



Republic of Kenya

MINISTRY OF EDUCATION

STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION

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REGIONAL DIRECTOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

When replying please quote

Ref: RDE/NRB/1/5 VOL. I | (18)

DATE: 22nd September, 2021

The Hon. John K. J. Kiarie M.P
Dagoretti South Constituency
P. O. Box 41842-00100
NAIROBI.

RE: CONSTRUCTION OF RIRUTA SATELLITE MIXED SECONDARY SCHOOL

Your letter dated 21st September, 2021 seeking for approval for the construction of the above school refers.

We are pleased to inform you that there is no objection on the construction of a Secondary School within the compound of the Riruta Satellite Primary School. This will help take care of the learners who were moved to Ndararua Primary School owing to lack of rooms.

Kindly liaise with Sub County Director of Education's Office for professional support and mobilization of stakeholders. We greatly appreciate your immense contribution in expanding Education opportunities in Dagoretti.

OBIERO J. O
REGIONAL DIRECTOR OF EDUCATION
NAIROBI.



Cc: Principal Secretary
Ministry of Education
State Department of Early Learning and Basic Education

Sub County Director of Education
DAGORETTI.



MINISTRY OF EDUCATION, SCIENCE & TECHNOLOGY
State Department of Early Learning and Basic Education



Telegrams.....
Telephone.....

When replying please quote

SUB-COUNTY DIRECTOR
OF EDUCATION
DAGORETTI SUB-COUNTY
P.O BOX 30124-00100
NAIROBI

Date: 6th October, 2021

Ref: DAGO/EDU/GA/01/10/21

The Hon. John K.J. Kiare M.P
Dagoretti South Constituency
P.O Box 41842-00100
Nairobi

RE: CONSTRUCTION OF RIRUTA SATELLITE MIXED SECONDARY SCHOOL

Your letter dated 21st September, 2021 seeking for approval for the construction of the above school refers.

This office is grand to inform you that there is no objection on the construction of a Secondary School within the compound of the Riruta Satellite Primary School. This will take care of the learners who travel a long distance having been moved to Ndururua Primary School owing to lack of rooms in Satellite Mixed Secondary School. This will also help in absorbing 100% transition now that the Satellite Secondary in Ndururua is already full.

We appreciate your immense contribution in expanding Education opportunities in Dagoretti Sub County.



for 
RAPHAEL N. MUSYOKI

Sub-County Director of Education
Dagoretti Sub - County.

Cc: 1. R.D.E Nairobi Region.

REPUBLIC OF KENYA



MINISTRY OF TRANSPORT, INFRASTRUCTURE, PUBLIC WORKS, HOUSING AND URBAN DEVELOPMENT

STATE DEPARTMENT OF PUBLIC WORKS

BILLS OF QUANTITIES

FOR

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND
ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY
SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

TENDER NO.: DS-NGCDF-NMSS-20/ 21

ISSUED BY:

REGIONAL WORKS OFFICER
NAIROBI REGION
P.O. BOX 42267
NAIROBI

PREPARED BY:

REGION ARCHITECT
NAIROBI REGION
P.O. BOX 42267
NAIROBI

REGION QUANTITY SURVEYOR
NAIROBI REGION
P.O. BOX 42267
NAIROBI

OCTOBER, 2021

REGIONAL WORKS OFFICER
NAIROBI REGION
STATE DEPARTMENT OF PUBLIC WORKS
P. O. Box 42267 - 00100, NAIROBI

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	K.SHS
	<u>PARTICULAR PRELIMINARIES</u>	
A	PRICING ITEMS OF PRELIMINARIES Prices SHALL BE INSERTED against items of "preliminaries" in the tenderer's priced Bills of Quantities. The contractor is advised to read and understand all preliminary items.	
B	DESCRIPTION OF THE WORKS The works to be carried out under this contract involves; CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK. The structures are constructed of reinforced concrete framed structure infilled with natural stone walls.	
C	MEASUREMENTS In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the PROJECT	
D	LOCATION OF SITE The site of the proposed works is located in located at in Dagoretti South constituency. The Contractor is advised to visit the site, to familiarize with the nature and position of the site. No claims arising from the Contractor's failure to do so will be entertained.	
E	SIGNING OF THE TENDER DOCUMENTS The bidder shall append his / her signature and / or company 's rubberstamp on each and every page of tender document.	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	K.SHS
<p align="center">A</p>	<p>DEMOLITIONS AND ALTERATIONS</p> <p>The Contractor is to allow for all temporary protection required during the works including ordinary and special dust screens, hoardings, barriers, warning signs, etc as directed by the Project Manager and</p> <p>as necessary for the adequate propping and protection of existing property, finishes, workmen employed on the site, employer's agents and the public. Any damage or loss incurred due to the insufficiency of such protection must be made good by the Contract</p> <p>The works shall be propped, strutted and supported as necessary before any alteration or demolition work commences. Prices shall include for all cleaning and preparatory work to structure and finishes and for making good to all finishes on completion whet</p> <p>Unless described as set aside for re-use all arising debris and surplus materials shall be carefully removed from building and carted away from site.</p> <p>The Contractor shall be entirely responsible for any breakage or damage which may occur to materials required for re-use during their removal unless it is certified by the Project Manager that such damage or breakage was inevitable as a result of the cond</p>	
<p align="center">B</p>	<p>CLEARING AWAY</p> <p>The Contractor shall remove all temporary works, rubbish, debris and surplus materials from the site as they accumulate and upon completion of the works, remove and clear away all plant, equipment, rubbish, unused materials and stains and leave in a clean</p> <p>The whole of the works shall be delivered up clean, complete and in perfect condition in every respect to the satisfaction of the Project Manager.</p>	
<p align="center">C</p>	<p>CLAIMS</p> <p>It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and / or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such a claim or intent to claim notice to the PROJECT MANAGER</p>	
	<p><i>Carried to collection</i></p>	

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

ITEM	DESCRIPTION	K.SHS
A	<p>PAYMENTS</p> <p>The tenderer's attention is drawn to the fact that the GOVERNMENT DOES NOT MAKE ADVANCE PAYMENTS but pays for work done and materials delivered to sit: all in accordance with Clause 23 of the Conditions of Contract Agreement. In order to facilitate this,</p>	
B	<p>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</p> <p>The Contractor is notified that these works are to be carried out on a restricted site where the client is going on with other normal activities. The Contractor is thus instructed to take reasonable care in the execution of the works as to prevent accident</p>	
C	<p>WORKING CONDITIONS</p> <p>The Contractor shall allow in his rates for any interference that he may encounter in the course of the works for the Client may in some cases ask the Contractor not to proceed with the works until some activities within the site are completed, as the fac</p>	
D	<p>SIGNBOARD</p> <p>Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the Project Manager.</p>	
E	<p>LABOUR CAMPS</p> <p>The Contractor shall not be allowed to house labour on site. Allow for transporting workers to and from the site during the tenure of the contract.</p>	
F	<p>MATERIALS FROM DEMOLITIONS</p> <p>Any materials arising from demolitions and not re-used shall become the property of the Ministry of Public Works. The Contractor shall allow in his rates the cost of transporting the demolished materials to the Provincial Works Office.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	K.SHS
A	<p>PRICING RATES The tenderer shall include for all costs in executing the whole of the works, including transport, replacing damaged items, fixing, all to comply with the said Conditions of Contract.</p>	
B	<p>SECURITY The Contractor shall allow for providing adequate security for the works and the workers in the course of execution of this contract. No claim will be entertained from the Contractor for not maintaining adequate security for both the works and workers.</p>	
C	<p>URGENCY OF THE WORKS The Contractor is notified that these " works are urgent" and should be completed within the period stated in these Particular Preliminaries.</p> <p>The Contractor shall allow in his rates for any costs he/ she deems that he/she may incur by having to complete these works within the stipulated contract period.</p>	
D	<p>PAYMENT FOR MATERIALS ON SITE All materials for incorporation in the works must be stored on site before payment is effected, unless specifically exempted by the Project Manager. This is to include materials of the Contractor, nominated sub-Contractors and nominated suppliers.</p>	
E	<p>EXISTING SERVICES Prior to the commencement of any work, the Contractor is to ascertain from the relevant authority the exact position, depth and level of all existing services in the area and he/she shall make whatever provisions may be required by the authorities concern</p>	
F	<p>BID SECURITY The Bidder shall furnish, as part of his bid, a security as specified in the tender advertisement.</p> <p>The bid security shall, at the bidder's option, be in the form of a certified cheque, bank draft, standby letter of credit or guarantee from a reputable bank located in Kenya or foreign bank which has been determined by the bidder to be acceptable to the</p> <p>Guarantees issued as surety for the bid shall be valid for a period of One Hundred and Twenty (120) days from the date of Tender Opening.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	K.SHS
A	<p>PERFORMANCE BOND</p> <p>A bond of 5% of the contract sum will be required in accordance with clause 6.00 (as amended) on award of contract of the Instructions to Tenderer's. No payment on account for the works executed will be made to the contractor until he has submitted the Performance Bond.</p>	
B	<p>TENDER DOCUMENTS</p> <p>Tender documents are as listed in Clause 2.1 of the Instruction to Tenderer's Page STD/8</p>	
A	<p>DELIVERY OF TENDER</p> <p>Tenders and all documents in connection therewith, as specified above must be delivered in the addressed envelope which should be properly sealed and deposited at the offices as specified in the letter accompanying these documents or as indicated in t</p> <p>Tenders will be opened at the time specified in the letter accompanying these Tender Documents or as indicated in the advertisement. Tenders delivered/received later than the above time will not be opened.</p>	
C	<p>VALUE ADDED TAX</p> <p>The Contractor's attention is drawn to the Legal Notice in the Finance Act part 3 Section 21(b) operative from 1st September, 1993 which requires payment of VAT on all contracts. The Contractor should therefore include allowance in his rates and prices fo</p> <p>The tenderer is advised that in accordance with Government public notice No. 35 & 36 Dated 11th September 2003 operational from 1st October 2003, VAT will be deducted against the contract sum at the prevailing rate by the Employer and remitted directly to</p> <p>NB: VAT SHALL be added at the Grand summary page (GS/1)</p>	
	<i>Carried to collection</i>	

