

LAMU COUNTY GOVERNMENT



BILL OF QUANTITY

PROPOSED CONSTRUCTRUCTION OF 2No. MODERNIZED TOILETS AT LAMU PUBLIC HEALTH OFFICE & PUBLIC WORKS OFFICE

COUNTY QUANTITY SURVEYOR

LAMU COUNTY GOVERNMENT

P.O. BOX 74 - 80500,

LAMU

PROCUREMENT ENTITY

LAMU COUNTY GOVERNMENT

P.O. BOX 74 - 80500,

LAMU

ITEM	DESCRIPTION	AMOUNT
	PARTICULAR PRELIMINARIES	
A	EMPLOYER The term "Employer" wherever used in these Bills of Quantities and in all other Contract Documents shall mean THE COUNTY GOVERNMENT OF LAMU, DEPARTMENT OF ENVIRONMENT AND SANITATION P.O. BOX 74-80500, LAMU	
В	ARCHITECT The term "Architect" is prescribed and protected by a statute. Where the term "Architect" appears hereinafter and in all other Contract Documents shall be deemed to mean COUNTY ARCHITECT, DEPARTMENT OF INFRASTRUCTURE DEVELOPMENT, PUBLIC WORKS SECTION P.O. BOX 74-80500, LAMU	
С	QUANTITY SURVEYOR The term "the Quantity Surveyor" wherever used hereinafter and in all Contract Documents shall mean COUNTY QUANTITY SURVEYOR, DEPARTMENT OF INFRASTRUCTURE DEVELOPMENT, PUBLIC WORKS SECTION P.O. BOX 74-80500, LAMU	
D	CIVIL ENGINEER The term "the Civil Engineer" wherever used hereinafter and in all Contract Documents shall mean PRINCIPAL CIVIL ENGINEER, DEPARTMENT OF INFRASTRUCTURE DEVELOPMENT P.O. BOX 74-80500, LAMU	
E	STRUCTURAL ENGINEER The term "the Structural Engineer" wherever used hereinafter and in all Contract Documents shall mean SENIOR STRUCTURAL ENGINEER, DEPARTMENT OF INFRASTRUCTURE DEVELOPMENT, PUBLIC WORKS SECTION P.O. BOX 74-80500, LAMU	
F	CONTRACTOR The term "the Contractor" wherever used hereinafter and in all Contract Documents shall mean the person or persons, partnership firm or Company whose Tender for the works hereinafter defined has been accepted by the Employer and who has, or have signed this Contract and shall include his or their heirs, executors, administrators, assignees, successors and duly appointed.	
G	EMPLOYER'S REPRESENTATIVE Wherever the term "Architect, Quantity Surveyor and Engineer" as defined above are used in all Contract Documents they shall be deemed to imply the "Employer's Representatives" and shall include such other persons as they may duly authorize to represent them on behalf of the Employer or the Successor in Office of such persons as may be deputed by such representatives to act on their behalf for the purpose of this Contract.	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
1.0.01	PRICING OF ITEMS OF PRELIMINARIES Items described in this section cover the minimum requirements and conditions necessary for the full and proper execution of the contract. The tenderer is required to read and fully understand his obligations under each item and thus asses his costs for complying with the same for the duration of the contract. Should no price be inserted against any item, it shall be assumed that the tenderer has covered any costs associated with that item elsewhere in the Bills of quantities and shall nevertheless be required to comply with such and all items of preliminaries.	
1.0.02	TENDER VALIDITY The attention of the Tenderers is drawn to clause 3.6 and 3.8 of Conditions of Contract on validity of tender and Tender Security.	
1.0.03	VALUE ADDED TAX (VAT) AND OTHER TAXES All prices will be inclusive of all statutory taxes and levies, including VAT, necessary for the complete and proper execution of that particular item of the works including compying with all statutory requirements. The amount of VAT payable will be deducted from every payment certified by the Project Manager and paid directly to the Commissioner of VAT.	
1.0.04	SCOPE OF CONTRACT The work to be carried out under this contract comprises of Construction of toilets and supporting facilities for the Department of Environment & Sanitation as described in these Bills of Quantities and in accordance with the contract drawings and any other drawings which may be issued in amplification thereof.	
1.0.05	DESCRIPTION OF THE WORKS The works generally comprises of construction of two (2) number toilets together with soak pits and all other ancilliary facilities, water & electricity connection and installation, plumbing, foul drainage, roofing etc	
1.0.06	AREA The total floor Area given for guidance only and with no warranty for its accuracy is 30 square metres.	
1.0.07	LOCATION OF SITE The sites for the works are located at Lamu Public Works Offices and Public Health Offices, Mkomani Ward. The tenderer shall be deemed to have visited the site and familiarised himself with all site conditions prior to submission of tenders. The contractor is advised to visit the site and if need be, get assistance from the designer.	
1.0.08	EXISTING BUILDINGS Special precautions shall be required throughout the contract period to avoid damage to the existing structures, roads, lawns,cables, drains and other services. The Contractor shall allow for making good any damage arising from his actions during execution of this contract at his own expense. CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
1.0.09	GENERAL The contractor is referred to the General Specifications for Building Works 1976 Edition and must allow for all costs in complying with these specifications.	
1.0.10	CONTRACT COMPLETION PERIOD The contract completion period in accordance with Clause 31 of the conditions of contract must be strictly adhered to. The "PROJECT MANAGER" shall strictly monitor the Contractor's progress in relation to the progress chart and should it be found necessary, the "PROJECT MANAGER" shall inform the Contractor in writing that his actual performance on site is not satisfactory. In all such cases, the Contractor shall accelerate his rate of performance, production and progress by all means such as additional labour, plant e.t.c., and working overtime all at his cost.	
1.0.11	PARTICULARS OF INSERTIONS TO BE MADE IN THE APPENDIX TO CONTRACT AGREEMENT The following are insertions to be made in the appendix to the Contract Agreement;	
	(i) Period of final measurement - 6 Months from practical completion date [Condition 32]	
	(ii) Defects Liability Period - 6 Months from practical completion date [Condition 20]	
	(iii) Date for Possession - To be agreed with "PROJECT MANAGER" [Condition 14]	
	(iv) Date of Completion - To be agreed with "PROJECT MANAGER" [Condition 31]	
	(v) Liquidated and Ascertained Damages Clause 24 - At the rate of Kshs.20,000/= per week or [Condition 27] part thereof	
	(vi) Period of Interim Certificates - Monthly [Condition 23]	
	(vii) Period of Honouring Certificates - Thirty (30) Days [Condition 23]	
	(viii) Percentage of Certified value retained [Condition 26] - 10%	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
	(ix) Limit of retention fund - 5% [Condition 26]	
	(x) Bond The Bond required shall be from an approved bank ONLY [Condition 28]	7
1.0.12	PROJECT MANAGEMENT EXPENSES Allow for project management expenses including transport, airtime and lunches to be used as directed by the Project Manager or deducted in whole or in part as the case may be.	
1.0.13	LABOUR CAMPS The Contractor shall not be permitted to house labour on the site and he must take full responsibility for transporting labour daily to and from the site as required and the cost of this shall be included in his tender.	
1.0.14	OFFICE FOR THE "PROJECT MANAGER" The site office mentioned in item B page GP/7 of the General Preliminaries shall be type "B" as shown on the Ministry of Works Standard Detail. The contractor shall insure the office and furniture against fire, theft and natural calamities and provideday and night security. He shall also provide and maintain adequate access and parking acceptable to the PROJECT MANAGER.	
1.0.15	TELEPHONE The contractor shall provide a telephone facilities (fixed or mobile) on site throughout the duration of the contract for use by the Project Manager. He shall also maintain the phone in permanent working condition and pay all charges for the duration of the Contract.	
1.0.16	SIGN BOARD Allow for providing ,erecting ,maintaining throughtout the course of the contract and after clearing away a signboard as designed,specified and approved by the Project Manager.	
1.0.17	HOARDING Hoarding shall not be erected	
1.0.18	PROGRAMME PROGRESS CHART The Contractor shall allow for providing within One (1) week after the date of possession of the site and in agreement with the "PROJECT MANAGER" a progress chart for the whole of the works. One copy shall be forwarded to the "PROJECT MANAGER" and another copy shall be retained on site on which progress shall be recorded by the Contractor. Should any circumstance arise affecting the programme or progress, the chart shall be modified as necessary in consultation with the "PROJECT MANAGER".	
	CARRIED TO COLLECTION	

