

RT

DATED: 19TH MAY, 2017

P.O. BOX 2736, LILONGWE, MALAWI

PARAMOUNT HOLDINGS LTD

AND

P.O. BOX 280, ZOMBA

BETWEEN THE CHANCELLOR COLLEGE

CONTRACT NO: CC/CW/EC/01-03-17

**CONSTRUCTION WORKS FOR THE SCHOOL OF
ECONOMICS - OFFICES, LIBRARY AND ASSOCIATED
EXTERNAL WORKS AT CHANCELLOR COLLEGE**



CONTRACT DOCUMENT

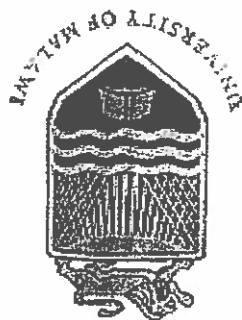
27

March, 2017

BILLS OF QUANTITIES

CONSULTANCY SERVICES TO REVIEW DESIGNS,
SUPERVISION AND CONSTRUCTION MANAGEMENT OF
WORKS OF ECONOMICS OFFICE AND LIBRARY BLOCK AT
CHANCELLOR COLLEGE

MINISTRY OF EDUCATION SCIENCE AND
TECHNOLOGY - CHANCELLOR COLLEGE. PROJECT



RT

1/S

Item No	Description	Amount (MK)
	BILL NO. 1	
	PRELIMINARIES	
	COLLECTION	
1	Collection from Page No. 1/1	1,500,000
2	Collection from Page No. 1/2	6,100,000
3	Collection from Page No. 1/3	11,650,000
4	Collection from Page No. 1/4	4,250,000
5	Collection from Page No. 1/5	8,250,000
6	Collection from Page No. 1/6	1,500,000
7	Collection from Page No. 1/7	1,500,000
8	Collection from Page No. 1/8	1,500,000
9	Collection from Page No. 1/9	3,500,000
10	Collection from Page No. 1/10	500,000
11	Collection from Page No. 1/11	3,250,000
	TOTAL CARRIED TO MAIN SUMMARY	42,000,000

Item	Description	Amount (MK)
A	BILL No 1	
	PRELIMINARIES	
B	Sufficiency of Tender	
	The Contractor shall be deemed to have satisfied himself before bidding as to the correctness and sufficiency of his Bid for the Works and of the rates and prices stated in the bills of Quantities which rates and prices shall cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works	
B	Definition of Terms and Abbreviations	
	The Terms and Abbreviations used in this Bills of Quantities Shall be interpreted as follows:- "B.S." shall mean "The current British Standard of Specification published by the British Standard Institution, Park Street, London, W.1 England "NO." shall mean Number "L.M." shall mean Linear Meter "M" shall mean Linear Meter "SM" shall mean Square Meter "CM" shall mean Cubic Meter "Ditto" shall mean "The whole of the preceding description except as qualified in the section in which it occurs. Where it occurs in brackets, it shall mean the whole of the preceding description which is contained within the appropriate. "MS" shall mean Measured separately "BSM" shall mean Both sides measured "P.C" shall mean Prime cost "75mm to 150mm" shall mean Exceeding 75mm but not exceeding 150mm in girth, and all items described in this manner shall be similarly constructed. "A small pipe" shall mean Any pipe not exceeding 55mm internal diameter "A large pipe" shall mean Any pipe exceeding 55mm internal diameter but not exceeding 110mm diameter "An Extra large pipe" shall mean Any pipe exceeding 110mm internal diameter	
TOTAL CARRIED TO COLLECTION		

Item	Description	Amount (MK)
A	Access to site and temporary roads Means of access to the Site shall be agreed with the Project Manager prior to the commencement of the Works and the Contractor must allow for building any temporary access roads for the transport of materials, plant and workmen as may be required for the complete execution of the Works including the provision of temporary culverts, crossings, bridges or any other means of gaining access. Upon the completion of the Works, the Contractor shall remove such temporary roads, culverts, bridges, etc., and make good and reinstate all Works and services disturbed to the satisfaction of the Project Manager. Area to be occupied by the Contractor The area of the Site which may be occupied by the Contractor for use as storage and for the purpose of erecting workshops, etc., shall be defined on the Site by the Project Manager. Setting out The Contractor shall set out the Works in accordance with the dimension and levels shown on the Drawings and shall be responsible for the correctness of all dimensions and levels so set out by him and will be required to amend all errors arising from inaccurate setting out at his own cost and expense. In the event of any error or discrepancy in the dimensions or levels marked on the Drawings being discovered, such errors or discrepancies shall be reported by the Contractor to the Project Manager for his immediate attention. No Work shall be commenced by the Contractor until he has received written instruction from the Project Manager to adjust such discrepancies which may be proved. Upon receipt of such instructions, the Contractor shall thereupon be responsible for accurate setting out of the Works, giving effect to the adjustments necessary to comply with such instructions, and no claim for extra expense or relief from the provision of Clause 12 of the Conditions of Contract based on any discrepancy or error in the dimensions or levels shown on the Drawings may be made thereafter. Before any Work is commenced by the Sub-Contractors or Specialised Firms, dimensions must be checked on the Site and / or buildings and agreed with the Contractor, irrespective of the comparative dimensions shown on the Drawings. The Contractor shall be responsible for the accuracy of such dimensions. Existing services Prior to the commencement of any Work, the Contractor is to ascertain from the relevant Authorities the exact position, depth and levels of all existing electric cables, water pipes or other services in the area and he shall make whatever provisions may be required by the Authorities concerned for the support, protection and relocation of such services. Any damage or disturbance caused to any service shall be reported immediately to the Project Manager and the relevant Authority and shall be made good to their satisfaction at the Contractor's expense.	1,500,000.00
	TOTAL CARRIED TO COLLECTION	1,500,000.00

Item	Description	Amount (MK)
A	Transport to and from the site	
B	The Contractor shall include in his prices for the transport of materials, workmen, etc., to and from the Site of the proposed Works, at such hours and such routes as are permitted by the Authorities Public and private roads, pavements	2,000,000.00
C	The Contractor will be required to make good, at his own expense, any damage he may cause to the present road surfaces and pavements during the period of the Works. In particular all the existing lawns, gardens, stormwater channels, hedges, fences etc., which may be destroyed or damaged during the progress of the Works are to be made good by the Contractor to the approval of the Project Manager. Security of the works The Contractor shall be entirely responsible for the security of all the Works, stores, materials, plant, personnel, etc., both of his own and Sub-Contractors', and shall provide all necessary watching, lighting and other precautions as necessary as to ensure the security and the protection of the public. Water for the works The Contractor shall allow for providing all temporary water supplies required for the works, including Sub-Contract Works, together with all necessary storage tanks and distribution systems for the same and must allow for bearing all expenses incurred and paying for all water consumed without charge to any Sub-Contractor. Expenses in connection with Nominated Sub-Contractors should be allowed for in the attendance items under the relevant P.C. Sums. No guarantee or warranty is given as to the availability of water at the site.	1,500,000.00
D	The Contractor shall allow for providing all temporary water supplies required for the works, including Sub-Contract Works, together with all necessary storage tanks and distribution systems for the same and must allow for bearing all expenses incurred and paying for all water consumed without charge to any Sub-Contractor. Expenses in connection with Nominated Sub-Contractors should be allowed for in the attendance items under the relevant P.C. Sums. No guarantee or warranty is given as to the availability of water at the site.	2,000,000.00
E	The Contractor shall allow for providing all temporary lighting and power supplies required for the works, including Sub-Contract works, together with all necessary distribution systems for the same and must allow for bearing all expenses incurred and paying for all current consumed without charge to any Sub-Contractor. Expenses in connection with Nominated Sub-Contractors should be allowed for in the attendance items under the relevant P.C. Sums. No guarantee or warranty is given as to the availability of power at the site.	600,000.00
TOTAL CARRIED TO COLLECTION		6,100,000.00

Item	Description	Amount (MK)
A	Temporary Buildings for use by the Contractor	
	The Contractor shall at his own cost, supply and erect all temporary buildings, sheds, mess rooms and stores with floors at least 150mm above ground level. No office, stores or other temporary buildings shall be erected on Site without first obtaining the consent from the Project Manager as to the type of temporary building to be supplied and the position in which they are to be erected.	5,000,000.00
B	Sheds for storage of Materials	
	The Contractor shall provide and maintain on the Site, ample weatherproof sheds for storage of cement and other perishable materials and shall clear the same away on completion and make good any disturbed surfaces.	2,650,000.00
C	Offices for the Project Manager	
(i)	The Contractor shall provide, erect and maintain where directed on site an approved weatherproof office for the sole use of the Project Manager. The office shall be not less than 15 square meters. The office shall be constructed with concrete or wooded floor and the walls and ceiling internally are to be lined with fibreboard. Glazed windows (with curtains or sunshades) shall be provided of not less than 1 meter square area and the door shall have a strong lock or fastening. The office shall be provided with artificial lighting and electric power. The contractor shall allow for regular cleaning of the office. The office is to be furnished with the following:	4,000,000.00
(a)	1 No. office desk with lockable drawers, and chair with arm rest	
(b)	1 No. Lockable metal filing cabinet	
(c)	2 No. Pin Boards with a minimum space of 1.5 square metres each	
(d)	Power and Lighting Points as necessary	
(iii)	The Contractor shall provide, erect and maintain where directed on Site approved weatherproof lockup office for the sole use of the Consultants with a floor area not less than 24 square meters. The office shall be constructed with concrete or wooded floor and the walls and ceiling internally are to be lined with fibreboard. Glazed windows (with curtains or sunshades) shall be provided of not less than 1 meter square area and the door shall have a strong lock or fastening. The office shall be provided with artificial lighting and electric power. The contractor shall allow for regular cleaning of the office. The office is to be furnished with the following:	
(a)	1 No. 20 Seater table, and 20 chairs.	
(b)	1 No. Pin Boards with a minimum space of 2.0 square metres	
(c)	1 No. A0 Size drawing chest with four drawers	
(v)	The Contractor shall maintain a display of the Programme and Progress chart in the project managers offices, devised in such a way that the lined programme is shown and progress can be marked up as the work proceeds. The Contractor shall keep this chart up to date at all times.	
TOTAL CARRIED TO COLLECTION		11,650,000.00

Item	Description	Amount (MK)
A	(vi) The Contractor shall keep on the Site and maintain in good condition, one dumpy or quickset level and levelling staff and one 30 metres steel/linen tape for the use of the Project Manager. The Contractor shall also provide stationery for use by the Project Manager. (vii) He shall provide, erect and maintain a lockup pedestal type water or bucket closet for the sole use of the Project Manager including making temporary connection to drain where applicable to the satisfaction of the Government and Medical officers of Health and shall provide the services of a cleaner and pay all conservancy charges and keep both office and closet clean and in sanitary condition from the commencement to the completion of the Works and dismantle and make good disturbed surfaces to the satisfaction of the Project Manager on completion of the Works. (viii) The office and the closet shall be completed before the Contractor is permitted to commence the Works. (ix) Allowance for the supply of office consumables for the Engineer's offices <u>Office for the Clerk of Works and Receptionist</u> The Contractor shall provide, erect and maintain where directed on site approved weatherproof offices for the sole use of the Clerk of Works and another for the Receptionist. The offices shall be not less than 12 square meters each and shall be of construction similar to the office of the Projects manager. The office shall as a minimum be furnished with the following: The contractor shall allow for regular cleaning of the office. (a) 2 No. office desk with lockable drawers, and chair with arm rest (b) 2 No. Lockable metal filing cabinet (c) 2 No. Pin Boards with a minimum space of 1.5 square metres each (d) Power and Lighting Points as necessary (e) Provide a camera for taking high resolution photos (Not less than 14MP) <u>Temporary communications</u> Provide and maintain a telephone; e-mail service on the site for the contractor's own use and provide similar separate facilities for the Clerk of Works, Project Managers Offices and pay all charges and expenses in connection therewith <u>Signboard</u> The contractor shall provide and erect where directed and maintain during the whole period of building operations and remove at completion, an approved temporary two faced signboard to the Architect's standard design and giving the title of the Works and showing the names of the Employer, Consultants, Contractor, Nominated Sub-Contractors and Suppliers, on both sides <u>Sanitation of the works</u> Sanitation of the Works shall be arranged and maintained by the Contractor to the satisfaction of the Government and Local Authorities, Labour Department and the Architect.	3,000,000.00
B		
C		750,000.00
D		500,000.00
	TOTAL CARRIED TO COLLECTION	4,250,000.00

Item	Description	Amount (MK)
A	Materials, tools, plant and scaffolding All materials and workmanship used in the execution of the Works shall be of the best quality and description unless otherwise described. Any materials for the Works condemned by the Project Manager shall immediately be removed from the Site at the Contractor's expense The Contractor shall be responsible for the provision of all materials, scaffolding, tools, plants, transport and workmen required for the Works except insofar as may be stated otherwise herein and he shall allow for the provision of the foregoing except for such items specifically and only required for the use of the Nominated Sub-Contractors as described herein. No timber used for scaffolding, formwork or similar purpose shall be used afterwards in the permanent Works. All such plant, tools and scaffolding shall comply with all regulations whether general or local in force throughout the period of the Contract and shall be altered or adapted during the Contract as may be necessary to comply with any amendments in / or additions to such regulations.	6,750,000.00
B	Supervision and Working hours The said Works shall be executed under the direction and to the entire satisfaction of the Project Manager, who shall at all times during normal working hours have access to the Works and to the yards and the workshops of the Contractor and Sub-Contractors or other places where work is being prepared for the Contract. The working hours shall be those generally worked by good employers in the Building and Civil Engineering Trade in Malawi. No work shall be carried out at night or on gazetted holidays unless the Project Manager shall so direct. No work shall be covered up nor shall any concreting be carried out in the absence of the Clerk of Works without the prior approval of the Project Manager in writing.	1,500,000.00
C	Fair wages The Contractor shall pay rates of wages and observe hours and conditions of labour not less favourable than the minimum rates of remuneration and minimum conditions of employment applicable in the district in which the works is carried out. The relevant notice must be posted up and kept posted upon the Site where it can conveniently be read by the employees concerned.	
D	Labour No labour with the exception of the watchman, may be housed on the Site and the Contractor shall allow for all transport and other charges in moving labour to and from the Site at such hours and such routes as are permitted by the Authorities. The Contractor is to provide, erect and maintain satisfactory housing for the watchmen and shall remove the same on completion of the Works.	
TOTAL CARRIED TO COLLECTION		8,250,000.00

