THE GOVERNMENT OF ZIMBABWE

BILLS OF QUANTITIES FOR

PROPOSED UMGUZA K9 STAFF ACCOMMODATION, DOG KENNELS & BOUNDARY WALL

AT

BULAWAYO (UMGUZA)

FOR ZIMRA

	BILL NO. 1	
	PRELIMINARIES	
	NOTES TO TENDERERS	
Α	The following Preliminaries shall apply to all tenders whether based on Bills of Quantities or on a Specification, issued by the Ministry of Local Government and Public Works.	
В	In the case of a tender based on Bills of Quantities the Tenderer should allow for all costs incurred in complying with these Preliminaries in the money column of this Bill and carry the total (if any) to the appropriate Summary in the Main Bills of Quantities, or as otherwise instructed in the Tender Documents.	
С	In the case of a Tender based on a Specification, the Tenderer should include for all costs and expenses in complying with these Preliminaries in his lump sum Tender figure for the work.	
D	In the case of a Contract based on a Specification those Preliminaries which refer to "Bills of Quantities", shall apply only where such term is synonymous with the term "Specification".	
E	The Specification or Bills of Quantities are to be read in conjunction with, and all workmanship and material, unless otherwise described, shall comply with the current edition of the Ministry of Local Government and Public Works "General Specification of Materials and Workmanship" and with any amendments thereto. It is hereby made a condition that the submission of a tender based on Bills of Quantities or a Specification issued by the Ministry of Local Government and Public Works shall be accepted as proof that the Tenderer was in possession of a copy of this "General Specification" and amendments thereto at the time of tendering and that his tender price was based upon the requirements of such "General Specification" and amendments thereto.	
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Α	No representation, explanation or statement which in any way alters the tender or contract documents, made prior to the acceptance of a tender or during the		
	progress of the contract shall bind the Secretary for		
	Local Government and Public Works unless such		
	explanation, statement or alteration be made and		
	confirmed under the signature of the Secretary for		
	Local Government and Public Works.		
В	Should there be any doubt or obscurity as to the		
	meaning of any particulars in the Specification, Bills		
	of Quantities or Tender Documents, the Tenderer		
	must obtain an explanation as to the true intent and		
	meaning in writing from the Secretary for Local		
	Government and Public Works before submitting		
	his tender. No claim for extras arising from any		
	doubt or obscurity will be admitted after the delivery		
	of his tender.		
С	The Tenderer is required to check the number of pages		
	in the Specification (and in the case of Bills of		
	Quantities all pages and references thereto in the		
	"Collections" and Summary), and should any pages or		
	references thereto be missing or duplicated or the		
	figures or typing be indistinct, he is to apply at once to		
	the Secretary for Local Government and Public Works		
	and have the same rectified. Any errors arising through		
	the Tenderer failing to do this will not be admitted after		
	the submission of his tender.		
D	The Contractor shall, when requested by the Secretary		
	for Local Government and Public Works, deposit his		
	Bills of Quantities fully priced out in ink with the		
	Secretary for Local Government and Public Works,		
	and on the basis of this Bill of Quantities all extras		
	and ommissions will be valued. The Secretary for		
	Local Government and Public Works shall be at		
	liberty to call for such adjustments of individual rates		
	and rectify discrepancies as he considers necessary		
	provided that the Tendered Amount is not altered.		
_	CONDITIONS OF CONTRACT		
Е	The Tenderer is referred to the "Conditions of		
	Contract" and if he considers any of the clauses		
	(or any amplification thereof given below) in such		
	Conditions involves expense not inluded elsewhere, he should inlude for same.		
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A	Should the Tenderer not be in possession of the Ministry of Local Government and Public Works Standard Conditions of Contract, two copies will be issued to him on application being made.
В	A Tenderer's failure to obtain a copy of the Conditions of Contract will not absolve him from complying with such Conditions.
С	Clause No. 1: Scope of Contract.
D	Clause No. 2: Drawings, Specifications and Bills of Quantities, etc.
E	Clause No. 3: Local and Other Authorities' Notices and Fees.
F	Clause No. 4: Setting Out of Works.
G	Clause No.5: Materials and Workmanship to Conform to Description.
Н	Clause No. 6: Foreman.
J	Clause No. 7: Access for Architect to Works.
К	Clause No. 8: Clerk of Works.
L	Clause No. 9: Ascertainment of Prices for Variations.
М	Clause No. 10: Bills of Quantities.
	Should the Contractor not affix any figures in the money column against any particular items, he shall write hyphens thus: against such items.
	Carried to Collection \$

All measurements, sizes and quantities throughout the Bills of Quantities are taken nett and should be held to mean the finished measurement and sizes, unless otherwise stated. The Quantities represent the actual nett quantities left in the building. The Contractor must allow in his prices for all cutting and waste, etc.

The Bills of Quantities are not to be used for the ordering of materials except at the Contractor's own risk. They have been prepared in order to enable the Contractor to furnish an estimate for the work and to provide unit rates for adjustment of variations.

No alterations, erasures or additions are to be made by the Tenderer in the text of the Bills of Quantities, and should any such alterations or additions be made the same will not be recognised and the text of the Bills of Quantities will be adhered to.

To assist the Tenderer in casting the various trades in these Bills of Quantities, sufficient space has been left at the end of each trade to enable him to cast each page separately, and carry the same to a column on the page in question under the heading of "Collection".

- A Clause No. 11: Unfixed Materials when taken into account to be Property of the Government.
- B Clause No. 12: Defects After Completion.
- C Clause No. 13: Assignment or Sub-letting.
- D Clause No. 14: Injury to Persons or Property.
 - (a) <u>Injury to Persons</u>: The Contractor is to allow for all costs and charges in taking out an Insurance Policy covering <u>THIRD PARTY RISKS</u>, in the joint names of the Government and the Contractor.
 - (b) Workmen's Compensation.
 - (c) Injury to Property.
 - (d) <u>Damage resulting from riot or civil</u> commotion.

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MINISTRY OF LOCAL GOVERNMENT AND PUBLIC WORKS

A	Clause No. 15: Insurance. The Contractor is to allow for all costs and charges in insuring the building against fire, for the full amount of the Contract plus 12½% to cover professional fees, from the commencement of work until the building is handed over. The policy is to be deposited with the Secretary for Local Government and Public Works and payments to the Contractor may be withheld until this Clause has been complied with.			
В	Clause No. 16: Occupation.			
С	Clause No. 17: Date of Possession and Completion.			
D	Clause No. 18: Damages for Non-completion.			
E	Clause No. 19: Delay and Extension of Time.			
F	Clause No. 20: Determination by Government.			
G	Clause No. 21: Determination by Contractor.			
н	Clauses No. 22 and 23: Nominated Sub-contractors and Suppliers.			
	Where the Government becomes the nominated sub-contractor or the nominated supplier no cash discount will be allowed.			
	When during the course of the contract the Government omits Provisional Sums included in the Bills of Quantities, Specification or Tender Documents for nominated sub-contractors or nominated suppliers and negotiates a separate contract for such work to be paid direct by the Government, the main Contractor shall allow such facilities and he shall be entitled to payment of profit and attendance at the rates included by him in the Bills of Quanties against the respective items, adjusted pro rata on the amount paid direct by the Government, but shall not be entitled to claim cash discount or compensation for loss thereof. Carried to Collection	\$		
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In the event of Provisional Sums for nominated sub-contractors' or suppliers' work being omitted in whole or in part, and such work not being otherwise carried out during the period of this contract all cash discount, profit and attendance shall be similarly omitted in whole, or in part pro rata. Α Clause No. 24: Artists, Tradesmen and Works Outside the Contract. The Government reserves the right at all times during the progress of the contract to let separate contracts for Specialists' work, or any other similar work not included in the Bills of Quantities, Specification or Tender Documents, and the main Contractor must grant access, and all facilities to such artists, tradesmen and others so engaged by the Government and such persons shall not be regarded as sub-contractors under this contract and no builders' discount or profit in respect thereof shall be payable to the Main Contractor, but in the event of attendance and making good being required payment will be made on a fair valuation of the services performed. To assist the Contractor in arranging any attendance required, the Government may, when there is prior knowledge of specialist work, state in the Specification or Bills of Quantities the approximate value of such intended or existing separate contracts, but the inclusion of this information is for the Contractor's guidance only and shall not be deemed to be an amount included in the value of the Contract. В Clause No. 25: Certificates and Payment The Contractor when requiring a progress payment, shall furnish the Secretary for Local Government and Public Works with an approximate statement of the work executed, detailed and priced under trades and based on his original tender. In all cases where the Contractor requires payment for unfixed materials on the site, the application for a progress payment must be accompanied by a complete list of all such materials, signed by the Contractor and countersigned by the Clerk of Works. All such material shall become the property of the Government and shall not be taken away (except for use in the building) without the written permission of the Secretary for Local

Government and Publi Works.

Not more than 80% of the value of any materials on site will be included in progress payments and such payments will only be made for materials which are properly protected from weather and theft, and which have not, in the opinion of the Quantity Surveyor, been brought prematurely upon the site.

All monies due to the nominated sub-contractors or suppliers and which are included in the contractor's certificate shall be paid to the sub-contractors or suppliers by the Contractor within 21 days after the date of the certificate in which the sum due is included. in the event of such payment not being made within the above stipulated time, the Contractor shall lose all right to claim any cash discount on the monies involved and the Secretary for Local Government and Public Works reserves the right to deduct ALL sums of maney that are due to the said sub-contractors or suppliers from the Contractor's next certificate and pay them direct to the sub-contractors or suppliers.

It is a condition of this contract that the Government shall not be bound to pay (except under an Order of the Court) any monies due or to become due hereunder to any persons save the Contractor who shall not have the right to assign his rights to payment to any third party without first obtaining the written consent of the Government to such assignment.