ITEM DESCRIPTION	AMOUNT
1.0.19 PERFORMANCE SECURITY (BOND) The Contractor should note that the Performance Security to be provided must be inform of a bank guarantee in the amount of 5 % of the Contract Sum. The form to be signed is M.O.W. 118 or any other format acceptable to the Employer.	
1.0.20 PAYMENTS TO DOMESTIC SUBCONTRACTORS The Main Contractor shall be fully responsible for paying his Domestic Sub - Contractors but the Government reserves the right in very exceptional circumstances to make such payments direct in the interest of the project, where completion thereof might be jeopardised by any dispute between any of the Contractors and Sub - Contractors involved.	
1.0.21 APPENDICES The Appendices to the Bills of Quantities shall be regarded for contract purposes as part of the Bill and shall be read and construed with the appropriate sections of the Bills if contained therein.	
1.0.22 SUFFICIENCY OF TENDER The main Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender 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 of the works.	
1.0.23 GENERAL SPECIFICATIONS For the full description of materials ,workmanship and method of execution of the works, the Contractor is referred to the Ministry of Works General specifications for building works dated 1976 or any subsequent revision thereof which is issued as a separate document and which shall be followed in all respects unless it conflicts with the General and Particular Preliminaries, Trade Preambles or other items in these Bills of Quantities. In the event of such conflict, then the provisions of the General and Particular Preliminaries, Trade Preambles and these Bills of Quantities take precedence.	
1.0.24 TRAINING LEVY The Contractor's attention is drawn to Legal Notice No. 237 of October 1971 which requires payment by the Contractor of a Training levy at the rate of 1/4 % of the Contract Sum on all Contracts of more than Kshs. 50,000.00 in value.	
1.0.25 MATERIALS ON SITE All materials for incorporation in the works must be stored on or adjacent to the site of the works before payment is effected by the "PROJECT MANAGER". This is to include the materials of the Main Contractor, Sub - contractors and Nominated Suppliers.	
CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
The Comply Sanita	ORITY AND ACCESS TO THE SITE ontractor must include in his tender for all necessary expenditure incurred in ying with the security regulations of the Department of Environment & tion, especially in relation to entry and exit from the site of the works and ment within the site.	
origin connect and cle Agenc 1.2 Where expens 1.3 The Cl letters 1.4 He wil	ontractor shall be responsible for ensuring that all personnel of non-Kenyan employed on site by himself or his sub-contractors or who are otherwise cted with the construction of contract through the Contractor must be approved eared to work on the project individually in writing by the relevant Government	
The C	ANCE ontractor shall not directly or indirectly or otherwise by himself or through his cause nuisance. Should he do so he shall be directly responsible for such acts.	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
	COLLECTION PAGE: PARTICULAR PRELIMINARIES	
1	Balance brought forward from page TOLT/Page1	
2	Balance brought forward from page TOLT/Page2	
3	Balance brought forward from page TOLT/Page3	
4	Balance brought forward from page TOLT/Page4	
5	Balance brought forward from page TOLT/Page5	
6	Balance brought forward from page TOLT/Page6	
	TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO SUMMARY	