Item	Description	Amount (MK)
A	Existing Property	
B	The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services and he will be held responsible for all damage thereto, arising from the execution of this Contract, and he shall make good all such damages when directed at his own expense. Protection of the works The Contractor shall cover up and protect all finished works liable to damage including provision of temporary roofs, gutters, drains, etc., until the completion of the Works. In the event of any damage occurring to the Works, materials, sewers, drains, gullies, paths or other Works on the Site temporarily in the possession of the Contractor, for the purpose of this Contract, either from the weather, want of proper protection, defects or insufficiency of the Works, the Contractor alone shall be responsible and shall without extra charges, make good all damages and pay all costs which may be levied. Government Acts involving Labour/Force/Works etc. Allow for complying with all Government Acts, Orders and Regulations in connection with the Employment of labour and other matters related to the execution of the works. The tender price must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, Pensions, Holidays safety, health or welfare of work people. The Contractor must duly acquaint himself with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc. It is most important that the Contractor, before tendering, shall obtain from the relevant authority the full information regarding all such regulations and/or restrictions which may affect the organization of the works, supply and control of labour, etc., and allow accordingly no claim in respect of want of knowledge in this connection will be entertained or allowed.	750,000.00
C	Standard Measurements All dimensions and measurements, etc., shown on the Drawings and given in this Bills of Quantities shall be metric. Bills of Quantities The Bills of Quantities have generally been prepared in accordance with the principles of the Standard Method of Measurement of Building works in Malawi Metric Edition dated January 1982. Any divergence from the rules of the Standard Method of Measurement will generally be in order to provide further more detailed information. The Method of Measurements herein used must be accepted and will be strictly adhered to for the adjustment of variations or for measurements as necessary. The whole of the quantities in these Bills, unless expressly otherwise stated, have been arrived at by taking the net measurements of various items of completed Works from the Drawings.	750,000.00
D	TOTAL CARRIED TO COLLECTION	1,500,000.00

Item	Description	Amount (MK)
A	All the Works in this Contract that is liable to adjustment has been measured as "Provisional" in these Bills of Quantities, and no excavation or foundation work or other works so described shall be filled in or covered up until all measurement needed for the Adjustments of Variations under clause 37 of the Conditions of Contract have been made by the Project Manager. The rates set out by the Contractor against each item shall, unless otherwise expressly provided to the contrary, or unless there is a separate item for extra labour, cutting or waste, be held to include for waste on materials, carriage and cartage, carrying in and return of empties, hoisting, setting, fitting and fixing in position, making good and all other labours and everything else necessary for the completion of each item and for establishment charges and profit. Throughout the Bills of Quantities generally, no mention is made of heights for hoisting and all prices must include for hoisting and fixing at any level within the limit shown on the Drawings or included in the general description unless a specific level is stated. The Contractor shall be deemed to have made allowance in his rates generally to cover items of Preliminaries expenses in connection with P.C. Sums or other items if these have not been priced against the respective items. These Bills of Quantities have been prepared in the elemental form and each element contains work in various trades. For the purpose of pricing, the Bills of Quantities may be taken apart and each trade collected together but when the Tender is submitted the Bills of Quantities must be re-assembled in the correct order.	-
	Pricing of Items in Preliminaries Wherever in the contractor's priced Bills of quantities no price appears against an item of preliminaries, the value of such items shall be deemed to be included in the price for other items in the Bills of quantities Prime Cost (P.C.) Sums (i) The words "Prime Cost" (or the initials "P.C.") wherever appearing in these Bills of Quantities, shall mean net cost exclusive of any trade, cash or other discounts whatsoever but inclusive of the cost of packing, carriage and delivery. Such costs shall be the sums due to the Sub-Contractor or suppliers after adjustment where applicable in respect of measurements or rates. (ii) Any increase or decrease in these Prime Cost Sums resulting from the adjustments and properly paid by the Contractor, shall be added to or deducted from the Contract Sum in the final account. In substantiation, the Contractor is required to produce to the Project Manager, all quotations, invoices and receipts accepted as shall be necessary to show the details of the sums actually paid.	-
TOTAL CARRIED TO COLLECTION		1,500,000.00

Item	Description	Amount (MK)
A	Visitors to the site The Contractor is required to control all visitors to the Site and to keep out unauthorised visitors and to provide a visitors book and ensure that all the authorised visitors sign therein. Progress Reports Monthly progress reports shall be prepared by the Contractor and submitted to the Project Manager in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates. Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the certificate of practical completion for the Works. Each report shall include but not limited to: (a) a programme and progress chart devised in such a way that the approved contract work programme is shown and progress can be marked up against it as the work proceeds; (b) photographs showing the state of progress on the Site; (c) records of the Contractor's Personnel and Equipment; (d) Site Weather Records duly certified by the Clerk of Works; (e) copies of quality assurance documents, test results and certificates of materials; (f) updated cash flow projection; (g) procurement schedule; (h) safety statistics; (i) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardise the completion in accordance with the Contract and the measures being (or to be) adopted to overcome the delays.	500,000.00
	Site progress photographs The Contractor shall take and develop (in both digital and still form) site progress photographs every two weeks. Adequate copies shall be made for distribution as follows: (a) Client 2 sets in still form & 2 sets in digital form. (b) Project Manager 1 set in still form & 1 set in digital form. (c) 1 set of photos in still form to be pinned up in the Site offices of the Project Manager.	500,000.00
TOTAL CARRIED TO COLLECTION		500,000.00

Item	Description	Amount (MK)
A	Contractor's Project and Site Administration and Foreman-in-charge	
	The Contractor shall permanently deploy properly qualified Project and Site Administrative Staff, fluent in English as presented in Section III (Qualification Information) under item 1.5 and approved by the Employer.	
	(i) Contract Manager (1 No)	
	(ii) Site Engineer (1 No)	
	(iii) General Foreman (1 No)	
	(iv) Trades Foreman (4 No)	
	(v) Quantity Surveyor (1 No)	
	The Contractor shall submit to the Project Manager a Site Organization Structure Chart within seven (7) days of commencement of the Contract.	
B	Temporary Hoardings, Fencing and the like	
	The Contractor shall be entirely responsible for all temporary hoarding and fencing which shall be required by either the Project Manager or the Local Authority. The Contractor should ascertain the extent of such temporary hoardings and fencing and include the costs in his bid.	
	<u>Temporary screens</u>	
C	Provide, erect and maintain such temporary screens and the like as may be specifically required.	
D	Mobilization on site	
E	Demobilize on completion of the works	
F	Monthly Site Meetings	
G	Preparation of As-built drawings	
	TOTAL CARRIED TO COLLECTION	3,250,000.00
		1,250,000.00
		2,000,000.00
		3,250,000.00

P11

ELEMENT	DESCRIPTION	PAGE NO	AMOUNT (MK)
	BILL NO.2		
	BUILDING WORKS		
	SUMMARY		
1	SUBSTRUCTURES	2/1/3	120,353,678
2	REINFORCED CONCRETE FRAME	2/2/1	183,921,984
3	REINFORCED CONCRETE STAIRCASE NO:1	2/3/1	2,459,476
4	REINFORCED CONCRETE STAIRCASE NO:2	2/4/1	7,249,574
5	WALLING	2/5/1	86,019,300
6	ROOFING CONSTRUCTION	2/6/1	24,072,850
7	DOORS	2/7/3	17,803,570
8	WINDOWS	2/8/2	56,773,726
9	EXTERNAL FINISHES	2/9/2	17,113,275
10	INTERNAL FINISHES	2/10/2	75,873,700
11	FITTINGS & FIXTURES	2/11/1	1,497,000
	TOTAL BILL NO.2 CARRIED TO MAIN SUMMARY		472,784,455

2/1/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 2	BUILDING WORKS				
	ELEMENT NO. 1				
	SUBSTRUCTURE				
	EARTHWORKS AND EXCAVATIONS				
	ALL PROVISIONAL				
	The work in this item includes all works up to and including the ground floor slab				
	The Contractor shall prepare and submit in ample time for approval before execution of the Works detail drawings, specifications and calculations of all temporary Works they may wish to use, which shall also show the location of such temporary Works and their order of				
	Allow for maintaining & upholding sides of excavation: clear off all fallen material				
A	ITEM	1			-
B	ITEM	1			-
C	SM	1215		100.00	121,500.00
D	SM	1215		400.00	486,000.00
E	CM	365		1,500.00	547,500.00
F	CM	133		1,000.00	133,000.00
G	CM	214		1,000.00	214,000.00
H	CM	522		40,000.00	20,880,000.00
I	CM	561		1,200.00	673,200.00
J	CM	351		900.00	315,900.00
K	CM	133		1,300.00	172,900.00
	TOTAL CARRIED TO COLLECTION				
					23,544,000.00

2/1/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	150mm Approved imported hardcore fill consolidated to make up levels	SM	890	1,150.00	1,023,500.00
B	35mm thick Sand and blinding or any other equal and approved material in blinding surface of hardcore	SM	890	300.00	267,000.00
C	Treat surface of sides and bottoms of excavation insecticide applied in accordance with approved manufacturer's instructions	SM	1883	750.00	1,412,250.00
D	Treat surface of tops of hard core with insecticide applied in accordance with approved	SM	890	750.00	667,500.00
CONCRETE WORK					
PLAIN CONCRETE CLASS 15, 20mm AGGREGATE:					
E	50mm Thick blinding layer under Strips	SM	290	5,000.00	1,450,000.00
F	50mm Thick blinding layer under Column Bases	SM	222	5,000.00	1,110,000.00
20mm AGGREGATE IN:					
G	Column bases	CM	126	160,000.00	20,160,000.00
H	Strip Foundation	CM	55	160,000.00	8,800,000.00
I	Stub columns	CM	10	160,000.00	1,600,000.00
J	Staircase	CM	4	160,000.00	640,000.00
K	150mm Thick floor slab	SM	936	24,024.00	22,486,464.00
L	150mm Thick ramp laid to slope not exceeding 150 to horizontal, including powerfloating with hardener and forming 25 x 20mm deep V-groove	SM	36	24,024.00	864,864.00
STEEL FABRIC REINFORCEMENT TO BS 4483 as described					
M	B.R.C. Fabric mesh reinforcement reference No. A142 including 0.2m end and side laps	SM	936	4,500.00	4,212,000.00
STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and					
MILD YIELD STEEL ROUND BARS TO BS 4449					
N	8 mm Diameter bars	KG	361	1,450.00	523,450.00
HIGH YIELD RIBBED BARS, TYPE 2 TO BS 4449:2005					
O	12mm Diameter bars	KG	256	1,450.00	371,200.00
P	16mm Diameter bars	KG	7125	1,450.00	10,331,250.00
Q	20mm Diameter bars	KG	86	1,450.00	124,700.00
TOTAL CARRIED TO COLLECTION					76,044,178.00

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Vertical sides of column bases	SM	239	15,000.00	3,585,000.00
B	Vertical sides of columns	SM	124	15,000.00	1,860,000.00
C	Sides & Edges of floor slab 150mm high	LM	186	1,200.00	223,200.00
D	Ditto to 150mm high Ramp	LM	29	1,200.00	34,800.00
E	Staircase risers	LM	34	1,200.00	40,800.00
PLINTH WALL					
Solid concrete blockwork jointed and pointed in cement sand (1:4) mortar: with and including hoop iron wall ties every alternative course: in					
F	250mm Thick walls.	SM	537	25,000.00	13,425,000.00
DAMP PROOF MEMBRANE					
G	1000 Gauge polythene sheeting laid on blinded	SM	936	700.00	655,200.00
PLINTH FINISHES					
20mm Cement and sand (1:4) backing: woodfloat finish: on concrete or blockwork: To plinth walls					
H	Prepare and apply three coats Black Bitumastic Paint: on rendered surfaces: externally: on	SM	269	2,200.00	591,800.00
I	Plinths	SM	269	1,300.00	349,700.00
TOTAL CARRIED TO COLLECTION					20,765,500.00
COLLECTION					
Total brought forward from Page 2/1/1					23,544,000.00
Total brought forward from Page 2/1/2					76,044,178.00
Total brought forward from Page 2/1/3					20,765,500.00
TOTAL CARRIED TO BILL SUMMARY					120,353,678.00

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 2				
	BUILDING WORKS				
	ELEMENT NO. 2				
	REINFORCED CONCRETE FRAME				
	VIBRATED REINFORCED CONCRETE CLASS 25				
	(20MM AGGREGATE) IN:				
A	Columns	CM	48	160,000.00	7,680,000.00
B	Beams	CM	116	160,000.00	18,560,000.00
C	Gutter	CM	36	160,000.00	5,760,000.00
D	Sunshades	CM	51	160,000.00	8,160,000.00
E	225mm thick suspended solid slab	SM	864	36,036.00	31,135,104.00
F	225mm thick suspended solid roof slab	SM	176	36,036.00	6,342,336.00
G	300mm thick suspended solid roof slab	SM	53	48,048.00	2,546,544.00
	STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks				
	MILD STEEL ROUND BARS TO BS 4449				
H	8mm Diameter bars	KG	4391	1,450.00	6,366,950.00
I	10mm Diameter bars	KG	1303	1,450.00	1,889,350.00
	HIGH YIELD RIBBED BARS, TYPE 2 TO BS 4449:2005				
J	10mm Diameter bars	KG	2794	1,450.00	4,051,300.00
K	12mm Diameter bars	KG	6527	1,450.00	9,464,150.00
L	16mm Diameter bars	KG	13597	1,450.00	19,715,650.00
M	20mm Diameter bars	KG	4742	1,450.00	6,875,900.00
N	25mm Diameter bars	KG	1883	1,450.00	2,730,350.00
O	32mm Diameter bars	KG	1159	1,450.00	1,680,550.00
	FORMWORK TO:				
P	Sides of columns	SM	381	15,000.00	5,715,000.00
Q	Sides and soffites of beams	SM	1107	15,000.00	16,605,000.00
R	Sides and soffites of gutter	SM	342	15,000.00	5,130,000.00
S	Sides and soffites of sunshades	SM	340	15,000.00	5,100,000.00
	TOTAL CARRIED TO COLLECTION				165,508,184.00

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Soffites of suspended slabs	SM	1093	15,000.00	16,395,000.00
B	Edges of suspended floor slab size 150-225mm high	LM	286	1,800.00	514,800.00
C	Edges of suspended floor slab size 225-300mm high	LM	29	2,000.00	58,000.00
D	SUNDRIES 20 SWG Hoop Iron wall tie 25mm wide x 450mm long cast 75mm into concrete and built into joint of blockwalling	NO	964	1,500.00	1,446,000.00
TOTAL CARRIED TO COLLECTION					18,413,800.00
COLLECTION					18,413,800.00
Total brought forward from Page 2/2/1					165,508,184.00
Total brought forward from Page 2/2/2					18,413,800.00
TOTAL CARRIED TO BILL SUMMARY					183,921,984.00