- A Clause No. 26: Wages
- Clause No. 27: Non-Payment of Certificates В Notwithstanding the provisions of Clause 25 of the "Conditions of Contract", the Government reserves the right to withhold retention money beyong the retention period until the Contractor has submitted to the Secretary for Local Government and Public Works all receipts in respect of monies due to nominated sub-contractors and nominated suppliers which have been included in payments made to the Contractor, and in the event of the Contractor failing to produce within 14 days of being asked in writing, conclusive evidence that such amounts have been fully paid, the Government shall have the right to make final payment direct to such sub-contractors or suppliers and to deduct the value thereof from the retention money, or other monies due under the Contract. Carried to Collection

GOVERNMENT AND PUBLIC WORKS

MINISTRY OF LOCAL

A	Clause No.28: Surety Bond The Contractor is to allow for all costs and charges in taking out the surety bond.	
В	Clause No. 29: Corrupt Gifts and Payments of Commission.	
С	Clause No. 30: Photographs.	
D	Clause No. 31: Articles of Value or Antiquity.	
Е	Clause No. 32: Patent Rights and Royalties.	
F	Clause No. 33: Arbitration.	
	PRELIMINARIES AND GENERAL	
	The tenderer is referred to section B, Preliminaries and General, Pages B.1 to B.9 of the General Specification and if he considers that any of the clauses or any amplification thereof given below involves expense not elsewhere included, he should include for same hereunder.	
	Clause B.1 Public Liability.	
G	1.1 Noise control.	
н	1.2 Nuisance. The Contractor shall make adequate provision by spraying, erecting screens or other suitable methods, against nuisance or damage by dust to all works under this Contract, to persons or property in the vicinity, and he will be held solely responsible for any complaints, damage or claims in this connection.	
J	1.3 Adjoining owners. The Contractor shall not in the execution of the Works enter upon or otherwise make use of any lands adjoining the site of the Works as demarcated on the site plan, without the consent in writing of the Secretary for Local Government and Public Works or without the consent of the owners of such adjoining lands, having been previously obtained, but shall (except with such consent) confine his operations within the site of the Works. No trespassing beyond the limits as Carried to Collection \$	

		above described will be allowed.
Α	1.4	Adjoining property.
В	1.5	Police regulations.
С	1.6	Statutory obligations.
D	1.7	Notices, fees and charges.
	Claus	se B.2 Prevention of Damage or Loss
Е	2.1	Locate existing services.
F	2.2	Protect existing services.
G	2.3	Damage to services.
н	2.4	Fire precautions.
J	2.5	Damage to roads.
К	2.6	Repairs to roads.
L	2.7	Clear roads Nothing shall be done by the Contractor or anyone employed by him that shall in anyway interfere with the free use by the public of any of the roads, gravel drives, paths, etc., within or approaching the site.
М	2.8	Protect trees and shrubs.
N	2.9	Replace trees and shrubs.
0	2.10	Existing features. Make good or reinstate at the Contractor's expense all damage which may occur to gates, fences, buildings or other Government property existing upon the site.
Р	2.11	Existing damage.
	Claus	se B.3 Management/administration Procedures
Q	3.1	Programme.
R	3.2	Submit. Carried to Collection \$

J 3.11 K 3.12 L 3.13	Monitoring. The Contractor shall provide on site a carbon copy record book which shall provide one original and two copies in which shall be recorded all site visits and daily record of work done. Safety, health and welfare. Use of site. Site meetings. Minutes. Measurements. Labour return. Daywork vouchers. Order materials. Se B.4 Resources/Temporary Works and Services Locations.
D 3.6 E 3.7 F 3.8 G 3.9 H 3.10 J 3.11 K 3.12 L 3.13 Claus M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	The Contractor shall provide on site a carbon copy record book which shall provide one original and two copies in which shall be recorded all site visits and daily record of work done. Safety, health and welfare. Use of site. Site meetings. Minutes. Measurements. Labour return. Daywork vouchers. Order materials. See B.4 Resources/Temporary Works and Services
E 3.7 F 3.8 G 3.9 H 3.10 J 3.11 K 3.12 L 3.13 Claus M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	Use of site. Site meetings. Minutes. Measurements. Labour return. Daywork vouchers. Order materials. se B.4 Resources/Temporary Works and Services
F 3.8 G 3.9 H 3.10 J 3.11 K 3.12 L 3.13 Claus M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	Site meetings. Minutes. Measurements. Labour return. Daywork vouchers. Order materials. See B.4 Resources/Temporary Works and Services
G 3.9 H 3.10 J 3.11 K 3.12 L 3.13 Claus M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	Minutes. Measurements. Labour return. Daywork vouchers. Order materials. Se B.4 Resources/Temporary Works and Services
H 3.10 J 3.11 K 3.12 L 3.13 Claus M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	Measurements. Labour return. Daywork vouchers. Order materials. Se B.4 Resources/Temporary Works and Services
J 3.11 K 3.12 L 3.13 Claus M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	Labour return. Daywork vouchers. Order materials. Se B.4 Resources/Temporary Works and Services
M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	Daywork vouchers. Order materials. Se B.4 Resources/Temporary Works and Services
M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	Order materials. Se B.4 Resources/Temporary Works and Services
M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	se B.4 Resources/Temporary Works and Services
M 4.1 N 4.2 O 4.3 P 4.4 Q 4.5	
N 4.2 O 4.3 P 4.4 Q 4.5	Locations
O 4.3 P 4.4 Q 4.5	
P 4.4 Q 4.5	Temporary works.
Q 4.5	Roads.
	Buildings.
B 46	SO's site office.
1 10	Storage for cement and lime.
S 4.7	Sanitary accommodation for supervisory staff.
T 4.8	Sanitary accommodation for artisan staff.
U 4.9	Hoardings, gantries and scaffolding.
V 4.10	ı II II II
	Name boards.

Α	4.11	Telephones.	
В	4.12	Water. Allow for providing all water for the Works and for sub-contractors, pay all fees and charges legally demandable and provide all necessary piping, taps and other fittings, storage tanks, etc. If this Contract embodies work at a Government building or institution where water is already lain on, the Contractor may by agreeing in writing with the Secretary for Local Government and Public Works, use the water from this supply. (Any connection to or extensions of the existing supply pipes must be provided at the Contractor's expense.) If permission be thus obtained and the Contractor uses the water from this source, he shall pay the Government	
		a sum equal to one quarter percent (1/4%) of the final completed cost of the work executed under this contract as disclosed in the final statement, and shall allow in his price for water such amount as he considers necessary to cover this cost.	
		The use of water from a Government supply is granted subject to the condition that the water used by the Contractor shall be for building purposes only and should the Government be satisfied that the Contractor is unduly wasting water and/or using water for any subsidiary purpose such as providing for living accommodation of his workmen on the site, the Government reserves the right to deduct from monies due under the contract their assessment of all such additional water used.	
C		Lighting and power. It is entirely the Contractor's responsibility to ascertain before tendering the availability of electricity and all costs and charges thereof, and no claim arising out of this clause will be considered after the submission of a tender. Plant.	
E	4.15	Sole use of plant.	
F	4.16	Removal of plant.	
G	4.17	Plant to comply. Carried to Collection \$	

Α	4.18 Protective clothing.	
	Clause B.5 Nominated Firms/Public Bodies	
В	S.1 Prime cost or provisional sums. Where Provisional and Prime Cost Sums are included for works to be performed, or materials supplied by nominated sub-contractors or suppliers, the Secretary for Local Government and Public Works will invite tenders (or may request the Contractor to obtain not less than three tenders) and direct the Contractor to accept a tender from a sub-contractor who will then become a nominated sub-contractor or supplier in terms of the "Conditions of Contract: Clauses 22 and 23". The main Contractor will be entirely responsible for the proper and timely execution of the sub-contract and no contract will exist between the nominated sub-contractor or supplier and the Government, and it is the responsibility of the main Contractor to ensure that the sub-contractor indemnifies the Contractor against the same obligations in respect of the sub-contract, as those for which the Contractor is liable in reslepect of the main contract. The Contractor shall not order any materials for which Provisional or Prime Cost Sums are included without first receiving instructions in writing from the Secretary for Local Government and Public Works so to do.	
	The Contractor will be required to produce all receipted invoices, if demanded by the secretary for Local Government and Public Works for the adjustment of accounts. If items are reserved for work of a nature usually carried out by the Contractor in the course of his business, the Government may give the Contractor an opportunity of tendering for the same without prejudice to the	
	Government's right to reject the lowest or any tender.	
С	5.2 Sub-contractors. The names of all sub-contractors (other than nominated) whom the Contractor proposes to employ shall be submitted to the Secretary for Local Government and Public Works for approval before the signing of the Contract. Such approval shall not be unreasonably withheld.	
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Α	5.3	General Attendance. Wherever the words 'allow for attendance" occur, it shall		
		be deemed to cover all the Contractor's costs involved in the following:-		
		(a) For giving the sub-contractor every facility to enable		
		him to execute his work in a workmanlike manner and in proper order and sequence.		
		(b) For allowing the sub-contractor free use of all scaffolding and plant as may be reasonably required by him, and for erecting, shifting and removing as necessary such scaffolding and plant free of charge to the sub-contractor.		
		(c) For providing water or electricty required by the sub-contractor.		
		(d) For receiving, unloading, checking, and removing to store all the sub-contractor's materials, articles and fittings on arrival at the site, and where necessary for providing proper storage accommodation for the prevention of pilferage, damage, etc., returning all empties and packaging of same carriage paid, and for hoisting or lowering materials, articles, or fittings to the requisite levels and positions in the building.		
		(e) For agreeing with the sub-contractor proper and accurate working dimensions and other particulars and for obtaining from the sub-contractors full data and particulars as to the sub-contractors' requirements, with particular regard to chases, recesses, mortices, notchings, holes, perforations, etc., and for obtaining full information from the sub-contractor to enable the Contractor to make proper arrangements and provisions during the general execution of the work for reception of the sub-contractor's work. The cost of any alterations consequent upon the non fulfilment of the foregoing stipulations will be at the Contractor's sole expense.		
		(f) For all items, conditions or requirements with regard to the sub-contractor's work mentioned or described in the general Conditions of Contract, Specification and Preliminaries not specifically stated in the foregoing.		
В	5.4	Supervision.		
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А	5.5 Programme.		
	Clause B.6 Quality/Testing/Approvals.		
В	6.1 Commodities.		
С	6.2 Manufacturer's Recommendations.		
D	6.3 Standards.		
Е	6.4 Single Sources.		
F	6.5 Samples of commodities.		
G	6.6 Samples of work.		
	Clause B.7 Accuracy/Setting Out.		
н	7.1 Set out the works.		
J	7.2 Profiles.		
К	7.3 Permanency.		
L	7.4 Instruments.		
М	7.5 Check all dimensions.		
N	7.6 Dimensions.		
	Clause B.8 Protection.		
0	8.1 Safeguard the site. Provide all necessary barriers, hoardings, footways, etc., and provide all necessary watching and lighting as required for the protection of the Works and materials and plant on the site, and for the protection of the public. The Contractor will be held responsible for all injury or accident that may happen through failure to provide adequate protection and lighting.		
Р	8.2 Inclement weather.		
Q	8.3 Stormwater and surface water. The Contractor must satisfy himself as to the quantities of subsoil and surface water to be dealt with and is to keep the building foundations and work generally clear of surface, subsoil and stormwater by baling, pumping Carried to Collection	\$	