ITEM		DESCRIPTION	AMOUNT
2.0.00		GENERAL PRELIMINARIES	
2.0.01	No Prices will b Contractor's price deemed to have Quantities or Sp	e inserted against items of Preliminaries and Preambles in the ced Bills of Quantities and Specification. The Contractor shall be included in his prices or rates for the various items in the Bills of ecification for all costs involved in complying with all the rathe proper execution of the whole of the works in the Contract.	
2.0.02	ABBREVIATION Throughout thesi interpreted as for	se Bills, units of measurement and terms are abbreviated and shall be	
	C.M.	Shall mean cubic metre	
	S.M.	Shall mean square metre	
	L.M.	Shall mean linear metre	
	mm	Shall mean Millimetre	
	KG	Shall mean Kilogramme	
	No.	Shall mean Number	
	PRS.	Shall mean Pairs	
	m.s.	Shall mean measured separately.	
	a. b. d	Shall mean as before described	
	ditto	Shall mean the whole of the preceding description except as qualified in the description in which it occurs.	
	B.S.	Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England	1.
2.0.03	The Contract B measurement of Published by	BILLS OF QUANTITIES ills have been prepared in accordance with the Standard method of f Building works for East Africa, First Edition (metric) 1970, the Architectural Association of Kenya, chapter of Quantities the is available for inspection at the offices of the Quantity Surveyors	
		CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
2.0.04	EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT Attendance: Clause B20(b) of the Standard Method of Measurement is deleted and the following clause is substituted:-	
	"Attendance on nominated Sub-Contractors shall be given as an item in each case shall be deemed to include: allowing use of standing scaffolding, messrooms, sanitary accommodation and welfare facilities; provision of special scaffolding where necessary; providing space for office, accommodation and for storage of plant and materials; providing light and water for their work: clearing away rubbish; unloading, checking and hoisting: providing electric power and removing and replacing duct covers, pipe casings and the like necessary for the execution and testing of Sub-Contractors' work and being responsible for the accuracy of the same."	
2.0.05	Fix Only:-	
	"Fix Only" shall mean take delivery at nearest railway station (Unless otherwise stated), pay all demurrage charges, load and transport to site where necessary, unload, store, unpack, assemble as necessary, distribute to position, hoist and fix only.	
2.0.06	PROJECT MANAGER The term "Project Manager." wherever used in these Bills of Quantities shall be deemed to imply the Project Manager as defined in Condition 1 of the Conditions of Contract or such person or persons as may be duly authorised to represent him on behalf of the County Government of Lamu.	
2.0.07	FORM OF CONTRACT The form of contract will be the one included in the Republic of Kenya Standard Tender Documents for Procurements of Works (2000 Edition) hereby attached and the Conditions of Contract are those attached thereto. If the contractor considers that the compliance with any of the Conditions of Contract involves any expenses he will distribute them among his rates for the various items in the Bills of Quantities. No claim shall be allowed arising from the Contractors Compliance with any of the conditions of Contract. These are numbered from 1 to 37 as set out on pages 18 to 38 of these tender Documents. Particulars of the insertions to be made in the Appendix of the Contract Agreement will be found in the Particular Preliminaries of these Bills Of Quantities.	
	CARRIED TO COLLECTION	

