.....	Item	1		
1	7	Tender Evaluation & Adjudication				
1	7	52 The evaluation of tenders will be based on the criteria stipulated in the Preferential Procurement Policy. F:..... V:..... T:.....	Item	1		
		Total Carried Forward				

BILL PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
1	8	SUMMARY OF CATEGORIES				
1	8	53.1 Category: Fixed R.....	Item	1		
1	8	53.2 Category: Value R.....	Item	1		
1	8	53.3 Category: Time R.....	Item	1		
		Total Carried Forward				

BILL PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
1	9	SECTION D : OCCUPATIONAL HEALTH AND SAFETY				
1	9	54 Without limiting the generality of the provisions of clause 7.0 of the Principal Building Agreement, the Contractors attention is drawn to the provisions of the Construction Regulations, 2003 issued in terms of Occupational Health and Safety Act, 1993 in which it is specifically stated and the Employer shall ensure that the Contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor is referred to the occupational Health and Safety of Construction attached to this document as Annexure A and the contractor shall price for compliance with the Act and the regulations and the provisions of the aforementioned Health and Safety Specification. The Legal requirements contemplated in Construction Regulation CR (1) (g) A client must ensure that potential principal contractors submitting tenders, have made adequate provision for the cost of health and safety measures And CR 5(1) (h) A Client must ensure that the principal contractor to be appointed has the necessary competencies and resource to carry out the construction work safely Shall apply and failure to price the Health and Safety items will result in the tender being deemed non - responsive OCCUPATIONAL HEALTH AND SAFETY ACT NO.85 1993 : THIS ACT NOT AFFECTED BY AGREEMENT Subject to the provisions of section 10 (4) and 37 (2), a provision of this Act or a condition specified in any notice or direction issued there under or subjects to which exemption was granted to any person under section 40, shall not be affected to any condition of any agreement whether such agreement was entered into before The contractors attention is further drawn to Section 41 of the or after the commencement of this Act or before or after the imposition of any such condition, as the case may be. Prior to pricing the Contactor MUST FAMILIARIZE HIM / HERSELF WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 1993 as well as the Construction Regulations, 2014, other Relevant Regulations and Standards.	Item	1		
1	9	GENERAL				
1	9	55.1 Notice the Provincial Director Department of Labor in writing of the commencement of construction work with and including submission of a letter or receipt and acknowledgement of the aforementioned notice by the director or his / her representative	Item	1		
1	9	55.2 Allow for the necessary workman's compensation fund or FEM contributions for the duration of the project with and including renewals .	Item	1		
1	9	F.....V.....T..... 55.3 Allow for the preparation and approvals of the project - specific H & S and file (CR7 (1) (A)	Item	1		
1	9	F.....V.....T..... 55.4 Allow for the implementation and maintenance of project - specific H&C Plan and File. (CR 7)	Item	1		
1	9	55.5 Allow for the appointment of a Full - Time/Part - Time competent Construction Health and Safety Officer to assist in the control of all health and safety related aspects on site as per CR8 (5)	Item	1		
1	9	55.6 Provide for appointment of responsible and competent person /s to manage and supervise the work and administer and enforce health and safety on site as per CR 8 (1), (2) and (7)	Item	1		
1	9	55.7 Allow for provision of telecommunication facilities for the appointed construction Health and Safety Office	Item	1		
		Total Carried Forward				

BILL PAGE NO	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
1	10	55.8 Allow for provision of Basic Emergency preparedness and Response equipment and minimum Level 2 First Aider/s	Item	1		
1	10	55.9 Provide, supply and maintain for each worker the following SANS approved personal Protective equipment & clothing as per the site - Specific risk assessment:	Item	1		
1	10	55.10 Hard Hat (High Density polyethylene with 6 - point lining)	Item	1		
1	10	55.11 Overall / Work suit (100% Cotton)	Item	1		
1	10	55.12 High Visibility reflecting vest and / or bibs	Item	1		
1	10	55.13 Safety boot / shoes (Steel - toes)	Item	1		
1	10	55.14 Safety Gumboot (Steel - toes)	Item	1		
1	10	55.15 Ear Plugs / Muffs	Item	1		
1	10	55.16 Dust Masks (at least FF2 type)	Item	1		
1	10	55.17 Respirators	Item	1		
1	10	55.18 Safety goggles	Item	1		
1	10	55.19 Temporary handrails, toe boards, etc. other than for access scaffoldings	Item	1		
1	10	55.20 Personal fall arrest and rescue equipment with and including life lines and associated equipments	Item	1		
