



KENYA INDUSTRIAL RESEARCH AND DEVELOPMENT INSTITUTE

**THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED
RESEARCH, TECHNOLOGY AND INNOVATION
LABORATORIES AND RELATED INFRASTRUCTURE ON
PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B',
NAIROBI**

**TENDER FOR LPG & COMPRESSED AIR SYSTEM, VACUUM
SYSTEM, KITCHEN & LAUNDRY EQUIPMENT**

TENDER REF NO: KIRDI 01/2026/2027

(FINANCIAL PROPOSAL)

Client

Kenya Industrial Research and Development Institute (KIRDI)
Popo Road, Off Mombasa Road,
O. Box 30650-00100, Nairobi, Kenya
Tel. +254-724 214 092
Email: directorgeneral@kirdi.go.ke
Website: www.kirdi.go.ke

Architects and Project Managers

Habitech Consultants
P.O.Box 66495 – 00800
Nairobi, Kenya

Quantity Surveyors

M and M Construction Consultants
P.O.Box 4677 – 00506
Nairobi

Structural / Civil Engineers

Multiscope Consulting Engineers Ltd
P.O.Box 12012 – 00100
Nairobi

Mechanical services Engineer

EMS Consultants Ltd
P.O.Box 11743 – 00100
Nairobi

Electrical Services Engineer

Gedox Associates Ltd
P.O.Box 64441 – 00620
Nairobi

Environment management & physical planners

Prof. George N. Njuguna & associates
P.O.Box 26442-00504,
Nairobi

**SUBMISSION DATE: On or before 14th August, 2026, 11.00 AM (East
African Time)**

TENDER DOCUMENTS FOR THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B', NAIROBI.

TENDER FOR LPG & COMPRESSED AIR SYSTEM, VACUUM SYSTEM, KITCHEN & LAUNDRY EQUIPMENT

1) NAME AND CONTACT ADDRESSES OF PROCURING ENTITY

Kenya Industrial Research and Development Institute (KIRDI)
Popo Road, Off Mombasa Road,
P. O. Box 30650-00100, Nairobi, Kenya
Tel. +254-724 214 092
Email: directorgeneral@kirdi.go.ke
Website: [www.kirdi .go.ke](http://www.kirdi.go.ke)

2) Invitation to Tender (ITT) No: **KIRDI 01/2026/2027**

3) **Tender Name:** THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B', NAIROBI

TENDER FOR LPG & COMPRESSED AIR SYSTEM, VACUUM SYSTEM, KITCHEN & LAUNDRY EQUIPMENT

PROCURING ENTITY: KENYA INDUSTRIAL RESEARCH AND DEVELOPMENT INSTITUTE (KIRDI)

CONTRACT NAME AND DESCRIPTION: THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B', NAIROBI –

TENDER FOR LPG & COMPRESSED AIR SYSTEM, VACUUM SYSTEM, KITCHEN & LAUNDRY EQUIPMENT

1. Tendering will be conducted under open competitive method using a standardized tender document. Tendering is open to Contractors Registered in the appropriate Category for Builders Works (**NCA category 2 and above**) .The tender is open to those who meet the requirements of eligibility as contained in this invitation and the tender documents
2. A complete set of tender documents may be obtained, downloaded and viewed by interested tenderers for free from the website www.kirdi.go.ke/ or Public Procurement Information Portal www.tenders.go.ke. Tenderers who download the tender document **MUST** forward their particulars immediately to the directorgeneral@kirdi.go.ke to facilitate any further clarifications or addendum that may be issued.

Note that failure to email the contract information will lead to automatic disqualification at the preliminary stage. Further clarifications and Addendum shall be posted at www.kirdi.go.ke/ and Public Procurement Information Portal www.tenders.go.ke.

3. Tenders shall be quoted be in Kenya Shillings and shall include all taxes. Tenders shall remain valid **for 180 days** from the date of opening of tenders.
4. All Tenders must be accompanied by a by a **Tender Security as specified in the Tender Data Sheet Clause ITT 19.1.**
5. The Tenderer **shall** chronologically serialize all pages of the tender documents submitted in the numerical format i.e., 1, 2, 3, 4 including the cover page. Tender Document must be tape bound and not Spiral bound. Spiral bound documents shall be automatically disqualified.
6. Completed tenders must be delivered to the address below on or before **14th August, 2026**, 11.00 AM . (**East African Time**). Electronic Tenders **will not** be permitted.
7. Tenders will be opened immediately after the deadline date and time specified above or any deadline date and times specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.
8. Late tenders will be rejected.
9. The addresses referred to above are:

A. Address for obtaining further information

Kenya Industrial Research and Development Institute (KIRDI)
Popo Road, Off Mombasa Road,
P. O. Box 30650-00100, Nairobi, Kenya
Tel. +254-724 214 092
Email: directorgeneral@kirdi.go.ke
Website: www.kirdi.go.ke

B. Address for Submission of Tenders.

Kenya Industrial Research and Development Institute (KIRDI)
Popo Road, Off Mombasa Road,
P.O. Box 30650-0100,
Nairobi, Kenya
Tel. +254-724 214 092

Email: directorgeneral@kirdi.go.ke

Website: www.kirdi.go.ke

C. Address for Opening of Tenders.

Kenya Industrial Research and Development Institute (KIRDI)

Popo Road, Off

Mombasa Road

Name: Designation: Director General

Signature _____

Date _____

6. FORM OF TENDER

INSTRUCTIONS TO TENDERERS

- i) *All italicized text is to help the Tenderer in preparing this form.*
- ii) *The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address. Tenderers are reminded that this is a mandatory requirement.*
- iii) *Tenderer must complete and sign CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF DECLARATION FORMS OF THE TENDERER as listed under (xxii) below.*