2/2/1

2/3/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 2				
	BUILDING WORKS				
	ELEMENT NO. 3				
	REINFORCED CONCRETE STAIRCASE NO 1				
	VIBRATED REINFORCED CONCRETE CLASS 25				
	(20MM AGGREGATE) IN:				
A	Staircases	CM	3	160,000.00	480,000.00
B	175mm Thick Landing	SM	6	28,021.00	168,126.00
	HIGH YIELD RIBBED BARS, TYPE 2 TO BS 4449:2005				
C	10mm Diameter bars	KG	106	1,450.00	153,700.00
D	12mm Diameter bars	KG	266	1,450.00	385,700.00
	FORMWORK TO:				
E	Sloping soffits of Staircases	SM	11	15,000.00	165,000.00
F	Soffits of landing	SM	6	15,000.00	90,000.00
G	Risers 150-225mm high	LM	35	1,800.00	63,000.00
H	Edges of landing 75-150mm high	LM	7	1,200.00	8,400.00
I	Open string edge of staircase 330mm (extreme) including cutting to profile of treads and risers	LM	6	2,200.00	13,200.00
	FINISHES				
	40mm thick screed : and finish smooth with steel float				
H	Landing	SM	6	3,900.00	23,400.00
I	Treads; 300mm wide nosing tiles including three rows 5mm x 5mm deep anti-slip grooves	LM	35	1,200.00	42,000.00
J	Risers 157mm high	LM	30	700.00	21,000.00
K	100 x 10mm skirting	LM	7	400.00	2,800.00
L	100 x 10mm sloping skirting; cut to profile	LM	6	400.00	2,400.00
	SUPPLY AND FIX: 300 x 300 x 10mm Thick Non slip approved ceramic floor tiles : bedded and jointed in approved adhesive : pointed with approved coloured grout : to				
M	Landing	SM	6	19,500.00	117,000.00
N	Treads; 300mm wide nosing tiles including three rows 5mm x 5mm deep anti-slip grooves	LM	35	7,850.00	274,750.00
O	Risers 157mm high	LM	30	5,100.00	153,000.00
	TOTAL CARRIED TO COLLECTION				2,163,476.00

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	100 x 10mm skirting	LM	7	4,000.00	28,000.00
B	100 x 10mm sloping skirting; cut to profile	LM	6	4,000.00	24,000.00
	INTERNAL LIME PLASTER				
	First coat of cement lime and sand (1:2:9) :				
	second coat of cement, lime putty and sand 1:1:6				
	steel trowelled.				
C	25mm Thick two coat work to sloping soffites	SM	11	2,100.00	23,100.00
D	Ditto but soffites of landings.	SM	6	2,100.00	12,600.00
E	Ditto but to open strings	SM	3	2,100.00	6,300.00
	PREPARE AND APPLY ONE MIST COAT AND THREE COATS first grade emulsion paint internally on:				
F	Steel trowelled plastered sloping soffites of staircase.	SM	11	2,500.00	27,500.00
G	Ditto but soffites of landings.	SM	6	2,500.00	15,000.00
H	Ditto but to open strings	SM	3	2,500.00	7,500.00
	BALUSTRADING				
	1000mm high Mild steel balustrading comprising of : 50 x 10mm mild steel plate baluster welded to mild steel bracket and grouted into walls; 25mm diameter x 3mm thick CHS mild steel intermediate rails ; 60mm diameter mild steel handrail fixed onto and including 50 x 10mm thick bar holder; 75mm diameter x 10mm thick mild steel base plate welded to support bracket; welded, bolted and screwed connections; including primer, three coats gloss oil paint and decorations to approval; to Architect's 1000mm high staircase balustrading	LM	10	15,200.00	152,000.00
	TOTAL CARRIED TO COLLECTION				296,000.00
	COLLECTION				
	Total brought forward from Page 2/3/1				2,163,476.00
	Total brought forward from Page 2/3/2				296,000.00
	TOTAL CARRIED TO BILL SUMMARY				2,459,476.00

2/3/1

2/4/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 2				
	BUILDING WORKS				
	ELEMENT NO. 4				
	REINFORCED CONCRETE STAIRCASE NO 2				
	VIBRATED REINFORCED CONCRETE CLASS 25				
	(20MM AGGREGATE) IN:				
A	Staircases	CM	6	160,000.00	960,000.00
B	175mm Thick Landing	SM	44	28,021.00	1,232,924.00
	HIGH YIELD RIBBED BARS, TYPE 2 TO BS 4449:2005				
C	10mm Diameter bars	KG	279	1,450.00	404,550.00
D	12mm Diameter bars	KG	446	1,450.00	646,700.00
	FORMWORK TO:				
E	Sloping soffits of Staircases	SM	23	15,000.00	345,000.00
F	Soffits of landing	SM	44	15,000.00	660,000.00
G	Risers 150-225mm high	LM	80	1,800.00	144,000.00
H	Edges of landing 75-150mm high	LM	27	1,200.00	32,400.00
I	Open string edge of staircase 330mm (extreme) including cutting to profile of treads and risers	LM	17	2,200.00	37,400.00
	FINISHES				
	40mm thick screed : and finish smooth with steel float				
H	Landing	SM	44	3,900.00	171,600.00
I	Treads; 275mm wide nosing tiles including three rows 5mm x 5mm deep anti-slip grooves	LM	72	1,200.00	86,400.00
J	Risers 180mm high	LM	80	700.00	56,000.00
K	100 x 10mm skirting	LM	17	400.00	6,800.00
L	100 x 10mm sloping skirting; cut to profile	LM	23	400.00	9,200.00
	SUPPLY AND FIX: 300 x 300 x 10mm Thick Non slip approved ceramic floor tiles : bedded and jointed in approved adhesive : pointed with approved coloured grout : to				
M	Floors	SM	44	19,500.00	858,000.00
N	Treads; 275mm wide nosing tiles including three rows 5mm x 5mm deep anti-slip grooves	LM	72	7,850.00	565,200.00
O	Risers 180mm high	LM	80	5,100.00	408,000.00
	TOTAL CARRIED TO COLLECTION				6,624,174.00

2/4/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	100 x 10mm skirting	LM	17	4,000.00	68,000.00
B	100 x 10mm sloping skirting; cut to profile	LM	23	4,000.00	92,000.00
	INTERNAL LIME PLASTER				
	First coat of cement lime and sand (1:2:9);				
	second coat of cement lime putty and sand 1:1:6				
	steel trowelled.				
C	25mm Thick two coat work to sloping soffites	SM	23	2,100.00	48,300.00
D	Ditto but soffites of landings.	SM	14	2,100.00	29,400.00
E	Ditto but to open strings	SM	8	2,100.00	16,800.00
	PREPARE AND APPLY ONE MIST COAT AND THREE COATS first grade emulsion paint internally on:				
F	Steel trowelled plastered sloping soffites of staircase.	SM	23	2,500.00	57,500.00
G	Ditto but soffites of landings.	SM	14	2,500.00	35,000.00
H	Ditto but to open strings	SM	8	2,500.00	20,000.00
	BALUSTRADING				
	1000mm high mild steel balustrading comprising of; 50 x 10mm mild steel plate baluster welded to mild steel bracket and grouted into walls; 25mm diameter x 3mm thick CHS mild steel intermediate rails; 60mm diameter mild steel handrail fixed onto and including 50 x 10mm thick bar holder; 75mm diameter x 10mm thick mild steel base plate welded to support bracket; welded, bolted and screwed connections; including primer, three coats gloss oil paint and decorations to approval; to Architect's 1000mm high staircase balustrading	LM	17	15,200.00	258,400.00
	TOTAL CARRIED TO COLLECTION				625,400.00
	COLLECTION				6,624,174.00
	Total brought forward from Page 2/4/1				625,400.00
	Total brought forward from Page 2/4/2				7,249,574.00
	TOTAL CARRIED TO BILL SUMMARY				7,249,574.00

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 2					
BUILDING WORKS					
ELEMENT NO. 5					
WALLING					
A	Solid concrete blocks jointed and pointed in cement sand (1:4) mortar with and including hoop iron ties every alternate course : in	250mm Thick walls	1633	25,000.00	40,825,000.00
B	Hollow concrete blocks jointed and pointed in cement sand (1:4) mortar with and including hoop iron ties every alternate course : in	150mm Thick walls	359	20,000.00	7,180,000.00
C	PRECAST CONCRETE CLASS 20, finished fair on all exposed surfaces including bedding and jointing in cement sand (1:3) mortar	SM	189	22,000.00	4,158,000.00
D	300 x 100mm Weathered and throated coping	LM	172	3,100.00	533,200.00
E	305 x 75mm Weathered and throated window sill	LM	118	2,500.00	295,000.00
DAMP PROOF COURSE OF BITUMEN FELT TO B.S. 743 Type A with 150mm laps including cement and sand (1:3) levelling bed					
F	230mm Thick walls	LM	356	300.00	106,800.00
G	150mm Thick walls	LM	71	300.00	21,300.00
H	Supply and fix anodized aluminium curtain walling as supplied and fixed by HULABOND or equal and approved mullions SIA 1991 transoms and transom cleats, spandrel profile 3003.65 x 65 x 6mm steel angle brackets, 8mm reflective structural glazing including all fixing accessories, silicon, horizontal top and bottom curtain wall frame cover strip profiles to architects approval	SM	166	150,000.00	24,900,000.00
I	Office Blinds Supply and install Office blinds as approved by the Architect	SM	194	40,000.00	7,760,000.00
TOTAL CARRIED TO COLLECTION					85,779,300.00

2/5/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	BALUSTRADING COMPRISING OF: 75mm diameter x 6mm thick mild steel hollow section railing; welded onto mild steel hollow section 50 x 25mm baluster rawl bolted to floor; 4 No. 25mm intermediate rails; 50mm diameter handrail fixed onto and including 50 x 10mm thick, 80mm long brackets welded to balusters; welded; bolted and screwed connections; INCLUDING PAINTING AND DECORATIONS; to Architect's detailed drawing	LM	6	20,000.00	120,000.00
	900mm high staircase balustrading	LM	6	20,000.00	120,000.00
B	Ditto but sloping				
TOTAL CARRIED TO COLLECTION					240,000.00
COLLECTION					
Total brought forward from Page 2/5/1					85,779,300.00
Total brought forward from Page 2/5/2					240,000.00
TOTAL CARRIED TO BILL SUMMARY					86,019,300.00

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	WATER PROOF CEMENT SAND SCREED (1:4) Finished to receive waterproofing membrane 25mm Thick to flat roofs;	SM	229	2,650.00	606,850.00
B	Two layers of Derbigum SP4 waterproofing membrane with 75mm side and 100mm end laps, sealed to primed surface to falls and crossfalls; reinforced with polyester, fully bonded and torch applied into solvent primer conforming to all manufacturers standards Flat roofs	SM	229	21,500.00	4,923,500.00
TOTAL CARRIED TO COLLECTION					5,530,350.00
COLLECTION					18,542,500.00
Total brought forward from Page 2/6/1					5,530,350.00
Total brought forward from Page 2/6/2					
TOTAL CARRIED TO BILL SUMMARY					24,072,850.00

2/6/1

2/7/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 2					
	BUILDING WORKS				
	ELEMENT NO. 7				
	DOORS				
	TIMBER DOORS				
	40mm THICK HOLLOW FLUSH DOORS, faced both sides with 6mm plywood veneer.				
	hardwood lipping all round, all to Architect's detailed drawing				
A	Door D03 overall size 900 x 2100mm high : to Door Schedules.	NO	35	35,000.00	1,225,000.00
B	Door D06 overall size 500 x 2100mm high : to Door Schedules.	NO	7	35,000.00	245,000.00
C	Door D05 overall size 900 x 2400mm high : to Door Schedules.	NO	29	40,000.00	1,160,000.00
D	Door D04 overall size 1500 x 2400mm high : to Door Schedules.	NO	10	90,000.00	900,000.00
	40mm THICK SOLID CORE HARDWOOD DOORS WITH FIXED GLASS LIGHT ABOVE, faced both sides with 6mm plywood veneer with hardwood lipping all round, all to Architect's detailed drawing				
E	230 x 50mm Frames, ditto	LM	223	5,700.00	1,271,100.00
F	150 x 50mm Frames, ditto	LM	162	4,500.00	729,000.00
G	50 x 25mm Architrave : moulded	LM	772	950.00	733,400.00
	IRON MONGERY				
	Supply and fix the following iron mongery : locks and furniture where applicable are to be equal to those manufactured by "UNION" and approved by the Architect				
H	HINGES				
	100mm polished stainless steel butt hinges Ref: "HN SW-403020-SSS"	PRS	126	3,000.00	378,000.00
	CYLINDERS				
I	Polished aluminium (Anodised Silver Finished) Euro profile cylinder Hscutcheon rings with concealed fixing ref: "AL8730AS"	NO	74	5,600.00	414,400.00
J	150 x 300mm aluminium kicking/pushing plate	NO	154	12,000.00	1,848,000.00
	TOTAL CARRIED TO COLLECTION				8,903,900.00

2/7/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Floor mounted Rubber door stop Ref: "DS-F-006-SSS"	NO	84	2,000.00	168,000.00
B	3-lever Mortice lock complete with flanged strike plate and dead bolt pocket Ref: "31-2277-PL"	NO	74	28,000.00	2,072,000.00
C	Indicator lock Ref: US416 1V	NO	36	12,600.00	453,600.00
D	Polished aluminium lever handles on Rose Ref: "LHS-RR-428-AS"	PRS	37	6,500.00	240,500.00
E	Disabled Pull handle set	NO	8	45,000.00	360,000.00
F	Male / Female / Disabled sex symbol ref: US466 / US 46PS	NO	6	15,000.00	90,000.00
G	General surfaces	SM	322	1,800.00	579,600.00
H	Ditto 200 - 300mm girth	LM	223	450.00	100,350.00
I	Ditto 100 - 200mm girth	LM	162	300.00	48,600.00
J	Ditto not exceeding 100mm girth	LM	772	150.00	115,800.00
K	Prime back of frame before fixing	LM	385	100.00	38,500.00
PURPOSE MADE DOORS: NATURAL ANODISED ALUMINIUM DOORS					
ALUMINIUM SECTIONS FOR SINGLE GLAZING, including beads and wash leather strips: with and including 6mm thick plate glass and glazing: AND ALL IRON MONGERY AND ACCESSORIES: as per Architect' Drawings					
L	Door D01 overall size 1800 x 2430mm high : to Door Schedules.	NO	2	612,360.00	1,224,720.00
M	Door D02 overall size 1500 x 2400mm high : to Door Schedules.	NO	2	504,000.00	1,008,000.00
N	Door D07 four Wings Manual revolving door with and including all accessories as approved by the project manager / architect	NO	2	958,000.00	1,916,000.00
TOTAL CARRIED TO COLLECTION					8,415,670.00