1	10	55.21 SANS approved safety netting (orange color minimum 1,2 meter high)	Item	1		
1	10	55.22 Temporary warning signs and symbols	Item	1		
1	10	55.23 Road traffic signs in terms of the South African Road Traffic signs Manual	Item	1		
1	10	MEDICAL EXAMINATIONS				
1	10	56.1 Allow for pre-employment medical examinations	Item	1		
1	10	56.2 Allow for baseline psychological examinations	Item	1		
1	10	56.3 Allow for exit medical examinations	Item	1		
1	10	Health and Safety Education				
1	10	56.4 Allow for HIV / AIDS Awareness and Implementation programmes, including STI and TB	Item	1		
1	10	56.5 Allow for all compulsory health and safety awareness programmes (e.g. Inductions, Toolbox, Talks, safety Promotions, H&S related training, etc.)	Item	1		
1	10	ENVIRONMENTAL				
1	10	57.1 Provide for adequate handling and storage of materials so as to minimize contamination of ground, air or water	Item	1		
1	10	57.2 Provide for the adequate and safe collection and disposal of waste material and effluent from site by and approved method.	Item	1		
1	10	57.3 Provide facilities and eating area for works.	Item	1		
1	10	57.4 Provide for rehabilitation on completion of site areas and temporary access route not covered by construction or landscaping specifications.	Item	1		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1		EARTHWORKS				
1		SUPPLEMENTARY PREAMBLES				
1		EXCAVATION, FILLING, ETC OTHER THAN BULK				
1		Excavation in earth not exceeding 2m deep				
1	1	Reduced levels under floors	m3	270		
1	2	Trenches	m3	990		
1		Extra over trench and hole excavations in earth for excavation in				
1	3	Soft rock	m3	25		
1	4	Hard rock	m3	180		
1		Extra over all excavations for carting away				
1	5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	315		
1		Risk of collapse of excavations				
1	6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	1080		
1	7	Sides of trench and hole excavations exceeding 1,5m deep	m2	90		
1		Keeping excavations free of water				
1	8	Keeping excavations free of water other than subterranean water	Item	1		
1		Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 98% Mod AASHTO density				
1	9	Backfilling to trenches, holes, etc	m3	675		
1		Earth filling supplied by the contractor under floors, steps, pavings, etc				
1	10	Over site of G5 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density	m3	252		
1		Coarse river sand filling supplied by the contractor				
1	11	Under floors, steps, pavings, etc	m3	45		
1		Compaction of surfaces				
1	12	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 98% Mod AASHTO density	m2	1620		
1		SOIL POISONING				
1		Soil insecticide				
1	13	Under floors, etc including forming and poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	1620		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2		BILL NO. 2				
2		CONCRETE, FORMWORK AND REINFORCEMENT				
2		SUPPLEMENTARY PREAMBLES				
2		UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2		15MPa/19mm concrete				
2	1	Surface blinding under footings and bases	m3	36		
2		REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
2		30MPa/19mm concrete				
2	2	Footing	m3	234		
2	3	Surface beds on waterproofing	m3	99		
2	4	Slabs and beams	m3	378		
2	5	Stairs including landings,beams and inverted beams	m3	108		
2		TEST BLOCKS				
2	6	Making and testing 150 x 150 x 150mm concrete strength test cube	No	125		
2		CONCRETE SUNDRIES				
2		Finishing top surfaces of concrete smooth with a wood float				
2	7	Surface beds, slabs, etc	m2	2070		
2	8	Apron slabs to falls	m2	540		
2	9	3 x 30mm Saw cut joints in top of concrete including reaming out to 10 x 25mm	m	90		
2		Finishing top surfaces of concrete smooth with a steel trowel				
2	10	Surface beds, slabs, etc to falls	m2	480		
2		ROUGH FORMWORK (DEGREE OF ACCURACY II)				
2		Rough formwork to sides,soffits.etc				
2	11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	1980		
2	12	Slabs not exceeding 255mm thick.	m2	3510		
2	13	Soffits of landing	m2	243		
2		MOVEMENT JOINTS, ETC				
2		Expansion joints with high density polystyrene between vertical concrete and brick surfaces				
2	14	10mm Joints not exceeding 300mm high	m	2800		
2		REINFORCEMENT				
2		High tensile steel reinforcement to structural concrete work				
2	15	Bars of various diameters	t	130,5		
2		Fabric reinforcement				
2	16	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	1620		
2		PILING				
2		Establishment				
2	17	Transportation to and establishment on site of necessary plant for the execution of works	Item	1		
2	18	Setting up plant at pile position	Item	1		
		Total Carried Forward				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
2		PRECAST CONCRETE DRIVEN PILES				
2	19	165 Diameter piles suitable for 150kN working load slabs, etc	m	285		
2		TEST CUBES				
2	20	Making and testing 150 x 150 x 150mm concrete strength test cube	No	285		