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
 SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

ITEM	DESCRIPTION	K.SHS
	<p>SPECIAL PRELIMINARIES</p> <p>A Allow for Kenya Shillings Six Hundred Thousand (Kshs 600,000.00) only for Project Management Expenses (transport, site meetings, inspection, stationaries and clerk of works)</p>	<p>600,000</p>
	<p><i>Carried to collection</i></p>	<p>600,000.00</p>

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	K.SHS
A	<u>PARTICULARS OF INSERTIONS TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT</u>	
	The following are the insertions to be made in the appendix to the Contract Agreement: -	
	Period of Final Measurement 3 Months From Practical completion	
	Defects Liability Period 6 Months from Practical completion	
	Date for Possession To be agreed with the Project Manager	
	Date for Completion Weeks from date of Possession	
	Liquidated and Ascertained At the rate of Kshs. 35,000... per week or part thereof	
	Prime cost sums for which	
	The Contractor desires to tender	
	Period of Interim Certificates Monthly	
	Period of Honouring Certificates 30 days	
	Percentage of Certified Value Retained 10%	
	Limit of Retention Fund 5%	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	K.SHS
	<u>COLLECTION</u>	
	Brought forward from page PP/1	
	Brought forward from page PP/2	
	Brought forward from page PP/3	
	Brought forward from page PP/4	
	Brought forward from page PP/5	
	Brought forward from page PP/6	600,000.00
	Brought forward from page PP/7	
	TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO SUMMARY OF PRELIMINARIES	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
	<p>GENERAL PRELIMINARIES</p> <p>A. PRICING ITEMS OF PRELIMINARIES AND PREAMBLES</p> <p>Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.</p> <p>The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.</p> <p>B. ABBREVIATIONS</p> <p>Throughout these Bills, units of measurement and terms are abbreviated and shall be all the requirements for the proper execution of the whole of the works in the Contract.</p> <p><i>C.M.</i> Shall mean cubic metre</p> <p><i>S.M.</i> Shall mean square metre</p> <p><i>L.M.</i> Shall mean linear metre</p> <p><i>MM</i> Shall mean Millimetre</p> <p><i>Kg</i> Shall mean Kilogramme</p> <p><i>No.</i> Shall mean Number</p> <p><i>Prs.</i> Shall mean Pairs</p> <p><i>B.S.</i> - Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England.</p> <p><i>Ditto</i> - Shall mean the whole of the preceding description except as qualified in the description in which it occurs.</p> <p><i>m.s.</i> Shall mean measured separately.</p> <p><i>a.b.d</i> Shall mean as before described.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
<p>A.</p>	<p>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</p> <p><i>Attendance</i> ; Clause B19(a) of the Standard Method of Measurement is deleted and the following clause is substituted:-</p> <p>Attendance on nominated Sub-Contractors shall be given as an item in each case shall be deemed to include: allowing use of standing scaffolding, mess rooms, 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.</p> <p><i>Fix Only</i>:-</p> <p>"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.</p>	
<p>B.</p>	<p>EMPLOYER</p> <p>The "Employer" is The NATIONAL GOVERNMENT CONSTITUENCY DEVELOPMENT FUND MANAGER-DAGORETTI SOUTH CONSTITUENCY.</p>	
<p>C.</p>	<p>PROJECT MANAGER</p> <p>The term "P.M." 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 Government.</p>	
<p>D.</p>	<p>ARCHITECT</p> <p>The term "Architect" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is District Works Officer , P.O. Box 42267, NAIROBI.</p>	
	<p><i>Carried to collection</i></p>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>QUANTITY SURVEYOR</p> <p>The term "Quantity Surveyor" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is District Works Officer, P.O. Box 42267, NAIROBI.</p>	
B	<p>ELECTRICAL ENGINEER</p> <p>The term "Electrical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is District Works Officer, P.O. Box 42267, NAIROBI.</p>	
C	<p>MECHANICAL ENGINEER</p> <p>The term "Mechanical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is District Works Officer, P.O. Box 42267, NAIROBI.</p>	
D	<p>STRUCTURAL ENGINEER</p> <p>The term "Structural Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is District Works officer, P.O. Box 42267, NAIROBI.</p>	
E	<p>FORM OF CONTRACT</p> <p>The Form of Contract shall be as stipulated in the Republic of Kenya's Standard Tender Document for Procurement of Building Works(2000 Edition) included herein</p> <p>The Conditions of Contract are also included herein</p> <p><i>Conditions of Contract</i></p> <p>These are numbered from 1 to 37 as set out in pages 18 to 38 of these tender documents.</p> <p>Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of Quantities</p>	
	<p><i>Carried to collection</i></p>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>BOND.</p> <p>The Contractor shall find and submit on the Form of Tender an approved bank who will be willing to be bound to the Government in an amount equal to five per cent (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 the relevant standard form included herein. (without the addition of any limitations) on the same day as the Contract Agreement is signed, by the Government, the Contractor shall furnish within seven days another Surety to the approval of the Government.</p>	
B	<p>PLANT, TOOLS AND VEHICLES</p> <p>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.</p>	
C	<p>TRANSPORT.</p> <p>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.</p>	
D	<p>MATERIALS AND WORKMANSHIP.</p> <p>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 ensure they are onsite when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.</p>	
E	<p>SIGN FOR MATERIALS SUPPLIED.</p> <p>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</p>	
	<p><i>Carried to collection</i></p>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>STORAGE OF MATERIALS</p> <p>The Contractor shall provide at his own risk and cost where directed on the site weather proof lock-up 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.</p>	
B	<p>SAMPLES</p> <p>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, Housing and Public Works.</p> <p>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 sub-contractors' work.</p>	
C	<p>GOVERNMENT ACTS REGARDING WORKPEOPLE ETC.</p> <p>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.</p> <p>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.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>SECURITY OF WORKS ETC.</p> <p>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.</p>	
B	<p>PUBLIC AND PRIVATE ROADS.</p> <p>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</p>	
C	<p>EXISTING PROPERTY.</p> <p>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</p>	
D	<p>VISIT SITE AND EXAMINE DRAWINGS.</p> <p>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.</p>	
E	<p>ACCESS TO SITE AND TEMPORARY ROADS.</p> <p>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 reinstate all works and surfaces disturbed to the satisfaction of the PROJECT MANAGER The Contractor should also allow for relocating existing fence (approx. 30 metres long).</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>AREA TO BE OCCUPIED BY THE CONTRACTOR</p> <p>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</p>	
B	<p>OFFICE ETC. FOR THE PROJECT MANAGER</p> <p>The Contractor shall provide, erect and maintain where directed on site and afterwards dismantle the site office of the standard type, 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 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 services of cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from 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 the "PROJECT MANAGER" a modern and accurate level together with levelling staff, ranging rods and 50 metre metallic or linen tape.</p>	
C	<p>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</p> <p>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 own cost 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 implied that sufficient water will be available from mains and the Contractor must make his own arrangements for 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.</p>	
D	<p>SANITATION OF THE WORKS</p> <p>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</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>SUPERVISION AND WORKING HOURS</p> <p>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.</p>	
B	<p>PROVISIONAL SUMS.</p> <p>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</p>	
C	<p>PRIME COST (OR P.C.) SUMS.</p> <p>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 work or to provide and fix materials or goods are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.</p>	
D	<p>PROGRESS CHART.</p> <p>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.</p>	
C.	<p>ADJUSTMENT OF P.C. SUMS.</p> <p>In the final account all P.C. Sums shall be deducted and the amount properly expended upon the PROJECT MANAGER'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"</p>	
	<p><i>Carried to collection</i></p>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>SUPERVISION AND WORKING HOURS</p> <p>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.</p>	
B	<p>PROVISIONAL SUMS.</p> <p>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</p>	
C	<p>PRIME COST (OR P.C.) SUMS.</p> <p>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 work or to provide and fix materials or goods are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.</p>	
D	<p>PROGRESS CHART.</p> <p>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.</p>	
C.	<p>ADJUSTMENT OF P.C. SUMS.</p> <p>In the final account all P.C. Sums shall be deducted and the amount properly expended upon the PROJECT MANAGER'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"</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>ADJUSTMENT OF P.C. SUMS. Ctd.....</p> <p>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.</p>	
B	<p>ADJUSTMENT OF PROVISIONAL SUMS.</p> <p>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, 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 the priced Bills of Quantities for similar items added.</p>	
C	<p>NOMINATED SUB-CONTRACTORS</p> <p>When any work is ordered by the PROJECT MANAGER to be executed by nominated sub-contractors, the Contractor shall enter into sub-contracts and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described the Contractor is to provide for such Sub-Contractors any or all of the facilities described in these Preliminaries. The Contractor should price for these with the nominated Sub-contract Contractor's work concerned in the P.C. Sums under the description "add for Attendance".</p>	
D	<p>DIRECT CONTRACTS</p> <p>Notwithstanding the foregoing conditions, the 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 any such instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A	<p>ATTENDANCE UPON OTHER TRADESMEN, ETC.</p> <p>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.</p>	
B	<p>INSURANCE</p> <p>The Contractor shall insure as required in Clause 30 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.</p>	
C	<p>PROVISIONAL WORK</p> <p>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.</p>	
D	<p>ALTERATIONS TO BILLS, PRICING, ETC.</p> <p>Any unauthorised 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.</p>	
	<i>Carried to collection</i>	