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Provide for general door signage As to be approved by the Architect before fixing	NO	28	15,000.00	420,000.00
B	PREPARE SURFACE AND APPLY FIXING PRIMER: apply one coat primer, one undercoat and two gloss finishing coats: on metal work: to General surfaces	SM	32	2,000.00	64,000.00
TOTAL CARRIED TO COLLECTION					484,000.00
COLLECTION					
Total brought forward from Page 2/7/1					8,903,900.00
Total brought forward from Page 2/7/2					8,415,670.00
Total brought forward from Page 2/7/3					484,000.00
TOTAL CARRIED TO BILL SUMMARY					17,803,570.00

2/7/3

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Window W08 Size 3700 x 600mm high (overall)	NO	4	171,500.00	686,000.00
B	Window W09 Size 16400 x 400mm high (overall)	NO	2	497,000.00	994,000.00
C	Window W10 Size 21800 x 400mm high (overall)	NO	2	505,000.00	1,010,000.00
D	Window W11 Size 15300 x 400mm high (overall)	NO	4	355,000.00	1,420,000.00
E	6mm PVB FADEBAND LAMINATED GLASS and glazing as described: to Metal casement in panes 0.1 to 0.5 square meters <u>PREPARE SURFACE AND APPLY ETCHING</u> <u>PRIMER: apply one coat primer, one undercoat and two gloss finishing coats: on metal work: to</u>	SM	243	54,085.50	13,142,776.00
F	Burglar proofing	SM	486	2,000.00	972,000.00
TOTAL CARRIED TO COLLECTION					18,224,776.00
COLLECTION					38,548,950.00
Total brought forward from Page 2/8/1					18,224,776.00
Total brought forward from Page 2/8/2					56,773,726.00
TOTAL CARRIED TO BILL SUMMARY					56,773,726.00

2/8/2

2/9/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 2				
	BUILDING WORKS				
	ELEMENT NO: 9				
	EXTERNAL FINISHES				
	WALL FINISHES				
	TWO COATS EXTERNAL CEMENT RENDER (1:4)				
A	25mm Thick to walls/concrete works.	SM	218	2,500.00	545,000.00
B	15mm backing Thick to walls.	SM	509	2,000.00	1,018,000.00
	PREPARE AND APPLY THREE COATS first grade weatherguard emulsion paint: externally: on				
C	Rendered surfaces	SM	218	2,000.00	436,000.00
	215 x 102.3mm long REI BRICK FACING :				
	bonded on cement sand (1:4) mortar : on				
D	Rendered surfaces	SM	509	15,200.00	7,736,800.00
	SUPPLY AND FIX: 500 x 500 x 10mm Thick Non				
	slip approved ceramic floor tiles : bedded and				
	jointed in approved adhesive : pointed with				
	approved coloured grout : to				
E	Floors	SM	51	25,000.00	1,275,000.00
F	Saircase risers	LM	34	4,300.00	146,200.00
G	Saircase steps	LM	24	6,900.00	165,600.00
H	SPLASH APRON				
	75mm thick concrete class 25/20mm aggregate splash reinforced with and including fabric mesh reinforcement rel A98 as before described; finished with 25mm thick cement sand screed (1:3) steel trowelled smooth; including all necessary	SM	85	9,375.00	796,875.00
I	600mm deep x 200mm thick foundation of splash Apron with and including foundation concrete; plastering to exposed surfaces; necessary excavation and disposal of surplus soil	LM	100	15,000.00	1,500,000.00
J	250mm Thick concrete walls bedded and jointed with in cement sand mortar with approved water proofing additive : finished with 20mm thick cement sand render (1:3) steel trowelled smooth including	SM	60	31,250.00	1,875,000.00
	TOTAL CARRIED TO COLLECTION				15,494,475.00

2/9/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	STORM DRAIN				
	300mm Wide x 400mm deep (internal) drainage channel comprising : 500 x 100mm thick mass concrete Class 15 base : 100mm thick solid concrete block walls bedded and jointed with in cement sand mortar with approved water proofing additive : finished with 20mm-thick cement sand render (1:3) steel trowelled smooth including a water proof additive: including excavation, disposal and formwork	LM	142	11,400.00	1,618,800.00
	TOTAL CARRIED TO COLLECTION				1,618,800.00
	COLLECTION				
	Total brought forward from Page 2/9/1				15,494,475.00
	Total brought forward from Page 2/9/2				1,618,800.00
	TOTAL CARRIED TO BILL SUMMARY				17,113,275.00

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BUILDING WORKS				
	ELEMENT NO: 10				
	INTERNAL FINISHES				
	WALL FINISHES				
	CEMENT AND SAND (1:4) SCREDS finished to				
	receive wall tiles				
A	Water borne areas	SM	450	1,950.00	877,500.00
	INTERNAL LIME PLASTER				
	First coat of cement lime and sand (1:2:9) :				
	second coat of cement, lime putty and sand				
	12mm Thick two coat work to walls/concrete				
B	SUPPLY AND FIX: 500 x 500 x 10mm Thick	SM	2807	2,000.00	5,614,000.00
	approved ceramic wall tiles : bedded and jointed				
	In approved adhesive : pointed with approved				
	coloured grout : to				
C	Water borne areas	SM	450	25,000.00	11,250,000.00
D	Extra over for PVC rounded edge top	LM	224	750.00	168,000.00
E	Extra over for PVC corner strip	LM	282	500.00	141,000.00
	Painting and Decorating				
	PREPARE AND APPLY THREE FINISHING-COATS				
	of emulsion paint internally on:-				
F	Plastered surfaces	SM	2807	2,000.00	5,614,000.00
	FLOOR FINISHES				
	CEMENT AND SAND (1:3) SCREED finished				
	smooth				
G	15mm Thick floor screed finished to receive other	SM	726	2,000.00	1,452,000.00
H	100 x 10mm Skirting.	LM	658	200.00	131,600.00
	CERAMIC TILES				
	SUPPLY AND FIX: 500 x 500 x 10mm Thick Non				
	slip approved ceramic floor tiles : bedded and				
	jointed in approved adhesive : pointed with				
	approved coloured grout : to				
I	Screeded floor	SM	165	25,000.00	4,125,000.00
J	Skirting	LM	278	5,400.00	1,501,200.00
	TOTAL CARRIED TO COLLECTION				30,874,300.00
	BILL NO. 2				

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	SUPPLY AND FIX: 500 x 500 x 10mm Thick approved PORCELAIN floor tiles: bedded and jointed in approved adhesive: pointed with approved coloured grout: to Screeded floor Skirting	SM	833	25,000.00	20,825,000.00
B	VINYL FLOORING	LM	380	6,250.00	2,375,000.00
C	2mm Thick approved soundproof inlaid vinyl sheet flooring to ASTM F1913 including underlay of self setting liquid: laid in accordance to manufacturer's instructions: to Screeded floor CEILING Metal lath Plaster Ceiling comprising: 75 x 50mm sawn soft wood framing at 600mm centres both ways with 100 x 50mm joists at 1800mm centres both ways: metal wire lathing nailed onto framework: 10mm thick mass concrete Class 10 on top of lathing including necessary formwork: 12mm thick internal lime plaster plaster Ceiling Extra over ceiling for trap door INTERNAL LIME PLASTER, FIRST COAT of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1:6) steel trowelled as described: to 12mm Two coat work to soffits of ceiling 75 x 75mm Coved Cornice Painting and Decorating PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint: on Plastered soffits 75 x 75mm Coved Cornice	SM	561	12,000.00	6,732,000.00
D	plaster Ceiling Extra over ceiling for trap door INTERNAL LIME PLASTER, FIRST COAT of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1:6) steel trowelled as described: to 12mm Two coat work to soffits of ceiling 75 x 75mm Coved Cornice Painting and Decorating PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint: on Plastered soffits 75 x 75mm Coved Cornice	SM	639	15,000.00	9,585,000.00
E	INTERNAL LIME PLASTER, FIRST COAT of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1:6) steel trowelled as described: to 12mm Two coat work to soffits of ceiling 75 x 75mm Coved Cornice Painting and Decorating PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint: on Plastered soffits 75 x 75mm Coved Cornice	NO	4	10,000.00	40,000.00
F	INTERNAL LIME PLASTER, FIRST COAT of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1:6) steel trowelled as described: to 12mm Two coat work to soffits of ceiling 75 x 75mm Coved Cornice Painting and Decorating PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint: on Plastered soffits 75 x 75mm Coved Cornice	SM	681	2,400.00	1,634,400.00
G	INTERNAL LIME PLASTER, FIRST COAT of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1:6) steel trowelled as described: to 12mm Two coat work to soffits of ceiling 75 x 75mm Coved Cornice Painting and Decorating PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint: on Plastered soffits 75 x 75mm Coved Cornice	LM	800	400.00	320,000.00
H	INTERNAL LIME PLASTER, FIRST COAT of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1:6) steel trowelled as described: to 12mm Two coat work to soffits of ceiling 75 x 75mm Coved Cornice Painting and Decorating PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint: on Plastered soffits 75 x 75mm Coved Cornice	SM	1320	2,400.00	3,168,000.00
I	INTERNAL LIME PLASTER, FIRST COAT of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1:6) steel trowelled as described: to 12mm Two coat work to soffits of ceiling 75 x 75mm Coved Cornice Painting and Decorating PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint: on Plastered soffits 75 x 75mm Coved Cornice	LM	800	400.00	320,000.00
TOTAL CARRIED TO COLLECTION					44,999,400.00
COLLECTION					30,874,300.00
Total brought forward from Page 2/10/1					44,999,400.00
Total brought forward from Page 2/10/2					75,873,700.00
TOTAL CARRIED TO BILL SUMMARY					75,873,700.00

2/10/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BUILDING WORKS ELEMENT NO. 11 FIXTURES & FITTINGS RATES FOR ALL JOINERY WORKS MUST INCLUDE ALL ACCESSORIES AND FITTINGS: PAINTING AND DECORATIONS: IRONMONGERY: AS PER ARCHITECT'S APPROVAL: VANITY TOPS IN CONCRETE WORKTOPS: FINISHED WITH 10mm CERAMIC TILE TOP, FASCIA AND SKIRTING: AS APPROVED BY THE ARCHITECT				
A	900mm x 600mm x 900mm high Vanity Tops HIGH-LEVEL CABINETS High level cabinets comprising 25mm thick blockboard shelving on 25 x 25 hardwood framing: 25mm thick hardwood glazed shutters, top and bottom panels: 25mm blockboard backing plugged to wall: including all ironmongery, painting and decorations: all to Architect's approval	NO	5	125,000.00	625,000.00
B	Overall size 400mm long x 450mm wide x 600 mm high in the pantry LOW LEVEL CUPBOARDS Low level shelves and cabinet comprising of: 100mm thick concrete class 2d benching finished in ceramic tiles: 25mm thick MDF shelves 25mm thick x 900mm high MDF cabinet shutters: with hardwood bearers and fixing brackets: all ironmongery and accessories: painting and decorations: to architect's approval: in	NO	6	54,000.00	324,000.00
C	Overall size 400mm long x 450mm wide x 600 mm high SOFTWOOD PIN BOARDS Softwood pin boards consisting of approved soft board fabric mounted on face of walling with and including 50 x 25mm wire softwood timber frame all round, chamfered edges and including 25 x 12mm spacers: to Architect's approval	NO	6	54,000.00	324,000.00
D	Overall size 1,500 x 1250mm high TOTAL CARRIED TO BILL SUMMARY	NO	4	56,000.00	224,000.00
					1,497,000.00

2/11/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 3					
EXTERNAL WORKS					
ELEMENT NO. 2					
WALKWAYS AND PAVED AREAS					
EXCAVATION					
A	Excavate average 200mm deep to remove vegetable soil; wheel and remove from site.	SM	348	400	139,200
B	Mass excavation to reduce levels commencing from stripped level not exceeding 1.5m deep; deposit in temporary spoil heaps on site.	CM	104	1,000	104,000
C	Load and cart away surplus excavated material from site.	CM	104	2,500	260,000
D	Compact existing subgrade to 93% MDD, (MOD AASHTO), CBR>15%	SM	232	950	220,400
E	Approved imported murrum fillings compacted in 150mm layers to 95% BS compaction including watering.	CM	87	2,500	217,500
F	PRECAST CONCRETE Class "20" as described finished fair on all exposed surfaces including bedding, jointing and pointing in cement and sand (1:3) mortar 50mm Paving slabs in 600 x 600mm panels laid with straight broken joints in both directions on and including a 20mm thick sand bed	SM	232	6,000	1,392,000
TOTAL CARRIED TO SUMMARY					2,333,100

3/2/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	BILL NO. 3 EXTERNAL WORKS ELEMENT NO: 3 LANDSCAPING GRASSING				
	Dig over surface of ground, apply imported black soil, plant approved grass/ trees and water until firmly rooted in the soil.	SM	2,018	1,650.00	3,329,700.00
TOTAL CARRIED TO SUMMARY					3,329,700

3/3/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 4				
	MECHANICAL WORKS				
	ALL SPECIFIED MATERIALS - GENERAL NOTES AND INSTRUCTIONS:-				
i)	To be supplied, delivered to site, installed, connected complete and commissioned in full working condition including all the necessary fixing/ mounting/ terminating accessories as per Specifications and Drawings; tested and commissioned to the satisfaction of the Mechanical Engineer.				
ii)	All pipework lengths measured under this Bills of Quantities are provisional. Actual measurements will be done on site during evaluation.				
iii)	Samples of all fittings shall be presented to the Mechanical Engineer for approval prior to installation.				
iv)	The entire plumbing and drainage installation shall be tested for compliance to the latest British Standards and Codes of Practice for Plumbing and Drainage and witnessed/ approved by the Mechanical Engineer				
v)	All pipes and fittings are to be of approved original manufacture.				
vi)	The rate for pipework shall cover couplings, flanges couplings, jointings couplings, connectors as required in the running lengths of the pipes.				
vii)	The rate for Cold and Hot water pipework shall cover all associated fittings which are but not limited to tees,sockets,elbows,threaded adapters,threaded elbows,reducers, reducing bush/sockets, and unions.				
viii)	The rate for Foul and waste water drainage pipework shall cover all associated fittings which are but not limited to tees, bends, swept tees, swept bends, elbows, reducers and access plugs.				
ix)	The rate for pipework shall cover and include materials for mounting pipes such as clips, holderbats/clamps, brackets, all associated builders' works such as chiselling,cutting and drilling through walls and slabs, all related activities/materials for fixing the pipe.				
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 4					
MECHANICAL WORKS					
ELEMENT NO: 1					
INTERNAL PIPE WORK					
Water Supply and Distribution					
	PPR PN25 pipes.				
A	20mm	M	60	1,000	60,000
B	25mm	M	150	1,200	180,000
C	50mm	M	70	2,150	150,500
	Isolating Valves in brass, as Pegler Prestex or approved equivalent				
D	20mm	No	8	18,000	144,000
E	25mm	No	16	21,500	344,000
F	50mm	No	8	35,000	280,000
G	15mm(1/2") stainless steel flexible tubing, braided, rubber, flexible connector with brass couplings; 450mm long as Pegler Prestex or approved equivalent	No	150	6,500	975,000
H	15mm angle valves as Pex England/Grohe or equal and approved	No	140	7,000	980,000
	Foul and Waste water Drainage				
	uPVC PN6 pipes				
I	40mm	M	70	600	42,000
J	50mm	M	150	700	105,000
K	110mm	M	150	1,950	292,500
L	110 x 50mm PVC Floor trap	No	50	6,900	345,000
M	110mm WC connector	No	20	3,500	70,000
N	150x150mm stainless steel grating	No	40	10,000	400,000
TOTAL CARRIED TO COLLECTION					4,368,000