2		REINFORCEMENT				
2		High tensile steel reinforcement to structural concrete work				
2	21	Bars of various diameters	t	11,6		
2		EXPOSING PILES FOR INSPECTION				
2	22	Exposing pile for inspection including excaation in earth and backfilling	No	285		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3		BILL NO.3				
3		MASONRY				
2		SUPPLEMENTARY PREAMBLES				
3		BRICKWORK				
3		Pointing				
3		Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
3		SAMPLES				
3		Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site				
3		FOUNDATIONS				
3		Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
3	1	Half brick walls	m2	288		
3	2	One brick walls	m2	810		
3		SUPERSTRUCTURE				
3		Brickwork of NFPE bricks (14 MPa nominal compressive strength) in class I mortar in loadbearing walls, etc				
3	3	Half brick walls	m2	2040		
3	4	Half brick walls in beamfilling	m2	180		
3	5	One brick walls	m2	7440		
3		BRICKWORK SUNDRIES				
3		Bagging of 1:3 cement and sand mixture				
3	6	On brick walls, piers, etc	m2	5760		
3	7	10mm Soft board built in vertically between brick skins.	m2	125		
3		Brickwork reinforcement				
3	8	75mm Wide reinforcement built in horizontally	m	3720		
3	9	150mm Wide reinforcement built in horizontally	m	17400		
3		"Fabcon" or equal and approved pre-stressed fabricated lintels				
3	10	100 x 70mm Lintels in lengths not exceeding 3m	m	1980		
3		Turning pieces				
3	11	220mm Wide turning piece to lintels, etc	m	1320		
3		Galvanised hoop iron cramps, ties, etc				
3	12	30 x 1,6mm Roof tie 1,6m long with one end fixed to timber and other end built into brickwork	No	1440		
3		Air bricks, etc				
3	13	229 x 152mm Glazed clay vermin proof air bricks	No	108		
3		Fibre-cement Window Sills				
3	14	Natural grey sills 65 x 290mm Wide type "H" sill set sloping and slightly projecting	m	540		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4		BILL NO. 4				
4		WATERPROOFING				
4		SUPPLEMENTARY PREAMBLES				
4		Waterproofing				
4		Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets, etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
4		DAMPProofing OF WALLS AND FLOORS				
4		One layer of 375 micron "Consol Plastics Brikgrip DPC" or equal and approved embossed damp proof course				
4	1	In walls	m2	288		
4	2	In walls under window cills	m2	72		
4		One layer of 250 micron "Consol Plastics Gunplas USB Green" or equal and approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
4	3	Under surface beds	m2	1170		
4		Two coats "Brixial" or equal and approved bitumen emulsion waterproof coating				
4	4	On bagged brick walls	m2	4365		
4		WATERPROOFING TO ROOFS, BASEMENTS, ETC				
4		"Tal Sureproof" or equal and approved two part liquid applied membrane waterproofing				
4	5	Flashing strip 76mm girth at turn-ups including sealing top edge	m	162		
4		JOINT SEALANTS, ETC				
4		Clear silicone sealing compound				
4	6	Pointing joint between window frames and brickwork	m	2160		
4		Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
4	7	10 x 10mm In expansion joints in floors including raking out expansion joint filler as necessary	m	1020		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5		BILL NO. 5				
5		ROOF COVERINGS ETC				
		ROOF SHEETING AND ACCESSORIES				
		0.53mm Zincolume roof sheeting steel resin coated, Az150 minimum (150g/m2) coating mass, grade 550 (minimum yield strength of 550 Mpa) and accessories fixed to timber purlins:				
5	1	Roof covering with pitch not exceeding 25 degrees	m2	1620		
5	2	AG 150 G550 ridge capping with broad flute closures to suit roof profile with pre-painted factory finish.	m	90		
5	3	Narrow and broad flute closers	m	360		
5	4	Moulded narrow and broad rib polyethylene filler blocks	m	640		
		ROOF AND WALL INSULATION				
		Sisalation 420 or equal and approved heavy industrial grade aluminium foil based insulation				
5	5	Insulation laid taut over purlins (at approximately 1,80m centres) and fixed concurrent with roof covering, including taped laps and nylon straining wires	m2	1530		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
6		BILL NO. 6				
6		CARPENTRY AND JOINERY				
6		ROOFS, ETC				
6		Sawn softwood				
6	1	38 x 114mm Wall plates	m	180		
6	2	50 x 76mm Purlins not exceeding 6.6 m in length, to manufacturer's specification	m	1890		
6		Sundries				
6	3	Two coats ABE Provinite on wrought timbers	m2	396		
6	4	Allow for Teco two way hurricane clips secured to purlins and trusses at every intersection externally and internally galvanised wire is to be used	Item	1		
		PREFABRICATED TIMBER ROOF TRUSSES, ETC				
		Design and supply plate nailed timber roof trusses				
		NOTE:				
		Timber roof trusses are to comply with SABS Code of Practice 0243. (The design, manufacture and erection of timber trusses, including nail-plated and bolted trusses with lapped members).				