ТЕМ	DESCRIPTION	AMOUNT
2.0.08	BOND. The Contractor shall find and submit on the Form of Tender the name of one surety who shall be an approved bank and who will be willing to be bound to the County Government of Lamu in and amount equal to Five percent (5%) of the Contract amount for the due performances of the Contract up to the date of completion as certified by the PROJECT MANAGER and who will when and if called upon sign a Bond to that effect on Ministry of Public Works Form No. 118 (without the addition of any limitations).	
2.0.09	PLANT, TOOLS AND VEHICLES Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub-Contractors as described herein. No timber used for scaffolding, formwork or temporary works of any kind shall be used afterwards in the permanent work.	
2.0.10	TRANSPORT. Allow for transport of workmen, materials, etc., to and from the site at such hours and by such routes as may be permitted by the competent authorities.	
2.0.11	MATERIALS AND WORKMANSHIP. All materials and workmanship used in the execution of the work shall be of the best quality and description unless otherwise stated. The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials to be obtained from local sources as early as necessary to ensure that they are on site when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.	
2.0.12	SIGN FOR MATERIALS SUPPLIED. The Contractor will be required to sign a receipt for all articles and materials supplied by the PROJECT MANAGER at the time of taking deliver thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and for replacements of any such loss or damage with articles and/or materials which will be supplied by the "PROJECT MANAGER" at the current market prices including Customs Duty and V.A.T., all at the Contractor's own cost and expense, to the satisfaction of the "PROJECT MANAGER"	
2.0.13	STORAGE OF MATERIALS The Contractor shall provide at his own risk and cost where directed on the site weatherproof lockup sheds and make good damaged or disturbed surfaces upon completion to the satisfaction of the PROJECT MANAGER. Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
2.0.14	SAMPLES The Contractor shall furnish at his own cost any samples of materials or workmanship including concrete test cubes required for the works that may be called for by the PROJECT MANAGER for his approval until such samples are approved by the PROJECT MANAGER and the PROJECT MANAGER, may reject any materials or workmanship not in his opinion to be up to approved samples. The PROJECT MANAGER shall arrange for the testing of such materials as he may at his discretion deem desirable, but the testing shall be made at the expense of the Contractor and not at the expense of the PROJECT MANAGER. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of Roads and Public Works. The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the PROJECT MANAGER. The Contractor shall allow in his tender for such samples and tests except those in connection with nominated subcontractors' work.	
2.0.15	GOVERNMENT ACTS REGARDING WORK PEOPLE 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. In particular the Contractor's attention is drawn to the provisions of the Factory Act 1950 and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople. The Contractor must make himself fully acquainted 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 fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc.,and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.	
	SECURITY OF WORKS ETC. The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public. PUBLIC AND PRIVATE ROADS. Maintain as required throughout the execution of the works and make good any damage to public or private roads arising from or consequent upon the execution of the works to the satisfaction of the local and other competent authority and the PROJECT MANAGER.	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
2.0.18	EXISTING PROPERTY. 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 and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the PROJECT MANAGER.	
2.0.19	VISIT SITE AND EXAMINE DRAWINGS. The Contractor is recommended to examine the drawings and visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which may affect his tender. No claim arising from his failure to comply with this recommendation will be considered.	
2.0.20	ACCESS TO SITE AND TEMPORARY ROADS. Means of access to the Site shall be agreed with the PROJECT MANAGER prior to commencement of the work and Contractor must allow for building any necessary temporary access roads for the transport of the 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 to the Site. Upon completion of the works, the Contractor shall remove such temporary access roads; temporary culverts, bridges, etc., and make good and and reinstate all works and surfaces disturbed to the satisfaction of the "PROJECT MANAGER".	
2.0.21	AREA TO BE OCCUPIED BY THE CONTRACTOR The area of the site which may be occupied by the Contractor for use of storage and for the purpose of erecting workshops, etc., shall be defined on site by the "PROJECT MANAGER"	
2.0.22	OFFICE ETC. FOR THE PROJECT MANAGER The Contractor shall provide, erect and maintain where directed on site and afterwards dismantle the Site Office of the type noted in the Particular Preliminaries, complete with furniture. He shall also provide a strong metal trunk complete with strong hasp and staple fastening and two keys. He shall provide, erect and maintain a lock-up pedestal type water or bucket closet for the sole use of the PROJECT MANAGER including making temporary connections to the drain where applicable to the satisfaction of Government and Medical Officer of Health and shall provide the services of cleaner and pay all conservancy charges and keep both office and keep both office and closet in a clean and sanitary condition from the commencement to the completion of the works and dismantle and make good disturbed surfaces. The office and closet shall be completed before the Contractor is permitted to commence the works. The Contractor shall make available on the Site as and when required by theby the PROJECT MANAGER a modern and accurate level together with levelling staff, ranging rods and 50 metre metallic or linen tape.	
	CARRIED TO COLLECTION	

TEM	DESCRIPTION	AMOUNT
2.0.23	WATER AND ELECTRICITY SUPPLY FOR THE WORKS The Contractor shall provide at his own risk and cost all necessary water, electric light and power required for use in the works. The Contractor must make his own arrangements for connection to the nearest suitable water main and for metering the water used. He must also provide temporary tanks and meters as required at his owncost and clear away when no longer required and make good on completion to the entire satisfaction of the PROJECT MANAGER. The Contractor shall pay all charges in connection herewith. No guarantee is given or or implied that sufficient water will be available from mains and the Contractor must make his own arrangements or augmenting this supply at his own cost. Nominated sub-contractors are to be made liable for the cost of any water or electric current used and for any installation provided especially for their own use.	
2.0.24	SANITATION OF THE WORKS The Sanitation of the works shall be arranged and maintained by the Contractor to the satisfaction of the Government and/or Local Authorities, Labour Department and the PROJECT MANAGER.	
2.0.25	SUPERVISION AND WORKING HOURS The works shall be executed under the direction and to the entire satisfaction in all respects of the PROJECT MANAGER who shall at all times during normal working hours have access to the works and to the yards and 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 employees in the Building and Civil Engineering trades in Kenya .No work shall be carried out at night or on gazzeted holidays unless the PROJECT MANAGER shall direct so. No work shall be covered up nor shall any concreting be carried out in the absence of the Clerk of Works without prior approval of the PROJECT MANAGER in writing.	
2.0.26	PROVISIONAL SUMS. The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7(i) of the Standard Method of Measurement Such sums are net and no addition shall be made to them for profit.	
2.0.27	PRIME COST SUMS. The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement. Persons or firms nominated by the PROJECT MANAGER to execute some of the works for the Contractor.	
2.0.28	DIRECT CONTRACTS Notwithstanding the foregoing conditions, the County Government reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In the instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
2.0.29	PROGRESS CHART. The Contractor shall provide within two weeks of Possession of Site and in agreement with the PROJECT MANAGER a Progress Chart for the whole of the works including the works of Nominated Sub- Contractors; one copy to be handed to the PROJECT MANAGER and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds. ADJUSTMENT OF P.C. SUMS. In the final account all P.C. Sums shall be deducted and the amount properly expended upon the D.R's order in respect of each of them added to the Contract sum. The Contractor shall produce to the PROJECT MANAGER such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the Contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance" (as previously described) following P.C. Sums shall be adjusted pro-rata to the physical extent of the work executed (not pro-rata to the amount paid) and this shall apply even though the Contractor's priced Bill shows a percentage in the rate column in respect of them. Should the Contractor be permitted to tender and his tender be accepted of any work for which a P.C. Sum is included in these Bill of Quantities profit and attendance will be allowed at the same rate as it would be if the work were executed by a Nominated Sub-Contractor. ADJUSTMENT OF PROVISIONAL SUMS. In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the PROJECT MANAGER's order added to the Contract Sum. Such work shall be valued as described for Variations in Conditions No. 22 of the Conditions of Contract, but should any part of the work be executed by a Nominated Sub-Contractor, the value of such work or articles for the work to be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in	AMOUNT
2.0.32	<u>.</u>	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
2.0.33	ATTENDANCE UPON OTHER TRADESMEN, ETC. The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The Contractor, however, shall not be required to erect any special scaffolding for them. The Contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the PROJECT MANAGER and the work will be measured and paid for to the extent executed at rates provided in these Bills.	
2.0.34	INSURANCE The Contractor shall insure as required in Conditions Nos. 22 and 23 of the Conditions of Contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the PROJECT MANAGER either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in all respects. Thereafter the PROJECT MANAGER shall from time to time ascertain that premiums are duly paid up by the Contractor who shall if called upon to do so, produce the receipted premium renewals for the PROJECT MANAGER's inspection.	
2.0.35	PROVISIONAL WORK All work described as "Provisional" in these Bills of Quantities is subject to remeasurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other work liable to adjustment under this Contract shall left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the PROJECT MANAGER Immediately the work is ready for measuring, the Contractor shall give notice to the PROJECT MANAGER. If the Contractor makes default in these respects he shall if the PROJECT MANAGER so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.	
2.0.36	ALTERATIONS TO BILLS, PRICING, ETC. Any unauthorized alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The Contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities. All items of measured work shall be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
2.0.37	BLASTING OPERATIONS Blasting will only be allowed with the express permission of the PROJECT MANAGER in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations laid down by the PROJECT MANAGER governing the use and storage of explosives.	
2.0.38	MATERIALS ARISING FROM EXCAVATIONS Materials of any kind obtained from the excavations shall be the property of the Government. Unless the PROJECT MANAGER directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used.	
2.0.39	PROTECTION OF THE WORKS. Provide protection of the whole of the works contained in the Bills of Quantities, including casing, casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the PROJECT MANAGER and remove such protection when no longer required and make good any damage which may nevertheless have been done at completion free of cost to the Government.	
2.0.40	REMOVAL OF RUBBISH ETC. Removal of rubbish and debris from the Buildings and site as it accumulates and at the completion of the works and remove all plant, scaffolding and unused materials at completion.	
2.0.41	WORKS TO BE DELIVERED UP CLEAN Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts ofmetalwork and leave the whole the buildings watertight, clean, perfect and fit for occupation to the approval of the PROJECT MANAGER.	
	CARRIED TO COLLECTION	