Date of this Tender submission:.....[insert date (as day, month and year) of Tender submission] **Tender**

Name **and** **Identification:**.....[insert identification] **Alternative**

No.:.....[insert identification No if this is a Tender for an alternative]

To: [Insert complete name of Procuring Entity]

Date of this Tender submission: [insert date (as day, month and year) of Tender submission] **Request**
for Tender No.: [insert identification] **Name and description of Tender** [Insert as per ITT) **Alternative No.:**
[insert identification No if this is a Tender for an alternative]

To: [insert complete name of Procuring Entity]

Dear Sirs,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct and complete the Works and remedy any defects therein for the sum¹ of Kenya Shillings *[Amount in figures]* _____ Kenya Shillings *[amount in words]* _____

The above amount includes foreign currency² amount (s) of *[state figure or a percentage and currency]*
[figures] _____ *[words]* _____

2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Architect notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Special Conditions of Contract.
3. We agree to adhere by this tender until _____ *[Insert date]*, and it shall remain binding upon us and may be accepted at any time before that date.
4. We understand that you are not bound to accept the lowest or any tender you may receive.
5. We, the undersigned, further declare that:
 - i) No reservations: We have examined and have no reservations to the tender document, including Addenda issued in accordance with ITT 28;
 - ii) Eligibility: We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3 and 4;

¹ This sum should be carried forward from the Summary of the Bills of Quantities.

² The percentage quoted above should not include provisional sums, and not more than two foreign currencies are allowed.

- iii) Tender - Securing Declaration: We have not been suspended nor declared ineligible by the Procuring Entity based on execution of a Tender-Securing or Proposal-Securing Declaration in the Procuring Entity's Country in accordance with ITT 19.8;
- iv) Conformity: We offer to execute in conformity with the tendering documents and in accordance with the implementation and completion specified in the construction schedule, the following Works: *[insert a brief description of the Works]*;
- v) Tender Price: The total price of our Tender, excluding any discounts offered in item 1 above is: *[Insert one of the options below as appropriate]*
- vi) Option 1, incase of one lot: Total price is: *[insert the total price of the Tender in words and figures, indicating the various amounts and the respective currencies]*; or
- Option2, in case of multiple lots:
- (a) Total price of each lot *[insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]*; and
- (b) Total price of all lots (sum of all lots) *[insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies]*;
- vii) Discounts: The discounts offered and the methodology for their application are:
- viii) The discounts offered are: *[Specify in detail each discount offered.]*
- ix) The exact method of calculations to determine the net price after application of discounts is shown below: *[Specify in detail the method that shall be used to apply the discounts]*;
- x) Tender Validity Period: Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- xi) Performance Security: If our Tender is accepted, we commit to obtain a Performance Security in accordance with the Tendering document;
- xii) One Tender Per Tender: We are not submitting any other Tender(s) as an individual Tender, and we are not participating in any other Tender(s) as a Joint Venture member or as a sub-contractor, and meet the requirements of ITT 3.4, other than alternative Tenders submitted in accordance with ITT 13.3;
- xiii) Suspension and Debarment: We, along with any of our subcontractors, suppliers, Engineer, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Public Procurement Regulatory Authority or any other entity of the Government of Kenya, or any international organization.
- xiv) State-owned enterprise or institution: *[select the appropriate option and delete the other]* *[We are not a state- owned enterprise or institution]/[We are a state-owned enterprise or institution but meet the requirements of ITT3.8]*;
- xv) Commissions, gratuities, fees: We have paid, or will pay the following commissions, gratuities, or fees with respect to the tender process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*.

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

- xvi) Binding Contract: We understand that this Tender, together with your written acceptance there of included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is

prepared and executed;

- xvii) Not Bound to Accept: We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other Tender that you may receive;
- xviii) Fraud and Corruption: We here by certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption; and
- xix) Collusive practices: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the “Certificate of Independent Tender Determination” attached below.
- xx) We undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copy available from _____ (specify website) during the procurement process and the execution of any resulting contract.
- xxi) **Beneficial Ownership Information**: We commit to provide to the procuring entity the Beneficial Ownership Information in conformity with the Beneficial Ownership Disclosure Form upon receipt of notification of intention to enter into a contract in the event we are the successful tenderer in this subject procurement proceeding.
- xxii) We, the Tenderer, have duly completed, signed and stamped the following Forms as part of our Tender:

- a) Tenderer's Eligibility; Confidential Business Questionnaire - to establish we are not in any conflict of interest.
- b) Certificate of Independent Tender Determination - to declare that we completed the tender without colluding with other tenderers.
- c) Self-Declaration of the Tenderer - to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
- d) Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal.

Further, we confirm that we have read and understood the full content and scope of fraud and corruption as informed in “**Appendix 1 - Fraud and Corruption**” attached to the Form of Tender.

Name of the Tenderer: *[insert complete name of person signing the Tender]

Name of the person duly authorized to sign the Tender on behalf of the Tenderer: **[insert complete name of person duly authorized to sign the Tender]

Title of the person signing the Tender: [insert complete title of the person signing the Tender]

Signature of the person named above: [insert signature of person whose name and capacity are shown above]

Date signed [insert date of signing] day of [insert month], [insert year]

Date signed _____ day of _____, _____

Notes

* In the case of the Tender submitted by joint venture specify the name of the Joint Venture as Tenderer.