		(NOTE: The contractor will be required to provide a certificate of approval signed by a registered engineer certifying that the trusses have been designed, manufactured and installed in accordance with the releant SABS specifications)				
6	5	Single pitched prefabricated plate nailed roof truss spanning approximately 6550 mm between wall plates to 12 degree pitch with 450mm eaves overhang on both ends.	No	155		
6	6	Single pitched prefabricated plate nailed roof truss spanning approximately 3400 mm between wall plates to 12 degree pitch with 450mm eaves overhang on both ends.	No	25		
		EAVES, VERGES, ETC				
		Everite medium density plain nutec-cement				
6	7	12 x 225mm Medium density fibre-cement fascia boards (Product No.041-202) with aluminium H-profile fascia joiners (Product No. 685-195), drill for and fix with hot-dip galvanised drive screws and washers	m	180		
6	8	80 x 200mm Socketless barge boards (Product No.721-800) with aluminium H-profile barge board joiners (Product No. 685-187), drill for and fix with hot-dip galvanised screws and washers	m	270		
		DOORS, ETC				
		Wrought meranti doors hung to steel frame, etc				
6	9	40 mm Framed door 813 2032mm high of 115mm top rails and stiles, 115mm midle rail and 212mm bottom rail, with 23 x 552mm high solid fielded bottom panel and open 1063mm high rebated all round including 12 x 12mm glazing beads on one side.	No	72		
		Solid flush panel doors with 3,2mm standard hardboard covering on both sides				
6	10	40mm Solid flush panel hollow core doors with approved hardwood veneer on both sides and two hardwood edge strips hung to steel frames, size 813 x 2032mm high.Refer Architect's Schedule	No	216		
6	11	KITCHEN CUPBOARDS Prefabricated Factory Finished cupboards				
		1680 x 600mm wide Floor mounted kitchen sink cupboard complete with waterproof "Duraboard" counter top faced with formica laminate or similar approved.	No	72		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7		BILL NO. 7				
7		CEILINGS AND PARTITIONS				
7		SUPPLEMENTARY PREAMBLES				
7		Descriptions:				
7		Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete				
7		Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere				
7		CEILINGS, ETC				
7		S.A Pine cornices				
7	1	44 x 19mm Cornices with 8 x 8mm recess nailed	m	1665		
7		"Aerolite" or equal and approved Fibre glass wool insulation				
7	2	100mm Insulation closely fitted and laid on top of brandering between roof timbers etc	m2	1620		
7		NAILED UP CEILINGS				
7		4mm Fibre-cement plain ceiling boards				
7	3	Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres in one direction	m2	1620		
7	4	Extra over ceiling for opening for 650 x 650mm trap door complete with trimmers, frame, cross branders, ceiling board, hinges, etc as described	No	27		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
8		BILL NO. 8				
8		TILING				
		200 x 200 x 4,7mm 'Johnson Matisse MWB4' glazed wall tiles fixed with 'Tal Gold Star 6' rapid setting tile adhesive to plaster (elsewhere measured) with 2mm wide joints continuous in both directions with joints pointed with 'Tal Fine Epoxy Grout' on:				
8	1	On walls	m2	120		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
9		BILL NO. 9				
9		IRONMONGERY				
		CATCHES, CABIN HOOKS, ETC.				