ITEM	DESCRIPTION	AMOUNT
	COLLECTION PAGE: PARTICULAR PRELIMINARIES	
1	Balance brought forward from page TOLT/Page8	
2	Balance brought forward from page TOLT/Page9	
3	Balance brought forward from page TOLT/Page10	
4	Balance brought forward from page TOLT/Page11	
5	Balance brought forward from page TOLT/Page12	
6	Balance brought forward from page TOLT/Page13	
7	Balance brought forward from page TOLT/Page14	
8	Balance brought forward from page TOLT/Page15	
9	Balance brought forward from page TOLT/Page16	
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO SUMMARY	

ITEM	DESCRIPTION	AMOUNT
	SUMMARY: PRELIMINARIES	
1	Total for Doution lan Dualinia arias from 1900 T/Daga7	
1	Total for Particular Preliminaries from page TOLT/Page7	
2	Total for General Preliminaries from page TOLT/Page17	
	TOTAL FOR PRELIMINARIES CARRIED TO GRAND SUMMARY	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0.00	ELEMENT 01-SUBSTRUCTURE				
1.1.00	Site clearance				
1.1.01	Clear the site of all bushes, grass, shrubs, undergrowth and small trees not exceeding 600mm girth and burn arising.	SM	14		
1.2.00	Excavation				
1.2.00	Excavation including maintaining and supporting sides and				
	keeping free from water, mud and falling materials				
1.2.01	For column and bases commencing at reduced level not exceeding 1.50 metres deep.	CM	5		
1.2.02	For strip foundation starting from reduced level not exceeding 1.50 meters deep and cart away as directed	СМ	14		
1.3.00	Disposal				
	Return, fill-in and rum selected excavated material.	CM	8		
1.3.02	Load and cart away from site surplus excavated material as directed.	СМ	11		
1.4.00	Imported Filling				
	300mm thick hardcore fill in making up levels, deposit and compacting in layers of 150mm maximum thickness	SM	14		
1.4.02	50mm thick murram blinding to surfaces of hardcore fill	SM	14		
1.5.00	Damp-proof Membrane				
	500 gauge polythene laid on murram blinding	SM	14		
1.6.00 1.6.01	Anti-termite treatment TERMIDOR' or other equal and approved insecticide with a ten-year guarantee to surfaces of fill, etc	SM	17		
1.7.00	Mass concrete class 15/25 (1:3:6)				
	50mm thick blinding mass concrete to bottoms of foundations	SM	12		
1.7.02	Ditto to column bases	SM	4		
<u> </u>	Total Carried to Collection	n			