**Person signing the Tender shall have the power of attorney given by the Tenderer to be attached with the Tender.

SECTION F

SCHEDULE OF UNIT RATES

SCHEDULE OF UNIT RATES

1. The tenderer shall insert unit rates against the items in the following schedules and may add such other items as he considers appropriate.
2. The unit rates shall include for supply, transport, insurance, delivery to site, storage as necessary, assembling, cleaning, installing, connecting, profit and maintenance in defects liability and any other obligation under this contract.
3. The unit rates will be used to assess the value of additions or omissions arising from authorized variations to the contract works.
4. Where trade names or manufacturer's catalogue numbers are mentioned in the specification, the reference is intended as a guide to the type of article or quality of material required. Alternative brands of **equal** and **approved** quality will be accepted.
5. The prices quoted shall be deemed to include for all obligations under the sub-contract including but not limited to supply of materials, labour, delivery to site, storage on site, installation, testing, commissioning and all taxes (including **16% V.A.T and 3% Withholding tax**).

SECTION G

BILL OF QUANTITIES

**THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND
RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B', NAIROBI**
BILL OF QUANTITIES FOR LPG, VACUUM & COMPRESSED AIR SYSTEM; KITCHEN & LAUNDRY EQUIPMENT

ITEM No.	DESCRIPTION	UNIT	QTY	Rate (Kshs)	Amount (Kshs)
1.00	<u>SUBCONTRACT PRELIMINARIES AND GENERAL CONDITIONS:</u>				
1.01	Provide bond as stated in the published conditions of subcontract	sum	1		
1.02	Provide insurance as required in the subcontract conditions	sum	1		
	Prepare "As-built" drawings and manuals – 2 sets each . Scales to be 1:100 and	sum	1		
1.03	1:50 -soft copy to be issued in flash disk				
1.04	Printing of copies of item 1.03 above.	sum	1		
1.05	Any other preliminaries not covered above	sum	1		
	NOTE: Vendor shall visit the site to appreciate available materials and condition.				
A0	TOTAL CARRIED FORWARD TO SUMMARY PAGE				

**THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION
LABORATORIES AND RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B',
NAIROBI**

BILL OF QUANTITIES FOR LPG, VACUUM & COMPRESSED AIR SYSTEM; KITCHEN & LAUNDRY EQUIPMENT

ITEM NO.	DESCRIPTION	UNIT	Qty	UNIT COST (KSH)	AMOUNT (KSH)
	Unless otherwise specified, all stainless steel used in the construction of units/equipment shall be class 304 not less than 1,2mm thick				
1	300mm x 600mm stainless steel floor drain (channel) with stainless steel mesh grating and 75mm diameter side outlet as "PURUS" or equal and approved.	No.	10		
2	1500mm x 700mm x 875mm high Stainless steel work table, with 400mm x 450mm sink and a swivel type of faucet, 2 No. under table shelves, 3 level drawer, 2/1 GN storage and a space below for a grease trap. As "ULINE" or equal and approved	No.	1		
3	Commercial Stainless Steel Kitchen Sink Faucet with Pull Down Sprayer Spring Mixer as "GUANGZHOU" or equal and approved	No.	10		
4	1500mm x 300mm 2 Tier stainless steel wall shelf as "Sheffield model No. WSD110" or equal and approved	No.	2		
5	Stainless steel fabricated hand wash sink with bin, soap and paper dispenser with a knee operated water tap as "COBRA" or equal and approved.	No.	6		
6	5 Tier stainless steel storage shelving rack measuring 1500mm x 600mm x 1800mm high.	No.	10		
7	1200mm x 1500mm x 875mm high stainless steel work table with a sink measuring 400mm x 450mm and a swivel type of faucet. With a djustable bottom shelf and leveling feet. As "ULINE" or equal and approved.	No.	2		
8	Gas tilting bratt pan as "CHIEFTAIN Model CGTBP; Power 83,000 Btu; capacity 80L measuring 800mm wide x 900mm deep x 850+120mm high or equal and approved.	No.	2		
9	2 Deck Combi Oven as "RATIONAL Model ICP 102 E" complete with water filtration unit or equal and approved	No.	2		
10	Lava Stone grill as "Sheffield model LSG -750F-7S" or equal and approved.	No.	1		
11	Free standing, 1/2 smooth, 1/2 grooved, hot plate griddle as "Sheffield part No. FAB/HOT/00007 Model No. HPSG -750-7S" or equal and approved.	No.	2		
12	4 Burner gas cooking range & oven as " CHIEFTAIN Model CGR-4" measuring 800mm wide x 900mm deep x 850mm high or equal and approved.	No.	4		
13	Double basket table top deep fat fryer as "CHIEFTAIN model CTF- 6+ 6" measuring 550 mm wide x 410mm long x 295mm high with a capacity of 6 + 6 liters; weight 12kg; power 2.5+ 2.5kw, single phase 220V/ 50Hz or equal and approved.	No.	2		
14	1 door x 3 drawer undercounter refrigerator 303l as " HOSHIZAKI Model HZ-RTDW-137MS4-D3" or equal and approved.	No.	6		
15	Commercial pass through food warmer / holding cabinet as " VULCAN" Model VP17" measuring 27 inch wide x 34.5 inch deep and 40 inch high or equal and approved.	No.	1		
16	20 L capacity 3 speed planetary dough mixer as " HK-Redline model B20GA ", rated at 1.1kw, 240v, 50Hz or equal and approved.	No.	2		
M1	TOTAL CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	UNIT	Qty	UNIT COST (KSH)	AMOUNT (KSH)
17	1606mm long servery containing 4 x Baine Marie and hot cupboard as " VICTOR CARIB2.416 Caribbean" or equal and approved.	No.	1		
18	4 pan buffet baine marie measuring 1600mm x 700mm with sneeze guard as "PROKIT" or equal and approved. 1600x700mm	No.	2		
19	L- Shaped stainless steel dirty dish landing table measuring 1000mm x 700mm x 700mm , with sink (400mm x 450mm) and garbage chute.	No.	2		
20	Automatic electrical commercial hood type dish washer as "EAWK" measuring 725mm x 820mm x 1500mm high or equal rated at 1900 pcs/h; 7/9 kw; 220v/380v; washing temperature 60-95°C. Functions include cleaning, disinfecting and drying.	No.	2		
21	Stainless steel tripple bowl (Bowl sizes- 600x500mm; 400x 400mm; and 400x300mm) pot wash sink model No. SDPP W 1806R Part No. FAB/DWN/00024 as "Sheffield" or equal and approved	No.	1		
22	Rust resistant black iron wall mounted 2 tier pot rack; with 12 S- heavy duty hooks as " KES Model KUR218S75B-BK-20200526" or equal and approved.	No.	2		
23	Two half door upright freezer model FED-X S/S - XURF600S1V as "FEDERAL" or equal with a gross volume of 618L; Net volume of 388L; Temperature rand -18 to -22°C; Power rating 7.26kwh/24hours; 465w/10A/240v.	No.	1		
24	SALADETTE UNIT WITH SELF CONTAINED THERMOWELL AND 9X1/3 GN PAN WITH LID - 6 NOS. DRAWER COMPARTMENT WITH WHEEL	No.	1		
25	Dough sheeter as "PERFORNI"; weight 117kg; dimensions 1770mm x 820mm x 620mm; capacity 4kg dough; 0.56kw/220v/50Hz; roller adjust gap 1-35mm; roller speed 124 rolls/ min; Belt size 1700mm x 430mm. or equal and approved.	No.	1		
26	Three deck oven as "PERFORNI" model SL-9; with independent deck control, top and bottom heat controls per deck; weight 345kg; external dimensions 165cm wide x 82cm deep x 153cm high; 9 trays (600mm x 400mm); internal baking area 3 x (1300x 680x 220mm); maximum temperature 400°C; 25.2kw/ three phase or equal and approved.	No.	1		
27	2 Deck 2 deck , 4 tray oven as " Bakewave" measuring 1220mm x 820mm x 1310mm high rated at 13.2kw / 380v or equal and approved.	No.	1		
28	Gas salamander as "VULCAN Model 36RB-P with heavy duty chrome plated grid measuring 27.5 inch x 13 inch deep; 3/4 inch top gas connection; capcity - six x 8,300 BTU cast iron burners. or equal and approved.	No.	1		
29	Solid top oven range as "FALCON Model G9181 rated at 10.3 Kw or equal and approved.	No.	1		
30	Electric pasta cooker as "LOTUS Model CP-1EM" Rated at 2.83kw/ 230v/50hz. Measuring 330mm x 550mm x 390mm.or equal and approved.	No.	1		
M2	TOTAL CARRIED TO COLLECTION PAGE				-