9	1	38mm Diameter rubber door stop plugged.	No	208		
		LOCKS				
		"Union"				
9	2	Four lever stainless steel mortice lock with chromiun plated handles, Union CZ682-24-61SC	No	432		
9	3	Two lever stainless steel mortice lock with chromiun plated handles, Union CZ682-24-61SC	No	216		
		LETTERS, NAMEPLATES, ETC.				
		"Union"				
9	4	150 x 150mm Aluminium plate with fire extinguisher indicator (Code: AL5022-E06)	No	72		
9	5	150 x 150mm Aluminium plate with fire hose reel indicator (Code: AL5022-E05)	No	36		
9	6	150 x 150mm Aluminium plate with emergency exit indicator sign (Code: AL5022-E14)	No	32		
9	7	150 x 150mm Aluminium plate with DB Board indicator sign (Code: AL5022-E01)	No	12		
9	8	150 x 150mm Aluminium plate with directional arrow indicator sign (Code: AL5022-E08)	No	120		
		4mm Thick clear perspex plate with helvetia medium white vinyl lettering 15mm high on back, holed and screw fixed to timber surface with four chrome plated self tapping screws				
9	9	Plate 200 x 60mm high with various wording, on plate fixed complete.	No	72		
		BATHROOM FITTINGS				
		"Solid Art"				
9	10	25mm Diameter chromium plated hanging rail 400mm long including Solid Art 262 end brackets.	No	72		
		"Franke"				
9	11	Soap dish holder - Vitreous china - 170 x 170 x 100mm	No	72		
9	12	Toilet roll holder, Code STRX672, fixed to wall according to manufacturers specifications	No	72		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
10		BILL NO. 10				
10		METALWORK				
10		SUPPLEMENTARY PREAMBLES				
10		Descriptions of bolts shall be deemed to include nuts and washers				
10		Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
10		Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
		SUNDRY HOT DIPPED GALVANISED STEELWORK				
		Galvanised mild steel brackets, framing, etc. (Provisional)				
10	1	Allow a budgetary amount of R55000.00 (Fifty Five Thousand Rand) for galvanised Washing line	Item	1	R 55 000,00	R 55 000,00
	2	(2) Contractor's Handling cost and profit on (1)	%			
		HOT DIPPED GALVANISED PRESSED STEEL DOOR FRAMES				
		1,2mm Double rebated frames suitable for one brick walls				
10	3	Frame for door 813 x 2032mm high.	No	72		
		1,2mm Double rebated frames suitable for half brick walls				
10	4	Frame for door 813 x 2032mm high.	No	216		
		ALUMINIUM WINDOWS, ETC				
		Refer to attached window schedules for details of windows				
10	5	Purpose made window, type W1, size 1500 x 900mm high	no	72		
10	6	Purpose made window, type W2, size 620 x 900mm high	no	72		
10	7	Purpose made window, type W3, size 1500 x 900mm high	no	72		
10	8	Purpose made window, type W4, size 600 x 600mm high	no	72		
10	9	Purpose made window, type W5, size 1500 x 900mm high	no	72		
10	10	Purpose made window, type W6, size 600 x 600mm high	no	72		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
11		BILL NO. 11				
11		PLASTERING				
11		SCREEDS				
11		3:1 Cement and sand screeds wood floated on concrete				
11	1	30mm Thick on floors and landings	m2	4620		
11		INTERNAL PLASTER				
11		Cement plaster on brickwork and small part on concrete				
11	2	On walls	m2	11280		
11	3	On narrow widths	m2	360		
11	4	On concrete slab	m2	3480		
11		EXTERNAL PLASTER				
11		Cement plaster on brickwork and small part on concrete				
11	5	On walls	m2	5220		
11	6	On narrow widths	m2	360		
11	7	On concrete slab	m2	270		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
12		BILL NO. 12				
12		PLUMBING AND DRAINAGE				
12		SUPPLEMENTARY PREAMBLES				
		Rainwater disposal				
12		0.8mm thick galvanized mild steel rainwater goods and accessories in long lengths including jointing				
12	1	100x125mm eaves gutters fixed with brackets to fascia boards	m	180		
12	2	Stopped end	No.	36		
12	3	75mm dia. downpipes plugged to wall with holderbats	m	350		
12	4	Extra for outlet for 75mm pipe	No.	30		
12	5	Extra for shoe	No.	30		
12	6	Extra for bend	No.	125		
		SANITARY FITTINGS				
12	7	Stainless steel single centre bopwl drop-in sink size 600 x 1200mm. Bowl size 610 x 460 x 230mm deep with overflow, manufactured in grade 304 tap to be 15mm 102CP demand bib tap. In accordance with SABS	No	72		