4/1/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 4					
MECHANICAL WORKS					
ELEMENT NO. 2					
SANITARY FITTINGS					
Supply and install the following sanitary fittings or approved equivalent including all necessary fittings and accessories. The contractor shall submit for approval a schedule of fittings before orders for the fittings are placed.					
A	WC pan for high level cistern in vitreous china, white in colour comprising dual outlet with fixing kit, WC inlet and outlet connector, complete with lacquered seat and cover with stainless steel hinges as Roca Victoria.	No	18	110,000	1,980,000
B	Concealed WC 3/4" Flush valve with round tray with curved as Roca Vortex. The water outlet into the flush valve should be 25mm(1").	No	18	5,000	90,000
C	560x460mm wash hand basin fixed on wall with one center tap hole as Roca Victoria, complete with 32mm chrome plated bottle trap as PEX, 1/2" self closing basin push tap as Vado project line PRO-167/C+H-CP with aerator, pop-up waste and flexible supply hose.	No	24	45,000	1,080,000
D	720 x 460mm wall urinal with integral spreader, fixing kit, cleaner plug, inlet connector as Roca Mural complete with 11/2" plastic domed waste, 11/2" chrome plated P-trap with 75mm seal, 15mm chrome plated Roca Aqualine urinal flush valve, 1/2" and all fixing accessories.	No	8	145,000	1,160,000
E	Urinal partition wall size 730mm high and 400mm wide as Roca Wing	No	6	42,500	255,000
F	Cleaners sink as Franke model LDS drip sink 600 x 500 x 358mm deep manufactured from Grade 304(18/10) stainless steel, 0.9mm thick and with 40mm waste outlet complete with stainless steel hinged bucket grid and stainless steel eagle brackets, bolts and 1No. 1/2" bib tap, 11/2" PVC bottle trap and all fixing accessories.	No	2	200,000	400,000
TOTAL CARRIED TO COLLECTION					4,965,000

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	ROCA Access close-coupled WC suite HO complete with 1 cistern, seat & cover, N-Meridian wash-stand basin with 1 centre tap hole, COBRA Elbow action pillar tap, 1No. MEDICLINICS Swing-up Grab Bar, Steel, White epoxy, Length: 735 mm, 5No. MEDICLINICS Straight Grab Bar, White epoxy, Length: 691 mm and 1No. Hotel's brass toilet roll holder.	No	6	215,000	1,290,000
B	MEDICLINICS Stainless steel surface mounted Gel dispenser size 118x115mm, 1.1litre capacity in a bright finish or approved equivalent.	No	14	29,500	413,000
C	Single bowl stainless steel kitchen sink as Roca/Franke size 450x450 made out of 18/10 Chrome-Nickel, 0.7mm thick complete with the waste outlet fittings 3/1/2" (Basket strainer waste), and pierced tap holes and pop-up waste and 15mm Kitchen Sink Mixer Tap as Roca Monojet-N Single Lever monoblock mixer with high swivel spout, aerator, flexible supply hoses and all fixing accessories.	No	2	110,000	220,000
D	Undersink water heater as Ariston SGR10L Power 1.2kW, Single Phase complete thermostat and all associated accessories.	No	2	75,200	150,400
E	Double stainless Steel Toilet Roll Holder as Roca Hotel's or approved equivalent	No	24	9,500	228,000
F	600 x 450mm wall mirror with bevelled edges polished and fixed with chrome plated dome shaped screws	No	24	12,000	288,000
G	Chrome plated Double coat Hooks as Roca Hotel's	No	24	1,250	30,000
TOTAL CARRIED TO COLLECTION					2,619,400
COLLECTION					4,965,000
Total brought forward from Page 4/2/1					2,619,400
Total brought forward from Page 4/2/2					7,584,400
TOTAL CARRIED TO BILL SUMMARY					7,584,400

4/2/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 4				
	MECHANICAL WORKS				
	ELEMENT NO: 3				
	FIRE FIGHTING INSTALLATION				
	Wet Riser Installation				
A	Wall mounted swinging type fire hose reel with 19mm bore, 30M long hose, 19mm gate valve and in-built pressure gauge 0-6 bars as Naffco or equal and approved.	No	2	265,000	530,000
B	Double compartment Hose reel Fire Fighting cabinet, W x H x D, 740mm x 1540mm x 400mm, the upper cabinet will house the hose reel and the lower cabinet will house the landing valve, 30m hose pipe and fire extinguisher.	No	2	31,300	62,600
C	Class B GI pipe 50mm, Complete with brackets, Elbows, Tees, Reducers, Unions, all associated fittings and accessories.	M	64	7,125	456,000
D	Ditto but 25mm GI pipe, Complete with Elbows, Tees, Reducers, Unions, all associated fittings and accessories.	M	16	3,250	52,000
E	Gate valve 50mm as peglar or equal and approved	No	2	32,500	65,000
F	Gate valve 25mm as peglar	No	2	16,500	33,000
	Portable Fire Extinguishers				
	Supply, deliver, install, test and commission the following portable fire extinguishers and conforming to BS EN 3 / BS 1449. All to be Loss Prevention Certification Board (LPCB) Approved.				
G	5kg carbon dioxide gas portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets. All to be Loss Prevention Certification Board (LPCB) Approved.	No	8	42,500	340,000
H	6kg dry chemical powder portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets. All to be Loss Prevention Certification Board (LPCB) Approved.	No	8	39,350	314,800
	TOTAL CARRIED TO COLLECTION				1,853,400

4/3/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	10kg automatic dry chemical powder fire extinguisher complete with pressure gauge, initial charge, glass bulb, sprinkler head and mounting base. The operating temperature of the bulb shall be 79°C. The unit shall be mounted on the concrete slab ceiling using purpose-made screws and to be as Germania, model GD 25 or equal and approved. All to be Loss Prevention Certification Board (LPCB) Approved.	No	1	69,450	69,450
B	6litre capacity wet chemical portable fire extinguisher conforming to BS 1288 including the appropriate nominal content.	No	2	52,600	105,200
C	1.8mx1.8m non-flammable fire blanket in quick-release PVC container	No	2	105,200	210,400
D	9" (225mm) manual operated alarm bell (Gong)	No	1	43,600	43,600
E	Fire Hose reel pump set already assembled on a common base frame complete with wiring from control panel to pumps and the following: 1.No. main electric pump as Grundfos Electric pump. CM5-6A Capacity: 3CuM/Hr at 50M Head, Power Input: 1.3kW, single phase, 1No. Pressure tank as Varem pressure tanks Capacity 24 litres model KS24. Bronze gate Valves 50mm as Crane/ Hattersfield	SET	1	265,900	265,900
F	Bronze gate Valves 50mm as Crane/ Hattersfield	No	8	39,500	316,000
G	Non Return Valve 50mm	No	4	39,500	158,000
H	Strainer 50mm	No	2	16,400	32,800
I	Electrical connections to the fire pumpset including 1No. Float switch for dry run protection.	Item	1	75,000	75,000
J	Allow for pipe identification of the services, painting and exposed pipework to the colour code and testing and commissioning to the approval of the Engineer.	Item	1	20,000	20,000
K	Fire Notices Allow for fire signage for the Hose reels systems, fire exits, fire instructions (Assembly points) as described in the particular specifications and for the Project Engineer's approval.	Item	1	20,000	20,000
TOTAL CARRIED TO COLLECTION					1,316,350

4/3/3

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Fire Fighting Tank as 4,000L PVC tank as Crestank CV-400C Size 1.76m diam, 2.1m High Complete with 25mm peglar ball valve, 25mm washout, 50mm distribution mains.Tank to be mounted on a structural base of 1.8m dia 250mm high to Structural Engineers detail.(Price should include the structural base).	No	1	795,600	795,600
TOTAL CARRIED TO COLLECTION					795,600
COLLECTION					
Total brought forward from Page 4/3/1					1,853,400
Total brought forward from Page 4/3/2					1,316,350
Total brought forward from Page 4/3/3					795,600
TOTAL CARRIED TO BILL SUMMARY					3,965,350

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 4					
MECHANICAL WORKS					
ELEMENT NO. 4					
SITE WORKS					
A	Water Supply, Storage and Distribution Excavate trench 0.6M wide, Max and 1M deep back fill ram and cart away excess soil to lay rising main and HDPE pipes for water mains distribution and stand pipes.	M	400	500	200,000
B	25GI as rising mains to water tanks on roof slab, Complete with Elbows, Tees, Unions and all associated fittings.	M	60	3,250	195,000
C	Ditto but 32GI	M	30	4,385	131,550
D	Water distribution pipes as 50mm PPR pipe PN25, complete with Tees, Elbows, Reducers and all associated fittings.	M	40	2,150	86,000
E	32mm HDPE pipe PN 10, Complete with all Elbows, Tees, Unions, Reducers, and all associated fittings and accessories.	M	80	1,750	140,000
F	Ditto but 25mm HDPE	M	200	950	190,000
G	Ditto but 20mm HDPE	No.	40	800	32,000
H	Lockable Taps 15mm as gardening/Car washing taps	No.	4	18,500	74,000
I	Gate Valves 50mm	No.	8	39,600	316,800
J	ditto but 32mm	No.	6	28,500	171,000
K	ditto but 25mm	No.	16	21,500	344,000
L	5,000L PVC tanks as Crestank CV-500C size 1.85m diameter, 2.12m High Complete with 25mm ball valve, 25mm washout, one 63mm outlet	No.	6	795,600	4,773,600
TOTAL CARRIED TO COLLECTION					6,653,950

4/4/1

4/4/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Pressure Booster pump	No	2	2,150,600	4,301,200
B	Grundfoss pump one duty, CM3-4A capacity: 1CuM/Hr at 38M Head , Power input 0.5KW, Single Phase.Complete with a control panel and wiring, pump controller as watertech press control power input of 1.5KW.	No	4	39,600	158,400
C	Bronze gate Valves 50mm as Crane/ Hattersfilled	No	2	39,500	79,000
D	Non Return Valve 50mm	No	2	16,400	32,800
E	Strainer 50mm	No	2	50,000	100,000
F	Provide By-Pass to the water pump and water line from water tank.This should include all pipework, valves, fittings and associated accessories housed in valve chambers.	Item	1	100,000	100,000
	Allow for production of 5sets of Hard and soft copies for Asbuilt drawings on A1 paper and Operation & Maintenance manuals for the Mechanical Installations to be handed over to the Engineer for approval and later submission to the Project Manager & Client for maintenance records.	Item	1	100,000	100,000
G	<u>External Foul Drainage system</u> Excavate trench 0.6M wide ,Max and 1M deep back fill ram and cart away excess soil to lay uPVC Drainage Pipes as detailed on the drawings.	M	400	500	200,000
H	uPVC pipe 160mm PN6 to be laid as detailed.	M	300	5,000	1,500,000
I	ditto but 110mm PN6 to be laid as detailed.	M	156	2,500	390,000
J	Manholes 600 x 450mm (internally) inspection chambers 600mm deep invert consisting of 150mm thick mass concrete block wall, benched and channeled in concrete (Class "20" and rendered and trowelled smooth in 20mm thick water proofed cement/sand screed including excavation, disposal, formwork and heavy duty approved cast iron cover and frame.	No	4	220,000	880,000
K	Double Sealed In-fill Heavy duty Manhole covers.These shall be allowed for all manholes and Gully traps.	No	10	110,000	1,100,000
TOTAL CARRIED TO COLLECTION					8,841,400

4/4/3

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Gully trap 300 x 300 complete with Gully piece concrete surround and grating and 300 x300 cast iron cover.	No	10	21,500	215,000
B	Manhole as 900 x 750 mm(internally) inspection chambers 800 to 1000mm deep invert consisting of 150mm thick mass concrete block wall, benched and channelled in concrete Class "20" and rendered and trowelled smooth in 20mm thick water proofed cement/sand screed including excavation, disposal, formwork and heavy duty approved cast iron cover and frame.	No	10	250,000	2,500,000
C	Manhole as 1200 x 900 mm(internally) inspection chambers 1500 to 2300mm deep invert consisting of 150mm thick mass concrete block wall, benched and channelled in concrete Class "20" and rendered and trowelled smooth in 20mm thick water proofed cement/sand screed including excavation, disposal, formwork and heavy duty approved cast iron cover and frame.	No	10	300,000	3,000,000
Fire/Cold water Pumps House					
D	Allow PC SUM for the pump house including all the civil and builders works. This shall house the pumps on the roof.	Item	1	6,000,000	6,000,000
E	110mm PVC Vent Cowl	No	1	1,750	1,750
F	450x450mm Aluminium Weathering Slate complete with rubber collar	No	1	65,000	65,000
G	Soakpit size 3M diam 6M deep filled with hardcore and covered with 1000 guage polythene and top made good to match surroundings.	No	2	400,000	800,000
H	Two chamber septic tank for 100USFRS to detail size 4,220 by 2,180mm deep to structural Engineer's detail complete with inlet and outlet chambers, excavations, disposal, form work and all associated builders works.	No	1	5,500,000	5,500,000
I	Allow for all associated drainage and water connection works to existing system which shall include cutting existing solid concrete floor, removing tiles and debris from site to lay drain and water pipes,connection to the existing drainage and water system, builders works and making good.	Item	1	2,000,000	2,000,000
TOTAL CARRIED TO COLLECTION					20,081,750

4/4/4

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
COLLECTION					
	Total brought forward from Page 4/4/1				6,653,950
	Total brought forward from Page 4/4/2				8,841,400
	Total brought forward from Page 4/4/3				20,081,750
TOTAL CARRIED TO BILL SUMMARY					35,577,100