	or otherwise. Provide for dealing with springs, underground streams, etc., which may be opened up and provide all necessary pipes and machinery sufficient for the above purposes, and an ample supply of power, and apply the same as necessary to enable all operations to be promptly and efficiently performed, including night and day attendance and work as necessary.
А	8.4 Overloading.
В	8.5 Cleanliness.
С	8.6 Damage by sunlight.
D	8.7 Datum.
	Clause B.9 Prefabricated Elements.
Е	9.1 Delivery.
F	9.2 Check fixings.
G	9.3 Authorise erection.
Н	9.4 Notice.
	Clause B.10 Work at Completion.
J	10.1 Clean the works.
K	10.2 Cleaning.
L	10.3 Remove.
М	10.4 Painted surfaces.
N	10.5 Moving parts.
0	10.6 Security at completion.
Р	10.7 Making good defects.
Q	10.8 Maintenance instructions.
	Clause B.11 Miscellaneous.
R	11.1 Photographs. Carried to Collection \$

A 11.2 Articles of value or antiquity.

B VISIT SITE

The Contractor must visit the site of the Works before submitting his tender and carefully examine the conditions that exist, and he is to satisfy himself as to the nature of the materials to be excavated as well as all natural conditions, water and light services, transport facilities, etc. No allowance will be made in the event of conditions being different from what he expected.

C FLUCTUATIONS IN COSTS

Where applying to nominated sub-contractors or suppliers

Where the following provisions for fluctuations in wages, cost of living allowances or prices of materials are applicable to a nominated sub-contractor or nominated supplier, the additional payments to them are to be regarded as a reimbursement of expense only, upon which the contractor shall not be entitled to claim any additional pro rata profit in terms of Clause 25 (e) of the conditions of contract.

2) Fluctuations in wages and cost of living allowances The Contractor is to pay not less than the recognised Standard Rate of wages and Allowances to all employees. If at any time between the date of delivery of the Contractor's tender and the date for the completion of the Works any statutory fluctuation (i.e. any specific increase or decrease stipulated by the Government Gazette) takes place in the Standard Rate of Wages, Cost of Living Allowances, or other statutory compulsory contribution in respect of the men employed on the Works covered by this Contract, whether on the site or in the workshops or yards of the Contractor or sub-contractors (but not in respect of merchants or suppliers), the Contractor is to submit WEEKLY to the Secretary for Local Government and Public Works receipted time sheets, together with aweekly return of the number of hours worked, signed by the Foreman and countersigned by the Clerk of Works, and the contract price shall be adjusted in accordance with the statutory fluctuation. Variations, if any, made under this clause shall be a nett increase or decrease, and no allowance will be made for any profit whatsoever. No claims will be admitted in respect of labour employed after the expiration of the contract completion date or any ammendments thereto under Clause 19 of the Conditions of contract.

3) Fluctuations in prices of materials

Should any statutory fluctuation (i.e. any secified increase or decrease in control prices of materials stipulated by notices published in the Government Gazette) take place after the date of delivery of the Contractor's tender, the Contractor is to submit invoices for such materials certified by the Clerk of Works and the contract price shall be adjusted in accordance with the statutory fluctuation. Such variations, if any, made under this clause shall be a nett increase or decrease, and no allowance will be made for any profit whatsoever.

The term "statutory fluctuation" is accepted to cover variation in custom duty or other Government tax, duty or surcharge only when detailed in the relevant Act of Parliament or statutory notices as payable direct on specified building materials and items incorporated in a building structure but will not be accepted to cover any indirect variation of costs or overheads, etc., of the Contractor, sub-contractors, merchants or suppliers, arising from fluctuations in such items as railage, shipping rates, insurance, postage, dock dues, clearance charges, transport, power and fuel costs, etc., whether arising directly or indirectly from Government action.

No claims will be admitted under this Clause for statutory fluctuations coming into effect after the expiration of the contract completion date or any amendments - theretp under Clause 19 of the Conditions of Contract.

If the Contractor wishes to be protected against fluctuations in cost of any basic materials he is to attach to the Form of Tender a list of such materials and prices in respect of which he wishes to be protected. Such prices to be those upon which he bases his tender.

In support of these prices, the Contractor is to furnish with his tender bona fide current merchants quotations (for quantities as required for the job).

The prices actually paid must be substantiated by receipted invoices, and all adjustment will be nett with no allowance for profit, provided that if the variations are positive then the Contractor may add not more than 5% to the nett amount. At completion of the works the Contractor will be required to substantiate the quantities used and the prices actually paid for all items listed in order that Government may benefit for any decrease in price that may have occured.

Orders for materials as listed shall have been placed within a reasonable time after the date of acceptance of the tender, otherwise no adjustment will be made. Such time to be mutually agreed when the tender is provisionally accepted.

All delivery notes for materials as listed must be certified by the Clerk of Works as having been delivered to the site, and shall be submitted to the Secretary for Local Government and Public Works failing which no adjustment will be made.

Where no materials have been listed the tender shall be treated as a firm tender.

Dumping duties are not acceptable as fluctuations, and it is a condition of the tender that any dumping duty levied at an time on items and goods incorporated in this contract shall be payable by the successful tenderer, and not recoverable from the government.

A AGREED WORKING HOURS

No work of any kind or description shall be done outside the agreed working hours of the building industry except such as shall be unavoidable or absolutely necessary for the saving of life or property, or the safety and protection of the works. Should the Contractor desire to execute any work outside the agreed working hours of the building industry, he shall first obtain the permission of the Secretary for Local Government and Public Works and any work executed outside such hours without the written permission having been first obtained will not be paid for, or if the Secretary for Local Government and Public Works desires the same taken out or pulled down and removed.

B DISMISSAL OF INCOMPETENT WORKMEN

The Contractor shall on the request of the Secretary for Local Government and Public Works immediately dismiss from the works any persons employed thereon who may, in the opinion of the Secretary for Local Government and Public Works be incompetent or miscounduct himself, or is likely to cause or who has caused strikes, disturbances or delays, and such persons shall not again be employed on the works without permission from the Secretary for Local Government and Public Works.

	PROJECT MANAGEMENT TEAM TOOLS OF TRADES		QTY	RATE	AMOUNT
	The contractor must allow for the prime cost sum to buy team to be capacitated for effective and effeciently impler				ı <u>sign</u>
А	The contractor must provide all necessary protective clothing twice a year which shall incluide work suits, safety boots (Rebel RE424-BK EXPEDITION HI, BROWN),khaki trouses, khaki		,	<u>501.</u>	
	shirts, reflective bibs and helmets	person	10		
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<u>COLLECTION</u> PAG	<u>BE</u>	
PG	/1	
PG	/2	
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BILL NO. 1: PRELIMINARIES CARRIED TO FINAL SUMMARY		
SIGNATURE OF CONTRACTOR	DATE	

	BILL NO.2				
	FOUNDATIONS (PROVISIONAL)				
	(For Preambles see General Specification)				
	Note: Foundations have been measured to top of				
	surface bed.				
	SITE CLEARANCE				
А	Clear site of all rubbish, bushes, shrubs, undergrowth, hedges, small trees, stumps, roots, etc.	m²	284		
В	Cut down and remove tree exceeding 500 and not exceeding 1000 mm girth measured 1000 mm above ground level including grubbing up roots and filling in holes.	no.	4		
С	Ditto tree exceeding 1000 mm and not exceeding 2000 mm ditto.	no.	4		
	EXCAVATION				
	Pumping and bailing				
D	Allow for the keeping excavations free of storm, surface and mud by pumping and bailing.	item	1		-
Е	Excavate over site to remove vegetable soil average 150 mm deep and deposit on site not exceeding 100 metres.	m²	179		-
F	Disposal of topsoil	m³	27		-
G	The contractor shall allow for soil testing from reputable laboratoies	item	1		
Н	The contractor shall allow for concrete testing of all batches for all concrete works from reputable laboratoies, Results for engineer's approval	item	1		
	Carried to collection				-

	Excavate in pickable earth for				
Α	Reduced levels not exceeding 2 metres deep.	m³	27	-	
В	Surface trenches not exceeding 2 metres deep.	m³	81	-	
С	Allow for searching and excavation all ants' nests below ground level, treating with "Shelldrite Ant Poison "fill in and well ram selected excavated material and consolidate.	m³	4		
D	Extra over excavation in pickable material for excavation in hard pickable material.	m³	17	-	
Е	Ditto excavation in rock.	m³	11	-	
	Planking and strutting				
F	Allow for maintaining and supporting sides of all excavations and making good all slips.	m²	278	-	
	<u>Disposal</u>				
G	Redig from spoil heap, return, fill and well compact selected excavated material around foundations to 95% L.C.E. density.	m³		-	
н	Redig from spoil heap and cart off site.	m³	27	-	
	Carried to collection			-	=

	<u>Formation</u>			
A	Scarify ground to a depth of 150 mm and compact to 95% L.C.E. density.	m²	179	-
В	Selected and approved clean, hard, non-expansive granular filling supplied and brought onto site by the contractor well watered and mechanically compacted under ground slabs in layers of 150 mm thick to 90% HCE density	m³	54	-
	SUNDRIES			
С	250 Micron black polythene sheeting well lapped at joints including all cutting and waste (measured nett) laid over filling to receive concrete.	m²	179	-
	<u>TERMITES</u>			
D	Termite treatment as described to top of filling and foundation walls with "Shelldrite Ant Poison" by a specialist company and provide a written 10 year guarantee.	m²	179	-
	REINFORCED CONCRETE			
	Concrete (Grade 25MPa) in			
Е	Footings.	m³	22	-
F	Ground floor slabs.	m³	16	-
	<u>Sundries</u>			
G	Strike off and cure top of concrete.	m²	179	-
	Carried to collection			-