12	8	WHB, size 510 x 405mm with overflow and two tap hole configuration fixed to wall and including 2 x 10mm bolt, 32 x 32mm bottle trap,chrome plated with 75mm deep seal, inlet screwed female, outlet , male for 40mm PVC. Chrome plated bottle trap with 75mm deep seal for 40mm PVC waste. 15mm chrome plated basin set pillare tap; 1 off basin waste with plug, chain, stay and back nut No. 301	No	72		
12	9	Low level Ceramic flush toilet with close couple cistern including plumbing and drainage, installed complete	No	72		
12	10	1700 x 700 x 400mm Bath with waste outlet, overflow grating with coupling and pair of handles, bedded in position	No	72		
12	11	WASTE UNIONS, ETC				
12	12	32mm 301 CP waste union	No	216		
		TRAPS,ETC				
12	13	40mm Antiac trap	No	72		
12	14	32mm 340 CP bottle trap	No	864		
		TAPS, VALVES, ETC				
12	15	Kitchen Mixer, Wall type sink mixer with aerated swivel outlet. 1/2' BSP male inlets.SANS 226 TYPE 1.	No	72		
12	16	WHB Pillar tap x 2 with hot and cold indices. 3/4" BSP Male Inlet	No	144		
12	17	Bath Extended Bib tap x 2 with hot and cold indices. 1/2" BSP Male	No	144		
		PVC Pipe and Fittings :				
12	18	40mm Pipes in trench 1000 meters deep	m	513		
12	19	50mm Pipes in trench 1000 meters deep	m	513		
12	20	110mm UG PVC Pipe in trench 1000 meters deep	m	393		
		Extra over uPVC pipes for uPVC fittings				
12	21	40mm Adaptor	No	108		
12	22	50mm Adaptor	No	108		
12	23	40mm Bend	No	540		
12	24	50mm Bend	No	324		
		Carried Forward				

		Brought Forward			
12	25	110mm Bend	No	216	
12	26	110mm Pan Connector	No	108	
12	27	110mm Access bend	No	108	
12	28	110mm 'GI two-way' vent valve	No	108	
		Sundries			
12	29	Wire balloon grating in top of pipe not exceeding 100mm	No	55	
12	30	Testing waste pipe system	Item	1	
12	26	110mm Pan Connector	No	108	
12	27	110mm Access bend	No	108	
12	28	110mm 'GI two-way' vent valve	No	108	
		Sundries			
12	29	Wire balloon grating in top of pipe not exceeding 100mm	No	55	
12	30	Testing waste pipe system	Item	1	
		WATER SUPPLIES			
		<u>Class O copper pipes</u>			
12	31	15mm Pipes	m	465	
12	32	22mm Pipes	m	585	
		Extra over class O copper pipes for capillary fittings			
12	33	15mm Fittings	No	545	
12	34	22mm Fittings	No	545	
		Extra over class O copper pipes for connex fittings			
12	35	15mm Fittings	No	545	
12	36	22mm Fittings	No	545	
		Copper overflow and services pipes			
12	37	15mm services pipes 350mm girth	No	216	
12	38	20mm Service pipes 350mm girth	No	216	
		TESTING			
12	39	Testing water pipe system	Item	1	
		ELECTRIC WATER HEATERS			
12	40	150 Litre geyser with galvanised sheet iron tray	No	72	
12	41	40mm HDPE black polythene overflow pipe fixed to timber trusses	m	72	
		Total Carried Forward to Summary			

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
13		BILL NO. 13				
13		PAINTWORK				
13		PAINTWORK, ETC TO NEW WORK				
13		ON FLOATED PLASTER				
13		One coat "Plascon Plaster Primer", one undercoat and two coats "Plascon Velvagio" polyurethane alkyd paint (Colour to Architects approval)				
13	1	On internal walls	m2	11520		
13	2	On external walls	m2	5400		
13	3	On concrete ceiling	m2	3480		
13		ON PLASTER BOARD				
13		One coat "Plascon Plaster Primer", one undercoat and two coats "Plascon Polvin Walls and Ceilings" acrylic emulsion paint (Colour to Architects approval)				
13	4	On ceilings and cornices	m2	2160		
13		Seal knots with "Plascon Woodcare Knot Seal", one coat "Plascon Wood Primer", one undercoat and two coats "Plascon Velvagio" polyurethane alkyd paint (Colour to Architects approval)				
13	5	On doors	m2	1020		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
14		BILL NO. 14				
		ELECTRICAL WORK				
		Allow a provisional sum for the installation of all electrical conduiting, draw boxes, distribution boards, wiring, light fittings, lightning protection, earthing, etc in accordance with statutory requirements inclusive of all material, labour, and time related costs as well as the issuing of regulatory compliance certificates.				