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

ITEM	DESCRIPTION	AMOUNT
A	<p>BLASTING OPERATIONS</p> <p>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 in force for the time being, and any special regulations laid down by the PROJECT MANAGER governing the use and storage of explosives.</p>	
B	<p>MATERIALS ARISING FROM EXCAVATIONS</p> <p>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 in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the PROJECT MANAGER. Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed.</p>	
C	<p>PROTECTION OF THE WORKS.</p> <p>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.</p>	
D	<p>REMOVAL OF RUBBISH ETC.</p> <p>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.</p>	
E	<p>WORKS TO BE DELIVERED UP CLEAN</p> <p>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 of metalwork and leave the whole of the buildings watertight, clean, perfect and fit for occupation to the approval of the PROJECT MANAGER</p>	
	<i>Carried to collection</i>	

**PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA
SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.**

ITEM	DESCRIPTION	AMOUNT
A.	<p>GENERAL SPECIFICATION.</p> <p>For the full description of materials and workmanship, method of execution of the work and notes for pricing, the Contractor is referred to the Ministry of Roads, Public Works and Housing General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities.</p>	
B.	<p>TRAINING LEVY</p> <p>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.</p>	
C.	<p>MATERIALS ON SITE</p> <p>All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected unless specifically exempted by the PROJECT MANAGER. This includes the materials of the Main Contractor, Nominated Sub-Contractors and Nominated Suppliers.</p>	
D.	<p>HOARDING</p> <p>The Contractor shall enclose all the site under construction with a hoarding 2400 mm high consisting of iron sheets gauge 30 on 100 x 50 mm 2nd grade treated sawn cypress timber posts firmly secured at 1800 mm centres with two 75 x 50 mm 2nd grade treated sawn cypress timber rails. The Contractor is in addition required to take all precautions necessary for the safe custody of the works, materials, plant, public and Employer's property on the site.</p>	
E.	<p>CONTRACTOR'S SUPERINTENDENCE/SITE AGENT</p> <p>The Contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall give his whole experience in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the Contractor all directions and instructions from the Project Manager and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.</p>	
	<i>Carried to collection</i>	

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

ITEM	DESCRIPTION	AMOUNT
	<u>COLLECTION</u>	
	Brought Forward From Page GP/ 1	
	Brought Forward From Page GP/ 2	
	Brought Forward From Page GP/ 3	
	Brought Forward From Page GP/ 4	
	Brought Forward From Page GP/ 5	
	Brought Forward From Page GP/ 6	
	Brought Forward From Page GP/ 7	
	Brought Forward From Page GP/ 8	
	Brought Forward From Page GP/ 9	
	Brought Forward From Page GP/ 10	
	Brought Forward From Page GP/ 11	
	Brought Forward From Page GP/ 12	
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO SUMMARY OF PRELIMINARIES	

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NO.1				
	ELEMENT NO. 1				
	<u>SUBSTRUCTURES (ALL PROVISIONAL)</u>				
	<u>Site clearance</u>				
A	Clear the site off grass, shrubs and all vegetation; cart away as directed	500	sm	60	30,000.00
	<u>Excavations and earth works</u>				
B	Excavate vegetable soil average 200mm deep to remove vegetable soil and cart away as directed	500	sm	82	41,000.00
C					
D	Excavate for strip foundation starting from reduced level not exceeding 1.50 meters deep and cart away as directed	191	cm	255	48,705.00
	ditto 1200mmx1200mm column pits	135	cm	255	34,425.00
E	Extra over excavation for excavating in rock. For any class type	20	cm	900	18,000.00
	<u>Disposal</u>				
F	Return, fill-in and rum selected excavated material around the foundation	224	cm	209	46,816.00
G	Remove and cart away from site surplus excavated material as directed	227	cm	200	45,400.00
	<u>Diposal of water</u>				
H	Allow for Keeping all excavations free from all water including spring or running water by pumping ,bailing or other approved means		Item		5,000.00
	<u>Planking and strutting</u>				
I	Allow for Plunking and Strutting to sides of all		Item		5,000.00
Carried to collection					274,346.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SUBSTRUCTURES (ALL PROVISIONAL)</u>				
	<u>CONT'D</u>				
	<u>Hard core Filling as described.</u>				
A	300mm Imported hardcore filling including depositing levelling and compacting in layers of 150mm maximum thickness n.e 1.5 mm.	150	cm	900	135,000.00
B	50mm thick Quarry dust blinding to surfaces of hardcore rolled smooth to receive polytheen	500	sm	200	100,000.00
	<u>Antitermite treatment</u>				
C	PREMISE 200CC' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	500	sm	200	100,000.00
	<u>Damp proofing</u>				
D	1000 gauge polythene or other equal and approved plastic sheet damp proof membrane laid over blinding (measured nett- allo for laps)	500	sm	200	100,000.00
	<u>In-situ concrete</u>				
	<u>Mass concrete (1.4.8/38-38 mm aggregate)</u>				
E	50mm thick mass concrete class x (1:4:8) to bottoms of foundations	7	cm	14,000	98,000.00
	ditto to column bases	4	cm	14,000	56,000.00
	<u>Vibrated reinforced concrete ; 1:1.5:3/ 25-20mm);as decribed in</u>				
F	Foundations in trenches irrespective of thickness	19	cm	14,000	266,000.00
	ditto 200mm thick to column bases	15		14,000	210,000.00
G	150mm thick bed	500	sm	2,100	1,050,000.00
	<u>Reinforcement</u>				
	<u>Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks of assorted diameter</u>				
	ditto 10mm to strip foundation footing	655	kgs	180	117,900.00
	ditto 12mm to column bases	776	kgs	180	139,680.00
	ditto 16mm to column stubs	840	kgs	180	151,200.00
	ditto 8mm to column links	210	kgs	180	37,800.00
	<u>Sawn formwork to insitu concrete as described:-</u>				
	to column stubs	104	sm	450	46,800.00
Carried to collection					
					2,608,380.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Mesh reinforcement : B.S. 4483</u>				
A	Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter (measured net - no allowance made for laps(including bends, tying wire and distance blocks	500	sm	400	200,000.00
	<u>Sawn formwork to insitu concrete as described:-</u>				-
					-
B	Edges of ground floor slab; 75 to 150mm wide	130	lm	60	7,800.00
	<u>Foundation Walling</u>				-
					-
C	200mm thick approved local natural stone, roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar and reinforced with and including 20swg x 25 mm wid hoopiron in every alternate course	344	sm	2,000	688,000.00
	<u>Insitu finishings</u>				-
					-
D	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	120	sm	250	30,000.00
	<u>Prepare and apply three coats black bituminous paint on:-</u>				-
					-
E	Rendered plinths, externally.	120	sm	250	30,000.00
	<i>Carried to collection</i>				955,800.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	COLLECTION				
	From page BW/1				
	From pageBW /2				274,346.00
	From page BW/3				2,608,380.00
					955,800.00
TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY					3,838,526.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	FRAME				
	<u>In situ concrete; reinforced; (1:1.5:3) class 25 / (20mm); vibrated</u>				
	ground floor columns	13	cm	14,000	182,000.00
	ground floor suspended beams and slabs	104	cm	14,000	1,456,000.00
	ditto to stairs	5	cm	14,000	70,000.00
	<u>Reinforcement</u>				
	<u>Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks of assorted diameter</u>				
B	16mm dia to ground floor columns	1480	kgs	180	266,400.00
	ditto 8mm ground floor column links	380	kgs	180	68,400.00
C	ditto 16mm ground floor suspended beams	640	kgs	180	115,200.00
	ditto 12mm to ground floor suspended beams	350	kgs	180	63,000.00
	ditto 10mm to ground floor suspended slab B1 & B2	3044		180	
	ditto 10mm to ground floor suspended slab T1 & T2	2646	kgs	180	547,920.00
	ditto 8mm suspended beams links	880	kgs	180	476,280.00
	ditto 10mm to stairs	380	kgs	180	158,400.00
					68,400.00
	16mm dia to 1st floor columns	1480	kgs	180	266,400.00
	ditto 8mm column links	380	kgs	180	68,400.00
	ditto 12mm to 1st floor beams	1110	kgs	180	199,800.00
	ditto 8mm to 1st floor beams (lintles) links	642	kgs	180	115,560.00
	<i>Carried to collection</i>				
					4,122,160.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<i>Sawn formwork to insitu concrete as described:-</i>				
A	to column sides	406	sm	450	182,700.00
	ditto to suspended beams sides ,soffits and slab soffits	800	sm	450	360,000.00
	ditto to stairs soffits	30	sm	450	13,500.00
	<i>To Collection</i>				556,200.00
	From page BW /5				4,122,160.00
	From Above				556,200.00
	TOTAL FOR FRAME CARRIED TO SUMMARY				4,678,360.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 3</u>				
	<u>Natural stone walling bedded and jointed in cement and sand (1:3) mortar and reinforced with and including 20 swg x 25 mm wide hoopiron: external</u>				
A	200 mm thick reinforced with hoop iron after every two alternate courses to ground floor	648	sm	2,200	1,425,600.00
	ditto firstfloor walling	530	sm	2,200	1,166,000.00
	ditto 200mm thick to internal gamble fillings.	47	sm	1,800	84,600.00
B	ditto 200mm thick eave fillings.	50	sm	1,800	90,000.00
C	Extra over horizontal pointing in 10mm thick rod in cement and sand (1:3) mortar to external wall	690	sm	250	172,500.00
	<u>Horizontal Damp Proof Course:one layer of 3-ply bituminous felt or other equal approved (measured nett-allow for laps)</u>				
D	200mm wide; B.S. 743 Type A bitumen hessian base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar	240	lm	200	48,000.00
	TOTAL FOR EXTERNAL AND INTERNAL WALLING CARRIED TO SUMMARY				2,986,700.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4				
	DOORS				
	<u>glazed steel casement door in 200 x 250mm high panes prepared for glazing (m.s) complete with all requisite frame, sub-frames, mullions, transomes, fixing lugs cast on, 1 1/2 pairs heavy duty pin type hinges associated casement door lock and handles, 2 x 200mm wide x 16 gauge</u>				
A	Door Size 2800 x 2700mm high overall Framed RHS Steel double leaf in four equal leaves	1	No	27,000	27,000.00
B	ditto 1500x2700mm high	11	No	24,000	264,000.00
C	ditto 900x2400mm high	6	No	22,000	132,000.00
	Glazing				
D	5mm Thick clear sheet glass panes over 0.1 but not exceeding 0.5 square meters; fixing with putty	6	sm	1,500	9,000.00
	Painting and Decorations				
	<u>Prepare and apply three coats oil paint full gloss to Crown Solo or other equal and approved to: -</u>				
E	General surfaces of Metal door	104	sm	300	31,200.00
	Timber Doors				
F	900x2400mm high solid core mahogany laminated	24	NO	7,000	168,000.00
G	ditto 1200x2700mm double flap timber flush doors for special toilets.	2	NO	7,800	15,600.00
	<u>Wrot Cypress door frames; selected and kept</u>				
H	200 x 50mm thick frames; with 2No.labours and countersunk screws	225	LM	1,400	315,000.00
I	75 x 15mm architrave	225	LM	200	45,000.00
J	25mm Dia quadrant beading	225	LM	200	45,000.00
	<u>Prepare and apply one coat wood primer on back of wood before fixing</u>				
K	Surfaces not exceeding 100mm girth	225	LM	60	13,500.00
	<u>Prepare, touch up primer and apply one undercoat and two coats clear varnish on wood surfaces</u>				
L	Door surfaces (measured flat both sides)	225	SM	300	67,500.00
M	Surfaces not exceeding 100mm girth	50	LM	60	3,000.00
	Carried to Collection				1,135,800.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR FIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Ironmongery</u>				
	Supply and fix the following to UNION catalogue or equal and approved				
A	Two lever mortice lock complete with set lever brass handle furniture	24	NO	2,000	48,000.00
B	100 mm wide pressed steel butt hinges	42	PRS	450	18,900.00
C	100mm barrel bolt.	4	NO	400	1,600.00
	<u>collection</u>				20,500.00
	From page 8				1,135,800.00
	From page above				20,500.00
	TOTAL FOR DOORS CARRIED TO SUMMARY				1,156,300.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5</u>				
	<u>WINDOWS</u>				
	<u>Following work to be executed by an approved</u>				
	<u>Standard sections purpose made steel casement windows to BS 990 in sub panes size 200 x 250mm complete with frames, sub-frames, mullions, transomes including one coat red oxide primier before fixing, all necessary polished brass window handle and stays, hinges, mosquito proofed hooded permanent vent, 20mm metal lugs cast on, 16mm mild steel square burglar proofing grilles at 250mm</u>				
A	Window size 2000 x 1500mm high overall	37	No	15,000	555,000.00
B	ditto 2400x4100mm high overall	2	No	49,200	98,400.00
C	ditto 2000 x 900mm high overall	12	No	9,000	108,000.00
D	ditto 1200x1500mm high overall	6	No	9,000	54,000.00
E	ditto 600x900mm high overall	19	No	2,700	51,300.00
F	ditto 1600x2100mm high overall	2	No	16,800	33,600.00
	<i>Carried to collection</i>				900,300.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUITION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Glazing</u>				
A	5mm Thick clear sheet glass panes over 0.1 but not exceeding 0.5 square meters, fixing with putty	181	sm	1,500	271,500.00
	<u>Window board</u>				
B	150 x 25 mm thick window boards including bull-nosed edges and 25 x 25 mm bearer, plugged, counter sinking and flush pelleting.	40	lm	250	10,000.00
	<u>Window cill</u>				
C	125 x 20 mm thick quarry tile cill with one curved edge including bedding and pointing in cement and sand (1:3) mortar	130	lm	250	32,500.00
D	20 x 10 mm impregnated sawn cypress timber ground plugged	130	lm	250	32,500.00
	<u>Painting and Decorations</u>				
	<u>Touch up premier, prepare and apply one undercoat and two finishing coats first quality gloss oil paint as 'Crown' or other equal</u>				
E	Surfaces of small panes casement windows including burglar proofing 9measured one side over	100	sm	300	30,000.00
	<i>Carried to collection</i>				376,500.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELLITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	COLLECTION				
	From page BW/10				900,300.00
	From page BW/11				376,500.00
	TOTAL FOR WINDOWS CARRIED TO SUMMARY				1,276,800.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 6				
	FINISHES				
	Wall finishes				
	Internal wall				
	Plaster: 12mm thick 2 No. coatwork, 9mm first coat of cement sand (1:6); 3mm second coat of cement and lime putty (1:10); steel trowelled				
A	Walls internaly	1433	sm	450	644,850.00
B	ditto to suspended baems and slab soffits	680	sm	450	306,000.00
C	ditto to stairs soffits	30	sm	450	13,500.00
	Painting and decorations				
	Prepare and apply three coats of first quality silk vinyl paint to: -				
D	Walls internaly	1433	sm	450	644,850.00
F	ditto to suspended baems and slab soffits	680	sm	450	306,000.00
G	ditto to stairs soffits	30	sm	450	13,500.00
	External finishes				
	Render: 18mm thick, 1 No. coatwork of cement and sand (1:3); wood floated to concrete or blockwork base generally to: -				
C	Beams and columns externaly	259	sm	450	116,550.00
D	Ditto below DPC	60	sm	450	27,000.00
	Painting and decorations				
	Prepare and apply three coats of first quality plastic emulsion paint to: -				
E	Beams and columns externaly	259	sm	450	116,550.00
F	Ditto belwo DPC	60	sm	450	27,000.00
	Carried to Collection for External & Internal Wall finishes				2,215,800.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Floor finishes</u> <u>20mm thick, 2 No. coat work terrazzo; approved colour, cement and marble chippings (1:2); machine polished, to concrete or blockwork base generally to: -</u>				
A	To Floors level; internal	1000	sm	2200	2,200,000.00
B	Skirtings; 100mm wide with rounded junction with wall finish and coved junction with floor finish	478	lm	200	95,600.00
	<u>Beds or Backings</u> <u>Screed, cement and sand (1:3)</u>				
C	20mm thick floor screed; wood floated to receive terrazzo paving (m/s)	600	sm	300	180,000.00
	<u>Ceiling finishes</u> <u>Wrot cypress</u>				
D	75 x 25mm moulded cornice	478	lm	250	119,500.00
	<u>Approved sawn softwood; second grade; pressure impregnated.</u>				
E	50 x 50mm brandering	1570	lm	250	392,500.00
	<u>Chip board</u>				
G	12mm thick plain chip-board ceiling board nailed to timber brandering (m/s); nails punched and puttied	500	sm	800	400,000.00
	<u>Painting and Decorations</u> <u>Prepare and apply one undercoat and three coats of first quality emulsion paint to the following surfaces</u> <u>To wood surfaces</u>				
H	Chip-board ceiling boards	500	sm	300	150,000.00
I	Moulded cornice not exceeding 100mm girth	478	lm	60	28,680.00
	<i>Carried to Collection</i>				3,566,280.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
COLLECTION				
From page BW/13				2,215,800.00
From page BW/14				3,566,280.00
TOTAL FOR FINISHES CARRIED TO SUMMARY				5,782,080.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELLITE MIXED SECONDARY SCHOOL, IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ROOFING CONSTRUCTION, COVERING AND RAIN WATER DISPOSAL</u>				
	<u>Galvanized steel IT5 box profile sheets; 28 gauge; prepainted</u>				
A	Roof covering; 150mm laps on one end and one and a half corrugation side lap; and fixing as necessary to steel purlins (m/s) on steel trusses (m/s) at 1200mm max. c/c all laid to fall at 22.50	690	sm	2200	1,518,000.00
	<u>Accessories, fixing as necessary to roof sheets</u>				
B	Standard ridge sheet	115	lm	250	28,750.00
C	Ditto valley / hip sheets	18	lm	250	4,500.00
	<u>Structural timber</u>				
	<u>Grade II presure impregnate sawn cypress in:</u>				
	<u>Framed timberwork</u>				
	<u>The following in trusses including scafed or dovetailed jointing, hoisted and fixed 3000/6000mm above ground floor slab</u>				
D	150x50mm rafter	456	lm	450	205,200.00
E	150x50mm Tie beam	380	lm	450	171,000.00
F	100x50mm Struts or ties	722	lm	450	324,900.00
G	150x50mm King post	86	lm	450	38,700.00
	<u>Unframed timber work</u>				
H	150x50mm Common rafter	192	lm	450	86,400.00
J	75x50mm Purlins	580	lm	450	261,000.00
K	220x50mm Ridge board	55	lm	200	11,000.00
L	100x50mm Wall plate fixed with and including 200mm long x 12mm diameter anchor bolts cast into beam at 1800mm centres, provide for all necessart drilling, threading, nuts and washers	130	lm	200	26,000.00
	<u>In grade II treated wrot cypress</u>				
M	225x25mm fascia or verge board	130	lm	200	26,000.00
N	25mm Thick prime grade tongued and grooved eaves or varge boarding in 100mm wide strips on and including 50x50mm sawn cypress brandaring at 600mm centres both direction	78	sm	200	15,600.00
	<i>Carried to collection</i>				2,717,050.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>RAINWATER DISPOSAL</u>				
	<u>Rain water goods</u>				
	<u>24g Galvanised mild steel sheeting; all welds ground smooth</u>				
A	150 x 100mm box gutter including soldered joints in the running length fixed to fascia board with and including brackets at approved centers	130	lm	800	104,000.00
B	Extra; for blocked ends with 75mm dia.outlet 100mm long	13	No	200	2,600.00
C	Extra; for 900 bends	13	No	200	2,600.00
D	Extra; 75mm dia.outlet 100mm long	13	No	200	2,600.00
E	75mm dia. rainwater downpipe fixed with and including mild steel straps at 900mm centres, plugged and screwed to wall	55	lm	800	44,000.00
F	Extra; swanneck bend	13	No	200	2,600.00
G	Extra; horse shoe bend	13	No	200	2,600.00
	<u>Painting and Decorations</u>				
	<u>On Woodwork</u>				
	<u>Prepare and apply one undercoat and two coats of 'CROWN SOLO' or other equal and approved super gloss oil paint to:-</u>				
H	Fascias; 200 to 300mm girth; external	130	lm	60	7,800.00
	<u>On Metal work</u>				
	<u>Prepare and apply one approved etching primer, one undercoat and two coats of 'CROWN SOLO' or other equal and approved super gloss oil paint to:-</u>				
I	General surfaces of gutters; over 300mm girth external	60	sm	300	18,000.00
	<i>Carried to collection</i>				186,800.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

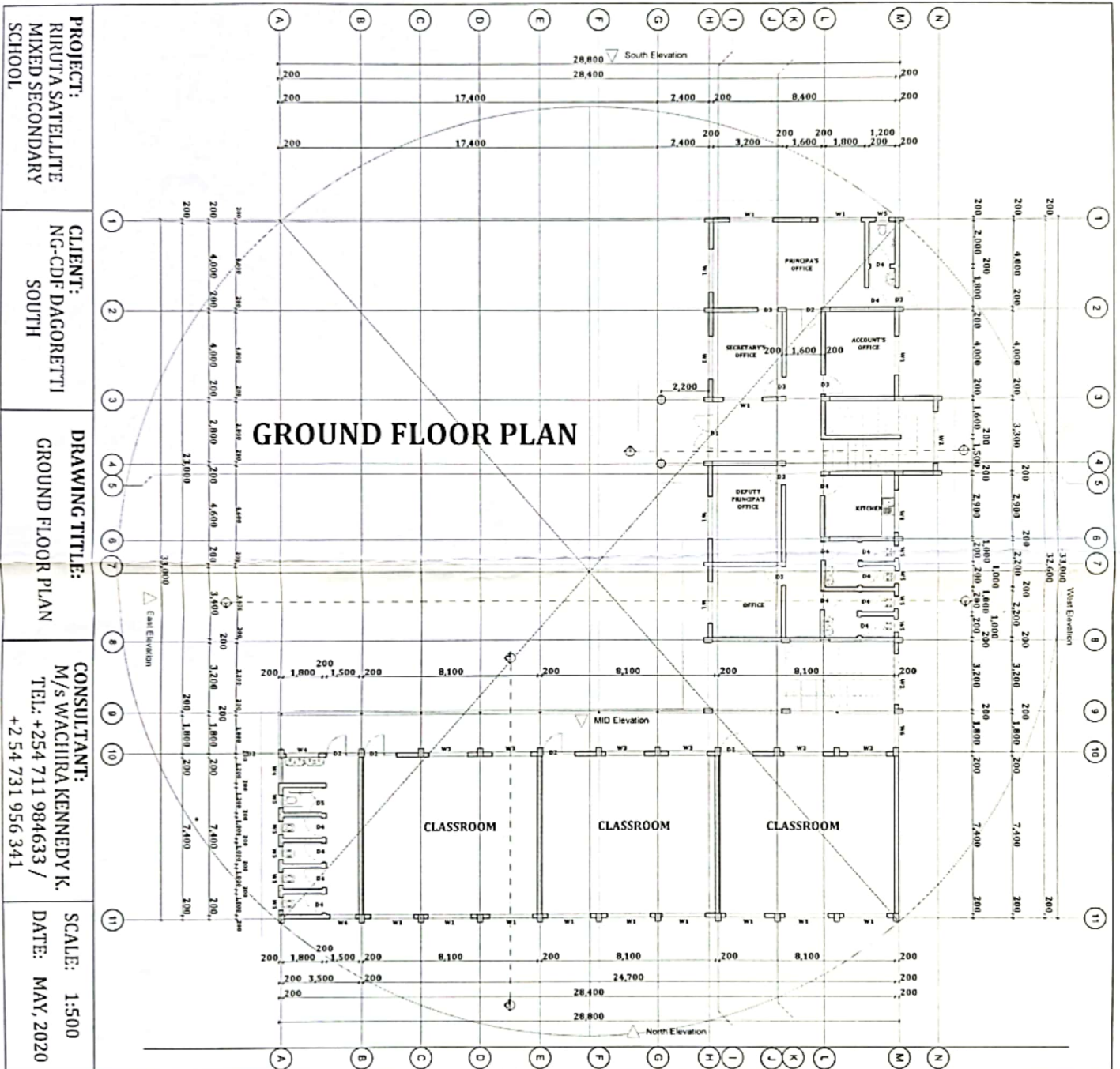
	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Tongue & Grooved Timber surfaces</u>				
	<u>Prepare and apply three coats of 'CROWN SOLO' or other equal and approved</u>				
A	Surfaces of eaves, over 300mm girth external	78	sm	300	23,400.00
	To collection				23,400.00
	<u>COLLECTION</u>				
	From page MH / 16				2,717,050.00
	From page MH / 17				186,800.00
	From Above				23,400.00
TOTAL FOR ROOFING CARRIED TO SUMMARY					2,927,250.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELLITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

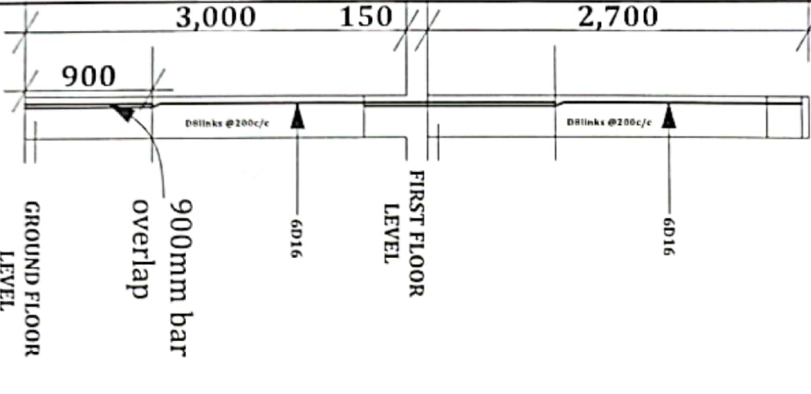
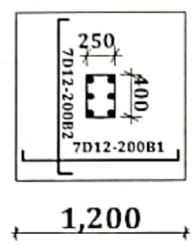
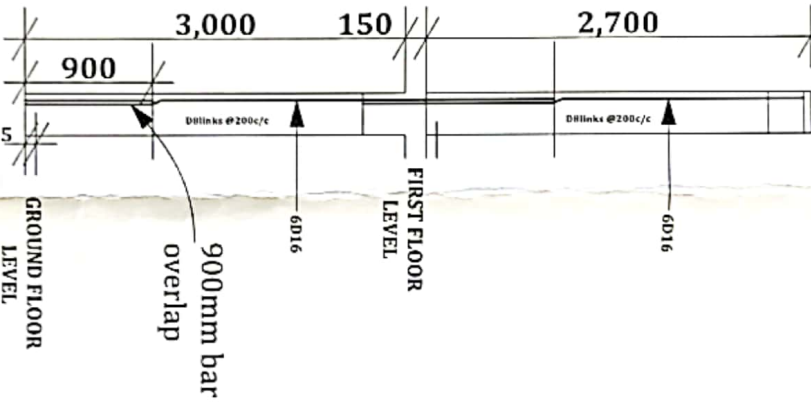
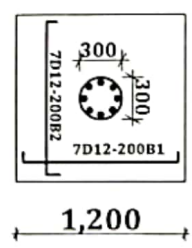
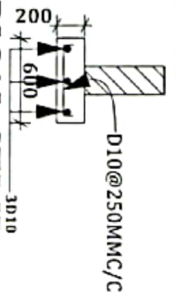
	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
SUMMARY					
ELEMENT NO.	TITLE	PAGE NO.			K.SHS.
1	SUBSTRUCTURE (ALL PROVISIONAL)		BW/4		3,838,526.00
2	R.C. SUPERSTRUCTURE		BW/6		4,678,360.00
3	EXTERNAL & INTERNAL WALLING		BW/7		2,986,700.00
4	DOORS		BW/9		1,156,300.00
5	WINDOWS		BW/12		1,276,800.00
6	FINISHES		BW/15		5,782,080.00
7	ROOFING		BW/18		2,927,250.00
TOTAL BUILDERS WORKS TO GRAND SUMMARY					22,646,016.00

PROPOSED CONSTRUCTION OF SIX CLASSROOMS, ABLUTION BLOCK AND ADMINISTRATION BLOCK FOR RIRUTA SATELITE MIXED SECONDARY SCHOOL IN DAGORETTI SOUTH CONSTITUENCY.

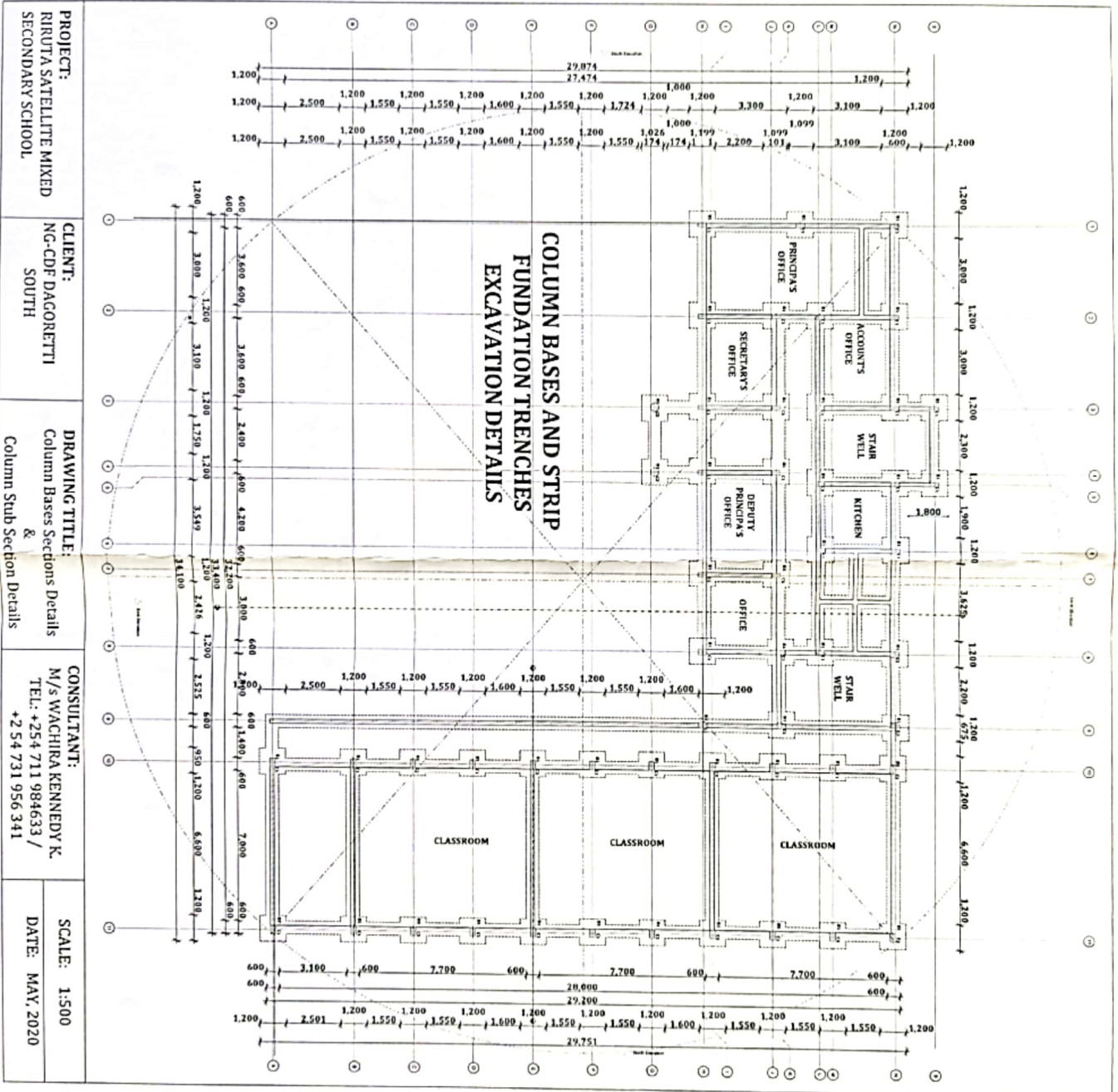
ITEM	DESCRIPTION	QTY	UNIT	RATE	K SHS
	PRIME COSTS & PROVISIONAL SUMS				
	PROVISIONAL SUMS				
	<u>The following provisional sums are to be measured on completion and priced in accordance with the rates contained in these bills of quantities or prorata thereto or deducted in whole if not required</u>				
A	Allow for Kenya Shillings Three hundred thousands (Kshs 300,000.00) only for Electrical Installations		ITEM		300,000.00
B	Allow for Kenya Shillings three hundred thousands (Kshs 300,000.00) only for Mechanical works and Installations		ITEM		300,000.00
C	Allow for Kenya Shillings Five Hundred Thousand (Kshs 500,000.00) only for Contingencies		ITEM		500,000.00
	TOTAL FOR P.C. & PROVISIONAL SUMS CARRIED TO GRAND SUMMARY				1,100,000.00