	Welded fabric reinforcement of approved manufacture including all cutting, tying, placing in position with necessary temporary supports and minimum 300 mm laps both ways (measured nett)				
А	Ref. S193 (mass of 1.93 kg/square metre) in top reinforcement to slab.	m²	154	-	
	BRICKWORK				
	Brickwork in approved common bricks in cement mortar as described				
В	Half brick wall.	m²	28	-	
С	One brick wall.	m²	125	-	
	Reinforcement				
	Brickforce lapped at joints and junctions and building in as the work proceeds (measured nett)				
D	Ref. C1 in half brick walls.	m	111	-	
Е	Ref. C2 in one brick walls.	m	493	-	
	Steel bar reinforcement including all bending ,hooked ends, binding wire and temporary surpports.				
F	Not exceeding 8mm diameter .	kg	432		
Н	Exceeding 10mm and not exceeding12mm diamete	r kg	680		
	Carried to collection			_	

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BILL NO.2: FOUNDATIONS (PROVISIONAL) CARRIED TO SUMMARY		_

	BILL NO.3					
	CONCRETE, FORMWORK AND REINFORCEMENT					
	(For Preambles see General Specification)					
	STRUCTURAL CONCRETE					
	Vibrated reinforced concrete Grade 25 Mpa in					
Α	Beams	m³	2			-
	Formwork Class A as described to					
В	Soffit of beams, lintels.	m²	10			-
С	Sides of beams, lintels.	m²	16			-
	REINFORCEMENT					
	Steel bar reinforcement including all bending ,hooked ends, binding wire and temporary surpports.					
)	Exceeding 8mm and not exceeding 10mm diameter	kg	216			-
	Exceeding 10mm and not exceeding12mm diameter	kg	390			
	Sundries					
	Strike off and cure top of concrete.	m²	10			-
	Carried to collection					-
				l		

	PRECAST CONCRETE			
	<u>Lintels</u>			
Α	115 x 170 x 1360mm long	no	4	-
В	230 x 170 x 1480mm long	no	8	-
	<u>Dripstones</u>			
С	Rainwater dripstone 450 mm wide and 650 mm thick and 800 mm long with segmental channel formed in top and place in position.	no.	16	-
	Precast concrete apron			
D	900 x 900mm Precast concrete pavers	m²	95	-
	Precast concrete Coping			
Е	Precast concrete coping as per Architects's design and Engineer's specification on top of parapet walls.	m	56	-
	<u>TESTING</u>			
F	Allow for carrying out slump tests when directed as described.	item	1	_
	Carried to collection			-

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BILL NO.3: CONCRETE, FORMWORK AND REINFORCEMENT CARRIED TO SUMMARY		-

	BILL NO.4 BRICKWORK (For Preambles see General Specification)			
	SAMPLES			
Α	Allow for providing samples of all bricks as described	item	1	
	BRICKWORK			
	Brickwork in approved common bricks in cement mortar as described			
3	Half brick wall.	m²	67	
	Half brick in beam filling.	m²	7	
)	One brick wall.	m²	298	
	SUNDRIES			
	Bed wall plate in cement mortar.	m	39	
-	1,25 mm Galvanised hoop iron tie 25 mm wide and 1000 mm long one end built into brickwork or cast into concrete and other end wrapped around and spiked to wall plate and foot of truss.	no.	51	
ì	230 x 150 mm Terra Cotta louvred and gauze backed external air brick and building into brick wall.	no.	32	
ł	230 x 150 mm cast plaster internal air brick and building into opening in plastered wall.	no.	32	
	WINDOW CILLS			
l	Brick on edge cills with dpc under (elswhere measured). All morter joints and holes exposed at side ends of cill to be plugged with crushed brick and cement mixture to match colour of cill bricks.	m	12	
	Carried to collection			

	DAMP PROOF COURSE			
	One layer of three ply bituminous felt sheeting as damp proof course as described, well lapped at joints and junctions (measured nett)			
Α	On half brick walls.	m²	3	
В	On one brick walls.	m²	26	
С	Under cills.	m²	2	
D	Under precast concrete copings.	m²	13	
	REINFORCEMENT			
	Brickforce lapped at joints and junctions and bedding in as the work proceeds (measured nett)			
Е	Ref. C1 in half brick walls.	m	197	
F	Ref. C2 in one brick walls.	m	877	
	BUILDING IN			
G	Set up in position, cross brace and build in steel door frame not exceeding 5 square metres.	no.	8	
	Leave or form opening through one brick wall including temporary centering to flat soffits of brickwork complete with all strutting, shoring not exceeding 5 metres high, bolting, wedging easing, striking and removing			
Н	Opening for Purpose made aluminium doors exceeding 5 square metres in area	no.	4	
I	Opening for Purpose made aluminium windows not exceeding 5 square metres in area	no.	12	
	Carried to collection			

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BILL NO.4: BRICKWORK CARRIED TO SUMMARY			-

	BILL NO.5 ROOF COVERINGS (For Preambles see General Specification) "Harvey" concrete roof tiles in approved colour laid			
	on sawn softwood battens to be fixed in strict accordance with the Manufacturers printed instructions including all square cutting (measured nett) to be fixed by an approved firm of specialits.			
А	Interlocking concrete tiles laid on softwood battens (elsewhere measured).	m²	251	-
В	Half round ridge or hip tile with and including three ply bituminous felt soaker bedded and pointed in cement mortar.	m	20	-
	BILL NO.5: ROOF COVERINGS CARRIED TO SUMMARY			-

1			Ī
BILL NO.6			
CARPENTRY			
(For Preambles see General Specification)			
PREFABRICATED ROOF TRUSSES			
The trusses are to be "Gangnail" Hydronail or other equal and approved prefabricated timber trusses with all members in the same plane and jointed together with steel plate nails. All timbers are to be sw.			
The roof is to be created in accordance with the drawings.			
Prices are to include for all necessary trusses and bracing, and for hoisting and fixing in position.			
The roof is designed to carry concrete roofing tiles and, plasterboard ceilings with trusses spaced at approximately 750 mm centres and the contractor will be required to produce all design calculations for checking, notwithstanding which, he will be held responsible for the sufficiency of the design.			
Trusses, necessary hips, jack rafters, bracing, purlins etc fixed complete as per drawings	item	1	-
Sawn softwood			
38 x 114 mm wall plate.	m	39	-
EAVES AND VERGES			
225 x 12 mm cement fibre fascia board	m	40	-
BILL NO.6: CARPENTRY CARRIED TO SUMMARY			
CARRIED TO COMMINANT			

	BILL NO.7			
	JOINERY AND IRONMONGERY			
	(For Preambles see General Specification)			
	CEILINGS			
Α	6 mm plasterboard ceiling boarding (plaster finish elsewhere measured) and fixing to and including 50 x 25 mm sawn softwood brandering at 400mm centres one way next wall and at end joints, skew nailed in opposite directions to roof timbers (elsewhere measured) including covering all joints with and including 75 mm wide strip of scrim planted on including all square cutting and waste	m^2	154	<u>-</u>
В	Extra over for forming trap door with 750 x 750mm clear opening comprising 20mm blockboard door size 775 x775mm hardwood lapped all round fitted loose with 38 x 38mm planted on (provisional) softwood rebated frame all round and 20 x 25mm cover beads.	no	4	-
	Cornices			
С	75mm Rhino coved cornice including mitres, etc.	m	183	-
	DOORS			
	Semi-solid core internal quality flush doors with venner suitable for painting both sides.			
D	44 mm Door. Size 813 x 2030 mm.	no.	4	-
	Solid core external quality fire rated flush doors with veneer suitable for painting both sides	-		
E	44 mm Door. Size 813 x 2030 mm.	no.	4	-
	Carried to collection			-

	IRONMONGERY			
A	Union No. CZ682 - 24 - 95CH two lever mortice lockset.	no.	4	-
В	Union No. CZ682 - 24 - 77CH three lever mortice lockset.	no.	4	-
	BUILT IN CUPBOARDS (PROVISIONAL)			
С	Provide a sum for the supply, delivery and installation of kitchen cupboards, polished granite vanity worktops executed complete as per Architect's drawings and specifications.	item	1	-
D	Provide a sum for the supply, delivery and installation of bedroom built-in cupboards executed complete as per Architect's drawings and			
	specifications.	item	1	-
	Carried to collection			_

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	BILL NO.7: JOINERY AND IRONMONGERY			
	CARRIED TO SUMMARY			-

	BILL NO.8			
	METALWORK (For Preambles see General Specification)			
	STANDARD DOOR FRAMES			
	Standard full profile pressed steel door frames with			
	chromium plated striking plates where appropriate			
	(building in elsewhere measured)			
	To suit half brick wall (P.B.S.) for			
А	44 mm Door size 813 x 2030 mm.	no.	4	-
	To suit one brick wall (P.B.S.) for			
В	44mm Door size 832 x 2030 mm.	no.	4	-
	PURPOSE MADE ALUMINIUM WINDOWS, DOORS AND FRAMES AS DESCRIBED (BUILDING IN ELSEWHERE MEASURED) INCLUDING 4mm EXTERNAL GLAZING WITH U-VALUE OF 5.73 AND SHGc OF 0.6. The whole to be executed by an approved firm of specialists. (Refer to the Window and Door Schedule for type in parenthis)			
С	Window type AC2F size 1020 x 950 mm high with and including 4mm obsure glass.	no.	4	-
D	Window type AC2F size 1020 x 950 mm high with and including 4mm clear glass.	no.	4	-
E	Window type AAW2 size 900 x 1800 mm high with and including 4mm clear glass.	no.	4	-
F	Sliding door size 2510 x 2180 mm high with and including 8mm clear laminated glass.	no.	1	-
	BILL NO.8: METALWORK CARRIED TO SUMMARY			
	O. H. H. H. D. C.			