14	1.1		Item	1	R 1 130 909,00	R 1 130 909,00
14	1.2	Add for profit	Item	%		
14	1.3	Add for attendance	Item	%		
		Allow a provisional sum for a new power supply electrical connection fee.				
14	2.1		Prov Sum	1	R 267 000,00	R 267 000,00
14	2.2	Add for profit	Item	%		
14	2.3	Add for attendance	Item	%		
		Allow a provisional sum for the provision and installation of lightning protection and earthing in accordance with statutory and manufacturer requirements for material and workmanship and inclusive of all associated costs				
14	3,1		Item	1	R 114 000,00	R 114 000,00
14	3,2	Add for profit	Item	%		
14	3,3	Add for attendance	Item	%		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		BILL NO. 15				
		SUMMARY				
15	1	EARTHWORKS				
15	2	CONCRETE, FORMWORK & REINFORCEMENT				
15	3	MASONRY				
15	4	WATERPROOFING				
15	5	ROOF COVERING				
15	6	CARPENTRY & JOINERY				
15	7	CEILINGS				
15	8	TILING				
15	9	IRONMONGERY				
15	10	METALWORK				
15	11	PLASTERING				
15	12	PLUMBING & DRAINAGE				
15	13	PAINTWORK				
15	14	ELERICAL WORK				
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1		BILL NO. 1				
1		SITE CLEARANCE, ETC				
1		Site clearance, etc				
1	1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	2200		
1	2	Stripping average 150mm thick layer of top soil and stockpiling on site	m2	2200		
1		REMOVAL OF TREES, ETC				
1	3	Tree exceeding 200mm and not exceeding 500mm girth	No	5		
1	4	Tree exceeding 500mm and not exceeding 1m girth	No	30		
1		BULK EXCAVATION, FILLING, ETC				
1		Excavate in all materials (Platform preparations) and use for embankment or Fill or dispose, as ordered				
1	5	Cut to spoil, including free-haul up to 1.0km. (a) Soft excavation	m3	450		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		BILL NO. 2				
2		DRIVEWAY AND PARKING				
2		Excavation in earth not exceeding 2m deep				
2	1	Reduced levels under floors	m3	60		
2		Extra over all excavations for carting away				
2	2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	60		
2		Surface preparation				
2	3	Compaction of ground surface under pavings, etc including scarifying for a depth of 150 mm, breaking down oversize material, adding suitable material where necessary and compacting to 93 % Mod AASHTO density	m2	300		
2	4	Apply "Weedmaster Turfmaster" or equal and approved weedkiller (at a rate of 40-45 ml to 5 litres of water per 50 m2) to surface of ground	m2	300		
2		Earth filling supplied by the contractor under pavings, etc				
2	5	Over site of G5 material in accordance with SABS 1200 DM compacted to 95% Mod AASHTO density	m3	50		
2		Precast concrete kerbs				
2	6	Kerb (Figure 6) on and including concrete base and unreinforced concrete (15 MPa) continuous haunch at back, bedded and jointed in in 20mm (6 : 1) cement mortar bed and pointing with keyed joints including all formwork, excavation, filling and ramming, etc.	m	120		
2	7	Ditto but circular on plan not exceeding 4m radius formed with short lengths of straight kerb including excavation, backfilling, etc	m	40		
		Total Carried Forward to Summary				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		BILL NO. 3				
		WATER SUPPLIES				
		<u>Excavate in all materials for trenches, backfill, compact and dispose of surplus material - for up to 110mm diameter pipes:</u>				
3	1	Not exceeding 1m deep.	m	600		
		Extra over excavation in all depths for:				
3	2	Soft rock excavations.	m	50		
3	3	Hard rock excavations.	m	80		
		<u>HDPE Class 12 water supply or similar approved including all necessary fittings</u>				
3	4	63mm diameter pipe.	m	600		
		WATER SUPPLIES TO FIRE APPLIANCES				
		<u>Excavate in all materials for trenches, backfill, compact and dispose of surplus material - for up to 110mm diameter pipes:</u>				
3	5	For depths not exceeding 1m.	m	195		
3	6	For depths exceeding 1m and not exceeding 2m.	m	25		
		Class 16 uPVC pressure pipes with rubber ring joints				
3	7	110mm diameter including all necessary fittings	m	195		
		Extra over excavation in earth for excavation in:				
3	8	Extra over item above for intermediate material.	m	25		
		STORMWATER DRAINAGE				