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 4					
MECHANICAL WORKS					
ELEMENT NO: 5					
ROOF RAIN WATER DISPOSAL					
PVC Key terrain fixed in accordance with manufacturer's instructions:-					
Down pipes					
A	110mm uPVC PN10 Storm water down pipe.Complete with all fixing brackets,swan necks offsets, and all associated fittings and accessories.	M	212	1,950	413,400
B	110mm diameter fullbora outlet.	M	14	2,500	35,000
C	Roof drain as Blucher type 402.10.Complete with clamping flange for single ply membrane.	No	8	18,000	144,000
D	Roof drain as Zurn Z187 6"x7" Oblique scupper drain Complete with downspout adapters,flush grate,backwater valve and all associated fittings and accessories.	No	6	20,000	120,000
E	Roof drain as Zurn Z185 6" Diameter Cornice drain.Complete with flat strainer,galvanized cast iron and all associated fittings and accessories.	No	8	20,000	160,000
TOTAL CARRIED TO BILL SUMMARY					872,400

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 6				
	EXTERNAL WORKS				
	ELEMENT NO: 1				
	ALL SPECIFIED MATERIALS - GENERAL NOTES				
i)	To be supplied, delivered to Site, installed, connected complete and commissioned in full working condition including all the necessary fixing/mounting/terminating accessories as per Specification and Drawings, tested and commissioned to the satisfaction of the Electrical Engineer.				
ii)	All electrical items to be suitable for 11000/415/240V power system.				
iii)	All items measured under this Bill of Quantities have provisional quantities. Actual measurements will be done on site during evaluation.				
iv)	All underground reticulation and distribution cables are to be supplied and installed c/w all necessary fixing / clipping / supporting / glanding and termination accessories as per general specification and type approved by the supervising Electrical Consultant.				
v)	The rate for the underground cables shall cover excavation, sand-bedding, backfilling, trenching, enclosing in PVC ducts, manholes, where necessary, and all associated builders' works. Actual measurements shall be based on the site conditions.				
vi)	All indoor cables are to be recessed within the cable ducts, ceiling voids, wall fabric enclosed in suitably sized PVC conduits neatly installed and to further instructions from the Electrical Engineer and/or Drawings.				
vii)	All lightings fittings shall be as per Specifications and Drawings with control gear compatible with 240V/50Hz. All lighting fittings are to be approved by the Electrical Engineer prior to installation.				
viii)	All Fire Detection and Alarm System elements are to be to fully addressable to Gent Vigilon System Architecture, or otherwise approved.				
ix)	All wiring accessories shall be as per original Legrand / Legrand / MK/ MEM / Crabtree Specifications and Drawings (or otherwise specified and approved) complete with all attachments and accessories. All samples to be approved prior to installation by the Engineer.				
x)	The entire electrical installation shall be tested for compliance in accordance to the 17th Edition of the IEE Wiring Regulations and witnessed / approved by the Engineer.				

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 6	ELECTRICAL WORKS				
	ELEMENT NO. 1				
	MAINS & STANDBY POWER SUPPLY WORKS:				
	MAINS POWER SUPPLY, EXTENSION AND CONNECTION				
A	Allow for PC Sum for Utility Power Supply Extension and Connection, to include but not limited to the following:				
i)	11kV HV Underground Cable T-off Structure and all attachments and accessories.				
ii)	11kV 3Core Underground Armoured HV Cable complete with all attachments.				
iii)	11kV HV Metering Unit complete with all accessories and attachments.				
iv)	Earthing of the High and Low Voltage Systems.				
v)	All associated civil works and connection costs (line interruption, inspection, security deposit, account opening etc.)				
vi)	Making good and builders' works to the Satisfaction of the Engineer.				
vii)	All works to approval of the Engineer and to Utility Standards and Code of Practice.				
	PC Sum				1,500,000
	TOTAL CARRIED TO SUMMARY				1,500,000

S/1/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 6				
	ELECTRICAL WORKS				
	ELEMENT NO: 2				
	TRANSFORMER SUPPLY AND INSTALLATION				
A	Supply and install a ground - mounted, 100kVA, 415V, 50Hz Dyn11 Transformer c/w all accessories and attachment as per ABB or approved equivalent; and as per the following specifications hereof:- i) Shall be double wound on a core of cold rolled, grain oriented sheet steel ii) Shall be cast-resin dry type iii) Rated Low Voltage (at no load) = 415V(phase- phase) iv) Rated Low Voltage (at no load) = 240V(phase- Neutral) v) Off-load tapplings: +/-2x2.5% vi) Tappings: Off circuit range +5%to -5% in steps of 2.5% vii) Rated Capacity(kVA): 200kVA viii) Rated High Voltage(kV): 11 ix) HV termination: Cable box for reception of pvc or XLPE 4 core copper cables x) System frequency: 50Hz xi) Highest system voltage: 16kV xii) Rated lightning impulse voltage (1.2/50 micro second): Withstand xiii) HV winding: 75kV xiv) Vector group: Dyn 11 xv) Rated/minute power frequency withstand voltage, HV winding: 28kV xvi) Shall comply BS 171 xvii) Shall be ground mounted pattern, Suitable for indoor use, cast-resin dry-type xviii) Insulation Materials will be to class A of BS 2757 and designed to with stand impulse voltage specified in BS171	Item	1	6,000,000	6,000,000
	TOTAL CARRIED TO SUMMARY				6,000,000

5/2/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 6				
	ELECTRICAL WORKS				
	ELEMENT NO. 3				
	SUPPLY & INSTALL STANDBY GENERATOR				
A	Supply and install 100KVA, 415/240V, 50Hz, Diesel Engine Standby Generator Set c/w Control Panel with Digital Display, instrumentation, hours run recorder, base tank for 8 hour operation, weatherproof and soundproof attenuated canopy, attachments and accessories all to Cummins / Caterpillar manufacture, and as per further specification hereof. The rate shall include the following:				
i)	Improved exhaust and silencing system				
ii)	Original manufacturer's Installation, Operation and Maintenance				
iii)	Manuals are to accompany the tender.				
iv)	External exhaust management systems				
v)	Emergency stop button mounted on enclosure exterior				
vi)	Output MCCB				
vii)	Warranty for atleast one year				
viii)	Standard Spare Parts for 2500 hour running.				
ix)	160A / 415V Automatic Mains Failure Load Transfer Switch				
x)	Testing and Commissioning the synchronized sets	No.	1	12,500,000	12,500,000
B	SEPARATE GENERATOR EARTHING: Earth the Generator Sets as per Code of Practice and IEE Regulations, as to achieve an earth resistance value of not more than 1.0 ohm.	Item	1	150,000	150,000
	TOTAL CARRIED TO SUMMARY				12,650,000

S/3/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 6				
	ELECTRICAL WORKS				
	ELEMENT NO. 4				
	POWER DISTRIBUTION & RETICULATION SYSTEM				
	MAIN LV DISTRIBUTION PANEL BOARD (MDB):				
A	160A, 415V, 6-Way Low Voltage TPN MCB-type Main Panel Distribution Switch Board (MDB), to be supplied and installed, complete with but not limited to the following items, all as per Specifications and Drawings: i) 1N0.x125A TP MCCB Isolator, 50KA - Incoming ii) 2N0.x63A TP MCB, 36KA - Outgoing iii) 4N0.x50A TP MCB, 36KA - Outgoing The Board shall also include: i) Emergency Stop Switch ii) Surge protection for the 3-Phases iii) Digital instrumentation iv) Phase indicators v) Under / Over Voltage Protection vi) Accurate and Tidy Labelling	Item	1	1,750,000	1,750,000
B	Metacased and Lockable 100A, 4-Way Low Voltage TPN MCB-type Distribution Boards c/w 100A TPN Mains Isolator, TP and SP MCBs, Spare ways with Blankings covers, Busbars, and all other accessories as per drawings to CRABTREE Loadstar / Memshield manufacture. The rate includes accurate labelling of all loads connected accordingly to the Board.	Item	3	1,500,000	4,500,000
C	Metacased and Lockable 100A, 6-Way Low Voltage TPN MCB-type Distribution Boards c/w 100A TPN Mains Isolator, TP and SP MCBs, Spare ways with Blankings covers, Busbars, and all other accessories as per drawings to CRABTREE Loadstar / Memshield manufacture. The rate includes accurate labelling of all loads connected accordingly to the Board.	Item	3	1,750,000	5,250,000
D	SEPARATE LOW VOLTAGE EARTHING: Earth the MDB as per Code of Practice and IEE Regulations, as to achieve an earth resistance value of not more than 1.0 ohm.	Item	6	50,000	300,000
	TOTAL CARRIED TO SUMMARY				11,800,000

S/4/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 6					
ELECTRICAL WORKS					
ELEMENT NO. 5					
RETICULATION & DISTRIBUTION CABLES					
A	70mm sq. 4-Core XLPE-SWA-PVC Copper cables.	L/m	60	30,000	1,800,000
B	50mm sq. 4-Core XLPE-SWA-PVC Copper cables.	L/m	10	27,500.00	275,000
C	35mm sq. 4-Core XLPE-SWA-PVC Copper cables.	L/m	10	19,250.00	192,500
D	25mm sq. 4-Core XLPE-SWA-PVC Copper cables.	L/m	10	13,750.00	137,500
E	16mm sq. 4-Core XLPE-SWA-PVC Copper cables.	L/m	180	8,800.00	1,584,000
F	10mm sq. 4-Core XLPE-SWA-PVC Copper cables.	L/m	10	5,500.00	55,000
G	6mm sq. 4-Core XLPE-SWA-PVC Copper cables.	L/m	10	3,300.00	33,000
H	4mm sq. 4-Core XLPE-SWA-PVC Copper cables.	L/m	30	2,200.00	66,000
TOTAL CARRIED TO SUMMARY					4,143,000
					5/5/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 6					
ELECTRICAL WORKS					
ELEMENT NO. 6					
GROUND FLOOR:					
LIGHTING FITTINGS:					
A	1200mm, surface mounted fluorescent luminaire c/w 1x36W T26 lamp with electronic fixed output circuit, white painted steel body, white polycarbonate endcaps and precision extruded clear prismatic polystyrene diffuser, to IP20. As Thorn DIFFUSALUX SAP Code 96206038, or approved equivalent	No.	45	32,500	1,462,500
B	Ditto as above but c/w 2x36W lamp.	No.	18	32,500	585,000
C	1200mm, surface mounted fluorescent luminaire c/w 1x36W T26 lamp with electronic fixed output circuit, white painted steel body, white polycarbonate endcaps and precision extruded clear prismatic polystyrene diffuser, to IP44. As Thorn COLLEGE SAP Code 96205769, or approved equivalent	No.	12	30,000	360,000
D	Ditto as above but 600mm luminaire c/w 1x14W lamp.	No.	4	30,000	120,000
E	1200mm, surface mounted fluorescent luminaire c/w 1 x 28W T16 lamp with electronic - fixed output ballast, white, pre-coated rolled form steel, injection moulded white Polycarbonate endcaps/ lamp holders and mounting plates, to IP20. As Thorn POPPACK PRO SAP Code 96239876, or approved equivalent	No.	20	30,000	600,000
F	Outdoor wall mounted amenity luminaire, in vandal resistant die cast aluminium body with UV stabilized polycarbonate diffuser fully enclosed to IP65. As Fitzgerald LED Sentinel Order Code SNT 20/CO/BK/850, or approved equivalent	No.	24	45,200	1,084,800
G	Ultra-slim white aluminium bodied non-maintained LED exit sign with engraved fire retardant acrylic sign blade, for suspended use. As Thorn Voyager LED, or approved equivalent	No.	8	25,000	200,000
I	Ditto as above but emergency type. As Thorn Amazon, Cat No. E3AMR0Z218W, or approved equivalent	No.	2	25,000	50,000
TOTAL CARRIED TO COLLECTION					4,462,300

5/6/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Striking Circular luminaire for 18W TC-DEL compact fluorescent lamps with die-cast aluminium 'floating halo' and double ring mounting and twin bridge with opal polycarbonate diffuser mounted to a die-cast aluminium body with lamp and gear, connected to Quick Fix bracket. As Thorn Amazon, Cat No. AMRO2218W, or approved equivalent.	No.	2	29,500	59,000
B	WIRING ACCESSORIES: 13A/250V SP 2-Gang silver flush moulded plate switched socket outlets c/w red LED indicators and flush mounting box, as to MK / MEM / Crabtree / Legrand Synergy Modern, or approved equivalent.	No.	45	9,000	405,000
C	13A SP 2-Gang switched socket outlet for trunking-mounting c/w 2-Gang accessory box, as to MARSHALL TUFFLEX Ref. Nos. ESS3 + ESSB2, or approved equivalent.	No.	24	9,000	216,000
D	Allow for trunking mounted MK boxes (to be used for Data/Voice Outlets) as to MARSHALL TUFFLEX manufacture.	No.	24	4,500	108,000
E	Voice/Data Outlet c/w Polished Brass Flush Mounting Plate & all accessories. As Legrand Synergy Cat. No. 7312 56.	No.	2	5,000	10,000
F	20A DP white moulded plate switch complete with flush mounting box, and fitted with a neon indicator lamp, as to CRABTREE List No. 4015/3, or equivalent.	No.	6	15,000	90,000
G	15 foot candle EM exterior photocell to Legrand Synergy manufacture or approved equivalent.	No.	2	22,000	44,000
H	Supply and install a 1.4kW/240V "No-Touch" hand drier, earthed Class 1 shock protection, motor type 2700 rpm brushless external rotor, low-noise fan with noise level of 67.5dBA @ 1.5 meter, as to HEATRAE SADIA Handy Dri 14E, Product Code No. 95:020:082, or approved equivalent.	No.	8	120,000	960,000
I	45A DP Cooker Control Unit c/w 13A DP switched socket outlet and red LED power indicator as to Legrand Cat 730029 or approved equivalent.	No.	1	32,600	32,600
TOTAL CARRIED TO COLLECTION					1,924,600

5/6/2

5/6/3

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Supply and install profile 201, 220mm x 65mm, 3-compartment prestige skirting and DADO trunking (for data, voice and power socket outlets), with all necessary accessories such as couplers, end caps, internal bends, external bends, flat angles, etc.; all to MARSHALL-TUFFLEX manufacture, or approved equivalent	L/m	110	25,000	2,750,000
B	WIRING Lighting points: Take delivery and fix all lighting fittings complete with switches, cabling, to be connected complete and ready from miniature circuit breakers, using 3x1.5mm sq. PVC-Insulated single core copper cables drawn in installed conduits/trunking/ceiling void, through switches, and as per drawings.	No.	135	8,000	1,080,000
C	Power points: All wiring of all power points are to be connected complete and ready from 32A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables in ring circuit, drawn in trunking/conduits, as per drawings.	No.	69	15,000	1,035,000
D	Ceiling fan points: All wiring of ceiling fans complete with cabling, to be connected complete and ready from miniature circuit breakers, using 3x1.5mm sq. PVC-Insulated single core copper cables drawn in installed conduits/trunking/ceiling void, through switches, and as per drawings.	No.	10	15,000	150,000
E	Pumps Wiring of the water pump sets to be connected complete and ready from 10A SP miniature circuit breakers of the respective Consumer Units using 2.5mm sq. 3-Core XLPE-SWA-PVC Insulated Copper cables, drawn in conduits / ducts, as per drawings.	No.	2	15,000	30,000
F	Hand Drier points All wiring of hand drier points are to be connected complete and ready from 20A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables, drawn in conduits, and through 20A DP control switches, as per drawings.	No.	8	15,000	120,000
TOTAL CARRIED TO COLLECTION					5,165,000