	BILL NO.9			
	PLASTERING AND WALL LININGS			
	(For Preambles see General Specification)			
	EXTERNALLY			
	One coat cement plaster (1:4) as described including all labours with a fine woodfloat finish on			
А	Walls.	m²	298	-
В	Ditto in narrow widths.	m²	1	-
	INTERNALLY			
	One coat cement/sand plaster (1:4) and set in rhinoset plaster with woodfloat finish on to the following surfaces			
С	Walls.	m²	306	-
D	Ditto in narrow widths.	m²	2	-
	Two coats "Rhinobond" plaster and one skimming coat of "Rhinoset" plaster applied with an approved flicking machine to give a tyrolean finish to an even thickness to the Architect approval on plasterboard			
Е	Ceilings	m²	154	-
	Carried to collection			-

A	Extra for 50 mm wide steel trowelled margin to edge of ceiling	m	183	-	
	WALL TILING				
	6 x 600 x 300 mm "Porcelain" or other equal approved glazed wall tiles with continuous horizontal and vertical joints fixed with and including approved adhesive on and including cement sand screed (1:4) and point in coloured cement, on completion cleandown to approval, on:	-			
В	Walls.	m²	174	-	
С	Walls, reveals, etc in narrow widths.	m²	1	-	
	<u>Sundries</u>				
D	150 x 150 mm recessed type toilet roll holder with spring loaded removable wood spindle and building				
	into plastered brickwork.	no.	4	-	
Е	"Varese" chrome plated shower soap dish.	no.	4	-	
F	"Varese" chrome plated double towel rail.	no.	4	-	
G	"Roma" chrome plated tumbler holder.	no.	4	-	
	Carried to collection			-	

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BILL NO.9: PLASTERING AND WALL LININGS CARRIED TO SUMMARY		
CARRIED TO SUMMARY		-

	BILL NO.10				
	PAVINGS, FLOOR COVERINGS, PLASTIC LININGS, ETC				
	(For Preambles see General Specification)				
	SCREEDS				
	Cement and sand screed (1:4) finished to a true and even surface				
А	40 mm thick screed to receive ceramic tiles.	m²	24	-	
В	40 mm thick screed to receive non-slip porcelain tiles.	m²	130	-	
	CERAMIC FLOOR TILES				
	300 x 300mm Ceramic tiles with non-slip surface, as in "Samca Tiles" or similar approved, colour from manufacturer's standard colour range, on adhesive to manufacturer's recommendation and 3mm wide grout joints.	-			
С	Tiles laid on floors.	m²	24	-	
	PORCELAIN FLOOR TILES				
	800 x 800mm "Porcelain" or equal approved non- slip ceramic tiles bedded and tight jointed in and including cement mortar and flush pointed in coloured cement and finished with two coats of wax polish.	-			
D	To floors on screed (elsewhere measured).	m²	130	-	
Е	75mm High skirting coved at junction with floor and fair edge and arris next to wall finish.	m	58	-	
	Carried to collection				_

	Sundries				I
А	3 x 40mm Aluminium division strip set in position between different floor finishes.	m	24	_	
	between amerent neer milenee.				
	Carried to collection			-	

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BILL NO.10: PAVINGS, FLOOR COVERINGS,		
PLASTIC LININGS, ETC CARRIED TO SUMMARY		-

	BILL NO.11			
	PLUMBING (PROVISIONAL)			
	(For Preambles see General Specification) FLASHINGS 0.6 mm Galvanised sheet iron as described in:			
Α	Flashings and fixing to walls.	m²	67	-
	RAINWATER DISPOSAL			
	PVC as described in			
В	100 mm Diametre semi-circle section eaves gutter on brackets as described to fascia boards.			
	on brackers as described to rascia boards.	m	39	-
С	100 mm Dia stop ends.	no.	8	-
D	Extra for angle.	no.	8	-
Е	Ditto outlet with nozzle for and joint to 100 mm Dia rainwater down pipe.	no.	8	-
F	100 mm Diameter rainwater pipe fixed 38 mm clear of wall with holderbats.	m	24	-
G	Extra for shoe.	no.	8	-
Н	Ditto eaves offset.	no.	8	-
	SANITARY FITTINGS			
J	510 x 405 mm white glazed vitreous china wash hand basin with concealed brackets, complete with integral overflow, chromium plated outlet, plug and chain, pair of 15 mm chromium plated colour coded pillar taps, bolt to brackets to wall and connect up.	no.	4	-
	Carried to collection			-

flush pipe, bolt to cistern to wall, fix pan flooor and connect up.	no. 4	-
B Citi Metal Series single bowl overlay state sink unit, size 750 x 535mm, complete to overflow, chromium plated waste outlet and backnut, with turndown at edge; tate position and including fixing one pair of 25 x 25 mm galvanised mild steel gallow fixing (code SGB)	with integral plug, chain p set in Citi metal	-
C 980 x 920 x 1800mm high Shower set of aluminium framing, 8mm obsure toughed panels (one fixed and two sliding), fitted and bottom roller bearings, shower tray outlet, 15 mm chromium colour coded diverter, bridging piece, 900 mm copper chromium plated arm and approved chromium plated rose including chasing into wall a valve to copper pipes.	ened glass I with top , waste undertile r riser with omium	
Geysers	no. 4	-
D 200 Litre solar geyser roof mounted wit backup water heater, set up in position up.		-
SANITARY PLUMBING		
"Promat" or equal rigid P.V.C. waste pip solvent cement and joints and fitting as		
E 110 mm diameter pipe laid in ground in excavating in trench not exceeding 2 m and fill in and ram and cart off site surp	etres deep	_
F 50 mm diameter pipe laid under floors	m 10	-
G 50 mm diameter pipe fixed to walls.	m 12	-
Carried to co	lection	-

	Extra on P.V.C. piping for			
Α	50 mm bend.	no.	12	-
В	50 mm bend with inspection eye.	no.	12	-
С	110 mm bend.	no.	4	-
D	110 mm bend with inspection eye.	no.	3	-
Е	110mm Inspection junction.	no.	4	-
F	110mm Reducing junction.	no.	4	-
G	110 mm Straight pan connector and joint to W.C. pan.	no.	4	-
Н	110 mm P.V.C. vent cowl and fixing to top of 110 mm diameter pipe.	no.	4	-
I	Assembled gulley trap with 110 mm diameter outlet connected to drain and gulley head with universal back inlet and removable grate.	no.	4	-
J	Joint small pipe to gulley.	no.	4	-
K	Ditto large pipe to gulley.	no.	4	-
	<u>Traps</u>			
L	32 - 40 mm diameter "Flexitrap" or equal "P" trap and joint to fitting and P.V.C. pipe.	no.	12	-
	Carried to collection			-

HOT AND COLD WATER RETICULATION				
Copper tubing as described				
15 mm diameter pipe fixed to walls.	m	6		-
15 mm ditto to walls in and including chase.	m	30		-
20 mm diameter pipe fixed to walls.	m	6		-
20 x 15 mm reducer.	no.	4		-
15 mm elbow.	no.	12		-
20 mm elbow.	no.	4		-
20 x 15 x 20 mm tee.	no.	4		-
20 mm socket union.	no.	4		-
15 mm diameter bent connector	no.	12		-
15 mm swivel elbow.	no.	4		-
15 mm socket union.	no.	4		-
Carried to collection				
Carried to collection	I			-
	Copper tubing as described 15 mm diameter pipe fixed to walls. 15 mm ditto to walls in and including chase. 20 mm diameter pipe fixed to walls. 20 x 15 mm reducer. 15 mm elbow. 20 mm elbow. 20 x 15 x 20 mm tee. 20 mm socket union. 15 mm diameter bent connector 15 mm swivel elbow. 15 mm socket union.	Copper tubing as described 15 mm diameter pipe fixed to walls. 15 mm ditto to walls in and including chase. 20 mm diameter pipe fixed to walls. m 20 x 15 mm reducer. 15 mm elbow. 20 mm elbow. 20 mm elbow. 20 mm socket union. 15 mm diameter bent connector no. 15 mm swivel elbow. no.	Copper tubing as described 15 mm diameter pipe fixed to walls. 15 mm ditto to walls in and including chase. 20 mm diameter pipe fixed to walls. m 6 20 x 15 mm reducer. 15 mm elbow. 20 mm elbow. 20 x 15 x 20 mm tee. 20 mm socket union. 15 mm diameter bent connector 15 mm swivel elbow. 10 mn socket union. 11 mn socket union. 12 mn socket union. 13 mn socket union. 14 mn socket union. 15 mn swivel elbow. 16 mn socket union. 17 mn socket union. 18 mn socket union. 19 mn socket union.	Copper tubing as described 15 mm diameter pipe fixed to walls. m 6 15 mm ditto to walls in and including chase. m 30 20 mm diameter pipe fixed to walls. m 6 20 x 15 mm reducer. no. 4 15 mm elbow. no. 12 20 mm elbow. no. 4 20 x 15 x 20 mm tee. no. 4 20 mm socket union. no. 4 15 mm swivel elbow. no. 4 15 mm socket union. no. 4 15 mm socket union. no. 4

	<u>Brasswork</u>			
Α	15 mm diameter brass high pressure screw down stop cock and joints to copper pipe.	no.	12	-
В	25 mm diameter brass or equal high pressure undertile stopcock, and joint to copper pipe.	no.	4	-
	PVC pipes as described			
С	22 mm diameter pipe fixed to walls.	m	6	-
D	22 mm ditto to walls in and including chase.	m	6	-
Е	22 mm diameter pipe underground.	m	12	-
F	22 x 20 mm reducer.	no.	1	-
G	22 mm elbow.	no.	1	-
н	22 mm socket union.	no.	1	-
	Carried to collection			-

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	BUILDER'S WORK IN CONNECTION WITH PLUMBING (PROVISIONAL)				
А	Chase brickwork for small pipe and flush up in cement mortar (1:3).	m	30	-	
	Hole for small pipe including making good through				
В	Half brick wall.	no.	1	-	
С	One brick wall.	no.	4	-	
	Hole for large pipe including making good through				
D	One brick wall.	no.	4	-	
	TESTING				
Е	Allow for the testing of all the Plumber's work to the satisfaction of the Engineers and for the retesting				
	after making good defects.	item	1	-	
	Carried to collection				┪

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	BILL NO.11: PLUMBING (PROVISIONAL) CARRIED TO SUMMARY		
	BILL NO.11: PLUMBING (PROVISIONAL) CARRIED TO SUMMARY		

