



**NAROK COUNTY GOVERNMENT  
RESERVED FOR WOMEN**

**STRATEGIC INTEGRATED WARD DEVELOPMENT PROGRAMME  
FOR NAROK COUNTY.  
PROPOSED CONSTRUCTION OF LIVESTOCK SALE YARD AND  
MODERN TOILETS (LOT 38)**

**TENDER NO: NCG/OT/043/2022-2023**

**TENDER CLOSING DATE 18-01-2023 AT 11:00 AM**

**DEPARTMENT OF AGRICULTURE, FISHERIES  
AND LIVESTOCK  
NAROK COUNTY  
GOVERNMENT, P.O. BOX 898–  
20500, NAROK.**

**THE GOVERNOR,  
NAROK COUNTY  
GOVERNMENT, P.O. BOX 898–  
20500, NAROK.**

**Lot 1 SITES**

**Lot 38: Comprise of the following-.**

**BILLS OF QUANTITIES FOR: PROPOSED  
CONSTRUCTION OF LIVESTOCK SALE YARD  
AND  
MODERN TOILETS (LOT 38)**

**TENDER NO: NCG/OT/043/2022-  
2023**

## PREAMBLES AND PRICING NOTES

### **A. GENERALLY**

All work to be carried out in accordance with the Ministry of Public Works General Specifications for Building Works issued in 1976 or as qualified or amended below.

### **B. MANUFACTURERS' NAMES**

Where manufacturers' names and catalogue references are given for guidance to quality and standard only. Alternative manufacturer of equal quality will be accepted at the discretion of the Project Manager.

### **C. WALLING**

All precast concrete blocks shall be manufactured by the methods and to the sizes specified in the Ministry of Public Works "Specification for Metric Sized Concrete Blocks for Building (1972)"

Walling of 100 mm thickness or under shall be reinforced with hoop iron every alternate course.

Prices for walling must allow for all costs in preparing, packing and sending sample blocks for testing as and when required by the Project Manager.

### **D. CARPENTRY**

The grading rules for cypress shall be the same for podocarpus and all timber used for structural work shall be select (second grade).

All structural timber must conform to the minimum requirements for moisture content and preservative treatment and timber prices must allow for preparing, packing and sending samples for testing when required.

Prices must also include for all nails and fasteners.

### **A. JOINERY**

Cypress for joinery shall be second grade in accordance with the latest grading rules of the Kenya Government.

Where Mahogany is specified, this refers to prime grade only. The Contractor may with the approval of the Project Manager; use either Msharagi or Mvuli in lieu of Mahogany but such approval will be given only in the case of shortages of the hardwoods specified.

Plugging shall be carried out by drilling walling or concrete with masonry drill and filling with propriety plugs of the correct sizes. Cutting with hammer and chisel will not be allowed.

Prices for joinery must include for pencil rounded arises, protection against damage, nails, screws, framing and bedding in cement mortar as required.

Sizes given for joinery items are nominal sizes and exact dimensions of doors, etc, must be ascertained on site.

## **B. IRONMONGERY**

Ironmongery shall be specified in the Bills of Quantities or equal and approved.

Prices must include for removing and re-fixing during and after painting, labeling all keys, and for fixing to hardwood, softwood, concrete or blockwork.

Catalogue references given for ironmongery are for purposes of indicating quality and size of item(s). Should the Contractor wish to substitute the specified item(s) with others of equal manufacture, he must inform the Project Manager and obtain approval in writing.

## **C. STRUCTURAL STEELWORK**

All structural steelwork shall comply with the Ministry of Public Works "Structural Steelwork Specification (1973) and shall be executed by an approved Sub-contractor.

## **A. PLASTERWORK AND OTHER FINISHES**

All finishings shall be as described in the general specifications and in these Bills of Quantities.

Prices for pavings are to include for brushing concrete clean, wetting and coating with cement and sand grout 1:1.

Rates for glazed wall tiling are to include for a 12 mm cement and sand (1:4) backing screed unless otherwise specified in these Bills of Quantities.

## **B. GLAZING**

Where polished plate glass is specified, this refers to general glazing quality.

Prices for glazing shall include for priming of rebates before placing putty.

The Contractor will be responsible for replacing any broken or scratched glass and handing over in perfect condition.

## **C. PAINTING**

Painting shall be applied in accordance with the manufacturers' instructions.

Prices for painting are to include for scaffolding, preparatory work, priming coats, protection of other works and for cleaning up on completion. Prices for painting on galvanized metal are to include for mordant solution as necessary.

DESCRIPTION	AMOUNT
<p><b>PRICING ITEMS OF PRELIMINARIES</b> 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.</p> <p><b>DESCRIPTION OF THE WORKS</b> The works consist of Ward based development projects as stated in the introduction.</p> <p><b>SCOPE OF WORKS</b> The works to be carried out under this contract comprises builder's work and associated civil works</p> <p><b>MEASUREMENTS</b> 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 MANAGER . The discrepancies shall then be treated as a variation and be dealt with in accordance with the Conditions of Contract..</p> <p><b>LOCATION OF SITE</b> The site of the proposed works is at the various wards within Narok County The Contractor is advised to visit the site, to familiarize with the nature and position of the site. Claims arising from the Contractor’s failure to do so will NOT be entertained.</p> <p><b>PAYMENTS</b> The Tenderers’ attention is drawn to the fact that the GOVERNMENT OF KENYA MAKES NO ADVANCE PAYMENTS, pays for work done and materials delivered to site: all in accordance with the Conditions of Contract agreement. In order to facilitate this, a list of the general component elements for the works is given in the summary page of these specifications and the Tenderer is requested to break down his tender sum commensurate to the said elements</p> <p><b>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</b> 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 instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of normal activities being carried out by the Client. The Contractor shall allow in his rates any expense he deems necessary by taking such care within the site.</p> <p><b>WORKING CONDITIONS</b> The Contractor shall allow in his rates for any interference that he may encounter in the course of execution 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 residents will be occupying the premises as usual during the course of the contract.</p>	
<b>Carried to collection</b>	

DESCRIPTION	AMOUNT
<p><b>SIGNBOARD</b> 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> <p><b>LABOUR CAMPS</b> 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> <p><b>CLAIMS</b> 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 claim or intent to claim notice to the PROJECT MANAGER within the contract period. No claims shall be entertained upon the expiry of the said contract period.</p> <p><b>MATERIALS FROM DEMOLITIONS</b> Any materials arising from demolitions and not re-used shall become the property of the Narok County Government.</p> <p><b>PRICING RATES</b> 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 Conditions of Contract.</p> <p><b>BID SECURITY</b> The tenderer shall furnish, as part of his bid, a bid security in the sum prescribed. The bid security shall, at the tenderer's option be in the form of a certified Cheque, Bank draft, stand by Letter of Credit or Guarantee from an approved bank/insurance co. located in Kenya or a foreign bank that has been determined to be acceptable to the government of Kenya. The format of the bank guarantee shall be in accordance with one of the sample forms of bid security included in the post qualification. Other formats may be permitted subject to prior approval of the government Letters of Credit, bank guarantee issued, as security for bid shall be valid for 30 days beyond the validity of the bid.</p> <p><b>URGENCY OF THE WORKS</b> The Contractor is notified that these "Works are Urgent" and should be completed within the period state in these Particular Preliminaries. The Contractor shall allow in his rates for any costs he deems that he/she may incur by having to complete the works within the stipulated contract period.</p> <p><b>PAYMENT FOR MATERIALS ON SITE</b> 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>	
<b>Carried to collection</b>	



DESCRIPTION	AMOUNT
<p><u>Collection</u></p> <p><i>Brought forward from P.P/1</i></p> <p><i>Brought forward from P.P/2</i></p> <p><i>Brought forward from P.P/3</i></p>	
<b>TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO THE MAIN SUMMARY</b>	



ITEM	DESCRIPTION	AMOUNT
	<p style="text-align: center;"><b>GENERAL PRELIMINARIES</b></p> <p><b>A PRICING OF ITEMS OF PRELIMINARIES AND PREAMBLES</b></p> <p><b>Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.</b></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>B ABBREVIATIONS</b></p> <p>Throughout these Bills, units of measurement and terms are abbreviated and shall be interpreted as follows:-</p> <p>C.M. Shall mean cubic metre</p> <p>S.M. Shall mean square metre</p> <p>L.M. Shall mean linear metre</p> <p>MM Shall mean Millimetre</p> <p>Kg. Shall mean Kilogramme</p> <p>No. Shall mean Number</p> <p>Prs. Shall mean Pairs</p> <p>B.S. Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England.</p> <p>Ditto Shall mean the whole of the preceding description except as qualified in the description in which it occurs.</p> <p>m.s. Shall mean measured separately.</p> <p>a.b.d Shall mean as before described.</p>	
	Carried to collection	

ITEM	DESCRIPTION	AMOUNT
A.	<p><b>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</b></p> <p><i>Attendance</i> ; Clause B19(a) 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, 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 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>	
B	<p><b>EMPLOYER</b></p> <p>The term "Employer" and "Narok County Government" wherever used in the contract document shall be synonymous</p>	
C	<p><b>PROJECT MANAGER</b></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. In this project the PM is the Director -Department of Public Works - Narok County. P.O. Box 898-20500 NAROK</p>	
D	<p><b>ARCHITECT</b></p> <p>The term "Architect" shall be deemed to mean "The Project Architect." whose address unless otherwise notified is the Department of Public Works -Narok County P.O. Box 898-20500 NAROK</p>	
E	<p><b>QUANTITY SURVEYOR</b></p> <p>The term "Quantity Surveyor" shall be deemed to mean "The Project Quantity Surveyor" whose address unless otherwise notified is Department of Public works -Narok County P.O. Box 898-20500, NAROK.</p>	
F	<p><b>ELECTRICAL ENGINEER</b></p> <p>The term "Electrical Engineer" shall be deemed to mean "The Project Electrical Engineer." whose address unless otherwise notified is Department of Public works -Narok County P.O. Box 898-20500, NAROK.</p>	
G	<p><b>MECHANICAL ENGINEER</b></p> <p>The term "Mechanical Engineer" shall be deemed to mean "The Project Mechanical Engineer" whose address unless otherwise notified is Department of Public Works -Narok County P.O. Box 898-20500, NAROK.</p>	
	Carried to collection	

ITEM	DESCRIPTION	AMOUNT
A	<p><b>STRUCTURAL ENGINEER</b>            Engineer."            whose address unless otherwise notified is Department of Public works -Narok County            P.O. Box 898-20500, NAROK.</p>	
B	<p><b>FORM OF CONTRACT</b>            The Form of Contract shall be as stipulated in the Conditions of Contract            The Conditions of Contract are also included herein</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>	
C	<p><b>OCCUPATIONAL HEALTH AND SAFETY</b></p> <p>Allow a Sum for Occupational health and safety measures.</p>	
D	<p><b>PLANT, TOOLS AND VEHICLES</b></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>	
E	<p><b>TRANSPORT.</b></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>	
F	<p><b>MATERIALS AND WORKMANSHIP.</b></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 order materials to be obtained from local sources as early as necessary to ensure that 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>	
G	<p><b>SIGN FOR MATERIALS SUPPLIED.</b></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>	
H	<p><b>STORAGE OF MATERIALS</b></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>	
	Carried to collection	

ITEM	DESCRIPTION	AMOUNT
	<p><b><u>COLLECTION</u></b></p> <p><i>Brought forward from G.P/1</i></p> <p><i>Brought forward from G.P/2</i></p> <p><i>Brought forward from G.P/3</i></p>	
	<b>TOTAL FOR GENERAL PRELIMINARIES CARRIED TO THE MAIN SUMMARY</b>	

### 3 NO LIVESTOCK SALE YARDS

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
A	<u>BILL NO.1</u>  PARTICULAR PRELIMINARIES				
B	<u>BILL NO.2</u>  GENERAL PRELIMINARIES				
	TOTAL FOR PRELIMINARIES				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<b><u>BILL NO.3-HOLDING YARD</u></b>				
	<u>Fencing</u>				
	<u>Site clearance</u>				
A	Clear site of grass and shrubs preserve trees on site and burn up arisings.	15350	SM		
B	Construct using salvaged materials temporary livestock market to be used by traders	411	Lm		
	<u>Excavation</u>				
C	Excavate pits size 400 x 400 x 750mm deep starting from ground level.	42	Cm		
	<u>Disposal</u>				
D	Load, wheel and spread on site excavated material as directed by the Project Manager.	42	Cm		
	<u>The following in 1800mm high railing comprising 75 x 75 x 4mm SHS mild steel posts set into concrete surround and 50 x 50 x 4mm SHS mild steel rails welded to vertical posts and primed ready for painting to Project Managers Approval</u>				
	<u>In situ concrete: (mix 1:2:4/20) in:-</u>				
E	Post footings.	42	Cm		
	<u>Posts</u>				
F	2000mm high lugged on one end and firmly set into concrete surround (m.s) at 2000mm centre to centre; 75x75x3mm SHS	350	No		
	<u>Rails</u>				
G	50 x 50 x 3mm Thick rails welded to SHS mild steel posts (m/s)	3869	Lm		
	<u>Gates</u>				
H	Supply and install 50 x 50 x 3mm thick SHS mild steel gates closing members permanently secured to posts (m.s) with approved heavy duty anti-theft chain as directed by the Project Manager	26	No		
	Total carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>Mass concrete (1:2:4) permanent safety seal to:</u>				
A	Top of hollow mild steel posts (m.s)	350	No		
B	Ends of hollow mild steel railings (m.s)	280	No		
C	Ends of hollow mild steel gate closing members	180	No		
	<u>Painting and decorating</u>				
	<u>Apply one under and two finishing coats of gloss oil paint on:</u>				
D	Metal surfaces 200-300mm girth	4394	Lm		
	<u>Loading Ramp and other civil works</u>				
	<u>Earthworks</u>				
E	Excavate oversite to remove vegetable soil average 200mm deep and cart away	16	Sm		
F	Ditto foundation trench not exceeding 1.5m deep starting from existing ground level	13	Cm		
	<u>Concrete works</u>				
G	50mm Thick concrete 1:4:8 blinding under foundations	13	Sm		
H	Mass concrete 1:2:4 in foundations	3	Cm		
	<u>Walling</u>				
I	200mm Thick stone foundation walling bedded and jointed in cement and sand (1:3) mortar and reinforced with 500g hoop iron	29	Sm		
	<u>Filling to make up levels</u>				
J	Natural stone hardcore, hand-packed, watered and compacted in layers in ramp and high traffic areas	328	Cm		
K	50mm Thick compacted murrum blinding on hardcore surface	16	Sm		
	Total carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
A	<u>Insecticide treatment</u> <u>Premise SC or other equal and approved</u> <u>termiticide 0.5% solution to be applied at the rate</u> <u>of 4 litres per square metre on top of blinded</u> <u>hardcore surface and top of foundation walls</u> To blinded surface and top of foundations	16	Sm		
B	<u>Damp-proof membrane</u> <u>1000 Gauge polythene; 150mm laps; no</u> <u>allowances made for laps</u> Horizontal; over 300mm wide	16	SM		
C	<u>Slab</u> <u>Insitu reinforced concrete: (mix 1:1½ :3) grade 25</u> <u>(20mm aggregate): vibrated in:</u> 150mm Thick sloping slab finished with textured surface	16	SM		
D	<u>Sawn timber formwork to:</u> Vertical sides of slab 75-150mm high	21	LM		
E	<u>Mesh fabric reinforcement</u> BRC Fabric mesh reinforcement Ref. A142; weighing 2.22kg per square metre(measured net no allowances made for laps) including bends tying wire and distance blocks.	16	SM		
F	<u>Plinth</u> 15mm Thick cement sand (1:4) rendering to plinth; wood float finish	18	SM		
G	Prepare and apply three coats of premium quality bituminous paint to rendered walls; externally	18	SM		
H	Car tyres buffer to loading ramp		Item		
	Total carried to summary				



ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
A	<p><u>Pit Latrine</u></p> <p>Provide all materials and construct 2-Door pit latrine comprising the following;  1000x1000x20,000mm deep hole including all excavations in rock and dosposals, 150 mm thick vibrated reinforced concrete slab, reinforced with BRC A142 mesh, walls in 200mm thick natural stone and roof cover in 28gauge corrugated Iron sheets, all finished with external keying, internal plaster and paint and 2No. match boarded doors and frames including furniture and locking accessories to detail provided and approval of the project manager.</p>	1	NO		
B	Ditto but 3door pit latrine	1	NO		
	Total carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u><b>SUMMARY</b></u>				
1	TOTAL FROM PAGE HY/1				
2	TOTAL FROM PAGE HY/2				
3	TOTAL FROM PAGE HY/3				
4	TOTAL FROM PAGE HY/4				
	Total for Holding Yard carried to grand summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>BILL NO.4-VETERINAY OFFICE BLOCK</u> <u>ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES</u>				
	<u>(All provisional)</u>				
A	Clear site of all grass and small trees not exceeding 600mm girth and cart away or burn arisings.	90	Sm		
B	Excavate oversite to remove vegetable soil average 200mm deep, cart away and spread on site as directed.	80	Sm		
C	Excavate for foundation trenches starting from stripped level but not exceeding 1.5m deep.	31	Cm		
D	Extra over all kinds of excavation for excavating rock irrespective of class.	7	Cm		
E	Allow for keeping excavations free from all water by pumping or otherwise.	1	Item		
F	Excavations.	1	Item		
	<u>Disposals</u>				
G	Return fill and ram selected excavated material around foundations.	19	Cm		
H	Excavated material and deposit in approved dumping area.	20	Cm		
	<u>50 mm plain concrete (1:4:8 - class 15/20mm) blinding under:</u>				
I	Strip footing.	31	Sm		
	<u>In situ concrete mix(1:1½:3) grade 25 (20mm aggregate): vibrated: reinforced in:-</u>				
J	Strip Foundation	6	Cm		
	Total to collection page				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO. 1 CONT'D</u>				
A	Ground floor slab 150mm thick	80	Sm		
	<u>Reinforcement (All Provisional)</u>				
	<u>High tensile square twisted bars BS 4461 as described in :</u>				
B	8mm Diameter bars	90	Kgs		
C	12mm Ditto	468	Kg		
D	BRC Fabric mesh Ref. A142	80	Sm		
	<u>Anti-termite treatment</u>				
	<u>Premise SC or other equal and approved termiticide 0.5% solution to be applied at the rate of 4 litres per square metre on top of blinded hardcore surface and top of foundation walls</u>				
E	To quarry dust surface and top of foundations	80	Sm		
	<u>Water proofing</u>				
	<u>Polythene Damp Proof Course</u>				
F	500 Gauge damp proof membrane with 300mm minimum laps	80	Sm		
	<u>SUBWALL</u>				
	<u>Natural Quarry Stone walling reinforced with 26G iron hoop in every alternate courses bedded and jointed in cement and sand mortar mix (1:3)</u>				
G	200mm Thick	62	Sm		
	<u>Imported Filling</u>				
H	300mm Thick approved handpacked hardcore filling to make up levels compacted in 150mm thick layer	80	Sm		
I	50mm murrum blinding to hardcore surface	80	Sm		
Total to collection page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	ELEMENT NO. 1 CONT'D				
	<u>Cement and sand (1:4) rendering</u>				
A	12mm thick cement and sand render mix 1:4 to plinth surfaces	39	Sm		
B	Prepare and apply three coats of black butimastic paint to rendered surfaces.	39	Sm		
	<u>Paving Slabs</u>				
C	Excavate, compact ground and lay 600x600x50mm thick precast concrete paving slabs on murrum bed including jointing and pointing in cement sand mortar mix (1:4)	47	Sm		
	Total to Collection				
	<u>COLLECTION</u>				
	Brought forward from page VO/1				
	Brought forward from page VO/2				
	Brought forward from above				
	Total for substructures carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO. 2</u> <u>RC SUPERSTRUCTURE</u>				
	<u>In situ concrete mix(1:1½:3) grade 25 (20mm aggregate): vibrated: reinforced in:-</u>				
A	Beams  <u>High yield square twisted bar reinforcement to B.S. 4461</u>	4	Cm		
B	8mm Diameter bars	146	Kg		
C	12mm Ditto	190	Kg		
	<u>Sawn formwork: to</u>				
D	Sides of beams	31	Sm		
E	Soffites of beams	4	Sm		
	Total for RC superstructures carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO.3</u> <u>WALING</u>  <u>NATURAL STONE WALLING</u>  <u>Approved natural stone; machine-cut; bedded and jointed in cement and sand (1:3) mortar</u>				
A	200mm Thick external walling reinforced with and including 20sqx25mm wide hoop iron in every alternate course	70	Sm		
B	Ditto internally	35	Sm		
	<u>Sundries</u>				
C	Fair raking cutting to top of 100mm thick natural stone wall	29	Lm		
D	Labour and materials in eaves filling with 200 mm thick natural stone laid and jointed in cement mortar (1:4) to eaves 150mm high	34	Lm		
	<u>Bituminous or other equal approved damp-proof course; 3 ply membrane</u>				
E	200mm wide	39	Lm		
	Total for walling carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO. 4</u>				
	<u>ROOF AND RAINWATER DISPOSAL TRUSSES</u> <u>(All Provisional)</u>				
	<u>The following in 7No. nailed cel-cured timber trusses spanning 4700mm including hoisting and placing 3000mm above ground floor level</u>				
A	150 x 50mm Rafters	86	Lm		
B	Ditto tie beam/ceiling joists	66	Lm		
C	100 x 50mm Struts and ties	54	Lm		
D	Ditto king post	20	Lm		
E	Ditto purlins	180	Lm		
F	225 x 25mm Wrot cypress facia board/verge board	46	Lm		
	<u>Covering</u>				
	<u>IT5 box profile roof covering</u> <u>26g prepainted iron roofing sheets laid and fixed to timber purlins (m/s) with approved screw nails with and including heavy duty rubber caps with matching</u>				
G	Roof covering	104	Sm		
H	Angled ridge cap	13	Lm		
	<u>RAIN WATER DISPOSAL</u> <u>The following in 24g mild steel sheeting</u>				
I	200 x 200 x 150mm box profile gutter including soldered joints in the running including approved 6mm thick metal brackets welded at 600mm centre to centre to purlins.	36	Lm		
J	Ditto elbow	4	No		
	Carried to collection page				



ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO. 4 Cont'd</u>				
A	Extra over ditto for stoppred ends	4	No		
B	Ditto horse shoe	4	No		
C	Ditto for 100mm diameter nozzle outlet	4	No		
D	100mm Diameter downpipe clipped to masonry/concrete	14	Lm		
E	Extra over ditto for swan neck	4	No		
	<u>Painting and Decoration</u>				
	<u>Prepare surfaces, knot, prime and stop and apply one undercoat and two finishing coats of first quality gloss oil paint to:</u>				
F	Timber surfaces 200-300mm girth	46	Lm		
G	Prepare and apply 2No. Metal primer 1No. Finishing coats of gloss paint to metal surfaces	20	Sm		
	Total Carried to Collection				
	<u>COLLECTION</u>				
	Brought forward from VO/6				
	Brought forward from above				
	Total for roofing and rainwater disposal carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO. 5</u> <u>DOORS</u> <u>Steel doors</u> <u>Fabricate, deliver and install the following purpose made steel casement doors (to Architect detail) to comply to B.S 990, obtained from approved manufacturer , primed with redoxide primer before delivery to site, complete with hinges, handles, catches and to include 300mm high louvered top vent covered with mosquito gauze wire reinforced with coffee tray wire.</u>				
A	Ditto 900 x 2400mm high	4	No		
	<u>Prepare and apply one undercoat and two finishing coats of first quality oil paint as described to:-</u>				
B	General surfaces of metal doors	18	Sm		
	Total for doors carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO.6</u>				
	<u>WINDOWS</u>				
	<u>Precast concrete units; mix 1:1.5:3 (12mm aggregates)</u>				
	<u>Vibrated; reinforced with 2No. 8mm</u>				
A	150x50mm cill; weathered, throated and grooved for water bar (m/s)	12	Lm		
	<u>Sundries</u>				
B	Form 20x20mm thick vertical groove in concrete or blockwork for water bar	12	Lm		
C	50x2mm PVC water bar to approval; set in groove	12	Lm		
	<u>Steel casement windows</u>				
	<u>Supply and fix standard composite section steel casement windows fabricated in 4mm thick Z and angle sections from an approved steel manufacturer with brass handles, stays and steel hinges; permanent vents along top full lengths; fixed with lugs built into concrete or blockwork; pointed externally in mastic oil and finished with one coat calcium plumbate</u>				
D	<u>Window size 1500x1500mm overall</u>	8	No		
	<u>Metal Grilles</u>				
	<u>Grilles comprising 8mm diameter square twisted bars spaced vertically and horizontally at 150mm centre with top, bottom and sides welded to 25x6mm thick metal flat fixed to masonry/concrete in cement and sand (1:4) mortar:-</u>				
E	Metal grilles as per Architects drawings	18	Sm		
	<u>Prepare and apply one undercoat and two finishing coats of first quality oil paint as described to:-</u>				
F	General surfaces of metal casements	36	Sm		
G	General surfaces of grilles	36	Sm		
	Total for windows carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO.7</u> <u>FINISHES</u>				
	<u>Floor finishes</u>				
	<u>Screed; cement and sand; finished smooth and hard with cement grout</u>				
A	25mm Thick	80	Sm		
	<u>Wall finishes</u>				
	<u>12mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to:-</u>				
B	Walls internally including beams	140	Sm		
	<u>12mm Thick cement and sand (1:4) render to:-</u>				
C	Walls externally including beams	15	Sm		
	<u>Recess horizontal and flush vertical key pointing in cement and sand (1:4) mortar to:-</u>				
D	Walls externally	80	Sm		
	<u>Ceiling Finishes</u>				
E	12m thick, celotex ceiling finish on timber bandering at 600mm centres (m/s)	70	Sm		
F	50x50mm sawn celcured cypress bandering at 600mm centres	245	Lm		
G	75x25mm wrot cypress moulded cornice plugged	85	Lm		
	<u>Painting and decoaration</u>				
	<u>Prepare and apply three coats PVA based premium quality silk vinyl emulsion paint or other equal and approved to:-</u>				
G	Plastered wall surfaces and ceiling internally	210	Sm		
	<u>Prepare and apply three coats first quality emulsion paint to:-</u>				
H	Rendered surfaces externally	15	Sm		
	Total for Finishes carried to summary				

**ELECTRICAL WORKS.**

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
	<b>Supply, install, test and commission the following</b>				
	<b><u>LIGHTING POINTS</u></b>				
A	Lighting points wired in 3x1.5mm <sup>2</sup> SC CU cables in concealed 20mm diameter HG P.V.C conduits for :-				
	a) one way switching	NO	11		
	<b><u>SWITCHES</u></b>				
B	10Amps, switch plate as MK RANGE or equal and approved equivalent as				
	a) one gang one way	NO	4		
	b) two gang one way	NO	1		
	<b><u>LIGHTING FITTINGS</u></b>				
C	Lighting fittings complete with bulbs or tubes as follows:-				
	a) 1200mm, 1X36Watts flourescent fitting bare battens as PHILLIPS or approved equivalent	NO	5		
	b) 100A bulkhead fitting as THORN or approved equivalent	NO	6		
	<b><u>SOCKET OUTLETS/POWER POINTS</u></b>				
D	13Amps socket outlet points wired in 3x2.5mm sq. single core PVC CU. Cables drawn in concealed 20mm HG PVC conduits.	NO	4		
E	13Amps moulded plate twin switched socket outlet as CLIPSAL or approved equivalent	NO	4		
	<b>Total to collection</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
<b><u>POWER DISTRIBUTION</u></b>					
A	4-way consumer unit wall mounted as HAVELLS or approved equivalent c/w 100A SPN integral switch.	NO	2		
B	Single pole miniature circuit breaker as HAVELLS or approved equivalent of the following rating:- a) 6A b) 16A	NO NO	3 3		
C	3x10.0mm PVC single copper cables drawn in 32mm HG PVC conduit concealed from distribution board to consumer unit.	M	14		
D	Electrical earthing comprising 16.0mm <sup>2</sup> single-Core copper cables drawn inside HG conduits, 1500mm by 15mm diameter copper electrode with clamp and a pre-cast concrete inspection pit with cover.	ITEM	1		
E	Single meter tariff pre-fabricated meter box complete with 63A double pole integral switches as ABB or approved equivalent	item	1		
<b><i>Total to collection</i></b>					
<b><u>COLLECTION</u></b>					
A	Collection from page VO/11				
B	Collection from Above				
<b><i>TOTAL TO SUMMARY FOR ELECTRICAL WORKS</i></b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
<b><u>SUMMARY</u></b>					
1	Substructures from VO/3				
2	RC superstructures from VO/4				
3	Walling from VO/5				
4	Roof construction from VO/7				
5	Doors from VO/8				
6	Windows from VO/9				
7	Finishes VO/10				
8	Electrical works VO/12				
Total for Veterinary Office Block carried to grand summary					

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>BILL NO.5-STALLS</u> <u>ELEMENT NO.1</u> <u>SUBSTRUCTURES (All Provisional)</u>				
A	Clear the site of all grass and small trees not exceeding 600mm girth and cart away or burn up arisings	120	Sm		
B	Excavate oversite to remove vegetable soilt average 200mm deep, cart away and spread on site as directed	120	Sm		
C	Excavate for foundation trenches starting from stripped level but not exceding 1.5m deep	52	Cm		
D	Ditto but column bases.	5	Cm		
E	Exta over excavations for excavating rock irrespective of class.	11	Cm		
F	Allow for keeping excavations free from all water by pumping or otherwise.		Item		
G	Ditto; for plunking and strutting to sides of		Item		
	<u>Disposals</u>				
H	Return, fill in and ram selected excavated materials around foundations.	34	Cm		
J	Load, wheel and cart away from site surplus excavated materials and deposit in approved dumping.	23	Cm		
	<u>50mm plain concrete (1:4:8- class 15/20mm) blinding under:</u>				
K	Strip footing	44	sm		
L	Column bases	4	sm		
	<u>insitu concrete mix (1:1½:3) grade 25 (20mm aggregate): vibrated: reinforced in:-</u>				
M	Strip foundation	9	Cm		
N	Column bases and columns	1	Cm		
P	Ground floor slab 150mm thick	77	Sm		
	<u>Reinforced ( All provisional)</u> <u>Ribbed bars as described in :</u>				
Q	8mm ditto	195	Kgs		
R	10mm ditto	380	Kgs		
S	12mm ditto	425	Kgs		
T	BRC Fabric mesh Ref A142	77	sm		
<b>Total to collection page</b>					



ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>Sawn form work to:</u>				
A	Sides of strip foundation	29	Sm		
B	Sides of column bases and columns	8	Sm		
C	Edges of slab; 150-25mm	45	Lm		
	<u>Anti-termite treatment</u>				
	<u>Premise SC or other equal and approved termiticide 0.5% solution to be applied at the rate of 4 litres per square metre on top of blinded hardcore surface and top of foundation walls</u>				
D	To quarry dust surface and top of foundations	77	Sm		
	<u>Polythene Damp Proof Course</u>				
E	500 Gauge damp proof membrane with 300mm minimum laps	77	Sm		
	<u>Natural Quarry Stone walling reinforced with 26G iron hoop in every alternate courses bedded and jointed in cement and sand mortar mix (1:3)</u>				
F	200mm Thick	80	Sm		
	<u>Imported Filling</u>				
G	300mm Thick approved handpacked hardcore filling to make up levels compacted in 150mm thick layers	77	Sm		
H	50mm murrum blinding to hardcore surface	77	Sm		
	<u>Cement and sand (1:4) rendering</u>				
J	12mm thick cement and sand render mix 1:4 to plinth surfaces	13	Sm		
K	Prepare and apply three coats of black butimastic paint to rendered surfaces.	13	Sm		
	<u>Paving Slabs</u>				
L	Excavate, compact ground and lay 600x600x50mm thick precast concrete paving slabs on murrum bed including jointing and pointing in cement sand mortar mix (1:4)	53	Sm		
	<b>Total to Collection</b>				
	<u>COLLECTION</u>				
	Brought forward from page S/1				
	Brought forward from page above				
	<b>Total for substructures carried to summary</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO. 2</u> <u>RC SUPERSTRUCTURE</u>				
	<u>In situ concrete mix(1:1½:3) grade 25 (20mm aggregate): vibrated: reinforced in:-</u>				
A	Beams  <u>Ribbed bar reinforcement to</u>	3	Cm		
B	8mm Diameter bars	60	Kg		
C	12mm Ditto	240	Kg		
	<u>Sawn formwork: to</u>				
D	Soffites of beams	26	Sm		
<b>Total for RC superstructures carried to summary</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO.3</u> <u>WALLING</u>				
	<u>NATURAL STONE WALLING</u>				
	<u>Approved natural stone; machine-cut; bedded and jointed in cement and sand (1:3) mortar</u>				
A	200mm Thick external walling reinforced with and including 20swqx25mm wide hoop iron in every alternate course	28	Sm		
B	Ditto in gables	21	Sm		
C	Ditto: but internally	48	Sm		
D	Ditto in gables internally	22	Sm		
	<u>Sundries</u>				
E	Fair raking cutting to top of 100mm thick natural stone wall	19	Lm		
F	Labour and materials in eaves filling with 200 mm thick natural stone laid and jointed in cement mortar (1:4) to eaves 150mm high	15	Lm		
	<u>Bituminous or other equal approved damp-proof course; 3 ply membrane</u>				
G	200mm wide	28	Lm		
	<u>Middle steel stanchions</u>				
H	300mm high bottom end bolted in concrete with and including plates, bolts and nuts, top side welded with plate 75x75x5mm SHS	4	No		
<b>Total for walling carried to summary</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO. 4</u>				
	<u>ROOF AND RAINWATER DISPOSAL TRUSSES</u> <u>(All Provisional)</u>				
	<u>The following in 13No. nailed cel-cured timber trusses spanning 7400mm including hoisting and placing 3000mm above ground floor level</u>				
A	150 x 50mm Rafters	123	Lm		
B	Ditto tie beam/ceiling joists	96	Lm		
C	100 x 50mm Struts and ties	80	Lm		
D	Ditto king post	38	Lm		
E	Ditto purlins	139	Lm		
F	225 x 25mm Wrot cypress facia board/verge board	47	Lm		
	<u>Covering</u>				
	<u>IT5 box profile roof covering</u> <u>26g prepainted iron roofing sheets laid and fixed to timber purlins (m/s) with approved screw nails with and including heavy duty rubber caps with matching</u>				
G	Roof covering	132	Sm		
H	Angled ridge cap	14	Lm		
	<u>RAIN WATER DISPOSAL</u> <u>The following in 24g mild steel sheeting</u>				
J	200 x 200 x 150mm box profile gutter including soldered joints in the running including approved 6mm thick metal brackets welded at 600mm centre to centre to purlins.	28	Lm		
	<b>Carried to collection page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO. 4 Cont'd</u>				
A	Extra over ditto for stopped ends	4	No		
B	Ditto for 100mm diameter nozzle outlet	4	No		
C	100mm Diameter mild steel downpipe gauge 26 clipped to masonry/concrete	12	Lm		
D	Extra over ditto for swan neck	4	No		
E	Ditto horse shoe	4	No		
	<u>Eaves Construction</u>				
F	3mm thick PVC tongued and grooved ceiling fixed on and including 50x50mm thick sawn celcred bandering	42	Sm		
G	PVC cornice to match	55	Lm		
	<u>Painting and Decoration</u>				
	<u>Prepare surfaces, knot, prime and stop and apply one undercoat and two finishing coats of first quality gloss oil paint to:</u>				
H	Timber surfaces 200-300mm girth	47	Lm		
J	Prepare and apply 2No. Metal primer 1No. Finishing coats of gloss paint to metal surfaces externally	19	Sm		
K	Prepare and apply 3No. Coats of bituminous paint to metal surfaces internally	15	Sm		
	Total Carried to Collection				
	<b><u>COLLECTION</u></b>				
	Brought forward from S/5				
	Brought forward from above				
<b>Total for roofing and rainwater disposal carried to summary</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
A	<u>ELEMENT NO.5</u> <u>Roller shutter Door</u> Rool-up aluminium door puller shutter size 3000x2550mm high with and including steel frames pinned to block wall with gears, rails all necessary <u>iron mongery and other necessary furniture all to detail</u> and approval	6	No		
	<b>Total for doors carried to grand summary</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
A	<u>ELEMENT NO.6</u> <u>STEEL BENCHES</u> Supply materials and fabricate fixed steel benches to Archrect's details and to Engineer's approval	1	Item		
	<b>Total for steel benches carried to grand summary</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO.7</u> <u>FINISHES</u>				
	<u>Floor finishes</u>				
A	<u>Screed; cement and sand; finished smooth and hard with cement grout</u> 25mm Thick	77	Sm		
	<u>Wall finishes</u>				
B	<u>12mm thick two coat gauged cement lime and sand (1:2:9) plaster steel trowelled smooth to:-</u> Walls internally including beams	154	Sm		
C	<u>12mm Thick cement and sand (1:4) render to:-</u> Walls externally including beams	26	Sm		
D	<u>Recess horizontal and flush vertical key pointing in cement and sand (1:4) mortar to:-</u> Walls externally	28	Sm		
	<u>Painting and decoaration</u>				
E	<u>Prepare and apply three coats PVA based premium quality silk vinyl emulsion paint or other equal and approved to:-</u> Plastered wall surfaces internally	154	Sm		
F	<u>Prepare and apply three coats first quality emulsion paint to:-</u> Rendered surfaces externally	28	Sm		
G	<u>Ceiling Finishes</u> 12m thick, celotex ceiling finish on timber bandering at 600mm centres (m/s)	77	Sm		
H	50x50mm sawn celcured cypress bandering at 600mm centres	260	Lm		
J	<u>Wrot cyrpess cornice, plugged.</u> 75x25mm, moulded	55	Lm		
K	<u>Prepare and apply three coats premium quality plastic emulsion paint to:-</u> Soffites of celotex surfaces	77	Sm		
L	Timber surfaces not exceeding 100mm girth	55	Lm		
M	Electrical works as per BQ		Item		
	<b>Total for Finishes carried to summary</b>				