	<u>COLLECTION PAGE</u>				
Item	Description	UNIT	Qty	UNIT COST (KSH)	AMOUNT (KSH)
	TOTAL BROUGHT FORWARD FROM:				
M1	FROM M1	ITEM	1		
M2	FROM M2-	ITEM	1		
A1-B	TOTAL CARRIED TO SUMMARY PAGE				-

THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B', NAIROBI

BILL OF QUANTITIES FOR LPG, VACUUM & COMPRESSED AIR SYSTEM; KITCHEN & LAUNDRY EQUIPMENT

KIRDI TECHNO CENTRE LAUNDRY EQUIPMENT					
ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT COST (KSH)	AMOUNT (KSH)
1	Stainless steel double laundry sink and waste as "FRANKE" TACC Part No. ZSNKSTL 183 ; measuring 103x 44 x 38.8cm or equal and approved.	No.	1		
2	300mm x 600mm stainless steel floor drain (channel) with stainless steel mesh grating and 75mm diameter side outlet as "PURUS" or equal and approved.	No.	7		
3	Washing machine with provision for washing and drying as "SUMSUNG Model WD9*T" measuring 600mm wide, 650mm deep, and 850mm high. Wasing and spinning capacity of 9kg and drying capacity of 6kg. The power consumption is 2.3kw for washing and 1.9kw for drying or equal and approved.	No.	1		
4	A Washer extractor shall be Line 6000 as "Electrolux model WH6-33CV" with a dry weight capacity of 33kg and rated at 19.1 kw or equal and approved. Measuring 1020mm wide x 1135mm deep and 1460mm high or equal and approved.	No.	2		
5	A Tumble dryer Line 6000 as "Electrolux model TD6-30" with a dry weight capacity of 30kg and 32kw power rating or equal and approved shall be installed. Measuring 1855mm wide x 960mm deep x 1365mm high.	No.	1		
6	Bed- type ironer as "Electrolux model IB442314 with 230mm roll diameter,1400mm ironing width, and 1 to 4 m/min ironing speed and rated at 7.2kw. Size of the unit measures 1795mm wide x 510mm deep x1025mm high or equal and approved.	No.	1		
7	The utility Laundry press shall be as "HONER" model code UPM; HS code 845130; working size 1200mm x 500mm; steam pressure 6bar; consumption of steam- 25kg/h; compressed air pressure- 6 bar; weight 260kg and external dimensions- 1350mm x 1110mm x 1400mm	No.	2		
A1-C	TOTAL CARRIED TO SUMMARY PAGE				-

**THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND RELATED
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BILL OF QUANTITIES FOR LPG, VACUUM & COMPRESSED AIR SYSTEM; KITCHEN & LAUNDRY EQUIPMENT**

ITEM NO.	DESCRIPTION				
		UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
	Supply, install and commission a Liquid petroleum gas (LPG) system as follows:				
1.00	Central LPG gas storage steel tank ; 600 kg, nominal LPG capacity (2250 liters water capacity)- 1m diameter x 1.985m long.	NO	0		
1.01	Pressure relief valve as "REGO" series A8434 or A8436 or equal	NO	1		
1.02	Pressure Regulator as " REGO" series 301 or 302 series or equal	NO	1		
1.03	Main gas meters as "REGO VTM series turbine meter"	NO	2		
1.04	Allow for labour by a licensed Class C1 technician as per petroleum (liquified petroleum gas) regulations 2025	Item	1		
M1	TOTAL CARRIED TO COLLECTION PAGE				

ITEM No.	DESCRIPTION	UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
	COPPER TUBING & FITTINGS (supply & Installation) Type K copper tubing complete with copper and brass fittings to suit the installation				
2.00	Piping				
2.01	28mmØ copper tube	LM	10		
2.02	22mmØ copper tube	LM	10		
2.03	15mmØ copper tube	LM	10		
2.04	12mmØ copper tube	LM	10		
2.05					
2.06	90°/45°Elbow				
2.07	28mmØ Elbow	No.	5		
2.08	22mmØ Ditto	No.	5		
2.09	15mmØ Ditto	No.	5		
2.10	12mmØ Ditto	No.	5		
2.11					
2.12	Equal Tee				
2.13	28mmØ Tee	No.	8		
2.14	22mmØ Ditto	No.	5		
2.15	15mmØ Ditto	No.	5		
2.16	12mmØ Ditto	No.	5		
2.17					
2.18	Adaptors				
2.19	28mm Ø Adaptor	No.	7		
2.20	22mmØ Ditto	No.	5		
2.21	15mmØ Ditto	No.	10		
2.22	12mmØ Ditto	No.	10		
2.23					
2.24	Reducers				
2.25	28mm x 22 mm Ø Reducer	No.	6		
2.26	22mm x 15mm Ø Ditto	No.	5		
2.27	15mmx 12 mm Ø Ditto	No.	5		
2.28					
2.29	Connectors/couplings				
2.30	28mmØ connector	No.	6		
2.31	22mmØ Ditto	No.	5		
2.32	15mmØ Ditto	No.	5		
2.33	12mmØ Ditto	No.	10		
2.34					
2.35	Nipples				
2.36	28mmØ copper nipple	No.	10		
2.37	22mmØ Ditto	No.	5		
2.38	15mmØ Ditto	No.	10		
2.39	12mmØ Ditto	No.	5		
2.40					
2.41					
2.42	28 mm diameter Brass Gas cock	NO	2		
2.43	22 mm diameter Brass Gas cock	NO	5		
2.44	15 mm diameter Brass Gas cock	NO	5		
2.45	12 mm diameter Brass Gas cock	NO	5		
M2	TOTAL CARRIED TO COLLECTION PAGE (PER FLOOR)				

ITEM No.	DESCRIPTION	UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
	COPPER TUBING & FITTINGS (Installation & commissioning only) Type K copper tubing complete with copper and brass fittings to suit the installation				
2.00	Piping				
2.01	28mmØ copper tube	LM	90		
2.02	22mmØ copper tube	LM	181		
2.03	15mmØ copper tube	LM	270		
2.04	12mmØ copper tube	LM	0		
2.05			0		
2.06	90°Elbow		0		
2.07	28mmØ Elbow	No.	10		
2.08	22mmØ Ditto	No.	97		
2.09	15mmØ Ditto	No.	225		
2.10	12mmØ Ditto	No.	0		
2.11			0		
2.12	Equal Tee		0		
2.13	28mmØ Ditto	No.	12.5		
2.14	22mmØ Ditto	No.	39		
2.15	15mmØ Ditto	No.	125		
2.16	12mmØ Ditto	No.	7.5		
2.17			0		
2.18	Adaptor / Reducers		0		
2.19	28mmx 22mmØ Ditto	No.	25		
2.20	22mmx 15mmØ Ditto	No.	100		
2.21	15mmx 12mm Ø Ditto	No.	7.5		
2.22	12mmØ adaptor	No.	7.5		
2.23			0		
2.24	Brass Connectors		0		
2.25	28mmØ Ditto	No.	30		
2.26	22mmØ Ditto	No.	2		
2.27	15mmØ Ditto	No.	400		
2.28	12mmØ Ditto	No.	5		
2.29			0		
2.30	Nipples / couplings		0		
2.31	28mmØ copper tubes	No.	2.5		
2.32	22mmØ copper tubes	No.	75		
2.33	15mmØ copper tubes	No.	100		
2.34	12mmØ copper tubes	No.	7.5		
2.35			0		
2.36	LPG Gas tap /cocks		0		
2.37	12 mm diameter Brass Gas cock	NO	0		
2.38	12 mm diameter LPG Gas tap	NO	368		
2.39	copper welding rods	NO	25		
2.40	250gm Flux powder for welding	NO	10		
2.41	Allow for any other accessories to complete the installation	ITEM	0.5		
2.42	Allow for commissioning	ITEM	0.5		
M3	TOTAL CARRIED TO COLLECTION PAGE				