	BILL NO.12			
	<u>GLAZING</u>			
	(For Preambles see General Specification)			
	<u>Mirrors</u>			
A	6 mm clear float quality glass silvered and sealed mirror with bevelled edges sprayed on back with clear lacquer before fixing four times drilled for and plugged and screwed to plastered walls with and including chromium plated capped mirror screws and rubber washers, size 600 x 600 mm.			
		no.	4	-
	BILL NO.12: GLAZING			
	CARRIED TO SUMMARY			-

	BILL NO.13			
	PAINTING			
	(For Preambles see General Specification)			
	ON PLASTER, ETC			
	Prepare and apply three coats external quality P.V.A. emulsion paint externally on			
Α	Fine woodfloat plastered walls.	m²	298	
В	Fine woodfloat plastered walls in narrow widths ditto.	m²	1	
	Prepare and apply three coats internal quality P.V.A. emulsion paint internally on			
С	Steel trowelled plastered walls.	m²	306	
D	Ditto in narrow widths.	m²	2	
	Prepare and apply three coats internal quality ceiling white PVA paint internally on			
Е	Ceilings	m²	179	
	Carried to collection			

	ON METAL			
	Clean down, touch up priming coat and apply one undercoat and two finishing coats high gloss enamel paint on			
Α	Pressed door frames.	m²	15	
	ON WOOD, ETC			
С	Carbolineum saturate sawn softwood wall plate before fixing.	m²	12	
	Clean down, prime, stop and apply one undercoat and two finishing coats high gloss enamel pain on			
D	General surfaces of doors.	m²	31	
	LEAVE CLEAN			
E	Allow for touching up all work throughout, clean off all paint, oil, cement or other stains or marks, floors, ceilings, glass, etc. and leave all surfaces in full and proper working order.		1	
	proportion and order			
	Carried to collection			

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BILL NO.13: PAINTING		
CARRIED TO SUMMARY		-

BILL NO.14

ELECTRICAL WORKS

STAFF ACCOMODATION ELECTRICAL BILL OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QTY	INSTAL LED PRICE/ RATE (US\$)	TOTAL INSTALLED PRICE (US\$)
	3 Phase Weatherproof Lockable Distribution Feeder Pillar c/w main switch, trunking, switch gear and pre-paid metering accessories [See Dwg. No 192383/E/02]	Nos	1		
	Flush Mounted Lockable Sub Distribution Board [DB] wired c/w switch gear [See Dwg. No 192383/E/02]	Nos	4		
	45A 6' x 6' MK or similar approved type Cooker Control Unit c/w flush mounting metal box and accessories	Nos	4		
1.1.4	35sqmm 4C PVCSWAPVC CAFCA or similar approved type cable [Provisional Length]	m	100		
1.1.5	16sqmm 3C PVCSWAPVC CAFCA or similar approved type cable	m	100		
1.1.6	No. 3 Cable gland and shroud	Nos	8		
	No. 5 Cable gland and shroud	Nos	6		
	6sqmm CAFCA or similar approved type s/c cable red	100m roll	0.3		
1.1.9	6sqmm CAFCA or similar approved type s/c cable black	100m roll	0.3		
1.1.10	2.5sqmm CAFCA or similar approved type s/c cable red	100m roll	8		
	2.5sqmm CAFCA or similar approved type s/c cable black		8		
	1.5sqmm CAFCA or similar approved type s/c cable red		7		
	1.5sqmm CAFCA or similar approved type s/c cable black	100m roll	5		
1.1.14	2.5sqmm CAFCA or similar approved type SBCC	m	600		
1.1.15	6sqmm CAFCA or similar approved type SBCC	m	30		
1.1.16	25sqmm CAFCA or similar approved type SBCC [Provisional Length]	m	100		
1.1.17	1.4m earth rod c/w clamp	Nos	1		
1.1.18	10A 3' x 3' MK or similar approved type shaver socket outlet	Nos	4		

1 1 10	10A 3' x 3' MK or similar approved type extract fan	Nos	4	
1.1.13	isolator	1403		
1 1 20	20A 3' x 3' MK or similar approved type air-	Nos	4	
	conditioning isolator	1100	-	
1.1.21	13A 6' x 3' MK or similar approved type double	Nos	30	
	switched socket outlet			
1.1.22	15A 3' x 3' MK or similar approved type single	Nos	4	
	switched socket outlet			
1.1.23	5A 3' x 3' MK or similar approved type one gang	Nos	16	
	one-way switch			
1.1.24	5A 3' x 3' MK or similar approved type two gang	Nos	12	
	one-way switch			
1.1.25	20mm PROPLASTICS or similar approved type pvc	4m length	50	
4.4.00	conduit	0 1 1		
1.1.26	32mm CLASS E PROPLASTICS or similar	6m length	2	
4 4 07	approved type PVC duct 75mm CLASS E PROPLASTICS or similar	Coo longeth	10	
1.1.27		6m length	10	
1 1 20	approved type PVC duct 75mm CLASS E PROPLASTICS or similar	Nos	4	
1.1.20	approved type PVC 90 degree bend	1105	4	
1 1 20	20mm PROPLASTICS or similar approved type	Nos	100	
1.1.20	PVC nipples	1403	100	
1.1.30	20mm PROPLASTICS or similar approved type	Nos	200	
	PVC couplings			
1.1.31	3' x 3' PROPLASTICS or similar approved type	Nos	50	
	PVC boxes			
1.1.32	6' x 3' boxes	Nos	30	
1.1.33	PROPLASTICS or similar approved type PVC	Nos	100	
	round boxes			
1.1.34	PROPLASTICS or similar approved type PVC	Nos	50	
	extension round boxes			
	20mm BE saddles	Nos	100	
	4.0 x 35mm wood screws	Box	3	
		00mls bottl		
	20mm Sprague tube 20mm Sprague tube connectors	M Nos	16 8	
	20mm dome cover	Nos	4	
	S6 fisher plugs	Box	2	
	Insulation tape	Rolls	3	
	Perforated copper bonding strip	M	25	
	15x20mm Veranda Bolts and Nuts	Nos	50	
	Cable Warning tape [Provisional length]	m	150	
	Cable Warning tile	Nos	4	
	Type 1 - 1 x 15W Ceiling Mounted Round Bulkhead	Nos	12	
	Light Fitting c/w 15W Led Bulb			
1.1.48	Type 2 - 1 x 11W Weatherproof Ceiling Mounted	Nos	4	
	Round Bulkhead Light Fitting c/w 11W Led Bulb			

1.1.49	Type 3 - 1 x 15W Wall Mounted Round Bulkhead Light Fitting c/w 15W Led Bulb	Nos	4	
1.1.50	Type 4 - 1 x 11 Wall Mounted Round Bulkhead Light Fitting c/w 11W Led Bulb	Nos	4	
1.1.51	Any other accessories required to complete the installation [Itemise]	Lot	1	
	BILL NO.14: ELECTRICAL WORKS CARRIED TO SUMMARY			

	SUMMARY	PAGE	
Bill <u>No.</u>	<u>Trade</u>		
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4	BRICKWORK	31	
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9	PLASTERING AND WALL LININGS	40	
10	PAVINGS, FLOOR COVERINGS, PLASTIC LININGS, ETC	43	
11	PLUMBING (PROVISIONAL)	50	
12	GLAZING	51	
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	CARRIED TO MAIN SUMMARY		

THE GOVERNMENT OF ZIMBABWE

BILLS OF QUANTITIES FOR

PROPOSED UMGUZA K9 DOG KENNELS

AT

BULAWAYO (UMGUZA)

FOR ZIMRA

	BILL NO.2			
	FOUNDATIONS (PROVISIONAL)			
	(For Preambles see General Specification)			
	Note: Foundations have been measured to top of surface bed.			
	SITE CLEARANCE			
Α	Clear site of all rubbish, bushes, shrubs, undergrowth, hedges, small trees, stumps, roots, etc.	m²	88	
В	Cut down and remove tree exceeding 500 and not exceeding 1000 mm girth measured 1000 mm above ground level including grubbing up roots and filling in holes.	no.	4	
С	Ditto tree exceeding 1000 mm and not exceeding 2000 mm ditto.	no.	4	
	EXCAVATION			
	Pumping and bailing			
D	Allow for the keeping excavations free of storm, surface and mud by pumping and bailing.	item	1	
E	Excavate over site to remove vegetable soil average 150 mm deep and deposit on site not exceeding 100 metres.	m²	61	
F	Disposal of topsoil	m^3	9	
G	The contractor shall allow for soil testing from reputable laboratoies	item	1	
Н	The contractor shall allow for concrete testing of all batches for all concrete works from reputable laboratoies, Results for engineer's approval	item	1	
	Carried to collection			

				ı	I
	Excavate in pickable earth for				
Α	Reduced levels not exceeding 2 metres deep.	m³	9		
В	Surface trenches not exceeding 2 metres deep.	m³	22		
С	Allow for searching and excavation all ants' nests below ground level, treating with "Shelldrite Ant Poison "fill in and well ram selected excavated material and consolidate.	m³	54		
D	Extra over excavation in pickable material for excavation in hard pickable material.	m³	2		
Е	Ditto excavation in rock.	m³	1		
	Planking and strutting				
F	Allow for maintaining and supporting sides of all excavations and making good all slips.	m²	53		
	<u>Disposal</u>				
G	Redig from spoil heap, return, fill and well compact selected excavated material around foundations to 95% L.C.E. density.	m³	8		
Н	Redig from spoil heap and cart off site.	m³	14		
	Carried to collection				

	<u>Formation</u>			
Α	Scarify ground to a depth of 150 mm and compact to 95% L.C.E. density.	m²	17	
В	Selected and approved clean, hard, non-expansive granular filling supplied and brought onto site by the contractor well watered and mechanically compacted under ground slabs in layers of 150 mm thick to 90% HCE density	m³	2	
	<u>SUNDRIES</u>			
С	250 Micron black polythene sheeting well lapped at joints including all cutting and waste (measured nett) laid over filling to receive concrete.	m²	54	
	TERMITES			
)	Termite treatment as described to top of filling and foundation walls with "Shelldrite Ant Poison" by a specialist company and provide a written 10 year guarantee.	m²	54	
	PLAIN CONCRETE			
	Concrete (Grade 25MPa) in			
	Footings.	m³	4	
	Ground floor slabs.	m³	9	
	Sundries			
	Strike off and cure top of concrete.	m²	130	
	Welded fabric reinforcement of approved manufacture including all cutting, tying, placing in position with necessary temporary supports and minimum 300 mm laps both ways (measured nett)			
	Ref. S193 (mass of 1.93 kg/square metre) in top reinforcement to slab.	m²	154	
	Carried to collection			