		<u>Excavate in all materials for trenches, backfill, compact and dispose of surplus material - for 450mm diameter pipes:</u>				
3	9	For depths not exceeding 1m.	m	250		
3	10	For depths exceeding 1m and not exceeding 2m.	m	30		
		Extra over excavation in earth for excavation in:				
3	11	Extra over item above for intermediate material.	m	10		
		Supply of bedding material from commercial sources including haulage:				
3	12	Class B bedding material for 450mm diameter pipes.	m	0		
		Supply, lay and bed pipes complete non-pressure pipes with couplings:				
3	13	450mm Diameter concrete with spigot and socket joint Class 100D.	m	280		
3	14	Supply and install catchpit average size 800 x 800 mm of depths varying between 1 - 2m deep internally with and including 600 x 600 mm cast iron dished grating and frame - Supply only	No	10		
3	15	Supply and install road stormwater catchpit with kerb-inlet, maximum approximate size 3 300 x 900 of depths varying between 1 - 2m deep internally and fitted with 550 mm diameter x 190 kg cast iron manhole cover and frame - Supply only	No	5		
		Testing:				
3	16	Allow for testing of the entire stormwater drainage system to Engineer's satisfaction.	Item	1		
		SOIL DRAINAGE				
		PREAMBLES				
		For preambles see "Model Preambles for Trades 2008" as issued by The Association of South African Quantity Surveyors				
		SUPPLEMENTARY PREAMBLES				
		uPVC pipes and fittings:				
		Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings.				
		Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings.				
		uPVC pressure pipes and fittings:				
		Total Carried Forward				

BILL	ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		Brought Forward				
		<p>Laying, backfilling, bedding, etc., of pipes:</p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled.</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following:</p> <p>SABS 1200L : Medium-pressure pipelines</p> <p>SABS 1200 LD : Sewers</p> <p>SABS 1200 LE : Stormwater drainage</p> <p>Pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches).</p> <p>Pipes shall be bedded in accordance with Clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes)</p> <p>Unless otherwise described bedding of rigid pipes shall be Class B</p> <p>General:</p> <p>Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 98% Mod AASHTO density and disposal of surplus material on site.</p> <p>As-built drawings:</p> <p>Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere).</p> <p>Excavate in all materials for trenches, backfill, compact and dispose of surplus material - for 200mm diameter pipes:</p>				
3	17	For depths not exceeding 1m.	m	650		
3	18	For depths exceeding 1m and not exceeding 2m.	m	15		
		uPVC UG pipes and fittings:				
3	19	110mm diameter.	m	45		
3	20	160mm diameter.	m	600		
		Extra over excavation in earth for excavation in:				
3	21	Extra over item above for intermediate material.	m	15		
		Supply of bedding material from commercial sources including haulage:				
3	22	Class B bedding material for 110mm and 160mm diameter pipes.	m	10		
		Supply and install manholes, etc.:				
3	23	"Type A" brickwork manhole, 1000 x 1000 x average 1240mm deep complete including all necessary excavations, filling and back filling, blinding layer of concrete, reinforced concrete surface bed, concrete benching, brick walls, reinforced concrete reducer slab, opening for manhole cover (cover and frame elsewhere measured).	No	20		
3	24	1200mm diameter x 75mm thick Precast ring Manhole, average 1360mm deep complete including all necessary excavations, filling and back filling, blinding layer of concrete, reinforced concrete surface bed, concrete benching, etc (cover and frame elsewhere measured).	No	15		
		Gratings, covers and frames:				
3	25	1200mm Diameter precast light duty frame and lid size 600mm diameter	No	5		
		Testing:				
3	26	Allow for testing of the entire stormwater drainage system to Engineer's satisfaction.	Item	1		
		Total Carried Forward to Summary				

		SUMMARY				
		BILL NO. 4				
4	1	SITE CLEARANCE, ETC				
4	2	DRIVEWAY AND PARKING				
4	3	WATER SUPPLIES, STORM WATER AND SOIL DRAINAGE				
		Total Carried Forward to Summary				