COLLECTION PAGE					
Item No.	Description	UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
	TOTAL BROUGHT FORWARD FROM:				
M1	FROM M1	ITEM	1		-
M2	FROM M2 (PER FLOOR)	FLOORS	1 8		
M3	FROM M1	ITEM	1		-
A2	TOTAL CARRIED FORWARD TO SUMMARY PAGE				-

**THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND
RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B', NAIROBI
BILL OF QUANTITIES FOR LPG, VACUUM & COMPRESSED AIR SYSTEM; KITCHEN & LAUNDRY EQUIPMENT**

ITEM NO.	DESCRIPTION	UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
	COMPRESSED AIR EQUIPMENT AND ACCESSORIES: Supply, deliver and install the following compressed air equipment and accessories. Tenderers must allow in their unit prices for all the necessary filters, regulators, lubricators, etc required for the satisfactory functioning of the compressed air system. COMPRESSOR & RECEIVER 1.01 Air compressor rated at 67L/sec F.A.D , 12 bar, 37Kw 3-phase motor As "ATLAS COPCO" model GA-37 VSD with a variable speed drive (VSD) or approved equivalent. Above to be supplied with a 3m ³ capacity air receiver. NO 1 1.02 1 No. refrigeration dryer as "Atlas Copco Model FX12" with inlet capacity of 148 l/s or equal and approved. The dryer will be located in the compressor room NO 1 ACCESSORIES 1.03 50mm diameter Compressed air particulate filter as "ATLAS COPCO" Model UD140+ rated at 140 l/s NO 1 1.04 50mm diameter Compressed air coalescing filter as "ATLAS COPCO" Model DD+160 rated at 160 l/s NO 1 1.05 50mm diameter Compressed air dry dust filter as "ATLAS COPCO" Model DDp+160 rated at 160 l/s NO 1 1.06 50mm diameter Compressed air activated carbon filter as "ATLAS COPCO" Model QDT 150 series rated at 150 l/s NO 2 1.07 1.08 50mm dia. Line separator complete with filter and NO 2 1.09 autodrain suitable for 12bar mains supply.As 1.10 "Spirax Monnier". 1.11 1.12 15mm compressed air filter/regulator with automatic drain, 15mm NO 2 pressure gauge suitable for operating pressure gauge 0.5 - 10 bar. As "Spirax Monnier" model IP2A or approved equivalent. 1.13 1.14 32mm dia. Screwed Diaphragm type isolating valve as "Saunders type A" , NO 2 bronze body to BSEN 1982 or equal and approved. 1.15 1.16 20mm dia. Ditto NO 2 1.17 1.18 15mm dia. Ditto NO 2				
M1	TOTAL CARRIED FORWARD TO COLLECTION PAGE				

ITEM NO.	DESCRIPTION	UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
2.00	Quick release air coupling rated 0.8m³/min F.A.D with 10mm dia. hose nipple.	NO	2		
2.01	15mm compressed air lubricator a SPIRAX MONNIER model IL1 or approved equivalent	NO	2		
2.02	15mm heavy duty automatic drain trap, suitable for operating pressure gauge 0.5 - 10 bar. The trap should have a bypass arrangement to permit manual draining. As "Atlas Copco" model WD80or approved equivalent.	NO	2		
2.03	Pedestal meter with 7.6m hose fitted with twin hold-on connectors (closed end). As "Presetair Deluxe" meters calibrated 0-1000KPa & 0-140psi or approved equivalent.	NO	2		
2.05	Allow for wiring from motor to isolator provided by others.	ITEM	0		
	Supply, deliver and install galvanized mild steel tubing medium grade to BS 1387:1985/ EN 10255:2004 Class C with screwed and socketed joints to BS 143 and 1256. Tenderers must allow in their pipework prices for all couplings, unions, connectors, reducers, pipe supports etc required for the satisfactory functioning of the compressed air system.				
	G.M.S PIPE (Risers and horizontal runs)				
2.06	50mm G.M.S Pipe	LM	254		
	Tees				
2.07	50 x 50 x 25mm dia. G.M.S. tee	NO	20		
2.08	50 x 50 x50mm -Ditto-	NO	15		
	Sockets:				
2.09	50mm dia. socket	NO	6		
2.10	25mm dia. socket	NO	2		
2.11	20mm dia. socket	NO	2		
2.12	15mm dia. socket	NO	2		
M2	TOTAL CARRIED FORWARD TO COLLECTION PAGE				

ITEM NO.	DESCRIPTION	UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
	G.M.S DISTRIBUTION PIPE				
	(Supply , install & commission)				
3.01	25mm –GMS pipe	LM	50		
3.02	20mm –Ditto	LM	50		
3.03	15mm –Ditto	LM	50		
	Extra-over g.m.s pipework for the following				
	Bends				
3.04	50mm G.M.S. bends	No.	5		
3.05	25mm –Ditto-	No.	10		
3.06	15mm ditto	No.	10		
	Tees				
3.07	25 x 25 x 25mm dia. G.M.S. tee	No.	10		
3.08					
3.09	15 x 15 x15mm -Ditto-	No.	15		
3.10					
3.11	25 x 25 x 15mm -Ditto-	No.	15		
3.12					
3.13	20 x 20 x 15mm -Ditto-	No.	5		
3.14					
3.15	50mm dia. Plug/ end cap	No.	2		
3.16	25mm dia. Ditto	No.	2		
3.17	20mm dia. ditto	No.	2		
3.18	15mm dia. Ditto	No.	2		
3.19					
3.20					
3.21	Reducers				
3.22	25 x 15mm dia. reducers	No.	5		
3.23	25 x 20mm dia. reducers	No.	5		
3.24	50 x 25mm dia. reducers	No.	5		
3.25					
3.26	Automotive paint Spray gun	No.	1		
3.27	Gas tap				
3.28	VG800501 as "vulcathene" 90º drop lever gas (anti-rotation pin)	NO	2		
3.29					
3.30	Testing and commissioning				
3.31	Allow for setting to work, testing and commissioning				
3.32	of the compressed air installation to the satisfaction	Item	1		
3.33	of the Project Engineer.				
M3	TOTAL CARRIED FORWARD TO COLLECTION PAGE (PER FLOOR)				