**ELECTRICAL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
	<b>Supply, install, test and commission the following</b>				
	<b><u>LIGHTING POINTS</u></b>				
A	Lighting points wired in 3x1.5mm <sup>2</sup> SC CU cables in concealed 20mm diameter HG P.V.C conduits for :-				
	a) one way switching	NO	14		
	<b><u>SWITCHES</u></b>				
B	10Amps, switch plate as MK RANGE or equal and approved equivalent as				
	a) one gang one way	NO	6		
	b) two gang one way	NO	2		
	<b><u>LIGHTING FITTINGS</u></b>				
C	Lighting fittings complete with bulbs or tubes as follows:-				
	a) 1200mm, 1X36Watts flourescent fitting bare battens as PHILLIPS or approved equivalent	NO	8		
	b) 100A bulkhead fitting as THORN or approved equivalent	NO	6		
	<b><u>SOCKET OUTLETS/POWER POINTS</u></b>				
D	13Amps socket outlet points wired in 3x2.5mm sq. single core PVC CU. Cables drawn in concealed 20mm HG PVC conduits.	NO	6		
E	13Amps moulded plate twin switched socket outlet as CLIPSAL or approved equivalent	NO	6		
	<b>Total to collection</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
<b><u>POWER DISTRIBUTION</u></b>					
A	4-way consumer unit wall mounted as HAVELLS or approved equivalent c/w 100A SPN integral switch.	NO	2		
B	Single pole miniature circuit breaker as HAVELLS or approved equivalent of the following rating:- a) 6A b) 16A	NO NO	3 3		
C	3x10.0mm PVC single copper cables drawn in 32mm HG PVC conduit concealed from distribution board to consumer unit.	LM	15		
D	4core armoured underground cable	LM	14		
E	Seven meter tariff pre-fabricated with 16 gauge sheet meter box .	No	1		
F	63A double pole integral switches as ABB or approved equivalent	No	3		
<b>Total to collection</b>					
<b><u>COLLECTION</u></b>					
A	Collection from page S/10				
B	Collection from Above				
<b>TOTAL TO SUMMARY FOR ELECTRICAL WORKS</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u><b>SUMMARY</b></u>				
A	SUBSTRUCTURES FROM PAGE S/2				
B	RC SUPERSTRUCTURE FROM PAGE S/3				
C	WALLING FROM PAGE S/4				
D	ROOF AND RAINWATER DISPOSAL FROM PAGE S/6				
E	DOOR FROM PAGE S/7				
F	STEEL BENCHES FROM PAGE S/8				
G	FINISHES FROM PAGE S/9				
H	ELECTRICAL WORKS FROM PAGE S/11				
	<b>Total for Stalls carried to grand summary</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>BILL NO.5-SHADE</u> <u>ELEMENT NO.1</u> <u>SUBSTRUCTURES</u> <u>(Provisional)</u>				
	<u>Site clearance</u>				
A	Clear the site of grass, shrubs and small trees and burn up arisings	40	Sm		
	<u>Earthworks</u>				
B	Excavate oversite to remove vegetable soil average 200mm deep and cart away	32	Sm		
C	Ditto strip foundation starting from stripped levels but not exceeding 1.50 metres deep	17	Cm		
D	Ditto but column bases.	6	Cm		
E	Exta over excavations for excavating in rock of any class.	12	Cm		
F	Return, fill in and ram selected excavated materials around excavations.	12	Cm		
G	Load and cart away excess excavated materials and spread as directed.	16	Cm		
	<u>Disposal of water</u>				
H	Keep all excavations free from all water including running and spring water.	1	Item		
I	Allow for plunking and strutting.	1	Item		
	<u>Filling</u>				
J	300mm Thick natural stone hardcore filling, watered compacted in layers not exceeding 100mm maximum thickness.	31	Sm		
K	50mm Thick quarry dust blinding to surfaces of hardcore.	31	Sm		
	Total carried to collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
A	TERMIDOR' or other equal and approved insecticide with ten year guarantee on surfaces of hardcore and tops of foundations.	32	Sm		
	<u>Concrete</u>				
B	50mm Thick mass concrete class Q (1:3:6) blinding under foundations.	17	Sm		
C	Ditto under column bases.	6	Sm		
	<u>In situ vibrated reinforced concrete class 20/(20mm) in:-</u>				
D	Strip foundations.	4	Cm		
E	Column bases.	3	Cm		
F	Sub columns.	1	Cm		
G	150mm Thick floor slab.	32	Sm		
	<u>Reinforcement</u>				
	<u>Bars:high yield steel;cold worked to BS 4461 including bends, hooks, tying wire, and distance blocks</u>				
H	16mm Diameter bars.	72	Kg		
I	12mm Ditto.	102	Kg		
J	8mm Ditto.	78	Kg		
	<u>Mesh fabric reinforcement to B.s 4483</u>				
K	Reference A142 mesh 200x200mm, weighing 2.22kg per m2 (measured net- no allowance made for laps) including bends, tying wire, and spacer blocks.	32	Sm		
	<u>Steel stud columns</u>				
L	100x4mm CHS stud columns with 150X150x10mm steel plate (m.s) welded at top and 4No. 100mm long 8mm diameter steel rod plugs columns (Approximate length 1.60 metres)	10	Lm		
	Total carried to collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
A	<u>Sawn timber formwork to:-</u> Sides of columns.	10	Sm		
B	Edge of slab 75-150mm high.	32	Lm		
C	<u>Sub-wall</u> 200mm Thick approved local stones roughly dressed in foundation walling bedded and jointed in cement and sand (1:3) mortar and reinforced in every third course with hoop iron.	32	Sm		
D	<u>Damp-proofing</u> 1000g Polythene damp-proof membrane.	32	Sm		
E	<u>In situ finishings</u> 14mm Thick cement and sand (1:3) render on plinth walls.	16	Sm		
F	Prepare surfaces and apply three coats of black bituminous paint on rendered surfaces.	16	Sm		
G	<u>Screed; cement and sand 1:4 steel trowelled;</u> 30 mm Thick with cement grout	32	SM		
	Total carried to collection below				
	<u>Collection</u> Total brought forward from page CS/1				
	Total brought forward from page CS/2				
	Total brought down from above				
	Total for substructures carried to Summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO.2</u> <u>STEEL STRUCTURE</u> <u>100 x 5mm thick CHS steel column with</u> <u>150 x 150x10mm thick steel plates (m.s)</u> <u>welded at top and bottom , 4No. Holes drilled</u> <u>into each plate, bottom bolted to steel stud</u> <u>columns.</u>				
A	Columns 2700mm high	6	No		
	<u>Fittings</u>				
B	150 x 150x10mm gusset plate with 4No. Holes to receive bolts.	0	No		
C	12mm diameter 50mm long bolts with head nuts and washer.	0	No		
	<u>Painting</u>				
	<u>Prepare and apply one coat lead oxide primer</u> <u>on:</u>				
D	General surfaces of metal	1	Sm		
	<u>Prepare and apply three coats gloss oil paint</u> <u>on:-</u>				
E	General surfaces of metal	1	Sm		
	Total for steel structure carried to summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO.4</u> <u>ROOFING</u>				
	<u>ROOFING CONSTRUCTION</u> <u>(PROVISIONAL)</u> <u>STEEL TRUSSES</u>				
	<u>The following in trusses welded and bolted in accordance with the fabricators shop drawings to the Engineers approval</u>				
A	50x50x4mm SHS rafters	30	Lm		
B	Ditto joists	20	Lm		
C	Ditto ties and struts	42	Lm		
	<u>Fittings</u>				
D	150 x 150 x 10mm gusset plate with 4No. holes to receive bolts	0	No		
E	12mm diameter 50mm long bolts headnuts and washers	0	No		
	<u>Purlins</u>				
F	50 x 50 x 4mm Thick SHS purlins including cleat angles	54	Lm		
G	30mm Diameter anti-sag rods	0	Lm		
H	IT5 26gauge resincot prepainted galvanised corrugated crimped ironsheets to various radii fixed with and including U-shaped bolt cups and washers on steel purlins (m.s).	42	Sm		
I	Ditto at gable ends	6	Sm		
	<u>Painting</u>				
J	<u>Prepare and apply one coat lead oxide primer on:-</u> General surfaces of metal	30	sm		
K	<u>Prepare and apply three coats gloss oil paint on:-</u> General surfaces of metal	30	sm		
	Total for Roofing carried to Summary				



ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>ELEMENT NO.5</u> <u>BRACINGS TO WALL AND ROOF</u> <u>The following in vertical and horizontal</u> <u>bracings to Structural Engineer's details</u>				
A	50x50x3mm SHS angle	0	Lm		
	<u>Painting</u> <u>Prepare and apply one coat lead oxide primer</u> <u>on:</u>				
B	General surfaces of metal	11	Sm		
	<u>Prepare and apply three coats gloss oil paint</u> <u>on:-</u>				
C	General surfaces of metal	11	Sm		
	Total for bracings carried to grand summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
A	<u>ELEMENT NO.6</u> <u>STEEL BENCHES</u> Supply materials and fabricate fixed steel benches to Archrect's details and to Engineer's approval	1	Item		
	Total for steel benches carried to grand summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>SUMMARY</u>				
A	SUBSTRUCTURES FROM PAGE CS/3				0
B	STEEL STRUCTURE FROM PAGE CS/4				
C	ROOFING FROM PAGE CS/5				
D	BRACINGS FROM PAGE CS/6				
E	STEEL BENCHES FROM PAGE CS/7				
	Total for Shade carried to grand summary				

ITEM	DESCRIPTION	QTY	UNIT	RATE	TOTAL
	<u>TANKS AND FIRE EXTINGUISHERS</u>				
	<u>Tanks &amp; Bases</u>				
A	<u>Provide all materials and construct Tank Bases comprising the following: 3000mm diameter base</u> including all excavations in rock and disposals, hardcore, blinding, treatment, DPM, 150mm thick vibrated reinforced concrete slab with a broom finish, reinforced with BRC A142 mesh, walls in 200mm thick natural stone to detail provided and approval of the project manager.	2	NO		
B	Supply and install a 5000 litres PVC water tank including all connections to approval	2	NO		
	<u>PORTABLE FIRE FIGHTING EQUIPMENT</u>				
C	9KG DP Fire Extinguisher	2	NO		
D	5KG CO2 Fire Extinguisher	1	NO		
	Total carried to grand summary				

ITEM	DESCRIPTION		
A	Particular & General preliminaries		
B	Holding Yard from HY/6		
C	Veterinary Office Block from VO/11		
D	Stalls from ST/46		
E	Shade from CS/8		
	<b>SUB Total 1 NO LIVESTOCK SALE YARDS</b>		
<b>Total 3 NO LIVESTOCK SALE YARDS carried to form of tender</b>			



ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<u>50 mm thick mass concrete (1:4:8) in:-</u>				
A	Blinding under strip foundation	SM	24		
B	Ditto under column bases	SM	9		
	<u>Insitu reinforced concrete class 20/20: vibrated: in</u>				
C	Strip foundation	CM	3		
D	Ditto in column bases	CM	3		
E	Ditto in columns	CM	1		
F	Ditto but 100 mm thick floor slab	SM	58		
	<u>Sawn formwork to:-</u>				
G	Sides: strip foundation	SM	31		
H	Sides: Column bases	SM	8		
I	Sides: Columns	SM	9		
J	Edges: slabs over 75 but not exceeding 150 mm girth	LM	31		
	<u>Reinforcement</u>				
	<u>High tensile square twisted steel bars to B.S. 4441</u>				
K	Assorted Bars	Kg	269		
	<u>Mesh fabric reinforcement ref. A-142 to B.S 4483 and setting in concrete with 300mm side and end laps (measured nett - allow for laps).</u>				
L	Fabric ref. A-142 weighing 2.22kg/ sq.metre,in surface bed.	SM	58		
	<b>Carried to collection</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
A	<p><u>Approved natural stonework; roughly squared; bedded in cement mortar (1:4); 25 mm wide x 20 Gauge hoop iron strapping every alternate course</u></p> <p>150mm thick foundation walls</p>	SM	36		
		<b>Carried to collection</b>			
	<p><u>Collection</u></p> <p>From page W/1</p> <p>From page W/2</p> <p>From Above</p>				
<b>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</b>					



ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>ELEMENT No. 2</u></b>				
	<b><u>REINFORCED CONCRETE WORKS</u></b>				
	<u>In situ reinforced concrete class 20/20: vibrated: in</u>				
A	Ring beams	CM	2		
B	Columns	CM	2		
C	150 mm suspended slab	SM	58		
	<u>Reinforcement (Provisional)</u>				
	<u>High tensile, square twisted bar reinforcement to BS 4461</u>				
D	Assorted Bars	Kgs.	631		
	<u>Sawn formwork as described to:-</u>				
E	Sides and soffits of beams	SM	25		
F	Sides: Columns	SM	22		
G	Soffits of suspended slab	SM	58		
<b>TOTAL FOR REINFORCED CONCRETE WORKS CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>ELEMENT No. 3</u></b>				
	<b><u>EXTERNAL WALLS</u></b>				
	<u>Ndarugu machine dressed stone walling or equal jointed and bedded in cement and sand mortar (1:4) as described in:-</u>				
A	150mm thick walls with and including 25x3mm thick hoop iron strips every alternate course.	SM	100		
	<u>Dump proof course</u>				
B	200mm wide "Pluvex" or other equal and approved dumproof course laid and bedded in and including cement and sand mortar (1:4)	LM	30		
<b>TOTAL FOR EXTERNAL WALLS CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<p><b><u>ELEMENT No. 4</u></b></p> <p><b><u>INTERNAL WALLS</u></b></p> <p><u>Ndarugu machine dressed stone walling or equal jointed and bedded in cement and sand mortar (1:4) as described in:-</u></p>				
A	<p>Ditto: 100 mm thick</p> <p><u>Dump proof course</u></p>	SM	92		
B	<p>200mm wide "Pluvex" or other equal and approved dumproof course laid and bedded in and including cement and sand mortar (1:4)</p>	LM	32		
<b>TOTAL FOR INTERNAL WALLS CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>ELEMENT NO. 3: ROOF AND RAINWATER DISPOSAL</u></b>				
	<b><u>ROOF FINISHES</u></b>				
	<i><u>Masterseal waterproofing application</u></i>				
A	Applied to roof slabs	SM	58		
B	Ditto to skirting 300mm high	LM	30		
C	Dress membrane round 100 mm rainwater outlet	No.	1		
	<i><u>Lightweight water proofed screeds</u></i>				
D	50mm average screed laid to falls and crossfalls to roof slabs	SM	58		
E	Ditto to skirting 300mm high	LM	30		
	<i><u>"Key terrain" or other equal and approved UPVC rainwater pipes and fittings</u></i>				
F	100mm diameter downpipe encased in concrete / ducting (m.s.)	LM	3		
G	100mm shoe	No.	1		
H	100mm diameter dome headed fulbora roof outlet and connecting to 75mm downpipe	No.	1		
	<b>Total Carried To Summary</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>ELEMENT NO. 6</u></b>				
	<b><u>WINDOWS</u></b>				
	<b><u>Casements</u></b>				
	<u>Steel casement windows purpose made primed steel complete in opening and fixed lights complete with fasteners and stays ;steel lugs built into stone work and complete with burglar proofing in 15 mm diamond patten solid bars to architects approval.</u>				
A	Window size 1200 x 1500 mm high	No.	1		
B	Ditto 900 x 900 mm	No.	8		
C	Ditto 900 x 1500 mm	No.	2		
	<b><u>Glazing</u></b>				
D	4 mm thick clear sheet glass and glazing to metal with metallic putty in different panes	SM	2		
E	Ditto obscure glass	SM	4		
	<b><u>Painting</u></b>				
F	Prepare and apply three coats of gloss oil paint to metal surfaces of windows externally	SM	9		
G	Ditto internally	SM	9		
	<b>TOTAL FOR WINDOWS CARRIED TO SUMMARY</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>ELEMENT No. 7</u></b>				
	<b><u>EXTERNAL DOORS</u></b>				
A	<u>Supply, assemble and fix the following purpose made welded steel casement doors complete with all necessary ironmongery, handles, lever or finger pulls and pins: and building lugs to jambs and reveals, bedding frames in waterproof cement mortar, including priming with one coat of red oxide primer, including all necessary coupling mullions, transomes and clear glazed fanlight over and jointing in approved mastic externally and afterward easing and oiling and adjusting opening lights on completion</u>				
B	Single leaf door overall size, 900 x 2400 mm high comprising 60 x 38 mm top and bottom rails, divided by 1 No. transome into: top fanlight size 900 x 300 mm high further divided by 2 No. mullions into panels size 750 x 300 mm high; whole door glazed with and including 6 mm thick toughened sheet glass	NO	2		
	<u>Glazing</u>				
C	6mm Thick clear sheet glass and glazing to metal in panes exceeding 0.10sm but not exceeding 0.5sm	SM	2		-
	<u>Prepare surfaces and apply one undercoat and two finishing coats of gloss oil paint on:</u>				
D	General glazed metal surfaces	SM	9		-
<b>TOTAL FOR EXTERNAL DOORS CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>ELEMENT No. 8</u></b>				
	<b><u>INTERNAL DOORS</u></b>				
	<u>Solid Cored flush door: mahogany lipped edges: mahogany veneered both sides</u>				
A	45mm thick door overall size 820 x 2060 mm high .	No.	3		
B	Ditto size 720 x 2060 mm high .	No.	10		
	<u>Prime grade wrot mahogany</u>				
C	200 x 50 mm Door frame: rebated: plugged	LM	50		
D	200 x 50 mm Transome; twice rebated	LM	9		
E	40 x 20 mm Architrave: splayed	LM	50		
F	15 mm Quadrant	LM	50		
	<u>Ironmongery</u>				
G	150mm brass butt hinges	Prs	15		
H	Two lever mortice lock set complete with handle furniture	No.	10		
I	Dowels	No.	20		
J	Fixing lugs	No.	30		
K	38mm rubber door stops as described	No.	13		
	<u>Glazing</u>				
L	5 mm thick clear sheet glass and glazing to timber with glazing beads (m.s.)	SM	2		
	<u>Painting</u>				
M	Prepare and apply three coats of clear varnish to timber surfaces	SM	34		
N	Ditto 100 - 200mm girth	LM	50		
O	Ditto but not exceeding 100mm girth	LM	100		
<b>TOTAL FOR INTERNAL DOORS CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>ELEMENT NO. 9 - WALL FINISHES</u></b>				
	<u>EXTERNAL</u>				
	<u>Key pointing</u>				
A	Extra over walling for horizontal recessed and flush vertical key pointed joints in cement and sand (1:4) mortar.	SM	90		
	<u>Wood float render</u>				
B	19mm thick cement and sand 1:4 render to walls & concrete surfaces	SM	10		
	<u>Paintwork</u>				
C	Prepare and apply three coats plastic emulsion paint to rendered surfaces.	SM	10		
	<u>75 mm thick weathered &amp; throated saddled-back copping</u>				
D	For 200 mm thick walls	LM	30		
	<u>INTERNAL</u>				
	<u>Gauged plaster 1:1:9 as described to:</u>				
E	Walls and concrete surfaces internally	SM	100		
	<u>Cement and sand 1:4 as described to:</u>				
F	10mm thick backing to receive wall tiles ( ms)	SM	92		
	<u>Coloured and glazed ceramic wall tiles</u>				
G	150x150x6mm thick wall tiles as SAJ or other equal and approved complete with cement grouting to joints to match.	SM	92		
	<u>Paintwork</u>				
H	Prepare and apply three coats plastic emulsion paint to plastered surfaces.	SM	100		
<b>TOTAL FOR WALL FINISHES CARRIED TO SUMMARY</b>					



ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>ELEMENT No. 10</u></b>				
	<b><u>FLOOR FINISHES</u></b>				
	<u>Woodfloat cement and sand screed (1:4) in:</u>				
A	32 mm to receive ceramic tiles	SM	58		
	<u>Ceramic floor tiles</u>				
B	8 mm thick non slip floor tiles as SAJ or other equal and approved fixed with and including cement slurry	SM	58		
C	100 x 20 mm thick skirting	LM	42		
	<b><u>CEILING FINISHES</u></b>				
	<u>Lime plaster 1:1:6 as described in:-</u>				
D	12mm thick plaster to soffits of horizontal slabs	SM	58		
	<u>Paintworks</u>				
E	Prepare and apply one undercoat and two finishing coats of plastic emulsion paint to plastered surfaces	SM	58		
<b>TOTAL FOR FINISHES CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)
	<b><u>SUMMARY</u></b>				
1	SUBSTRUCTURES				
2	REINFORCED CONCRETE WORKS				
3	EXTERNAL WALLS				
4	INTERNAL WALLS				
5	ROOFING				
6	WINDOWS				
7	EXTERNAL DOORS				
8	INTERNAL DOORS				
9	WALL FINISHES				
10	FLOOR AND CEILING FINISHES				
11	ALLOW A PC SUM FOR ELECTRICAL ENGINEERING SERVICES				100,000.00
12	ALLOW A PC SUM FOR MECHANICAL ENGINEERING SERVICES				200,000.00
13	ALLOW A PC SUM FOR SANITARY FITTINGS				200,000.00
	<b>SUB-TOTAL - 1 BLOCK</b>	<b>NO</b>	<b>1</b>		
	<b>TOTAL - 2 NO MODERN WASHROOMS</b>	<b>NO</b>	<b>2</b>		

**GRAND SUMMARY OF BILLS OF QUANTITIES**  
**STRATEGIC INTEGRATED WARD DEVELOPMENT PROGRAMME FOR NAROK COUNTY**

**PROPOSED CONSTRUCTION OF THE LIVESTOCK SALE YARD AND  
MODERN TOILETS (LOT 38)**  
**TENDER NO: NCG/OT/043/2022-2023**

BILL NO.	DESCRIPTION	AMOUNT (Kshs)
1	PARTICULAR PRELIMINARIES	
2	GENERAL PRELIMINARIES	
3	PROPOSED 3 NO LIVESTOCK SALE YARD	
4	PROPOSED 2 NO MODERN TOILETS	
A	SUB TOTAL (A)	
B	Add 2.5% of subtotal of bills for contingencies to be expended in whole ' or in part as directed by the Project Manager ((A) x 0.025).	
C	Add 16% VAT = ( SUB TOTAL A) X 16%.	
	( SUB TOTAL A + B( Contingencies ) + C ( 16% V.A.T)	
<b>TOTAL GRAND SUMMARY CARRED TO THE FORM OF TENDER KSH</b>		