1	I		1 1	l	
	BRICKWORK				
	Brickwork in approved common bricks in cement mortar as described				
А	Half brick wall.	m²	26		
В	One brick wall.	m²	7		
	Reinforcement				
	Brickforce lapped at joints and junctions and building in as the work proceeds (measured nett)				
С	Ref. C1 in half brick walls.	m	102		
D	Ref. C2 in one brick walls.	m	27		
	Carried to collection				
	BILL NO.2: FOUNDATIONS (PROVISIONAL)				
	CARRIED TO SUMMARY				
	l		1		

I		BILL NO.3				
		CONCRETE, FORMWORK AND REINFORCEMENT				
		(For Preambles see General Specification)				
		STRUCTURAL CONCRETE				
		Vibrated reinforced concrete Grade 25 Mpa in				
		PRECAST CONCRETE				
		<u>Lintels</u>				
	Α	115 x 170 x 1360mm long	no	4		
	В	230 x 170 x 1480mm long	no	8		
		<u>TESTING</u>				
	С	Allow for carrying out slump tests when directed as described.	item	1		
						1
		BILL NO.3: CONCRETE, FORMWORK AND REINFORCEMENT CARRIED TO SUMMARY				

	BILL NO.4 BRICKWORK			
	(For Preambles see General Specification)			
	SAMPLES			
A	Allow for providing samples of all bricks as described	item		
	<u>BRICKWORK</u>		1	
	Brickwork in approved common bricks in cement mortar as described		'	
В	Half brick wall.	m²	89	
С	brick wall in pier	m²	8	
	SUNDRIES			
D	Bed wall plate in cement mortar.	m	6	
Ε	1,25 mm Galvanised hoop iron tie 25 mm wide and 1000 mm long one end built into brickwork or cast into concrete and other end wrapped around and spiked to wall plate and foot of truss.	no.	6	
	DAMP PROOF COURSE			
	One layer of three ply bituminous felt sheeting as damp proof course as described, well lapped at joints and junctions (measured nett)			
F	On half brick walls.	m²	3	
G	On one brick walls.	m²	2	
	REINFORCEMENT			
	Brickforce lapped at joints and junctions and bedding in as the work proceeds (measured nett)			
Н	Ref. C1 in half brick walls.	m	262	
J	Ref. C2 in one brick walls. Carried to collection	m	24	

	BUILDING IN			
А	Set up in position, cross brace and build in steel door frame not exceeding 5 square metres.	no.	4	
	Leave or form opening through one brick wall including temporary centering to flat soffits of brickwork complete with all strutting, shoring not exceeding 5 metres high, bolting, wedging easing, striking and removing			
Н	Kennel doors in standard wondow section type ND1 with metal panel refere to archtectural drawing.	no.	4	
	Carried to collection			
	COLLECTION		6	
			6 7	
	BILL NO.4: BRICKWORK CARRIED TO SUMMARY			

	BILL NO.5 ROOF COVERINGS (For Preambles see General Specification)				
A	3300mm corrugated asbestors sheeting purpose made one piece ridge copping roof pitch	m²	14		
	BILL NO.5: ROOF COVERINGS CARRIED TO SUMMARY				

	BILL NO.6			
	CARPENTRY			
	(For Preambles see General Specification)			
	PREFABRICATED ROOF TRUSSES			
	The trusses are to be "Gangnail" Hydronail or other equal and approved prefabricated timber trusses with all members in the same plane and jointed together with steel plate nails. All timbers are to be sw.			
	The roof is to be created in accordance with the drawings.			
	Prices are to include for all necessary trusses and bracing, and for hoisting and fixing in position.			
	The roof is designed to carry concrete roofing tiles and, plasterboard ceilings with trusses spaced at approximately 750 mm centres and the contractor will be required to produce all design calculations for checking, notwithstanding which, he will be held responsible for the sufficiency of the design.			
Α	Trusses, necessary hips, jack rafters, bracing, purlins etc fixed complete as per drawings	item		
	Sawn softwood			
В	38 x 114 mm wall plate.	m	6	
	EAVES AND VERGES			
С	225 x 12 mm cement fibre fascia board	m	13	
	BILL NO.6: CARPENTRY CARRIED TO SUMMARY			

	BILL NO.7			
	JOINERY AND IRONMONGERY			
А	DOORS Standard steel window section type ND1 size 1250 x 535mm with metal panel and handle	no.	4	
	<u>IRONMONGERY</u>			
В	locksets on all doors	no.	4	
С	hinges and locking bolt and padlocks	no.	4	
	BILL NO.7: JOINERY AND IRONMONGERY CARRIED TO SUMMARY			

	BILL NO.8		
	METALWORK (For Preambles see General Specification)		
	PURPOSE MADE DOOR FRAMES		
	Standard steel window section		
	(building in elsewhere measured)		
A	Kennel doors in standard wondow section type ND1 with metal panel refere to archtectural drawing.	no.	4
В	Gate opening size 690 x 1870	no	4
С	50mm X 3mm x 1800mm Galvanised round fencing poles	no	24
D	50mm x 50mm x 1800mm Diamond mash fencing wire	m2	29
E	690mm x 1890mm Steel framed gate covered with 50mm x 50mm diamond mesh wire refer to drawing 192383/A/02	no	4
	DULL NO 0. METAL WORK		
	BILL NO.8: METALWORK CARRIED TO SUMMARY		
	l		

	BILL NO.9			
	PLASTERING AND WALL LININGS			
	(For Preambles see General Specification)			
	EXTERNALLY			
	One coat cement plaster (1:4) as described including all labours with a fine woodfloat finish on			
А	Walls.	m²	69	
	INTERNALLY			
	One coat cement/sand plaster (1:4) and set in rhinoset plaster with woodfloat finish on to the following surfaces			
С	Walls.	m²	15	
	BILL NO.9: PLASTERING AND WALL LININGS			
	CARRIED TO SUMMARY			

	BILL NO.10			
	PAVINGS, FLOOR COVERINGS, PLASTIC LININGS, ETC			
	(For Preambles see General Specification)			
	SCREEDS			
	Cement and sand screed (1:4) finished to a true and even surface			
A	40 mm thick screed and 75mm skirting with grano finish.	m²	9	
	TIMBER FLOOR TILES			
В	Removable timber boards floor	m2	5	
	BIL NO 10; PAVINGS, FLOOR COVERINGS, PLASTIC LININGS, ETC CARRIED TO SUMMARY			

	BILL NO.11			
	<u>PAINTING</u>			
	(For Preambles see General Specification)			
	ON PLASTER, ETC			
	Prepare and apply three coats external quality P.V.A. emulsion paint externally on			
Α	Fine woodfloat plastered walls.	m²	69	
	Prepare and apply three coats internal quality P.V.A. emulsion paint internally on			
С	Steel trowelled plastered walls.	m²	15	
D	Drinking water trough rendered and painted internally with swimming pool type paint.	m²	1	
Е	Allow for touching up all work throughout, clean off all paint, oil, cement or other stains or marks, floors, ceilings, glass, etc. and leave all surfaces in full and proper working order.	item	31	
	BILL NO.11: PAINTING CARRIED TO SUMMARY			

	BILL NO.12		
	ELECTRICAL WORKS		
Α	Flush Mounted Lockable Sub Distribution Board [DB] wired c/w switch gear [See Dwg. No 192383/E/02]	Nos	1
В	6.0sqmm 3C PVCSWAPVC CAFCA or similar approved type cable [Provisional Length]	Nos	100
С	1.5sqmm CAFCA or similar approved type s/c cable red	100m roll	2
D	1.5sqmm CAFCA or similar approved type s/c cable black	100m roll	2
Е	1.5sqmm CAFCA or similar approved type SBCC	m	200
F	10sqmm CAFCA or similar approved type SBCC [Provisional Length]	m	50
G	1.4m earth rod c/w clamp	Nos	1
Н	10A 3' x 3' MK or similar approved type two gang one-way switch	Nos	1
J	20mm PROPLASTICS or similar approved type pvc conduit	4m length	20
K	50mm CLASS E PROPLASTICS or similar approved type PVC duct	6m length	2
L	50mm CLASS E PROPLASTICS or similar approved type PVC 90 degree bend	Nos	2
М	20mm PROPLASTICS or similar approved type PVC nipples	Nos	100
N	20mm PROPLASTICS or similar approved type PVC couplings	Nos	100
0	PROPLASTICS or similar approved type PVC round boxes	Nos	50
Р	PROPLASTICS or similar approved type PVC extension round boxes	Nos	50
	Carried to collection		

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Α	20mm BE Saddles	Nos	100	
В	4.0 x35mm wood screws	Box	1	
С	500ml solvent cement	00mls bottl	1	
D	S6 fisher plugs	Box	1	
Е	Insulation tape	Rolls	1	
F	Perforated copper bonding strip	m	2	
G	Cable warning tape [Provisional Length]	m	100	
Н	Cable warning tile	Nos	1	
J	Type A: Moistureproof 2 x 18W 1200mm Surface Mounted Luminaire c/w 2 x 18W LED Tubes and Diffuser.	Nos	12	
K	Type B: Weatherproof Wall Mounted Bulkhead Light Fitting c/w 7W Led Lamp.	Nos	4	
L	Any other accessories required to complete the installation [Itemise]	Lot	1	
	Carried to collection			
I	I			

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BILL NO.12: ELECTRICAL WORKS		
CARRIED TO SUMMARY		

Bill No.	SUMMARY Trade		
2	FOUNDATIONS (PROVISIONAL)		
3	CONCRETE, FORMWORK AND REINFORCEMENT		
4	BRICKWORK		
5	ROOF COVERINGS		
6	CARPENTRY		
7	JOINERY AND IRONMONGERY		
8	METALWORK		
9	PLASTERING AND WALL LININGS		
10	PAVINGS, FLOOR COVERINGS		
11	PAINTING		
12	ELECTRICAL WORKS		
	CARRIED TO MAIN SUMMARY		

THE GOVERNMENT OF ZIMBABWE

BILLS OF QUANTITIES FOR

PROPOSED UMGUZA K9 BOUNDARY WALL AT

BULAWAYO (UMGUZA)