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
A	Cooker Control Unit	No.	1	25,000	25,000
	All wiring of all cooker points are to be connected complete and ready from 32A SP miniature circuit breakers, using 6mm sq. PVC-Insulated single core copper cables, drawn in trunking/conduits, as per drawings.				
	TOTAL CARRIED TO COLLECTION				25,000
	COLLECTION				
	Total brought forward from Page 5/6/1				4,462,300
	Total brought forward from Page 5/6/2				1,924,600
	Total brought forward from Page 5/6/3				5,165,000
	Total brought forward from Page 5/6/4				25,000
	TOTAL CARRIED TO SUMMARY				11,576,900

5/6/4

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 6					
ELECTRICAL WORKS					
ELEMENT NO: 7					
FIRST FLOOR:					
LIGHTING FITTINGS:					
A	1200mm, surface mounted fluorescent luminaire c/w 1x36W T26 lamp with electronic fixed output circuit, white painted steel body, white polycarbonate endcaps and precision extruded clear prismatic polystyrene diffuser, to IP20. As Thorn DIFFUSALUX SAP Code 96206038, or approved equivalent.	No.	40	32,500	1,300,000
B	Ditto as above but c/w 2x36W lamp.	No.	21	32,500	682,500
C	1200mm, surface mounted fluorescent luminaire c/w 1x36W T26 lamp with electronic fixed output circuit, white painted steel body, white polycarbonate endcaps and precision extruded clear prismatic polystyrene diffuser, to IP44. As Thorn COLLEGE SAP Code 96205769, or approved equivalent.	No.	12	30,000	360,000
D	Ditto as above but 600mm luminaire c/w 1x14W lamp.	No.	3	30,000	90,000
E	1200mm, surface mounted fluorescent luminaire c/w 1 x 28W T16 lamp with electronic - fixed output ballast, white, pre-coated rolled form steel, injection moulded white Polycarbonate endcaps/ lamp holders and mounting plates, to IP20. As Thorn POPPACK PRO SAP Code 96239876, or approved equivalent.	No.	20	30,000	600,000
F	Ultra-slim white aluminium bodied non-maintained LED exit sign with engraved fire retardant acrylic sign blade, for suspended use. As Thorn Voyager LED, or approved equivalent.	No.	4	25,000	100,000
G	Striking Circular luminaire for 18W TC-DEL compact fluorescent lamps with die-cast aluminium 'floating halo' and double ring mounting and twin bridge with opal polycarbonate diffuser mounted to a die-cast aluminium body with lamp and gear, connected to Quick Fix bracket As Thorn Amazon, Cat. No. AMROZ218W, or approved equivalent.	No.	4	29,500	118,000
H	Ditto as above but emergency type. As Thorn Amazon, Cat. No. E3AMROZ218W, or approved equivalent.	No.	2	29,500	59,000
TOTAL CARRIED TO COLLECTION					3,309,500

5/7/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
WIRING ACCESSORIES:					
A	13A/250V SP 2-Gang silver flush moulded plate switched socket outlets c/w red LED indicators and flush mounting box, as to MK / MEM / Crabtree / Legrand Synergy Modern, or approved equivalent	No.	45	9,000	405,000
B	13A SP 2-Gang switched socket outlet for trunking-mounting c/w 2-Gang accessory box, as to MARSHALL TUFFLEX Ref. Nos. ESS3 + ESSB2, or approved equivalent	No	28	9,000	252,000
C	Allow for trunking mounted MK boxes (to be used for Data/Voice Outlets) as to MARSHALL TUFFLEX manufacture.	No	28	4,500	126,000
D	Voice/Data Outlet c/w Polished Brass Flush Mounting Plate & all accessories. As Legrand Synergy Cat. No. 7312 56.	No.	2	5,000	10,000
E	20A DP white moulded plate switch complete with flush mounting box, and fitted with a neon indicator lamp, as to CRABTREE List No. 4015/3, or equivalent	No.	6	15,000	90,000
F	Supply and install a 1.4kW/240V "No-Touch" hand drier, earthed Class 1 shock protection, motor type 2700 rpm brushless external rotor, low-noise fan with noise level of 67.5dBA @ 1.5 meter, as to HEATRAE SADIA Handy Dri 14E, Product Code No. 95:020:082, or approved equivalent	No.	4	120,000	480,000
G	45A DP Cooker Control Unit c/w 13A DP switched socket outlet and red LED power indicator as to Legrand Cat 730029 or approved equivalent	No	1	120,000	120,000
H	Supply and install profile 201, 220mm x 65mm, 3-L/m MARSHALL-TUFFLEX accessories such as couplers, end caps, internal bends, external bends, flat angles, flat tees, etc.; all to equivalent	L/m	110	25,000	2,750,000
TOTAL CARRIED TO COLLECTION					4,233,000

5/7/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
WIRING					
A	Lighting points: Take delivery and fix all lighting fittings complete with switches, cabling, to be connected complete and ready from miniature circuit breakers, using 3x1.5mm sq. PVC-Insulated single core copper cables drawn in installed conduits/trunking/ceiling void, through switches, and as per drawings.	No.	106	8,000	848,000
B	Power points: All wiring of all power points are to be connected complete and ready from 32A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables in ring circuit, drawn in trunking/conduits, as per drawings.	No.	73	15,000	1,095,000
C	Ceiling fan points: All wiring of ceiling fans complete with cabling, to be connected complete and ready from miniature circuit breakers, using 3x1.5mm sq. PVC-Insulated single core copper cables drawn in installed conduits/trunking/ceiling void, through switches, and as per drawings.	No.	10	15,000	150,000
D	Hand Drier points All wiring of hand drier points are to be connected complete and ready from 20A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables, drawn in conduits, and through 20A DP control switches, as per drawings.	No.	4	15,000	60,000
E	Cooker Control Unit All wiring of all cooker points are to be connected complete and ready from 32A SP miniature circuit breakers, using 6mm sq. PVC-Insulated single core copper cables, drawn in trunking/conduits, as per drawings.	No.	1	25,000	25,000
TOTAL CARRIED TO COLLECTION					2,178,000
COLLECTION Total brought forward from Page 5/7/1 Total brought forward from Page 5/7/2 Total brought forward from Page 5/7/3					3,309,500 4,233,000 2,178,000
TOTAL CARRIED TO SUMMARY					9,720,500

5/7/3

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 6					
ELECTRICAL WORKS					
ELEMENT NO: 8					
FIRE DETECTION & ALARM SYSTEM					
	Supply and install the following elements (c/w fixing accessories) of the Menvier / GENT analogue addressable fire detection system or approved equivalent. The rate shall include Manuals, Testing and Commissioning the System to the Satisfaction of the Engineer.				
A	Optical sensor c/w base	No.	24	27,250	654,000
B	Heat detector c/w base	No.	1	32,500	32,500
C	Addressable Manual Breakglass call point	No.	6	12,500	75,000
D	Addressable Alarm sounder	No.	3	25,600	76,800
E	Fully addressable 4-Loop Fire Alarm Control Panel with 24hr Battery Backup and network card and flush mounting kit, to Menvier / GENT manufacture, or approved equivalent	No.	1	350,000	350,000
F	Loop wiring of Detection Elements using 1.5mm sq 2-core Firetec OHLS 300/500V stranded copper cables to AEI CABLES LTD ref F2C1.5E or approved equivalent, in flush conduits (cable included).	No.	35	8,560	299,600
TOTAL CARRIED TO SUMMARY					1,487,900

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 6					
	ELECTRICAL WORKS				
	ELEMENT NO: 9				
	LIGHTNING PROTECTION SCHEME & BUILDING				
	EARTHING				
	All items are to be supplied and installed complete with all the required mounting, fixing, clipping, testing, connecting accessories, connected, tested and commissioned to the satisfaction of the Electrical Engineer.				
A	25mm x 3mm copper tape as to FURSE manufacture, or approved equivalent.	L/m	140	6,250	875,000
B	25mm x 3mm copper square test clamp, as to FURSE Cat.No. CT 105, or approved equivalent.	No.	2	25,000	50,000
C	2000mm x 15mm air rod, as to FURSE Cat. No. RA 240 c/w multiple point, as to FURSE Cat. No. RA 600, air terminal base, as to FURSE Cat. No. SD 105, and ridge saddle, as to FURSE Cat. No. SD 115, or approved equivalent.	No.	8	31,200	249,600
D	25mm x 3mm tape clip as FURSE cat CP210	No.	100	3,250	325,000
E	1200mm x 20mm solid copper earth rod, as to FURSE Cat.No. RC 015, complete with driving stud and coupler, and accessories.	No.	2	8,560	17,120
G	Concrete inspection chamber, as to FURSE Cat. No. PT005 or approved equivalent.	No.	2	35,000	70,000
H	Building Earthing Allow for the building grounding system to include but not be limited to the following: Bonding together all columns through their footers using a copper ground ring (Provisional Length). Welding a ground bar to each of the selected columns for future attachment points for other grounding conductors. The ground bars are to be directly welded to any exposed steel columns. Bonding between columns on either side of expansion joints using flexible copper conductor.	L/m	240	8,560	2,054,400
ii)		No.	20	2,500	50,000
iv)		No.	8	3,500	28,000
TOTAL CARRIED TO COLLECTION					3,719,120

5/9/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
iii)	Cast copper alloy ground plates are to be imbedded in concrete structures for attachment of future grounding conductors. The plates are to be provided complete with a pigtail and / or drilled and tapped holes for lug attachment.	No.	20	65,200	1,304,000
v)	Bonding the steel columns within the building to the column footer.	No.	10	6,500	65,000
vi)	Electrically connect the column anchor bolts to the footer reinforcing bars.	No.	10	3,500	35,000
TOTAL CARRIED TO COLLECTION					1,404,000
COLLECTION					3,719,120
Total brought forward from Page 5/9/1					1,404,000
Total brought forward from Page 5/9/2					5,123,120
TOTAL CARRIED TO SUMMARY					5,123,120

5/9/2

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
	BILL NO. 6				
	ELECTRICAL WORKS				
	ELEMENT NO: 10				
	DATA SYSTEM				
A	Supply and install the following elements (c/w fixing and mounting accessories) of the Legrand/ Siemens/ Alcatel/ Cisco manufacture or approved equivalent. The rate shall include, Manuals, Testing and Commissioning the System to the Satisfaction of the Engineer. Allow a PC Sum for provision of conduits and access ways for incoming Voice and data lines, and connection from a Utility Telecommunication Firm(s) subject to Approval	PC Sum	1	400,000	400,000
B	16U VDI Cabinet of size 0.8m high x 0.6m wide x 0.6m length with glass door, lateral panels, uprights and other accessories as LEGRAND Cat 034053, or approved equivalent.	No.	1	35,000	35,000
C	Ditto but 4-Way.	No.	3	46,500	139,500
E	1U 24-Way RJ45 cat 6 UTP connector panel as LEGRAND cat 32700 or approved equivalent	No.	6	52,600	315,600
F	1U 2-axes through-wiring panel as LEGRAND cat 33246, or approved equivalent.	No.	6	12,500	75,000
G	2U 240V British Standard power supply unit c/w switch and 5No. Socket outlets as LEGRAND cat 633900	No.	3	195,000	585,000
H	2.0m Category 6 UTP Patch cords as LEGRAND cat 51773 or equivalent	No.	100	2,670	267,000
I	1.0m Category 6 UTP Patch cords as LEGRAND cat 51772 or equivalent	No.	100	2,670	267,000
J	Any other accessories as may be deemed necessary for use with items A to F above.	Item	1		-
K	RJ 45 category 6 Avaya twin socket module with 2MGS 400 connectors and 8 contacts without shutters c/w flush mounting plate and accessory box as to LEGRAND Cat No. 742 99 or approved equivalent	No.	100	4,250	425,000
J	4-pair UTP cable of Category 6 performance or better and to approved manufacture.	L/m	600	950	570,000
K	Allow for Labelling, testing & certification, documentation and commissioning	Item	1		10,000
	TOTAL CARRIED TO SUMMARY				3,089,100

5/10/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 6					
ELECTRICAL WORKS					
ELEMENT NO. 11					
TELEPHONE SYSTEM					
A	Supply and install the following elements (c/w fixing and mounting accessories) of the Legrand/ Siemens/ Alcatel manufacture or approved equivalent. The rate shall include, Manuals, Testing and Commissioning the System to the Satisfaction of the Engineer. Allow a PC Sum for provision of conduits and access ways for incoming Telephone lines, and connection from Utility Sum 100 Extensions, 6 Incoming lines PABX, complete with attachments and accessories to approval. A 100-pair discase / Main distribution frame (MDF) c/w connection modules and all accessories 20-pair discase/ Floor distribution frames (DF) c/w connection modules and all accessories 1/0.5mm² 100-pair telephone cable connecting the MDF to the PABX 1/0.5mm² 20-pair telephone cable connecting the MDF to the 20-pair distribution frames 1/0.5mm² 4-pair telephone cable connecting the distribution frames to the telephone outlets Telephone outlets complete with flush mounting plate and all accessories Operator console Analogue phones	No.	1	250,000	250,000
B		No.	1	150,000	150,000
C		No.	1	35,000	35,000
D		No.	2	9,800	19,600
E		L/m	20	3,500	70,000
F		L/m	20	3,500	70,000
G		L/m	150	3,500	525,000
H		No.	20	1,000	20,000
I		No.	1	45,000	45,000
J		No.	12	15,000	180,000
TOTAL CARRIED TO SUMMARY					1,364,600
					5/11/1

Item No.	Description	Unit	Qty	Rate (MK)	Amount (MK)
BILL NO. 6					
ELECTRICAL WORKS					
ELEMENT NO: 12					
OTHER ITEMS					
A	Allow for production of 3 Sets of Hard and Soft Copies for the Electrical Installation to be handed over to the Project Manager (and Client) for maintenance and records.	Item	1	20,000	20,000
B	Allow for witnessing of tests and commissioning the entire electrical installation as per code of practice and regulations by the Engineer.	Item	1	50,000	50,000
C	Contractor to allow conduit provisions and access ways for the satellite television co-axial cabling connecting the Satellite Dishes (Position to be approved on site) to the to the TV Points as positioned on the Drawings.	Item	1	100,000	100,000
D	Contractor to allow conduit provisions and access ways for all security systems (Working Drawings to be provided) for connection of all outlets to the central equipment points. The cables shall be installed in flush conduits / trunking / ducts and as per further site instructions.	Item	1	100,000	100,000
E	UNINTERRUPTIBLE POWER SUPPLY Supply, Install, Test and Commission 5kVA, 415/240V Pure Sine Wave Uninterruptible Power Supply Unit complete with all the necessary accessories to APC manufacture or Approved Equivalent for the Server Room/	Item	2	150,000	300,000
TOTAL CARRIED TO SUMMARY					570,000