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.8.00	Concreting				
	Reinforced vibrated insitu concrete; class 20/(20mm)to;-				
1.8.01	Foundation strips	CM	3		
1.8.02	Column bases	CM	1		
1.8.03	Sub columns	CM	2		
1.8.04	200mm thick floor base slab	SM	14		
1.9.00	Reinforcements				
	High yield deformed steel bars; cold worked to B.S. 4461				
	including bends, hooks, tying wire and distance blocks -Reinforcements allowed for as 100kgs/CM of concrete				
1 0 01	8mm Diameter bars	V.~	43		
1.9.01	onini Diameter bars	Kg	43		
1 0 02	10mm Diameter bars	Kg	28		
1.9.02	Tomin Dianetti bars	Νg	20		
1 9 03	12mm Diameter bars	Kg	32		
1.7.03	12mm Diameter ours	Kg	32		
1.10.00	Steel mesh fabric reinforcement to B.S. 4483				
	Reference A142 mesh 200 x 200 mm, weighing not less				
	than 2.22 kgs per square metre (measured net - no				
	allowance made for laps) inclunding tying wire and distance				
	blocks	SM	14		
	Sawn formwork to insitu concrete as described:-				
1.11.01	To sides of strip foundations.	SM	9		
1.11.02	To sides of column bases.	SM	8		
	T :1 0 1 1				
1.11.03	To sides of sub columns.	SM	6		
1 11 04	Edges of ground floor slob; 150 to 225 mm high	1.14	20		
1.11.04	Edges of ground floor slab; 150 to 225mm high	LM	20		
1.12.00	Foundation walling				
	200mm thick natural stone walling bedded and jointed in				
1.12.01	cement and sand mortar (1:3) with 20gauge; 25mm wide				
	hoop irons in alternate courses cast into concrete one end				
	and built into mortar joints of walling	SM	23		
	J 5	51.1			
	Total Carried to Collectio	n			

ITEM	DESCRIPTION	AMOUNT
	COLLECTION	
A	Total from pg 1	
В	Total from pg 2	
	Total for Substructures Carried to Summary	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2.0.00	ELEMENT 02-SUPERSTRUCTURE				
2.1.00	Concreting				
	Reinforced vibrated insitu concrete; class 20/(20mm)to;-				
2.1.01	Beams	CM	4		
		G) I			
2.1.02	Columns	CM	2		
2.2.00	Reinforcements				
	High yield deformed steel bars; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks -Reinforcements allowed for as 100kgs/CM of concrete				
2.2.01	12mm Diameter bars	Kg	92		
2.2.02	10mm Diameter bars	Kg	76		
2.2.03	8mm Diameter bars	Kg	108		
2.3.00	Sawn formwork to insitu concrete as described:-				
2.3.01	To sides of columns	SM	5		
2.3.02	To sides and soffits of beams	SM	3		
2.4.00	Supersructure Walling (Natural Stone Walling)				
	Natural stone with a crushing strength of 7.5 N/mm², bedded and jointed in cement and sand mortar (1:3) with 20gauge; 25mm wide hoop irons in alternate courses cast into concrete one end and built into mortar joints of walling;				
2.4.01	200mm thick walling	SM	102		
2.5.00	Paving				
	For walkways and areas around toilet excavate over site average 150mm deep to remove vegetable soil, load, wheel, deposit and spread on site where directed. Add 100 mm bed of approved murram, wellwatered and compacted. Lay precast concrete "(Class 20/20mm)" paving slabs of size 600 x 600 x 50mm thick, finished fair on exposed surfaces, jointed and pointed in cement and sand (1:4) mortar, on 50 mm fine sand blinding. (only paving slabs casted in steel				
	moulds will be accepted) Total for Superstructures Carried to	SM	16		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.0.00	ELEMENT 03: WINDOWS				
3.1.01	Wrot Hardwood; camphor, or equal and approved 150x50mm. Frame plugged	LM	9		
3.1.02	Bore 50 mm in timbers for 16mm.diameter bars	No	8		
3.1.03	16mm.Diameter mild steel horizontal burglar proofing bars cut and fitted into timber frame (ms)	LM	3		
3.1.04	PVC sheething to burglar proofing bars (ms)	LM	3		
3.2.00	Louvres <u>Supply and fix the following adjustable anodized</u> <u>alluminium louvre jambs as "NACO" complete with 150mm</u> <u>clips and fixing:-</u>				
3.2.01	Set of two (2) blade jambs	No	8		
	Glazing 5mm clear glass louvre blade size 150mm wide with ground set in claps	LM	4		
3.4.00	Painting Knot, Prime, Stop and apply three coats of clear varnish on woodwork.				
3.4.01	Surface not exceeding 100mm girth frame externally.	LM	68		
3.4.02	Ditto surfaces 100-200mm girth.	LM	32		
	Total for Windows Carried to Su	ummary			

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4.0.00	ELEMENT 04: DOORS				
	50mm framed, ledged and braced door size 800 x 2000mm high, consisting 0f 45 x 130mm stiles, top, rail, middle and bottom rails each with two labours 20 x 150mm braced with panels filled with 25mm tongued, grooved and 'v' jointed				
	match boarding externally including hanging to frame.	No	4		
4.1.02	150 x 50 mm; 2 No. labours; plugged door frame	LM	24		
4.2.00	Ironmongery				
4.2.01	100 mm brass butt hinges	PRS	6		
4.2.02	3 -Lever UNION mortice lock brass plate	No	4		
4.2.03	30mm Diameter plastic door stop	No	4		
	Painting and Decorating <u>Aluminium primer or other equal and approved wood</u> <u>primer before fixing: -</u>				
	Backs of frame, board, etc over 100mm but not exceeding 200mm girth.	LM	20		
4 3 02	<u>Prepare and apply three coats polyurethane clear varnish</u> <u>on woodwork internally</u> Frames; over 100mm but not exceeding 200mm girth	LM	20		
4.3.02	Frames, over Toolinii out not exceeding 2001iiii girtii	LIVI	20		
4.3.03	Frames not exceeding 100mm girth	LM	80		
4.3.04	Prepare and apply three coats of clear polyurethane lacquer on the following timber woodwork surfaces General surfaces of flush and panel doors; over 300mm girth internally	SM	15		
	Total for Doors Carried to Sum	nmary			