REGIONAL WORKS OFFICE
 NAIROBI REGION
 STATE DEPARTMENT OF PUBLIC WORKS
 P.O. Box 42967 - 00100 NAIROBI

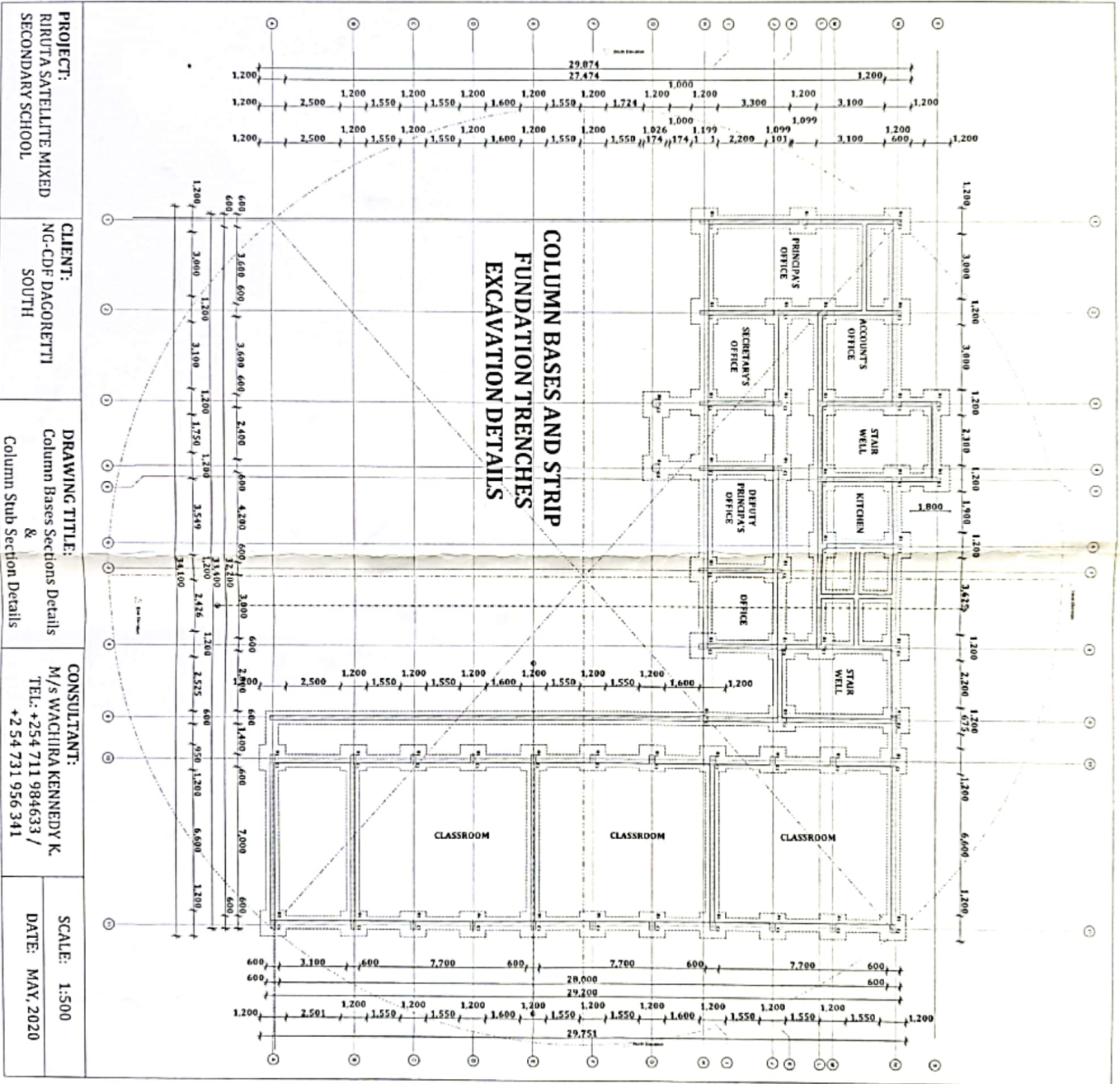
PROJECT: RIRUTA SATELLITE MIXED SECONDARY SCHOOL.	CLIENT: NG-CDF DAGORETTI SOUTH	DRAWING TITLE: Column Bases Sections Details, Column Stub Section Details & Strip Foundation Details	CONSULTANT: M/s WACHIRA KENNEDY K. TEL: +254 711 984633 / +2 54 731 956 341	SCALE: 1:500 DATE: MAY, 2020										
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>TYPICAL COLUMN (C1)</p>  <p>TYPICAL COLUMN BASE (B1)</p>  </div> <div style="width: 45%;"> <p>TYPICAL COLUMN (C2)</p>  <p>TYPICAL COLUMN BASE (B1)</p>  </div> </div> <div style="margin-top: 20px;"> <p>TYPICAL STRIP FOUNDATION</p>  </div> <div style="margin-top: 20px;"> <p>NOTES</p> <ol style="list-style-type: none"> THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND STRUCTURAL DRAWINGS. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED. COVER TO REINFORCEMENTS: <table border="0" style="margin-left: 20px;"> <tr> <td>FOUNDATIONS</td> <td>50mm</td> </tr> <tr> <td>COLUMNS</td> <td>40mm</td> </tr> <tr> <td>BEAMS</td> <td>25mm</td> </tr> <tr> <td>SLABS</td> <td>20mm</td> </tr> </table> FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING. <p>SECTION LEGENDS:</p> <ol style="list-style-type: none"> DPC BITUMINOUS FELT UNDER ALL WALLS ZBRCA142 150mm THICK SLAB 4 D P.M ON 60mm THICK MURRAM BLINDING LAYERS HARD CORE COMPACTED IN TWO EQUAL LAYERS 150mm EACH TO DEPTH NOT EXCEEDING 300mm ANY DISCREPANCY TO BE NOTED TO THE ENGINEER CONCRETE CLASS 20/20 (1:1.5:3MIX) TO BE USED BLINDING CONCRETE TO BE 1:3:6 MIX ALL TIMBER TO BE CELL CURED. ALL BLACK COTTON SOIL TO BE REMOVED FROM THE CONSTRUCTION AREA. CHARACTERISTIC STRENGTH OF STEEL <table border="0" style="margin-left: 20px;"> <tr> <td>(a) MAIN STEEL = 500N/mm²</td> </tr> <tr> <td>(b) LINKS STEEL = 500N/mm²</td> </tr> </table> </div>					FOUNDATIONS	50mm	COLUMNS	40mm	BEAMS	25mm	SLABS	20mm	(a) MAIN STEEL = 500N/mm ²	(b) LINKS STEEL = 500N/mm ²
FOUNDATIONS	50mm													
COLUMNS	40mm													
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SLABS	20mm													
(a) MAIN STEEL = 500N/mm ²														
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 THE OFFICE OF REGIONAL WORKS
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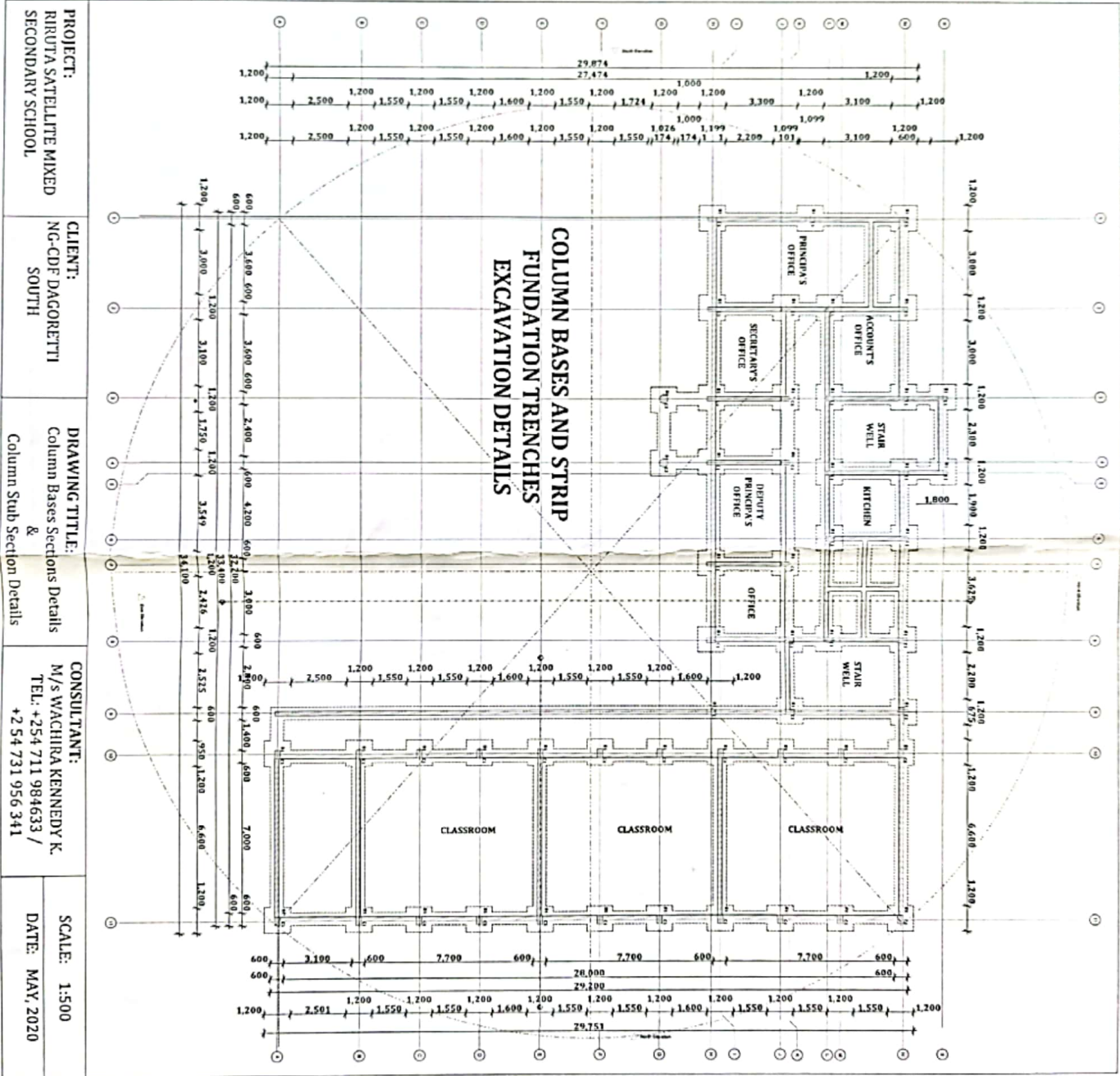
PROJECT: RIRUTA SATELLITE MIXED SECONDARY SCHOOL	CLIENT: NG-CDF DAGORETTI SOUTH	DRAWING TITLE: Column Bases Sections Details & Column Stub Section Details	CONSULTANT: M/s WACHIRA KENNEDY K. TEL: +254 711 984633 / +254 731 956 341	SCALE: 1:500
				DATE: MAY, 2020

REGIONAL WORKS OFFICE
Nairobi Region
STATE DEPARTMENT OF ROAD WORKS
P.O. Box 42377 - Nairobi, Kenya



PROJECT: RIRUTA SATELLITE MIXED SECONDARY SCHOOL	CLIENT: NC-GDF DACORETTI SOUTH	DRAWING TITLE: Column Bases Sections Details & Column Strip Section Details	CONSULTANT: M/S WACHIRA KENNEDY K TEL: +254 711 984633 / +254 731 956 341	SCALE: 1:500
				DATE: MAY, 2020

REGIONAL WORKS OFFICER
MARIKONI REGION
STATE DEPARTMENT OF PUBLIC WORKS
P.O. BOX 47877 - 00100 NAIROBI



Approved: WAGHIRA KENNEDY K.
 MARCH 2021
 CIVIL ENGINEER
 P.O. Box 27-07-070 (Nairobi)