FOR ZIMRA

		BILL NO.2			
		FOUNDATIONS (PROVISIONAL)			
		(For Preambles see General Specification)			
		Note: Foundations have been measured to top of			
	Α	surface bed. SITE CLEARANCE Cut down and remove tree exceeding 500 and not exceeding 1000 mm girth measured 1000 mm above ground level including grubbing up roots and filling in holes. EXCAVATION	no	R/O	
		Pumping and bailing			
	В	Allow for the keeping excavations free of storm, surface and mud by pumping and bailing.	item	1	
	С	Excavate over site to remove vegetable soil average 150 mm deep and deposit on site not exceeding 100 metres.	m²	3193	
	D	Disposal of topsoil	m³	479	
		Excavate in pickable earth for			
	Е	Surface trenches not exceeding 2 metres deep.	m³	1676	
	F	Extra over excavation in pickable material for excavation in hard pickable material.	m³	168	
	G	Ditto excavation in rock.	m³	251	
		Planking and strutting			
	Н	Allow for maintaining and supporting sides of all excavations and making good all slips.	m²	4312	
		Carried to collection			
١					

	<u>Disposal</u>			
Α	Redig from spoil heap, return, fill and well compact selected excavated material around foundations to 95% L.C.E. density.	m³	780	
В	Redig from spoil heap and cart off site.	m³	896	
	<u>Formation</u>			
С	Scarify ground to a depth of 150 mm and compact to 95% L.C.E. density.	m²	2235	
	PAIN CONCRETE			
	Concrete (Grade 30MPa) in			
D	Footings.	m³	514	
	<u>Sundries</u>			
Е	Strike off and cure top of concrete.	m²	2235	
	Carried to collection			

	<u>BRICKWORK</u>			
	Brickwork in approved common bricks in cement mortar as described			
Α	One brick wall.	m²	400	
В	One brick x one brick attached pier.	m³	26	
	Reinforcement			
	Brickforce lapped at joints and junctions and building in as the work proceeds (measured nett)			
С	Ref. C2 in one brick walls.	m	2453	
	<u>Sundries</u>			
D	20 mm "Kaylite" or other equal and approved joint filler between brick faces in narrow widths not exceeding 300mm wide	m²	18	
	g to the graph of			
	Carried to collection			

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	01	
BILL NO.2: FOUNDATIONS (PROVISIONAL)		
CARRIED TO SUMMARY		

	BILL NO.3				I
	CONCRETE, FORMWORK AND REINFORCEMENT				
	(For Preambles see General Specification)				
	PRECAST CONCRETE				
	Precast concrete Coping				
A	Precast concrete coping as per Architects's design and Engineer's specification on top of brickwork.	m	3050		
	BILL NO.3: CONCRETE, FORMWORK AND				
	REINFORCEMENT CARRIED TO SUMMARY				1

	BILL NO. 4		
	BRICKWORK (For Preambles see General Specification)		
	BRICKWORK		
	Brickwork in approved common bricks or similar approved in cement mortar as described		
Α	One brick wall.	m²	1463
В	One brick x one brick attached pier.	m³	93
	DAMP PROOF COURSE		
	One layer of three ply bituminous felt sheeting as damp proof course as described, well lapped at joints and junctions (measured nett)		
С	On one brick walls.	m²	734
D	Under precast concrete copings.	m²	1403
	REINFORCEMENT		
	Brickforce lapped at joints and junctions and bedding in as the work proceeds (measured nett)		
Е	Ref. C2 in one brick walls.	m	4301
	Expansion Joint		
F	20mm Kaylite or equal approved joint filler between brickwork in narrow widths.	m²	65
	<u>Sundries</u>		
G	Providing weep holes in brick masonry with 100mm dia PVC pipe, extending through the full width of structure with a slope (as per Eng. instruction). BILL NO.4: BRICKWORK CARRIED TO SUMMARY	item	1

	BILL NO.5 METALWORK (For Preambles see General Specification)			
Α	STEEL GATES (PROVISIONAL) Supply and fix steel cladded electric powered sliding gate, painted both sides with corrosive resistant paint, wheels, electric motor, locking devices, accessories etc executed complete size 7500 x 2278mm high.	no	1	
	BILL NO.5: METALWORK CARRIED TO SUMMARY			

	BILL NO.6			
	<u>PAINTING</u>			
	(For Preambles see General Specification)			
	PAINT TO WALLS			
	Prepare and apply three coats glose paint to			
Α	Walls	m²	2926	
	PAINT TO METAL			
В	Gate	m²	17	
	LEAVE CLEAN			
С	Allow for touching up all work throughout, clean off all paint, oil, cement or other stains or marks, floors, ceilings, glass, etc. and leave all surfaces in full and proper working order.	item	1	
	BILL NO.6: PAINTING			
	CARRIED TO SUMMARY			

		BILL NO.7 ELECTRICAL WORKS (For Preambles see General Specification) PROVISIONAL SUMS			
A		3 Phase Weatherproof Lockable Distribution Feeder Pillar for K9 Kennels c/w main switch, trunking, switch gear and pre-paid metering accessories [See Dwg. No 192383/E/01]	no	1	
E	3	80W IP44 rated single arm Beka Schreder or Similar Approved type solar street light fitting c/w 8m steel mounting pole, base plate and accessories. 1 x 80W LED Fitting, Solar PV Panel and Frame, Charge Controller including 1 x			
		150W Solar Panel, 150AH Btteries and Battery Box.	no	45	
		Any other accessories required to complete the installation cement, stones etc [Itemise]	lot	1	
l					
Ī		DILL NO 7. ELECTRICAL WORKS			
		BILL NO.7: ELECTRICAL WORKS CARRIED TO SUMMARY			

ו וום	SUMMARY	ı	1 1	
BILL <u>No.</u>	<u>TRADE</u>		<u>PAGE</u>	
2	FOUNDATIONS (PROVISIONAL)			
3	CONCRETE, FORMWORK AND REINFORCEMENT			
4	BRICKWORK			
5	METALWORK			
6	PAINTING			
7	ELECTRICAL WORKS			
	TOTAL CARRIED TO MAIN SUMMARY			

ZIMRA -UMGUZA UNIT KENNELS- CIVIL WORKS

ITEM	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
4	WATER RETICULATION	UNIT	QNII	KAIL	AWIOUNT
4.1			50		
4.1	Clear vegetation and trees of girth up to 1m (width of line maximum 2m)	m	30		
4.2	EXCAVATION				
1	Excavation in all materials for				
	trenches ,backfill ,compact,and				
	dispose off surplus/unsuitable material,				
	depth not exceeding 1.5m for pipes				
	3				
4.3	50mm PVC class 12 pipes	m^3	10		
	Extra-over all excavations For				
4.4	Intermediate excavations	m^3	10		
		2			
4.5	Hard rock excavations	m ³	5		
_	DIDE DEDDING				
5	PIPE BEDDING				
	Provide D1 bedding (provisional)	m ³	5		
5.1	PIPE LAYING		3		
0.1	Supply ,lay , joint and test the following				
	water mains complete with fittings				
	63mm PVC class 16 pipes	m	50		
6	FITTINGS				
	Allow for fixing and supplying gate valves,				
	fire hydrants, Tees, PVC bends, reducers				
	and valve boxes				
	UPVC bends				
	63mm* 905deg	no	1		
6.1	CONNECTIONS				
	Supply all materials and install				
	complete as detailed stand connections				
	63mmX 1Way	no	2		
	Disinfect pipelines				
6.2	Allow for all cost of flushing and				
0.2	sterilizing of pipelines as specified	sum	1		
	or directed by the Engineer	Suiii	'		
	or anotice by the Engineer				
7	Site,drill ,encase and fully equip a borehole	sum	1		
	including pressure tank, elevated 10cbm tank,				
	water quality testing, water treatment unit				
	reticulation to tank etc (provisional sum)				
	Borehole depth 100m, min yield 1,2ltrs/sec				
	TOTAL CARRIED TO SUMMARY FO	R WAT	TER RET	CULATION	

ITEM	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
8	SEWERAGE RETICULATION				
8.1	Clear vegetation and trees of girth up	m	334		
	to 1m (width of line maximum 2m)				
8.2	EXCAVATION				
8.3	Excavate in all materials for trenches				
0.0	backfill,compact and dispose of				
	surplus or unsuitable material, for pipes:				
8.4	0-1.0m	m ³	87		
0.5	extra over all excavations for:				
8.5	extra over all excavations for.				
8.6	Intermediate excavation	m^3	70		
8.7	Hard rock excavation	m ³	10		
	Pipe bedding for PVC pipes				
0.0	Measured compacted volume in trenches	m ³	25		
8.8	a)Selected granular material	'''	25		
9	PIPEWORK				
	Supply, lay, bed, joint and test sewer				
	the following pipes				
0.4	400 DVO		004		
9.1	160mm uPVC sewer pipes	m	334		
9.2	Supply all materials and install Y-junction	no	2		
9.3	CONSTRUCTION OF MANHOLES				
	Supply and install precast concrete				
	manholes complete with medium				
	duty cast iron covers for				
	900mm dia manholes				
10.4	over and up to	N ₁	c		
10.1	0.0 m 1.0 m	No	8		
10	Allow for the onstruction of a standard upto 80	sum	1		
	people septic tank and a soakaway				
	as indicated on the drawings				
	TOTAL COST FOR SEWER RETICULATION				

SUMMARY

BILL 1	WATER RETICULATION
BILL 2	SEWER RETICULATION
	SUBTOTAL
	ADD 15% V.A.1
	SUBTOTAL
	ADD 10% CONTINGENCY
	GRAND TOTAL

MAIN SUMMARY

<u>SECTION</u>	<u>SECTION SUMMARY</u>		<u>TOTAL</u>
		<u>PAGE</u>	<u>AMOUNT</u>
1	PRELIMINARIES AND GENERALS		
2	STAFF COTTAGES (Do not include P & Gs)		
3	DOG KENNELS		
4	BOUNDARY WALL (PROVISIONAL)		
5	CIVIL WORKS		
	SUB-TOTAL A		
	Add 10% CONTIGENCY		
	SUB-TOTAL B		
	Add 15% VAT		
	TOTAL CARRIED TO FORM OF TENDER		
	Signature of Contractor Date		