5/12/1

ELEMENT	DESCRIPTION	PAGE NO	AMOUNT (MK)
	BILL NO.5		
	ELECTRICAL WORKS		
	SUMMARY		
1	MAINS POWER SUPPLY, EXTENSION AND CONNECTION	5/1/1	1,500,000
2	TRANSFORMER SUPPLY AND INSTALLATION	5/2/1	6,000,000
3	STANDBY POWER SUPPLY	5/3/1	12,650,000
4	MAIN LV DISTRIBUTION PANEL BOARD (MDB):	5/4/1	11,800,000
5	RETICULATION & DISTRIBUTION CABLES	5/5/1	4,143,000
6	GROUND FLOOR	5/6/4	11,576,900
7	FIRST FLOOR	5/7/3	9,720,500
8	FIRE DETECTION & ALARM SYSTEM	5/8/1	1,487,900
9	LIGHTNING PROTECTION SCHEME & BUILDING EARTHING	5/9/2	5,123,120
10	DATA SYSTEM	5/10/1	3,089,100
11	TELEPHONE SYSTEM	5/11/1	1,364,600
12	MISCELLANEOUS	5/12/1	570,000
	TOTAL BILL NO.5 CARRIED TO MAIN SUMMARY		69,025,120

5/5

Sum Bill No. 5

UNIVERSITY OF MALAWI- CHANCELLOR COLLEGE PROPOSED ECONOMICS OFFICE & LIBRARY BLOCK

BILL OF QUANTITIES MAIN SUMMARY

BILL NO.	DESCRIPTION	AMOUNT (MK)
1	PRELIMINARIES	42,000,000.00
2	BUILDING WORKS	472,784,455.00
3	EXTERNAL WORKS	31,230,900.00
4	MECHANICAL WORKS	54,287,250.00
5	ELECTRICAL WORKS	69,025,120.00
	SUB - TOTAL "A"	669,327,725.00
	Add 10% Contingency	66,932,772.50
	SUB - TOTAL "B"	736,260,497.50
	Add 1% NCIC Levy	7,362,604.98
	SUB - TOTAL "C"	743,623,102.48
	Add 16.5% VAT	122,697,811.91
	GRAND SUMMARY	866,320,914.38

Section 7: General Conditions of Contract

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Section 7. General Conditions of Contract

A. General

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

The "Activity Schedule" means the priced Activity Schedule forming part of the Bid for a Lump Sum Contract.

An "Admeasurement Contract" means a contract based on a priced Bill of Quantities or schedule of unit price rates in which payment to the Contractor is subject to measurement of physical quantities of items by the Employer.

The "Adjudicator" is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in Clauses 24 and 25 hereunder.

"Bill of Quantities" means the priced and completed Bill of Quantities forming part of the Bid for an Admeasurement contract.

"Compensation Events" are those defined in Clause 44 hereunder.

The "Completion Date" is the date of completion of the Works as certified by the Project Manager, in accordance with Sub-Clause 52.1.

The "Contract" is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The "Contract Price" is the price stated in the Notice of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

"Contractor" means the Supplier appointed under the Contract for the performance of the Works.

"Days" are calendar days; "months" are calendar months.

"Dayworks" are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.

A "Defect" is any part of the Works not completed in accordance with the Contract.

The "Defects Liability Certificate" is the certificate issued by Project Manager upon correction of defects by the Contractor.

The "Defects Liability Period" is the period named in the Special Conditions of Contract and calculated from the Completion Date.

"Drawings" include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

"Equipment" is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The "Initial Contract Price" is the Contract Price listed in the Procuring Entity's Notice of Acceptance.

The "Intended Completion Date" is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Special Conditions of Contract. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.

"Materials" are all supplies, including consumables, used by the Contractor for incorporation in the Works.

"Plant" is any integral part of the Works that shall have a mechanical, electrical, chemical, or

biological function.

The "Procuring Entity" is the party who employs the Contractor to carry out the Works.

The "Project Manager" is the person named in the Special Conditions of Contract (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.

The "Site" is the area defined as such in the Special Conditions of Contract.

"Site Investigation Reports" are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.

"Specification" means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.

The "Start Date" is given in the Special Conditions of Contract. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

A "Subcontractor" is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.

The "Supplier" is a person or corporate body whose Bid to carry out the Works has been accepted by the Procuring Entity.

The "Contractor's Bid" is the completed bidding document submitted by the Contractor to the Procuring Entity.

"Temporary Works" are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

A "Variation" is an instruction given by the Project Manager which varies the Works.

The "Works" are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Special Conditions of Contract.

2. Interpretation

2.1 In interpreting these General Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager will provide instructions clarifying queries about these General Conditions of Contract.

2.2 If sectional completion is specified in the Special Conditions of Contract, references in the General Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

2.3 The documents forming the Contract shall be interpreted in the following order of priority:

- (1) Agreement,
- (2) Notice of Acceptance,
- (3) Contractor's Bid,
- (4) Special Conditions of Contract,
- (5) General Conditions of Contract,
- (6) Specifications,
- (7) Drawings,
- (8) Bill of Quantities or Activity Schedule, and

(9) any other document listed in the Special Conditions of Contract as forming part of the Contract.

3. Language and Law

3.1 The language of the Contract is English and the governing law is that of Republic of Malawi.

4. Project Manager's Decisions

4.1 Except where otherwise specifically stated and subject to any restrictions in the Special Conditions of Contract, the Project Manager will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

5.1 The Project Manager may delegate any of his duties and responsibilities to other people, except to an Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

6. Communications

6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.

7. Subcontracting

7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.

8. Other Suppliers

8.1 The Contractor shall cooperate and share the Site with other suppliers, contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Suppliers, as referred to in the Special Conditions of Contract. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Suppliers, and shall notify the Contractor of any such modification.

9. Personnel

9.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel, as referred to in the Special Conditions of Contract, to carry out the functions stated in the Schedule or other personnel approved by the Project Manager. The Project Manager will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Schedule.

9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven (7) days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks

10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

11.1 From the Start Date until the Defects Correction Certificate has been issued, the following are Employer's risks:

- (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to:

- (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works, or
- (ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
- (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the Republic of Malawi.

- 11.2 From the Completion Date until the Defects Correction Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to

- (a) a Defect which existed on the Completion Date,
- (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
- (c) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

- 12.1 From the Starting Date until the Defects Correction Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.

13. Insurance

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Special Conditions of Contract for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plant, and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
- (d) personal injury or death.

- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable as required to rectify the loss or damage incurred.
- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

- 13.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.

- 13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

- 14.1 The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the Special Conditions of Contract, supplemented by any information available to the Bidder.

15. Queries about the Special Conditions of Contract

15.1 The Project Manager will clarify queries on the Special Conditions of Contract.

16. Contractor to Construct the Works

16.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.

17. The Works to Be Completed by the Intended Completion Date

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Programme submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

18. Approval by the Project Manager

18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for design of Temporary Works.

18.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.

19. Safety

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries

20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Special Conditions of Contract, the Employer will be deemed to have delayed the start of the relevant activities, and this will be a Compensation Event.

22. Access to the Site

22.1 The Contractor shall allow the Project Manager and any person authorised by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

23. Instructions

23.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.

24. Disputes

24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within fourteen (14) days of the notification of the Project Manager's decision.

25. Procedure for Disputes

25.1 The Adjudicator shall give a decision in writing within twenty-eight (28) days of receipt of a notification of a dispute.

25.2 The Adjudicator shall be paid by the hour at the rate specified in the Bid Data Sheet and Special Conditions of Contract, together with reimbursable expenses of the types specified in the Special Conditions of Contract, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within twenty-eight (28) days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above twenty-eight (28) days, the Adjudicator's decision will be final and binding.

25.3 The arbitration shall be conducted in accordance with the arbitration procedure published by the institution named and in the place shown in the Special Conditions of Contract.

26. Replacement of Adjudicator

26.1 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within thirty (30) days, the Adjudicator shall be designated by the Appointing Authority designated in the Special Conditions of Contract at the request of either party, within fourteen (14) days of receipt of such request.

B. Time Control

27. Programme

27.1 Within the time stated in the Special Conditions of Contract, the Contractor shall submit to the Project Manager for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works.

27.2 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.

27.3 The Contractor shall submit to the Project Manager for approval an updated Programme at intervals no longer than the period stated in the Special Conditions of Contract. If the Contractor does not submit an updated Programme within this period, the Project Manager may withhold the amount stated in the Special Conditions of Contract from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

27.4 The Project Manager's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Project Manager again at any time. A revised Programme shall show the effect of Variations and Compensation Events.

28. Extension of the Intended Completion Date

28.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.

- 28.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within twenty-one (21) days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

29. Acceleration

- 29.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager will obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date will be adjusted accordingly and confirmed by both the Employer and the Contractor.
- 29.2 If the Contractor's priced proposals for an acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.

30. Delays Ordered by the Project Manager

- 30.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

31. Management Meetings

- 31.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 31.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

32. Early Warning

- 32.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.

- 32.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

33. Identifying Defects

- 33.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.

34. Tests

- 34.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a

Compensation Event.

35. Correction of Defects

- 35.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the Special Conditions of Contract. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 35.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.
36. Uncorrected Defects
- 36.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager will assess the cost of having the Defect corrected, and the Contractor will be liable for this amount. The amount will be deducted from current and future payment certificates, or paid by the Contractor if insufficient funds are due under the contract.

D. Cost Control**37. Bill of Quantities or Activity Schedule**

37.1 This Contract is:

- (a) An Admeasurement Contract with a Bill of Quantities, subject to Option 1; or
- (b) A Lump Sum Contract with an Activity Schedule, subject to Option 2,

as indicated in the Special Conditions of Contract.

Option 1: Bill of Quantities for Admeasurement Contract

37.2 The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

37.3 The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

Option 2: Activity Schedule for Lump Sum Contract

37.4 The Contractor shall provide updated Activity Schedules within fourteen (14) days of being instructed to by the Project Manager. The activities on the Activity Schedule shall be coordinated with the activities on the Programme.

37.5 The Contractor shall show delivery of Materials to the Site separately on the Activity Schedule if payment for Materials on Site shall be made separately.

38. Change in the Bill of Quantities or Activity Schedule**Option 1: Changes in the Bill of Quantities for Admeasurement Contracts**

38.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than twenty-five (25) percent, provided the change exceeds one (1) percent of the Initial Contract Price, the Project Manager shall adjust the rate or price to allow for the change.

38.2 The Project Manager shall not adjust rates or prices from changes in quantities if thereby the Initial Contract Price is exceeded by more than five (5) percent, except with the prior approval of the Employer.

38.3 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

and securing the Works, and less advance payments received up to the date of the certificate.

60. Property

60.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.

61. Force Majeure

61.1 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Contractor that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Contractor. Such events may include, but not be limited to, acts of the Employer in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

61.2 If a Force Majeure situation arises, the Contractor shall promptly notify the Employer in writing of such condition and the cause thereof. Unless otherwise directed by the Employer in writing, the Contractor shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

61.3 The Contractor shall not be liable for forfeiture of its performance security or retention monies held, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

62. Release from Performance

62.1 If the Contract is frustrated by an event of Force Majeure or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

Section 8. Special Conditions of Contract

Special Conditions of Contract

Part 3: Section 8

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC Clause Reference	Special Conditions
GCC 1.1	The Employer is: Chancellor College The Project Manager is: Joadah Consult Ltd The name and procurement reference number of the Contract is: CC/CW/EC/01-03-17 The Works consist of: Construction of Economics Department – Office, Library and Associated External Works The Site is located at: Chancellor College, Zomba, Malawi and its defined in Drawings Nos: A1-02 The Start Date shall be: 19th June, 2017 The Intended Completion Date for the whole of the Works shall be: 12 Months
GCC 2.3	The following documents also form part of the Contract: a. Schedule of Materials b. Technical Specifications
GCC 4.1	The Employer's specific approval is required for: any new Variations or Compensation Events or Measurements which together with previously approved Variations and Compensation Events and Measurements, would result in an increase to the Initial Contract Price.
GCC 8.1	The Schedule of Other Suppliers shall form part of the Contract
GCC 9.1	The Schedule of Key Personnel shall form part of the Contract
GCC 13.1	The minimum insurance cover and deductibles shall be: a) For loss or damage to the Works, Plant and Materials: The Contract price plus 10%. (b) For loss or damage to Equipment: 100% of the value of the equipment (c) For loss or damage to property (except the Works, Plant, Materials,

GCC Clause	Reference
Special Conditions	
GCC 21.1	The Site Possession Date shall be: To be communicated
GCC 25.2	Fees and types of reimbursable expenses to be paid to the Adjudicator are: Current hourly rate as prescribed by the Architects and Quantity Surveyors Registration Board of Malawi
GCC 25.3	The institution whose arbitration procedures shall be used is: Arbitration shall take place at: National Construction Industry Council of Malawi
GCC 26.1	The Appointing Authority for the Adjudicator is: National Construction Industry Council of Malawi
GCC 27.1	The Contractor shall submit a revised Programme for the Works within 14 days of delivery of the Notice of Acceptance.
GCC 27.3	The period between Programme updates is 28 days. The amount to be withheld for late submission of an updated Programme is: MK200,000.00.
GCC 35.1	The Defects Liability Period is: 12 Months
GCC 37.1	This Contract is a Admeasurement Contract
GCC 44.1(i)	The following events shall also be Compensation Events: N/A
GCC 47.1	The Contract is not subject to price adjustment
GCC 48.1	The proportion of payments retained is 10 up to 5 percent of the contract price.
GCC 49.1	The rate per day for liquidated damages is 0.05 percent of the final Contract Price per day. The maximum amount of liquidated damages for the whole of the Works is 10 percent of the final Contract Price.
GCC 50.1	The Advance Payment will be equivalent to Maximum of Twenty percent (20%) of the Contract Price excluding VAT and NCIC levy and will be paid in the same currencies and proportions as the Contract Price.
GCC 50.3	The Advance Payment will be repaid by deducting equal amounts from

Part 3: Section 8

Special Conditions of Contract

GCC Clause Reference	Special Conditions
GCC 51.1	The Performance Security shall be for 10 percent of the Contract Price:
GCC 57.1	The date by which operating and maintenance manuals are required is: One (1) months after Certificate of Completion The date by which "as built" drawings are required is: One (1) months after Certificate of Completion
GCC 57.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is: 3,000,000 MK
GCC 59.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is: Ten (10%) percent

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