ITEM NO.	DESCRIPTION	UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
	G.M.S DISTRIBUTION PIPE				
	(install and commission only)				
3.01	25mm –GMS pipe	LM	37		
3.02	20mm –Ditto	LM	8.3		
3.03	15mm –Ditto	LM	26		
	Extra-over g.m.s pipework for the following Bends				
3.04	50mm G.M.S. bends/ elbows	No.	58		
3.05	25mm –Ditto-	No.	26		
3.06	15mm Wide pattern return bends	No.	20		
	Tees				
3.07	50 x 50 x 50mm dia. G.M.S. tee	No.	10		
3.08	25 x 25 x 25mm dia. G.M.S. tee	No.	58		
3.09	15 x 15 x15mm -Ditto-	No.	15		
3.10					
3.11	25 x 25 x 15mm -Ditto-	No.	15		
3.12					
3.13	20 x 20 x 15mm -Ditto-	No.	5		
3.14	50mm dia. End cap	No.	2		
3.15	50mm dia. socket	No.	10		
3.16	25mm dia. socket	No.	199		
3.17	20mm dia. socket	No.	18		
3.18	15mm dia. socket	No.	3		
	Reducers				
3.19	25 x 20mm dia. reducers	No.	20		
3.23	25 x 15mm dia. reducers	No.	0		
3.20	20 x 15mm dia. reducers	No.	49		
3.24	Automotive paint Spray gun	No.	0		
	Gas tap				
3.25	VG800501 as "vulcathene" 90º drop lever gas (anti-rotation pin)	NO	280		
3.26	Emergency showers as "METHOD"	NO	8		
	Testing and commissioning				
3.27	Allow for setting to work, testing and commissioning of the compressed air installation to the satisfaction of the Project Engineer.	Item	1		
M4	TOTAL CARRIED FORWARD TO COLLECTION PAGE				

COLLECTION PAGE

ITEM NO.	DESCRIPTION	UNIT	QTY	Rate(KSHS)	AMOUNT (KSHS)
	TOTAL BROUGHT FORWARD FROM:				
M1	COMPRESSOR EQUIPMENT AND ACCESORIES	ITEM	1		-
M2	COMPRESSOR EQUIPMENT AND ACCESORIES	ITEM	1		-
M3	DISTRIBUTION PIPING (PER FLOOR)	FLOOR FLOORS	1 8	-	-
M4	DISTRIBUTION PIPING & GAS TAPS	ITEM	1		-
A3	TOTAL FOR CARRIED TO SUMMARY PAGE				-

**THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND
RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B', NAIROBI**

BILL OF QUANTITIES FOR LPG, VACUUM & COMPRESSED AIR SYSTEM; KITCHEN & LAUNDRY

EQUIPMENT BILL OF QUANTITIES FOR LABORATORY VACUUM SYSTEM					
ITEM No.	DESCRIPTION	UNIT	QTY	Rate (Kshs)	Amount (Kshs)
1.00	Supply, install and commission Vacuum system as follows: Model GV60 rotary vane vacuum pump as "ATLAS COPCO" or equal and approved; single stage, oil sealed, air cooled,integral oil separator with coalescing filter, oil filter and oil return line, inlet non-return valve. With switchable gas ballast valve. Fill of oil supplied loose.With Air intake filter complete with filter element;Nominal capacity 60m3/hr (16.7 l/s) @ 50Hz, 72m3/hr @ 60Hz; Ultimate pressure <0.5mbar (hPa);3 phase motor 1.5kW /1.8kW 175-300/300-520V 50/60Hz; Inlet connection G1"(1" BSP) ;Exhaust connection G 1 1/4" (1-1/4" BSP) or vent; Weight 45kg. {1 hpa = 0.001bar}. The vacuum pumps to be supplied complete with a control panel with all the automatic control devices	NO	2		
1.01	Allow for other accessories for successful completion of the work	Item	1		
M1	TOTAL TO COLLECTION PAGE				-