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5.0.00	ELEMENT 05: ROOF CONSTRUCTION AND				
	COVERING				
5.1.00	Carpentry				
	Structural timbers in sawn cypress pressure impregnated as				
	described (Note: Rates for timber in trusses to include all				
	bolted connections, hoop-iron strips, surfed joints and				
	fabricating, hoisting and fixing trusses in position				
	approximately 3,000 mm high above ground level)				
	The following in single pitch trusses of varying spans				
5 1 01	150 x 50mm sawn cypress struts	LM	38		
3.1.01	Jeo ne comme dann dyptess strats	Livi	30		
5.1.02	100 x 50mm wall plate	LM	16		
	-				
5.1.03	100 x 75mm sawn cypress purlins	LM	47		
5.2.00	Wrot cypress, prime grade				
5.2.01	200 x 25mm thick fascia board/Verge boards	LM	27		
5.2.02	Prepare,knot,stop apply one undercoat and two finishing				
	coats of external quality suppergloss to general surfaces of	T 3 4	27		
	wood 200-300mm girth.	LM	27		
5.3.00	Roof Covering				
	Galvanized corrugated roofing sheet: 28gauge prepainted;				
0.5.01	not exceeding 450 from horizontal; fixed to timber				
	structure(m.s) with roofing nails and neoprene washers, J				
	bolts, nuts, caps	SM	30		
5.4.00	Ceiling Finishes				
	Sawn cypress; pressure impregnated as described in:-				
5.4.01	50 x 50mm brandering	LM	43		
5.4.02	50 x 100mm ditto; plugged	LM	32		
5.4.02	Cypress grade GJ as described in:-	T 3 C			
5.4.03	75 x 75mm cornice with three labours; plugged	LM	60		
	Celotex ceiling boards				
5.4.04	13mm thick nailed to 50 x 50mm timber brandering (m/s),				
3.4.04	nails punched and puttied; set to pattern to ceilings	SM	30		
	r manes and panies, set to panein to coming	5111			
5.4.05	Extra; access panels 600 x 600mm, 50 x 50mm softwood				
	framing all round; fixing with chromium plated screws and				
	cup washers	No	2		
	Total for Roofing Carried to Summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6.0.00	ELEMENT 06: SOAK-AWAY PIT				
	The following in 1 No. soak pit; 3000 litres capacity				
6.0.01	Excavate pit in red soil not exceeding 1.50m deep from				
	ground level	CM	22		
6.0.02	71. 470. 400. 4	a			
6.0.02	Ditto 1.50 - 3.00m deep ditto	CM	22		
6.0.03	Extra over excavation for excavating in rock of any class	Item			
0.0.03	Extra over excavation for excavating in fock of any class	item			
6.0.04	Backfill selected excavated materials around block walling	CM	18		
6.0.05	Level and spread on site excess excavated material	CM	26		
6.0.06	Allow for planking and strutting to uphold sides				
	of excavations	Item			
6.0.07	Allow for keeping excavations free from ground or				
0.0.07	running water and mud by pumping, bailing or otherwise	Item			
	running water and mad by pumping, burning or otherwise	item			
6.1.00	Vibrated reinforced concrete class 20/20mm aggregate				
	100mm thick suspended slab including leaving opening size				
	600 x 450 mm and reinforcing with 10mm diameter bars at				
	100mm centres	SM	2		
6.2.00	Comp Francisco de Comp				
	Sawn Formwork to: Soffits of suspended slab	SM	2		
0.2.01	Sornts of suspended stab	SIVI	2		
6.2.02	Edge of suspended slab 75 - 150mm girth	LM	5		
	- 100 or 1 mp or 100 or				
6.2.03	Form 75 x 50mm rebated in concrete and build in cast iron				
	frame (measured separately) and make good	SM	3		
6.2.00	~				
6.3.00	Solid natural block walling 200mm thick wall bedded and jointed in cement and sand				
6.3.01	(1:4) and reinforced with 25mm x 20 gauge hoop iron				
	strapping on every alternate course	SM	30		
6.4.00	Waterproof cement and sand (1:2) mix in;				
6.4.01	12mm thick to soffits of suspended slab	SM	2		
C 4 02					
6.4.02	Ditto to walls	SM	30		
	Total Carried to Collectio	n	<u>I</u>	I	

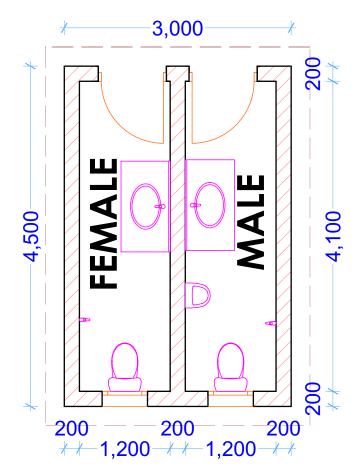
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6.5.00	Metal work				
6.5.01	Cast iron frame size 600 x 450mm made from 150 x 75 x 6mm thick angle with and including 12mm diameter U-shaped hook for padlock	No	2		
6.5.02	Galvanised iron sheet septic cover gauge 14; size 600 x 450mm with and including 2 No. purpose made hinges welded to frame; include for hasp and all other necessary locking devices	No	2		
6.6.00	Manhole Notwithstanding the Standard Method of Measurement Clause V7 (a) to (e), manholes are enumerated and described in detail				
6.6.01	Manholes; 450 x 600 x 600mm deep internally; excavating in ordinary soil, backfilling and disposing surplus soil by spreading on site; 150mm thick plain concrete (1:3:6) - 20mm aggregate bed; 150mm reinforced concrete class 21/20mm aggregate cover slab, reinforced with 12mm diameter high tensile bars at 250mm centres both ways; formwork; 200mm thick clay block walling in cement mortar (1:4) holes for pipes; finished internally with 12mm thick waterproofed cement and sand (1:4) render, steel trowelled; forming main and branch channels; step irons, 450 x 600mm medium duty cast iron manhole cover and				
	frame	No	2		
	Total Carried to Collection	n	•		
A	<u>Collection</u> Total from previos page				
В	Total from this page				
	Total for Soak Pit Carried to Su	ummers.			
	TOTAL TOLOUGH THE CALLED TO	пппат у			

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
7.0.00	ELEMENT 07: FINISHES				
7.1.00	Wall Finishes				
7.1.01	12mm thick 2 No. coatwork cement sand (1:3) plaster; steel trowelled to walls and concrete works.	SM	198		
7.2.00	Painting				
7.2.00	Touch up primer, prepare and apply one undercoat and two finishing coats first quality gloss oil paint as "Crown" or other equal and approved manufacturer on:				
7.2.01	Plastered surfaces.	SM	198		
7.3.00	Wall Tiles (1500mm high)				
	Approved ceramic tiles to B.S. 1281; local; coloured glazed wall tiles to regular or approved other pattern; bedding and jointing in cement sand (1:4) mortar, grouting with white cement				
	200x 300 x 6mm thick; butt joints straight both ways; to cement sand base (m/s) to walls internal	SM	48		
7.4.00	Floor Finishes Cement and sand screed as described in:				
7.4.01	15mm thick cement and sand (1:3) mortar to floor surface over concrete slab	SM	20		
	Approved non slip ceramic floor tiles to B.S. 1281; local; coloured glazed floor tiles to regular or approved other pattern; bedding and jointing in cement sand (1:4) mortar, grouting with white cement: 300 x 300 x 8mm thick; butt joints both ways; to cement sand base (m/s); to floors level; internal	SM	20		
	Total for Finishes Carried to Su	mmarsy			

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.0.00	ELEMENT 08: PRIME COSTS & PROVISIONAL SUM				
8.1.00	Prime Cost sums				
8.1.01	Prime Cost sums for works to be executed by nominated subcontractors Kenya Shillings forty five thousands (Kshs. 45,000.00) only for Electrical Installations		ITEM		45,000
8.1.01.1	Allow for contractor's profit		%		
8.1.01.2	Allow for attendance		%		
; ; ;	Kenya Shillings one hundred and fifteen thousands (Kshs. 115,000.00) only for Plumbing and Drainage works including water connection, piping & sanitary fittings, classic WC, Urinals, Toilet roll holder, terrazzo dhobi sink, glass mirror, PVC and UPVC waste and vent pipes, water storage tanks (500Litres), etc and testing & commissioning to the satisfaction of project manager		ITEM		115,000
	Allow for contractor's profit		%		ŕ
8.1.01.2	Allow for attendance		%		
8.2.00	Provisional Sums				
8.2.01	The following provisional sums are to be measured on completion and priced in accordance with the rates contained in these bills of quantities or prorata thereto or deducted in whole if not required Provide a provisional sum of KES 90,000.00 for work supervision and project management expenses including printing, transport, airtime and lunches to be used as directed by the Project Manager or deducted in whole or in part as the case may be		SUM		80,000
	Provide a provisional sum of Kshs 50,000.00 for Contingencies to be expended as whole or part with the authority of the client/financier.		SUM		50,000
	TOTAL FOR PC & PS CARRIED TO	O SUMMAI	RY	<u> </u>	

ITEM	DESCRIPTION	AMOUNT
	CD AND CHMM A DV	
A	GRAND SUMMARY Total for Substructures from pg 3	
В	Total for Superstructures from pg 4	
C	Total for Windows from pg 5	
D	Total for Doors from pg 6	
Е	Total for Roofing from pg 7	
F	Total for Soak Pit from pg 9	
G	Total for Finishes from pg 10	
Н	Total for Prime Cost & Provisional Sums from pg 11	
	SUB-TOTAL	
	ADD 16% V.A.T	
	TOTAL CARRIED TO FORM OF TENDER	

AMOUNT IN WORDS	
NAME AND ADDRESS OF TENDERER:	
SIGNATURE	DATE
NAME AND ADDRESS OF WITNESS:	
SIGNATURE	DATE



PROPOSED LAYOUT PLAN

1:100

Project Title PROPOSED CONSTRUCTION OF

MODERNIZED TOILET

Department of Public Health, Sanitation & Environment

Project Status

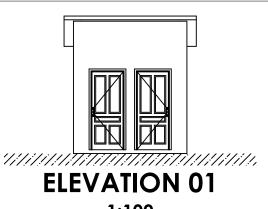
Working Drawings (Plan and Elevations)



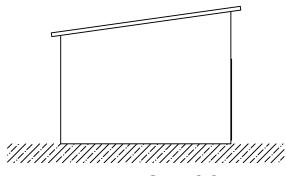
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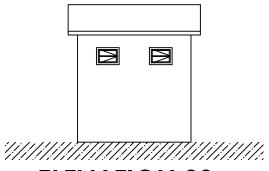


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ELEVATION 02

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ELEVATION 03

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