ITEM No.	DESCRIPTION	UNIT	QTY	Rate (Kshs)	Amount (Kshs)
	VACUUM COPPER TUBING & FITTINGS (Supply & Installation)				
	Type K copper tubing complete with copper and brass fittings to suit the installation per floor				
2.00	Piping				
2.01	28mmØ copper tube	LM	5		
2.02	22mmØ copper tube	LM	5		
2.03	15mmØ copper tube	LM	5		
2.04	12mmØ copper tube	LM	5		
2.05					
2.06	90°Elbow				
2.07	28mmØ Elbow	No.	5		
2.08	22mmØ Ditto	No.	5		
2.09	15mmØ Ditto	No.	15		
2.10	12mmØ Ditto	No.	15		
2.11					
2.12	Equal Tee				
2.13	28mmØ Ditto	No.	2		
2.14	22mmØ Ditto	No.	2		
2.15	15mmØ Ditto	No.	15		
2.16	12mmØ Ditto	No.	15		
2.17					
2.18	Adaptor / Reducers				
2.19	28mmx 22mmØ Ditto	No.	5		
2.20	22mmx 15mmØ Ditto	No.	4		
2.21	15mmx 12mm Ø Ditto	No.	15		
2.22	12mmØ adaptor	No.	15		
2.23					
2.24	Connectors				
2.25	28mmØ Ditto	No.	4		
2.26	22mmØ Ditto	No.	4		
2.27	15mmØ Ditto	No.	10		
2.28	12mmØ Ditto	No.	10		
2.29					
2.30	Nipples / couplings				
2.31	28mmØ copper tubes	No.	5		
2.32	22mmØ copper tubes	No.	5		
2.33	15mmØ copper tubes	No.	15		
2.34	12mmØ copper tubes	No.	15		
2.35					
2.36	Gas tap /cocks				
2.37	28 mm diameter Brass Gas cock	NO	4		
2.38	22 mm diameter Brass Gas cock	NO	5		
2.39	15 mm diameter Brass Gas cock	NO	10		
2.40	12 mm diameter Brass Gas cock	NO	10		
2.41					
2.42	Allow for any other accessories to complete the installation	ITEM	1		
2.43	Allow for commissioning	ITEM	1		
M2	TOTAL TO COLLECTION PAGE (PER FLOOR)				

ITEM No.	DESCRIPTION	UNIT	QTY	Rate (Kshs)	Amount (Kshs)
	VACUUM COPPER TUBING & FITTINGS (Installation and commissioning only)				
	Type K copper tubing complete with copper and brass fittings to suit the installation per floor				
3.00	Piping				
3.01	28mmØ copper tube	LM	5		
3.02	22mmØ copper tube	LM	5		
3.03	15mmØ copper tube	LM	5		
3.04	12mmØ copper tube	LM	5		
3.05					
3.06	90°Elbow				
3.07	28mmØ Elbow	No.	5		
3.08	22mmØ Ditto	No.	5		
3.09	15mmØ Ditto	No.	15		
3.10	12mmØ Ditto	No.	15		
3.11					
3.12	Equal Tee				
3.13	28mmØ Ditto	No.	2		
3.14	22mmØ Ditto	No.	2		
3.15	15mmØ Ditto	No.	15		
3.16	12mmØ Ditto	No.	15		
3.17					
3.18	Adaptor / Reducers				
3.19	28mmx 22mmØ Ditto	No.	5		
3.20	22mmx 15mmØ Ditto	No.	4		
3.21	15mmx 12mm Ø Ditto	No.	15		
3.22	12mmØ adaptor	No.	15		
3.23					
3.24	Brass Connectors				
3.25	28mmØ Ditto	No.	4		
3.26	22mmØ Ditto	No.	4		
3.27	15mmØ Ditto	No.	10		
3.28	12mmØ Ditto	No.	10		
3.29					
3.30	Nipples / couplings				
3.31	28mmØ copper tubes	No.	5		
3.32	22mmØ copper tubes	No.	5		
3.33	15mmØ copper tubes	No.	15		
3.34	12mmØ copper tubes	No.	15		
3.35					
3.36	Vacuum Gas tap /cocks				
3.37	12 mm diameter Brass Gas cock	NO	4		
3.38	12 mm diameter Vacuum Gas tap	NO	5		
3.39	copper welding rods	NO	10		
3.40	250gm Flux powder for welding	NO	10		
3.41	Allow for any other accessories to complete the installation	ITEM	1		
3.42	Allow for commissioning	ITEM	1		
M3	TOTAL TO COLLECTION PAGE (Material on site to be installed in all 8 floors)				

ITEM No.	DESCRIPTION	UNIT	QTY	Rate (Kshs)	Amount (Kshs)
	COLLECTION PAGE:				
1.00	FROM M1 -(Equipment)	ITEM	1		-
2.00	FROM M2- (copper tubing & fittings per floor)	ITEM	1	-	
3.00	TOTAL FOR 8 FLOORS (litem 2 x 8 No.)	Floor	8	-	-
4.00	FROM M3	ITEM	1	-	-
A4	TOTAL FOR VACUUM CARRIED TO SUMMARY PAGE				

**THE PROPOSED PHASE 2 WORKS FOR THE PROPOSED RESEARCH, TECHNOLOGY AND INNOVATION LABORATORIES AND
RELATED INFRASTRUCTURE ON PLOT L.R. NO. 209/5811, DUNGA ROAD, SOUTH 'B', NAIROBI**
**BILL OF QUANTITIES FOR LPG, VACUUM & COMPRESSED AIR SYSTEM; KITCHEN &
LAUNDRY EQUIPMENT**

<u>SUMMARY OF BILL OF QUANTITIES</u>			
ITEM No.	DESCRIPTION	UNIT	AMOUNT(KSHS)
A0	PRELIMINARIES AND GENERAL CONDITIONS AS TENDERED	ITEM	
A1-B	KITCHEN EQUIPMENT	ITEM	
A1-C	LAUNDRY EQUIPMENT	ITEM	
A2	LPG SYSTEM	ITEM	
A3	COMPRESSED AIR SYSTEM	ITEM	
A4	VACUUM SYSTEM	ITEM	
	SUBTOTAL		-
	ADD CONTIGENCY COSTS 10%		-
	TOTAL CARRIED TO FORM OF TENDER		-

Total in words:

Name of Contractor:

Address:

Telephone:.....

Pin No.Vat Reg. No.....

Signature:

Official Stamp/Date: