



Kenya Power

The Kenya Power & Lighting Co. Ltd
Central Office – P.O. Box 30099 Nairobi, Kenya
STIMA PLAZA, KOLOBOT ROAD, PARKLANDS, NAIROBI.
Telephone – 24-20-3201000 – Fax No. 254 – 20 – 3514485

Our Ref: KPI/9A.4/OT/TPT/06/19-20

Date: 02.04.2020

Your Ref:

TO:

ALL PROSPECTIVE BIDDERS

Dear Sirs/ Madams

RE: ADDENDUM NO. 1 TO THE TENDER NO. KPI/9A.4/OT/TPT/06/19-20 – SUPPLY OF HYDRAULIC TOOLS AND EQUIPMENT, ASSORTED WORKSHOP TOOLS AND EQUIPMENT AND CIVIL WORKS. (KPLC-TRANSPORT PORTAL)

Interested bidders are hereby notified of the following amendments to the above tender:

1: SECTION-VI (6.4) ON AWARD CRITERIA

All interested bidders are hereby notified that the award criteria will be on “**LOT BASIS**”

2: SECTION-IV (3.18) ON TENDER SECURITY

Interested bidders are hereby informed that the tender security will be as per Lot. Those bidding for more than one Lot will submit a combined tender security for the same as below:

item	Lot	Tender Security
1	LOT-1	Kshs. 100,000.00
2	LOT-2	Kshs. 100,000.00
3	LOT-3	Kshs. 50,000.00
4	LOT-4	Kshs. 100,000.00
5	LOT-5	Kshs. 20,000.00

3: SECTION-XXII ON TECHNICAL SPECIFICATIONS & GTPs

The Technical specifications and General Technical Particulars have been reviewed as per the attached **Appendix-1**

4. SECTION-1(1.3) TENDER CLOSING (SUBMISSION) DATE

The tender closing date has been extended from **14th April, 2020** to **30th April, 2020**.
The tender will close at 11.00 a.m. and will be opened same date at 11.30 a.m. at Stima Plaza Auditorium.

All other terms and conditions remain as per the Principal Tender Document.

Yours faithfully

FOR: THE KENYA POWER & LIGHTING COMPANY LIMITED



Dr. JOHN NG'ENO

GENERAL MANAGER, SUPPLY CHAIN.



Kenya Power

ADDENDUM-I APPENDIX-1

**HYDRAULIC UNIT TOOLS AND
EQUIPMENT, ASSORTED WORKSHOP
TOOLS AND EQUIPMENT AND CIVIL
WORKS TENDER NO:
KP1/9A.4/OT/TPT/06/19-20**

SECTION V: SCHEDULE OF REQUIREMENTS

LOT NUMBER	DESCRIPTION
LOT 1	Part A - Hydraulic Unit Layout Design and Civil Works.
	Part B - Supply, installation, testing and commissioning of the Hydraulic Unit tools and equipment, user training and aftersales support.
LOT 2	Part A - Tyre Section Civil Works.
	Part B - Supply, installation, testing and commissioning of the Tyre Section tools and equipment, user training and aftersales support.
LOT 3	Supply, installation, testing and commissioning of vehicle hoists, user training and aftersales support.
LOT 4	Supply, installation, testing and commissioning of assorted workshop tools and equipment, user training and aftersales support.
LOT 5	Existing air grid refurbishment (The supply, installation, testing of the various fittings and commissioning of the system).

LOT 1: PART A - HYDRAULIC UNIT LAYOUT DESIGN AND CIVIL WORKS

Item	Description	Qty.	Unit
	<u>Technical Hydraulic Unit Layout Design</u>		
A	Provide Technical Hydraulic Unit Layout Design in liaison with the client/employer. (KPLC)	1	Layout Design
	<u>Floors</u>		
B	Carefully hack the existing cement sand floor screed (Av. 50mm thick) and cart away debris as directed and prepare surfaces for new flooring.	156	SM
	<u>Anti-termite treatment</u>		
C	Premise 200 SC' or other equal and approved anti-termite insecticide treatment with ten years guarantee, applied strictly in accordance with manufacturer's instructions, to tops of fills	156	SM
	<u>Repair to timber doors</u>		
D	Allow for repair of existing timber doors including replacement of 2lever door locks	2	NO
	<u>Terrazzo floor</u>		
	<u>Beds or Backings</u>		
	<u>Screed: cement and sand (1:2)</u>		
E	20mm thick one coat backings; wood floated to receive terrazzo floor (m/s) to concrete or base; to floors level; internal	156	SM
	<u>In-situ polished Terrazzo floor as described in:-</u>		
F	30mm Thick floor in bays n.e 2sq m	156	SM
G	20x100mm skirting finished with rounded to edge and coved junction with floor finish.	43	lm
H	32x3mm. Thick metallic or equal and approved dividing strips set in terrazzo.	259	lm

	<u>Gates</u>		
	HEAVY DUTY SOLID SLAT ROLLER SHUTTERS		
	<p><u>Curtains</u> - Continuously interlocking high quality Steel curtains of 1.0 – 2.0 mm thick slats, securely held together by end locks all with high quality powder coated finishes.</p> <p><u>Side rails</u> – Appropriate steel tube design in consideration of the loading and gate size.</p> <p><u>End plates</u> – Steel made end plates with relevant thickness and relative to the door size.</p> <p><u>Rollers</u> – Made of mild steel pipe Class A designed to meet gate size.</p> <p><u>Operation</u> – Electrical motorised with remote operation as well as in-built limit switch/push button operation to stop the shutter at the end of each travel c/w strong padlock box.</p> <p><u>Warranty</u> – Minimum – 2 years.</p> <p><u>Roller Shutter Dimensions:</u> 4800 mm (Width) x 5200 mm (Height).</p>		
I	2 No. of heavy duty solid slat roller shutters as specified under gates.	2	No.
	<i>An alternative gate design will be considered.</i>		
	<u>Grills</u>		
	<u>High tensile steel burglar proof rhs/shs at 150mm centres vertical and 500mm centres horizontal; ends lugged in masonry or concrete; welds ground smooth; one coat primer before fixing.</u>		
K	25 x25x 2 mm rhs welded and ground smooth to approval.	108	sm
	<u>Painting and Decorations</u>		
	<u>On Metal work</u>		
	<u>Prepare and apply three coats: gloss paint to Crown Solo or other equal and approved to: -</u>		
L	General surfaces of metal; over 300mm girth	204	sm
	<u>On previously painted wall surfaces</u>		
M	Scrub off peeling paints and prepare surfaces for new paintworks	265	SM
	<u>Painting and decorations</u>		
	<u>Prepare and apply one undercoat and two finishing coats of first quality external matt paint to "crown Paints" or other equal and approved to: -</u>		
N	Previously painted wall surfaces	265	SM
	<u>Electrical Works</u>		
O	Provision of at least five (5) 3phase electrical outlets and five (5) Single-phase electrical outlets for connecting the mounted equipment.	10	NO

P	Allow for repair of lighting points.	10	NO
Q	Supply and installation of distribution board (1 No.) of 100 Amps. rating with the following specifications: Triple pole breakers – 63 Amps each (5 No.) Single pole breakers – 30 Amps each (5 No.) Single pole breakers – 10 Amps each (10 No.)	1	NO.
R	Supply and installation of industrial sockets and isolators of 63 Amps. rating (5 No.)	5	NO.
S	The wiring, cabling, conduits layout and installation to be carried out by the successful bidder in compliance IEE standards.	1	ITEM

LOT 1: PART B - SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF HYDRAULIC UNIT TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

The following tools and equipment shall be supplied, installed, tested and commissioned, users trained and after sales support offered.

No.	Hydraulic Unit Tools and Equipment	Unit	Number of Units
1	Electric Hydraulic Hose Crimping Machine	Piece	1
2	Hydraulic Hose Cutter	Piece	1
3	Electric Hose Skiving Machine	Piece	1
4	Hydraulic Hose Test Bench	Piece	1
5	Hose Reel Dispenser	Piece	4
6	Racks and Trays	Piece	3
7	Work Station Bench	Piece	4
8	Hydraulic Pipe Bender	Piece	1
9	Hydraulic Hose Hand Held Projectile Cleaner Kit	Piece	2
10	Manual Flaring Tool	Set	2
11	Hydraulic Pressure Gauge Set	Piece	2
12	Digital Pressure Gauge Set	Piece	2
13	Manual Hydraulic Hose Skiving Machine	Piece	1
14	Portable Hydraulic Hose Crimping Machine	Piece	1
15	Manual Tube Bender	Set	1

LOT 2: PART A – TYRE SECTION CIVIL WORKS

Item	Description	Qty.	Unit
	<u>Floors</u>		
A	Carefully hack the existing cement sand floor screed (Av. 50mm thick) and cart away debris as directed and prepare surfaces for new flooring.	150	SM
	<u>Anti-termite treatment</u>		
B	Premise 200 SC' or other equal and approved anti-termite insecticide treatment with ten years guarantee, applied strictly in accordance with manufacturer's instructions, to tops of fills	150	SM
	<u>Provision of alternative door to existing office</u>		
C	Demolish a section of an existing office in order to provide an alternative door and install a standard wooden door complete with a lock and related works and provide suitable manhole cover of existing underground tank.	1	NO
	<u>Terrazzo floor</u>		
	<u>Beds or Backings</u>		
	<u>Screed; cement and sand (1:2)</u>		
D	20mm thick one coat backings; wood floated to receive terrazzo floor (m/s) to concrete or base; to floors level; internal	150	SM
	<u>In-situ polished Terrazzo floor as described in:-</u>		
E	30mm Thick floor in bays n.e 2sq m	150	SM
F	20x100mm skirting finished with rounded to edge and coved junction with floor finish.	45	lm
G	32x3mm. Thick metallic or equal and approved dividing strips set in terrazzo.	260	lm
	<u>Paints</u>		
	<u>On previously painted wall surfaces</u>		
H	Scrub off peeling paints and prepare surfaces for new paintworks	265	SM
	<u>Painting and decorations</u>		
I	Prepare and apply one undercoat and two finishing coats of first quality external matt paint to "crown Paints" or other equal and approved to: -		
J	Previously painted wall surfaces	265	SM
	<u>Electrical Works</u>		
K	Provision of at least two (2) 3phase electrical outlets and five (5) Single-phase electrical outlets.	7	NO
L	Allow for repair of lighting points.	10	NO
M	Supply and installation of industrial sockets and isolators of 63 Amps.	2	NO

	rating (2 No.)		
N	The wiring, cabling, conduits layout and installation to be carried out by the successful bidder in compliance IEE standards.	1	ITEM
O	Supply and installation of distribution board (1 No.) of 100 Amps. rating with the following specifications: Triple pole breakers – 63 Amps each (5 No.) Single pole breakers – 30 Amps each (5 No.) Single pole breakers – 10 Amps each (10 No.)	1	NO.
	<u>Other Works</u>		
P	Dismounting and repositioning/installation of existing three equipment within the section–Wheel Balancing Machine and Tyre Changing Machines.	2	NO.
Q	Dismount the exiting tyre inflation cage and supply and install a standard/similar steel and mesh tyre inflation cage of 6ftx6ftx3ft.	1	NO.
R	Movable two (2) steel lockers of dimensions 6ftx1.5ftx1.5ft.	2	NO.
S	Additional three (3) wall mounted pressure take off points with double quick release couplings at various positions within the tyre section and two (2) below surface pressure take off points at the wheel alignment unit position with double quick release couplings.	5	NO.

LOT 2: PART B - SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF TYRE SECTION TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

The following tools and equipment shall be supplied, installed, tested and commissioned, users trained and after sales support offered.

No.	Tyres Section Tools and Equipment	Unit	Number of Units
1	Fully Integrated Computerised Wheel Alignment Unit	Piece	1
2	Tyre branding iron	Piece	1
3	Branding letters	Piece	4
4	Branding numbers	Piece	10
5	Tyre tread depth gauge- metal	Piece	1
6	Digital wall tyre pressure inflator/gauge c/w 30 ft. hose,2pcs hand remote control,2 pcs twin connector hold on open.	Set	2
7	Analogue wall tyre pressure inflator/gauge c/w 30 ft. hose,2pcs hand remote control,2 pcs twin connector hold on open.	Set	2
8	Valve mounting tool	Piece	2
9	Tyre lever for motor cycles	Piece	2
10	Rim straitening lever	Piece	2

LOT 3: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF VEHICLE LIFTING EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

The following tools and equipment shall be supplied, installed, tested and commissioned, users trained and after sales support offered.

No.	Assorted Workshop Tools and Equipment	Unit	Number of Units
1	Double Electro Hydraulic Scissor Vehicle Lift	Set	3
2	Electrical Items for installation		
	Supply and installation of distribution board (2 No.) of 100 Amps. rating with the following specifications: 1.Triple pole breakers - 63 Amps each (5 No.) 2.Single pole breakers - 30 Amps. Each (5 No.) 3.Single pole breakers - 10 Amps. each (10 No.)	Piece	2

LOT 4: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF ASSORTED WORKSHOP TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

No.	Description	Unit	Number of units
1	Portable Steam Vehicle Washer	Piece	1
2	Portable Pressure Car Wash Machine	Piece	2
3	Angle Grinder - 7"	Piece	2
4	Angle Grinder - 9"	Piece	1
5	Portable MIG Welding Machine Set	Piece	1
6	Combined Pin And Hook Spanner Wrench Tool Set	Piece	2
7	Pneumatic Impact Wrench - 1/2" Drive Long Anvil	Piece	3
8	Panel Puller Spotter	Piece	1
9	Inverter Dc Arc Welding Machine 200 Amps.	Piece	1
10	Single Side Spot Welding Machine C/W Single Sided Spot Gun	Piece	1
11 Assorted Body Shop Tools And Equipment			
1	Panel Beating Set 9pc with wooden shafts	Set	2
2	Body Panel Levering/Separating Tool Set 13pc	Set	2
3	Sledge Hammers with wooden shafts	Set	2
4	Ball Pein hammers with wooden handles	Set	2
5	Club hammers with wooden handles	Set	2
6	Heavy Duty Pry Bar Set	Set	2
7	Wrecking Bar Set 5pc	Set	2
8	Heel Bar Set 4pc 150, 300, 410, 510mm	Set	2
9	Retractable Snap-Off Knife Heavy-Duty	Set	2
10	Random Orbital Sander Variable Speed	Piece	5
11	Flexible heavy duty Electric Extension Cables	Piece	3
12	Hydraulic Body Pull Rams	Set	2
13	Chain Kit 2 x 2m Chains 2 x Clamps	Set	2
14	Pull Hook Kit Large	Set	2
15	Door Restraining Bars Pack of 2	Set	1
16	Air Suction Dent Puller Set	Set	3
17	HVLP Gravity Feed Spray Gun 1.3mm Set-Up	Set	2
18	Spray Gun Standard Gravity Feed 1.4mm Set-Up	Set	2
19	Spray Gun Gravity Feed 2.2mm Set-Up	Set	2
20	Swivel Head Riveting Kit	Set	3
21	Threaded Nut Riveter	Set	1
22	Caulking Gun 220mm - Heavy-Duty	Piece	5
23	Tinman's Shears 250mm Spring Loaded	Piece	5
24	Offset Tin Snips 280mm	Piece	5
25	Sanding Block Hook-and-Loop kit 6pc	Kit	2
26	Professional Adjustable Hand File Holder	Piece	5
27	Scraper Set with Hammer Cap 3pc	Set	3
28	Butt Welding Clamp Set 4pc	Set	5
29	Panel Stand - Door, Wing, Bonnet & Bumper	Piece	2
30	Folding Bumper Stand	Piece	2
31	Rotating Universal Panel Stand	Piece	1
32	Adjustable Transport Car Trolley 2tonne Capacity	Piece	2
33	'C' Clamp & Welding Clamp Set 3pc	Set	2
34	Thread Tapping Spanners Inner Sizes	Set	2
35	Thread Tapping Spanners Outer Sizes	Set	2
36	Heavy Duty Electric Kettle	Piece	2
37	Air Gas hose pipes -	Piece	1
38	Auto workshop Acetylene gas industrial hose – 10 Meters	Piece	2
39	Auto workshop Oxygen gas industrial hose – 10 Meters	Piece	2
40	A set of Oxygen and Acetylene regulators	Set	2
41	Auto workshop oxy-acetylene Gas welding nozzles	Set	2
42	Oxy-Acetylene Gas cutting torch	Set	2
12 Other vehicle diagnostic and repair equipment			
i.	Fuel pressure testing kit	Kit	1
ii.	Compression testing Kit	Kit	1
iii.	Nozzles testing and configuration Kit	Kit	1
iv.	Timing light	Piece	2

LOT 5 - EXISTING AIR GRID REFURBISHMENT (SUPPLY, INSTALLATION, TESTING OF THE VARIOUS FITTINGS AND COMMISSIONING)

No.	Air Grid Refurbishment Fittings and Works	Unit	Number of Units
1	Quick release couplings - ½" complete set	Piece	60
2	Manual gate valve - ½" complete set	Piece	30
3	Nipples - ½" male male	Piece	30
4	Filter regulator with automatic drains – 40 micron	Piece	30
5	Sockets - ½" female female	Piece	30
6	Aluminium/G.I bends - ½"	Piece	30
7	Analogue pressure gauges with ½" side connection with 0-60 bar range indicationg both psi and bar.	Piece	10
8	Other miscellenous/related items, works and contingencies		
9	Consumables		
10	Labour		

PRICE SCHEDULES

LOT 1: PART A - HYDRAULIC UNIT LAYOUT DESIGN AND CIVIL WORKS

Item	Description	Qty.	Unit	Rate	Amount Vat Excl. (Ksh)
	<u>Technical Hydraulic Unit Layout Design</u>				
A	Provide Technical Hydraulic Unit Layout Design in liaison with the client/employer. (KPLC)	1	Layout Design		
	<i>Carried to summary</i>				
	<u>Floors</u>				
B	Carefully hack the existing cement sand floor screed (Av. 50mm thick) and cart away debris as directed and prepare surfaces for new flooring	156	SM		
	<u>Anti-termite treatment</u>				
C	Premise 200 SC' or other equal and approved anti-termite insecticide treatment with ten years guarantee, applied strictly in accordance with manufacturer's instructions, to tops of fills	156	SM		
	<u>Repair to timber doors</u>				
D	Allow for repair of existing timber doors including replacement of 2lever door locks	2	NO		
	<i>Carried to summary</i>				
	<u>Terrazzo floor</u>				
	<u>Beds or Backings</u>				
	<u>Screed; cement and sand (1:2)</u>				
E	20mm thick one coat backings; wood floated to receive terrazzo floor (m/s) to concrete or base; to floors level; internal	156	SM		
	<u>In-situ polished Terrazzo floor as described in:-</u>				
F	30mm Thick floor in bays n.e 2sq m	156	SM		
G	20x100mm skirting finished with rounded to edge and coved junction with floor finish.	43	lm		
H	32x3mm. Thick metallic or equal and approved dividing strips set in terrazzo.	259	lm		
	<i>Carried to summary</i>				
	<u>Gates</u>				
	<u>HEAVY DUTY SOLID SLAT ROLLER SHUTTERS</u>				
	<u>Curtains</u> - Continuously interlocking high quality Steel curtains of 1.0 – 2.0 mm thick slats, securely held together by end locks all with high quality powder coated finishes. <u>Side rails</u> – Appropriate steel tube design in consideration of the loading and gate size. <u>End plates</u> – Steel made end plates with relevant thickness				

	and relative to the door size. <u>Rollers</u> – Made of mild steel pipe Class A designed to meet gate size. <u>Operation</u> – Electrical motorised with remote operation as well as in-built limit switch/push button operation to stop the shutter at the end of each travel c/w strong padlock box. <u>Warranty</u> – Minimum – 2 years. <u>Roller Shutter Dimensions:</u> 4800 mm (Width) x 5200 mm (Height)				
I	2 No. of heavy duty solid slat roller shutters as specified under gates.	2	No.		
	<i>Alternative gate design price quotation.</i>				
	<i>Carried to summary</i>				
	<u>Grills</u>				
	<u>High tensile steel burglar proof rhs/shs at 150mm centres vertical and 500mm centres horizontal; ends lugged in masonry or concrete; welds ground smooth; one coat primer before fixing.</u>				
K	25 x25x 2 mm rhs welded and ground smooth to approval.	108	sm		
	<u>Painting and Decorations</u>				
	<u>On Metal work</u>				
	<u>Prepare and apply three coats; gloss paint to Crown Solo or other equal and approved to: -</u>				
L	General surfaces of metal; over 300mm girth	204	sm		
	<u>On previously painted wall surfaces</u>				
M	Scrub off peeling paints and prepare surfaces for new paintworks	265	SM		
	<u>Painting and decorations</u>				
	<u>Prepare and apply one undercoat and two finishing coats of first quality external matt paint to "crown Paints" or other equal and approved to: -</u>				
N	Previously painted wall surfaces	265	SM		
	<i>Carried to summary</i>				
	<u>Electrical Works</u>				
O	Provision of at least five (5) 3phase electrical outlets and five (5) Single phase electrical Outlets	10	NO		
P	Allow for repair of lighting points	10	NO		
Q	Supply and installation of distribution board (1 No.) of 100 Amps. rating with the following specifications: Triple pole breakers – 63 Amps each (5 No.)	1	NO.		

	Single pole breakers – 30 Amps each (5 No.) Single pole breakers – 10 Amps each (10 No.)				
R	Supply and installation of industrial sockets and isolators of 63 Amps. rating (5 No.)	5	NO.		
S	The wiring, cabling, conduits layout and installation to be carried out by the successful bidder in compliance IEE standards.	1	ITEM		
	<i>Carried to summary</i>				
	<u>SUMMARY</u>				
	From page Ren / 1				
	From page Ren / 2				
	From page Ren / 3				
	From page Ren / 4				
	From page Ren / 5				
	From page Ren / 6				
Total carried to grand summary (VAT Exclusive)					
16% VAT					
Total For Refurbishment of Hydraulic Unit at Ruaraka Depot Carried To Grand Summary (VAT Inclusive)					

LOT 1: PART B - SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF HYDRAULIC UNIT TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

No.	Hydraulic Unit Tools and Equipment	Unit	Number of Units	Unit Price Ksh. VAT Excl.	Total Price Ksh. VAT Excl.
1	Electric Hydraulic Hose Crimping Machine	Piece	1		
2	Hydraulic Hose Cutter	Piece	1		
3	Electric Hose Skiving Machine	Piece	1		
4	Hydraulic Hose Test Bench	Piece	1		
5	Hose Reel Dispenser	Piece	4		
6	Racks and Trays	Piece	3		
7	Work Station Bench	Piece	4		
8	Hydraulic Pipe Bender	Piece	1		
9	Hydraulic Hose Hand Held Projectile Cleaner Kit	Piece	2		
10	Manual Flaring Tool	Set	2		
11	Hydraulic Pressure Gauge Set	Piece	2		
12	Digital Pressure Gauge Set	Piece	2		
13	Manual Hydraulic Hose Skiving Machine	Piece	1		
14	Portable Hydraulic Hose Crimping Machine	Piece	1		
15	Manual Tube Bender	Set	1		
	Total Price (VAT Excl.)				
	16% VAT				
	GRAND TOTAL				

LOT 2: PART A – TYRE SECTION CIVIL WORKS

Item	Description	Qty.	Unit	Rate	Amount VAT Excl. (Ksh)
	<u>Floors</u>				
A	Carefully hack the existing cement sand floor screed (Av. 50mm thick) and cart away debris as directed and prepare surfaces for new flooring.	150	SM		
	<u>Anti-termite treatment</u>				
B	Premise 200 SC' or other equal and approved anti-termite insecticide treatment with ten years guarantee, applied strictly in accordance with manufacturer's instructions, to tops of fills.	150	SM		
	<u>Provision of alternative door to existing office</u>				
C	Demolish a section of an existing office in order to provide an alternative door and install a standard wooden door complete with a lock and related works and provide suitable manhole cover of existing underground tank.	1	NO		
	<i>Carried to summary</i>				
	<u>Terrazzo floor</u>				
	<u>Beds or Backings</u>				
	<u>Screed: cement and sand (1:2)</u>				
D	20mm thick one coat backings; wood floated to receive terrazzo floor (m/s) to concrete or base; to floors level; internal	150	SM		
	<u>In-situ polished Terrazzo floor as described in:-</u>				
E	30mm Thick floor in bays n.e 2sq m	150	SM		
F	20x100mm skirting finished with rounded to edge and coved junction with floor finish.	45	lm		
G	32x3mm. Thick metallic or equal and approved dividing strips set in terrazzo.	260	lm		
	<i>Carried to summary</i>				
	<u>Paints</u>				
	<u>On previously painted wall surfaces</u>				
H	Scrub off peeling paints and prepare surfaces for new paintworks	265	SM		
	<u>Painting and decorations</u>				
I	Prepare and apply one undercoat and two finishing coats of first quality external matt paint to "crown Paints" or other equal and approved to: -				

J	Previously painted wall surfaces	265	SM		
	<i>Carried to summary</i>				
	<u>Electrical Works</u>				
K	Provision of at least two (2) 3phase electrical outlets and five (5) single-phase electrical outlets.	7	NO		
L	Allow for repair of lighting points	10	NO		
M	Supply and installation of industrial sockets and isolators of 63 Amps. rating (2 No.).	2	NO		
N	The wiring, cabling, conduits layout and installation to be carried out by the bidder in compliance IEE standards.	1	ITEM		
O	Supply and installation of distribution (1 No.) board of rating 100 Amps. rating with the following specifications: Triple pole breakers – 63 Amps each (5 No.) Single pole breakers – 30 Amps each (5 No.) Single pole breakers – 10 Amps each (10 No.)	1	NO.		
	<i>Carried to summary</i>				
	<u>Other Works</u>				
P	Dismounting and repositioning/installation of existing two equipment within the section–Wheel Balancing Machine and Tyre Changing Machine.	2	NO		
Q	Dismount the exiting tyre inflation cage and supply and install a standard steel and mesh tyre inflation cage of 6ftx6ftx3ft.	1	NO		
R	Movable two (2) steel lockers of dimensions 6ftx1.5ftx1.5ft.	2	NO		
S	Additional three (3) wall mounted pressure take off points with double quick release couplings at various positions within the tyre section and two (2) below surface pressure take off points at the wheel alignment unit position with double quick release couplings.	5	NO		
	<i>Carried to summary</i>				
	<u>SUMMARY</u>				
	From page Ren / 1				
	From page Ren / 2				
	From page Ren / 3				
	From page Ren / 4				
	From page Ren / 5				
	Total carried to grand summary (VAT Exclusive)				
	16% VAT				
	Total For Refurbishment of Tyre Section at Ruaraka Depot Carried To Grand Summary (VAT Inclusive)				

LOT 2: PART B - SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF TYRE SECTION TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

No.	Tyres Section Tools and Equipment	Unit	Number of Units	Unit Price Ksh. VAT Excl.	Total Price Ksh. VAT Excl.
1	Fully Integrated Computerised Wheel Alignment Unit	Piece	1		
2	Tyre branding iron	Piece	1		
3	Branding letters	Piece	4		
4	Branding numbers	Piece	10		
5	Tyre tread depth gauge- metal	Piece	1		
6	Digital wall tyre pressure inflator/gauge c/w 30 ft. hose, 2 pcs hand remote control, 2 pcs twin connector hold on open.	Set	2		
7	Analogue wall tyre pressure inflator/gauge c/w 30 ft. hose, 2 pcs hand remote control, 2 pcs twin connector hold on open.	Set	2		
8	Valve mounting tool	Piece	2		
9	Tyre lever for motor cycles	Piece	2		
10	Rim straitening lever	Piece	2		
	Total Price (VAT Excl.)				
	16% VAT				
	GRAND TOTAL				

LOT 3: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF VEHICLE LIFTING EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

No.	Assorted Workshop Tools and Equipment	Unit	Number of Units	Unit Price VAT Excl.	Total Price VAT
1	Double Electro Hydraulic Scissor Vehicle Lift	Set	3		
2	Electrical Items for installation				
	Supply and installation of distribution board (2 No.) of 100 Amps. rating with the following specifications: 1. Triple pole breakers - 63 Amps each (5 No.) 2. Single pole breakers - 30 Amps. Each (5 No.) 3. Single pole breakers - 10 Amps. each (10 No.)	Piece	2		
	Total Price (VAT Excl.)				
	16% VAT				
	Total Price (VAT Inclusive)				

LOT 4: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF ASSORTED WORKSHOP TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

No.	Description	Unit	Number of units	Unit Price Ksh. VAT Excl.	Total Price Ksh. VAT Excl.
1	Portable Steam Vehicle Washer	Piece	1		
2	Portable Pressure Car Wash Machine	Piece	2		
3	Angle Grinder - 7"	Piece	2		
4	Angle Grinder - 9"	Piece	1		
5	Portable MIG Welding Machine Set	Piece	1		
6	Combined Pin And Hook Spanner Wrench Tool Set	Piece	2		
7	Pneumatic Impact Wrench -1/2" Drive Long Anvil	Piece	3		
8	Panel Puller Spotter	Piece	1		
9	Inverter Dc Arc Welding Machine 200 Amps	Piece	1		
10	Single Side Spot Welding Machine C/W Single Sided Spot Gun	Piece	1		
11 Assorted Body Shop Tools And Equipment					
1	Panel Beating Set 9pc with wooden shafts	Set	2		
2	Body Panel Levering/Separating Tool Set 13pc	Set	2		
3	Sledge Hammers with wooden shafts	Set	2		
4	Ball Pein hammers with wooden handles	Set	2		
5	Club hammers with wooden handles	Set	2		
6	Heavy Duty Pry Bar Set	Set	2		
7	Wrecking Bar Set 5pc	Set	2		
8	Heel Bar Set 4pc 150, 300, 410, 510mm	Set	2		
9	Retractable Snap-Off Knife Heavy-Duty	Set	2		
10	Random Orbital Sander Variable Speed	Piece	5		
11	Flexible heavy duty Electric Extension Cables	Piece	3		
12	Hydraulic Body Pull Rams	Set	2		
13	Chain Kit 2 x 2m Chains 2 x Clamps	Set	2		
14	Pull Hook Kit Large	Set	2		
15	Door Restraining Bars Pack of 2	Set	1		
16	Air Suction Dent Puller Set	Set	3		
17	HVLP Gravity Feed Spray Gun 1.3mm Set-Up	Set	2		
18	Spray Gun Standard Gravity Feed 1.4mm Set-Up	Set	2		
19	Spray Gun Gravity Feed 2.2mm Set-Up	Set	2		
20	Swivel Head Riveting Kit	Set	3		
21	Threaded Nut Riveter	Set	1		
22	Caulking Gun 220mm - Heavy-Duty	Piece	5		
23	Tinman's Shears 250mm Spring Loaded	Piece	5		
24	Offset Tin Snips 280mm	Piece	5		
25	Sanding Block Hook-and-Loop kit 6pc	Kit	2		
26	Professional Adjustable Hand File Holder	Piece	5		
27	Scraper Set with Hammer Cap 3pc	Set	3		
28	Butt Welding Clamp Set 4pc	Set	5		
29	Panel Stand - Door, Wing, Bonnet & Bumper	Piece	2		
30	Folding Bumper Stand	Piece	2		
31	Rotating Universal Panel Stand	Piece	1		
32	Adjustable Transport Car Trolley 2tonne Capacity	Piece	2		
33	'C' Clamp & Welding Clamp Set 3pc	Set	2		
34	Thread Tapping Spanners Inner Sizes	Set	2		
35	Thread Tapping Spanners Outer Sizes	Set	2		
36	Heavy Duty Electric Kettle	Piece	2		
37	Air Gas hose pipes -	Piece	1		
38	Auto workshop Acetylene gas industrial hose – 10 Meters	Piece	2		
39	Auto workshop Oxygen gas industrial hose – 10 Meters	Piece	2		
40	A set of Oxygen and Acetylene regulators	Set	2		
41	Auto workshop oxy-acetylene Gas welding nozzles	Set	2		
42	Oxy- Acetylene Gas cutting torch	Set	2		
12 Other vehicle diagnostic and repair equipment					
i.	Fuel pressure testing kit	Kit	1		
ii.	Compression testing Kit	Kit	1		
iii.	Nozzles testing and configuration Kit	Kit	1		
iv.	Timing light	Piece	2		
Total Price (VAT Excl.)					
16% VAT					
GRAND TOTAL					

LOT 5 - EXISTING AIR GRID REFURBISHMENT (SUPPLY, INSTALLATION, TESTING OF THE VARIOUS FITTINGS AND COMMISSIONING)

No.	Air Grid Refurbishment Fittings and Works	Unit	Number of Units	Unit Price Ksh. VAT Excl.	Total Price Ksh. VAT Excl.
1	Quick release couplings - ½" complete set	Piece	60		
2	Manual gate valve - ½" complete set	Piece	30		
3	Nipples - ½" male male	Piece	30		
4	Filter regulator with automatic drains – 40 micron	Piece	30		
5	Sockets - ½" female female	Piece	30		
6	Aluminium/G.I bends - ½"	Piece	30		
7	Analogue pressure gauges with ½" side connection with 0-60 bar range indicationg both psi and bar.	Piece	10		
8	Other miscellenous/related items, works and contingencies				
9	Consumables				
10	Labour				
	Total Price				
	16% VAT				
	GRAND TOTAL				

GRAND TOTAL PRICE (VAT INCLUSIVE)

Lot Number	Description	Amount VAT Incl. (Ksh.)
LOT 1	Part A - Hydraulic Unit Layout Design and Civil Works.	
	Part B - Supply, installation, testing and commissioning of the Hydraulic Unit tools and equipment, user training and aftersales support.	
	Total Lot Amount (VAT Incl.) in Ksh.	
LOT 2	Part A - Tyre Section Civil Works.	
	Part B - Supply, installation, testing and commissioning of the Tyre Section tools and equipment, user training and aftersales support.	
	Total Lot Amount (VAT Incl.) in Ksh.	
LOT 3	Supply, installation, testing and commissioning of vehicle lifting equipment, user training and aftersales support.	
LOT 4	Supply, installation, testing and commissioning of assorted workshop tools and equipment, user training and aftersales support.	
LOT 5	Existing air grid refurbishment (The supply, installation, testing of the various fittings and commissioning of the system).	
GRAND TOTAL AMOUNT (VAT Inclusive) in Ksh.		

Yours sincerely,

Name of Tenderer

Signature of duly authorised person signing the Tender

Name and Designation of duly authorised person signing the Tender

Stamp or Seal of Tenderer

SECTION XIX - TECHNICAL SPECIFICATIONS

Technical specifications describe the basic requirements for goods. In addition to the information and documentation in the Tender Document regarding the technical aspects of this tender, all Tenderers shall comply with the following -

GUARANTEED TECHNICAL PARTICULARS (GTPs)

Notes:

1. The Guaranteed Technical Particulars (GTPs) constitute of the following documents;
 - i. Part A (i) - General Requirements for Lot 1
 - ii. Part A (ii) - General Requirements for Lot 2
 - iii. Part A (iii) - General Requirements for Lot 3
 - iv. Part A (iv) - General Requirements for Lot 4
 - v. Part A (v) - General Requirements for Lot 5
 - vi. Part B (i) - Detailed Technical Specifications for Lot 1: Part A
 - vii. Part B (ii) - Detailed Technical Specifications for Lot 1: Part B
 - viii. Part B (iii) - Detailed Technical Specifications for Lot 2: Part A
 - ix. Part B (iv) - Detailed Technical Specifications for Lot 2: Part B
 - x. Part B (v) -Detailed Technical Specifications for Lot 3
 - xi. Part B (vi) -Detailed Technical Specifications for Lot 4
 - xii. Part B (vii) -Detailed Technical Specifications for Lot 5
2. All pages of the GTPs for the tenderer bid lot to be signed, stamped and submitted by the bidder for evaluation. In submitting the GTPs, cross-references should be made to the documents submitted.
3. Bidders to fully quote per Lot for interested Lot (s) or for all Lots.
4. Approximate means within +/- 10% of given value.
5. All literature and technical documentation shall be in English language or translated to English language. The specific items on offer shall be marked clearly for the goods they intended for supply.
6. The tools, equipment and/or fittings supplied shall be brand new.
7. The Contractor shall submit a program for the Works within twenty-one (21) days of contract signing.
8. All relevant building/renovation permit (s) to be obtained by the successful bidder from the local authorities.
9. The site possession date shall be agreed with the Project Manager.
10. Project completion period shall within be six (6) months for Lot 1,2,3 & 4 and three (3) months for Lot 5 after issuance of LPO or earliest possible.
11. The proposed hydraulic unit and tyre section is based in Nairobi, KPLC Ruaraka complex at the Transport Services workshop.
12. The Defects Liability period is 180 days in addition to the various warranties for the given item (s) whichever is longer.
13. The Performance Bond shall be valid for a period of six (6) months after the project completion and lapse of contract.
14. The below are indicative minimum requirements only. Suppliers must meet or exceed these specifications.

PART A (i): GENERAL REQUIREMENTS FOR LOT 1

No.	Descriptions	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
1.	The hydraulic unit project and workshop tools and equipment supply shall be a turnkey project. This shall include design, civil works and the supply, installation, testing and commissioning of the tools and equipment as outlined in the section of schedule of requirements. The project shall also include relevant training to users/operators and after sales support.	(Mandatory)	
2.	Civil works for the hydraulic unit to be carried out as outlined per the Schedule of Requirements.	(Mandatory)	
3.	Valid registration certificate for building works from the NCA 5 category and above for civil works/sub-contractor of the same. Attach certificate.	(Mandatory)	
4.	Current Contractors Practicing License from NCA for civil works/sub-contractor of the same. Attach licence.	(Mandatory)	
5.	Site visit and pre-bid meeting of the bidders at the Ruaraka complex in Nairobi. Attach attendance certificate.	(Mandatory)	
6.	Attach proposed layout of the hydraulic equipment of the proposed site.	(Mandatory)	
7.	Suppliers must be locally based. Attach lease or official address documents and locations of operations.	(Mandatory)	
8.	Must have undertaken related/comparable supply or installations. Attach LPOs and/or contract (s).	(Mandatory)	
9.	The Defects Liability period is 180 days. Attach binding commitment.	(Mandatory)	

PART A (ii): GENERAL REQUIREMENTS FOR LOT 2

No.	Descriptions	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
1.	The tyres section project and workshop tools and equipment supply shall be a turnkey project. This shall include civil works and the supply, installation, testing and commissioning of the tools and equipment as outlined in the section of schedule of requirements. The project shall also include relevant training to users/operators and after sales support.	(Mandatory)	
2.	Civil works for the tyre section to be carried out as outlined per the Schedule of Requirements.	(Mandatory)	
3.	Valid registration certificate for building works from the NCA 5 category and above for civil works/sub-contractor of the same. Attach certificate.	(Mandatory)	
4.	Current Contractors Practicing License from NCA for civil works/sub-contractor of the same. Attach licence.	(Mandatory)	
5.	Site visit and pre-bid meeting of the bidders at the Ruaraka complex in Nairobi. Attach attendance certificate.	(Mandatory)	
6.	Suppliers must be locally based. Attach lease or official address documents and locations of operations.	(Mandatory)	
7.	Must have undertaken related/comparable supply or installations. Attach LPOs and/or contract (s).	(Mandatory)	
8.	The Defects Liability period is 180 days. Attach binding commitment.	(Mandatory)	

PART A (iii): GENERAL REQUIREMENTS FOR LOT 3

No.	Descriptions	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
1.	The Assorted Workshop tools and equipment supply shall be a turnkey project. This shall include the supply, installation, testing and commissioning of the tools and equipment as outlined in the section of schedule of requirements. The project shall also include relevant training to users/operators and after sales support.	(Mandatory)	
2.	Site visit and pre-bid meeting of the bidders at the Ruaraka complex in Nairobi. Attach attendance certificate. Attach certificate.	(Mandatory)	
3.	Suppliers must be locally based. Attach lease or official address documents and locations of operations.	(Mandatory)	
4.	A service level agreement (SLA) for relevant support services shall be entered into with the successful bidder for the repair and maintenance for 24 months on an 'as and when required' need basis.	(Mandatory)	
5.	Must have undertaken related/comparable supply or installations. Attach LPOs and/or contract (s).	(Mandatory)	
6.	The tools and equipment shall be of standard production of latest design in their class, robust construction/heavy duty specifications. They must be in current production and suitable for motor vehicle workshop operations in extremes of temperatures and dust. Attach catalogues, brochures or other relevant literature.	(Mandatory)	
7.	Items tendered shall meet the appropriate BS, EN, DIN, ISO standards or equivalent. Attach proof and/or certificates.	(Mandatory)	
8.	All tools/equipment to have CE Declaration of Conformity. Attach certificates.	(Mandatory)	
9.	Tools and equipment to be supplied with instructions/operators catalogues, service manuals, Parts catalogues where applicable.	(Mandatory)	
10.	Warranty extended (Min 24 months).Attach warranty.	(Mandatory)	

PART A (iv): GENERAL REQUIREMENTS FOR LOT 4

No.	Descriptions	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
1.	The Assorted Workshop tools and equipment supply shall be a turnkey project. This shall include the supply, installation, testing and commissioning of the tools and equipment as outlined in the section of schedule of requirements. The project shall also include relevant training to <u>users/operators</u> and after sales support.	(Mandatory)	
2.	Site visit and pre-bid meeting of the bidders at the Ruaraka complex in Nairobi. Attach attendance certificate. Attach certificate.	(Mandatory)	
3.	Suppliers must be locally based. Attach lease or official address documents and locations of operations.	(Mandatory)	
4.	A service level agreement (SLA) for relevant support services shall be entered into with the successful bidder for the repair and maintenance for 24 months on an 'as and when required' need basis.	(Mandatory)	
5.	Must have undertaken related/comparable supply or installations. Attach LPOs and/or contract (s).	(Mandatory)	
6.	The tools and equipment shall be of standard production of latest design in their class, robust construction/heavy duty specifications. They must be in current production and suitable for motor vehicle workshop operations in extremes of temperatures and dust. Attach catalogues, brochures or other relevant literature.	(Mandatory)	
7.	Items tendered shall meet the appropriate BS, EN, DIN, ISO standards or equivalent. Attach proof and/or certificates.	(Mandatory)	
8.	All tools/equipment to have CE Declaration of Conformity. Attach certificates.	(Mandatory)	
9.	Tools and equipment to be supplied with instructions/operators catalogues, service manuals, Parts catalogues where applicable.	(Mandatory)	
10.	Warranty extended (Min 24 months).Attach warranty.	(Mandatory)	

PART A (v): GENERAL REQUIREMENTS FOR LOT 5

No.	Descriptions	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
1.	The refurbishment of the existing air grid shall be a turnkey project. This shall include the refurbishment, supply, installation, testing of the fittings and commissioning of the system.	(Mandatory)	
2.	Site visit and pre-bid meeting of the bidders at the Ruaraka complex in Nairobi. Attach attendance certificate.	(Mandatory)	
3.	Must have undertaken related/comparable supply and/or installations. Attach LPOs and/or contract (s).	(Mandatory)	
4.	Warranty extended (Min 24 months).Attach warranty.	(Mandatory)	

PART B (i): DETAILED TECHNICAL SPECIFICATIONS FOR LOT 1: PART A**HYDRAULIC UNIT LAYOUT DESIGN AND CIVIL WORKS**

The detailed scope of work as outlined in the Section V - Schedule of Requirements under Lot 1: Part A.

PART B (ii): DETAILED TECHNICAL SPECIFICATIONS FOR LOT 1: PART B**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING HYDRAULIC UNIT TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.****1. ELECTRIC HYDRAULIC HOSE CRIMPING MACHINE**

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Capacity - 2" 4SP	Mandatory	
e)	Operation Mode: Automatic Crimping Control System	Mandatory	
f)	Crimp force: Min. 200 Tons	Mandatory	
g)	System pressure : Min 20 Mpa	Mandatory	
h)	Crimping range: Approx. 4-70 mm	Mandatory	
i)	Opening with dies :Min \varnothing +30 mm	Mandatory	
j)	Complete opening: Min 100 mm	Mandatory	
k)	Master-die length:Approx.80 mm	Mandatory	
l)	Motor: Approx. 4Kw	Mandatory	
m)	Voltages: 220-240, 50/60Hz, 3Ph	Mandatory	
n)	Machine head material: Forged Steel or specify.	Specify	
o)	Radial die movement	Mandatory	
p)	Dimensions and Weight	Specify	
q)	Cleaning and maintenance kit	Mandatory	
r)	Quick change gun/device	Mandatory	
s)	Die storage panel or Die set rack	Mandatory	
t)	Electrical footswitch	Mandatory	
u)	Mechanical backstop	Mandatory	
v)	Die sets: Magnetic. Min 12 Pieces	Mandatory	
w)	Hydraulic crimp mounted on a sturdy steel work station/base with the relevant accessories.	Mandatory	
x)	Equipment Warranty (Min 24 months).	Mandatory	
y)	CE declaration of conformity & test certificate	Mandatory	
z)	Operating/maintenance manuals mandatory	Mandatory	
aa)	Operators training (min. 5 operators)	Mandatory	

2. HYDRAULIC HOSE CUTTER

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Capacity - 2" 4SP	Mandatory	
e)	Operation Mode: Electric	Mandatory	
f)	Voltage: 220-240 50/60Hz 3Ph	Mandatory	
g)	Motor : Approx. 3Kw	Mandatory	
h)	Blade: Scalloped. Min. \varnothing 200 mm	Mandatory	
i)	Cutting range: Max. Hose \varnothing 80 mm	Mandatory	
j)	Rotation speed: Approx. 3000 rpm	Mandatory	
k)	Dimensions and Weight	Specify	
l)	Safety protection features	Mandatory	
m)	Suction features	Specify	
n)	Measuring hose holder	Specify	
o)	Hydraulic hose cutter mounted on a sturdy steel work station with the relevant accessories.	Mandatory	
p)	Equipment Warranty (Min 24 months).	Mandatory	
q)	CE declaration of conformity	Mandatory	
r)	<u>Operating/maintenance</u> manuals	Mandatory	
s)	Operators training (min. 5 operators)	Mandatory	

3. ELECTRIC HOSE SKIVING MACHINE

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Capacity - 2"	Mandatory	
e)	Skiving range : 4-50 mm	Mandatory	
f)	Operation Mode: Electric semi-automatic	Mandatory	
g)	Voltage: 220-240 50/60Hz 3Ph	Mandatory	
h)	Motor : Approx. 0.25Kw	Mandatory	
i)	Rotation speed: Approx. 100 rpm	Mandatory	
j)	Dimensions and Weight	Specify	
k)	Safety footswitch	Mandatory	
l)	Suction features/protection	Specify	
m)	Waste container	Mandatory	
n)	Internal skiving tool sets/mandrels	Mandatory	
o)	External skiving tool sets/mandrels	Mandatory	
p)	Tool holder	Mandatory	
q)	Hydraulic hose skiver mounted on a sturdy steel work station with the relevant accessories.	Mandatory	
r)	Tools storage rack/compartments provided	Mandatory	
s)	Equipment Warranty (Min 24 months).	Mandatory	
t)	CE declaration of conformity	Mandatory	
u)	Operating/maintenance manuals	Mandatory	
v)	Operators training (min. 5 operators)	Mandatory	

4. HYDRAULIC HOSE TEST BENCH

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Indicative Capacity – ¾ " to 2"	Mandatory	
e)	Maximum pressure – 2,000 Bar	Mandatory	
f)	Minimum test pressure – 80 Bar	Mandatory	
g)	Multi-Port Manifold Outlet connections: Min. 5 ports	Mandatory	
h)	Compressed air input: Min. 5 Bar	Mandatory	
i)	Minimum compressed air flow: 1000 L/min	Mandatory	
j)	Operation Mode: Programmable electronic model with paper printout of test report with data backup.	Mandatory	
k)	Standard fluid used for tests: Water/Oil	Mandatory	
l)	Safety switch - Automatic pressure cut off when door is opened	Mandatory	
m)	Indicative pressure gauges	Mandatory	
n)	Powder coat finish for durability	Mandatory	
o)	Reinforced safety window	Mandatory	
p)	Full front opening for hose loading	Mandatory	
q)	Voltages: 220-240, 50/60Hz, 3Ph	Mandatory	
r)	Cleaning and maintenance kit	Mandatory	
s)	Electrical footswitch	Mandatory	
t)	Mechanical backstop	Mandatory	
u)	Hydraulic hose test bench mounted on a sturdy steel work station/base with the relevant accessories.	Mandatory	
v)	Equipment Warranty (Min 24 months).	Mandatory	
w)	CE declaration of conformity & test certificate	Mandatory	
x)	Operating/maintenance manuals mandatory	Mandatory	
y)	Operators training (min. 5 operators)	Mandatory	

5. HOSE REEL DISPENSER

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Number max of coils - 7	Mandatory	
e)	Minimum internal Ø – 300 mm	Mandatory	
f)	Maximum external Ø – 800 mm	Mandatory	
g)	Maximum height – 200 mm	Mandatory	

6. RACKS AND TRAYS

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Item description: Standard workshop racks and trays for holding hydraulic fittings, parts and other materials.	Mandatory	
b)	Fabrication: Mild steel consisting of tubes and steel mesh fabricated to form workshop rack.	Mandatory	
c)	Dimensions: Main rack measurement: 8ft.x8ft.x1ft. Fabricated with suitable 1"x1" steel tubes and suitable size of steel mesh/plate (or otherwise as proposed by the bidder). Partitions: 1ft.x1ft.x1ft provision for holding trays. (or as otherwise proposed by the bidder). Holding trays: Provision of removable plastic trays to be fitted into the partitions in order to store hydraulic fittings, parts and other materials (or otherwise as proposed by the bidder).	Specify	
d)	Scope: Design, fabricate/supply and installation.	Mandatory	

7. WORK STATION BENCH

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Item description: Standard workshop workstation bench for heavy duty motor garage workshop application.	Mandatory	
b)	Fabrication: Mild steel angle lines, flat steel plates and chequered steel plate top. (And/or as proposed by the bidder).	Mandatory	
d)	Dimensions: 3ftx6ftx3ft Min. 3mm chequered steel plate top and below 3ftx6ft under shelf. (or otherwise as proposed by the bidder)	Specify	
e)	Scope: Design, fabricate/supply and installation.	Mandatory	

8. HYDRAULIC TUBE/PIPE BENDER

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application – Tube bender	Mandatory	
e)	Power source - Electric	Mandatory	
f)	Operation – Semi-automatic	Mandatory	
g)	Input Power – Approx. 1500 w	Mandatory	
h)	Capacity – Max 1" Tube bender	Mandatory	
i)	Pipe wall thickness – 0.5 mm – 2 mm	Mandatory	
j)	Complete set of standard die set/bender kit	Mandatory	
k)	220/240 50/60 Hz 3Ph	Mandatory	
l)	Equipment Warranty (Min 24 months).	Mandatory	
m)	CE declaration of conformity & test certificate	Mandatory	
n)	Operators training (min. 5 operators)	Mandatory	

9. HYDRAULIC HOSE HAND HELD PROJECTILE CLEANER KIT

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Capacity/Maximum hose size - 2"	Mandatory	
e)	Hose range : 6-50 mm	Mandatory	
f)	Operation Mode: Manual pneumatic	Mandatory	
g)	Hand-held, portable, compact packaging	Mandatory	
h)	Pneumatic input – Approx. 5 bar	Mandatory	
i)	Exit pressure – Approx. 50 bar	Mandatory	
j)	Air flow rate – Approx. 200 L/min	Mandatory	
k)	Adapter set included	Mandatory	
l)	Fine filter	Mandatory	
m)	Supplied with complete set of nozzles	Mandatory	
n)	Supplied with two (2) compatible flexible pneumatic hoses	Mandatory	
o)	Supplied with pellets – Min 500 reusable	Mandatory	

	projectiles		
p)	Supplied with projectile catcher accessories.	Mandatory	
q)	Equipment Warranty (Min 24 months).	Mandatory	
r)	CE declaration of conformity & test certificate	Mandatory	
s)	Operating/maintenance manuals	Mandatory	
t)	Operators training (min. 5 operators)	Mandatory	

10. MANUAL FLARING TOOL

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Hand-held, portable, compact packaging	Mandatory	
e)	Operation - Manual		
f)	Single flares from approx. $\frac{3}{16}$ to $\frac{5}{8}$ outside diameter tubing.	Mandatory	
g)	Double from approx. $\frac{3}{16}$ to $\frac{1}{2}$ outside diameter tubing	Mandatory	
h)	Double lap adaptors range - $\frac{3}{16}$ to $\frac{1}{2}$	Mandatory	
i)	Can flare brass, aluminium and mild steel tubing	Mandatory	
j)	Tools Warranty (Min 24 months)	Mandatory	
k)	CE declaration of conformity	Mandatory	
l)	Operating/maintenance manuals	Mandatory	
m)	Supplied complete with carry case	Mandatory	

11. HYDRAULIC PRESSURE GAUGE SET

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application – Hydraulic systems pressure testing	Mandatory	
e)	Easily readable and highly visible	Mandatory	
f)	High strength bourdon tube	Mandatory	
g)	Supplied with carry case	Mandatory	
h)	Pressure range – 0-600 bar	Mandatory	
i)	Gauges calibrated and comply to ASME B40.1 Grade B.	Mandatory	
j)	Have NPT various connections set	Mandatory	
k)	Tool Kit Warranty (Min 24 months).	Mandatory	
l)	CE declaration of conformity	Mandatory	

12. DIGITAL PRESSURE GAUGE SET

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application – hydraulic systems pressure testing	Mandatory	
e)	Pressure values displayed on LED display	Mandatory	
f)	Pressure range – 0-700 bar	Mandatory	
g)	Gauges calibrated and comply to ASME B40.7	Mandatory	
h)	Have NPT various connections set	Mandatory	
i)	Durable carry case for the gauge set	Mandatory	
j)	Tool Kit Warranty (Min 24 months).	Mandatory	
k)	CE declaration of conformity	Mandatory	

13. MANUAL HYDRAULIC HOSE SKIVING MACHINE

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Capacity - 2"	Mandatory	
e)	Skiving range : 4-70 mm	Mandatory	
f)	Operation Mode: Manual	Mandatory	
g)	Internal skiving tool sets/mandrels	Mandatory	
h)	External skiving tool sets/mandrels	Mandatory	
i)	Tool holder	Mandatory	
j)	Dimensions and Weight	Specify	
k)	Suction features/protection	Specify	
l)	Waste container	Mandatory	
m)	Internal and external skiving tool sets	Mandatory	
n)	Hydraulic hose skiver mounted on a sturdy steel work station with the relevant accessories.	Mandatory	
o)	Tools storage rack/compartment provided	Mandatory	
p)	Equipment Warranty (Min 24 months).	Mandatory	
q)	CE declaration of conformity	Mandatory	
r)	Operating/maintenance manuals	Mandatory	
s)	Operators training (min. 5 operators)	Mandatory	

14. PORTABLE HYDRAULIC HOSE CRIMPING MACHINE

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Capacity - $1\frac{1}{4}$ 4SP	Mandatory	
e)	Operation Mode: Manual	Mandatory	
f)	Crimp force: Min. 100 Tons	Mandatory	
g)	System pressure : Min 20 Mpa	Mandatory	
h)	Crimping range: Approx. 4-50 mm	Mandatory	
i)	Opening with dies :Min \varnothing +20 mm	Mandatory	
j)	Complete opening: Min. 70 mm	Mandatory	
k)	Master-die length:Approx.60 mm	Mandatory	
l)	Radial die movement	Mandatory	
m)	Dimensions	Specify	
n)	Weight	Specify	
o)	Quick change gun/mechanism	Mandatory	
p)	Die storage panel or Die set rack	Mandatory	
q)	Die sets: Magnetic. Min 12	Mandatory	
r)	Hydraulic hose crimp mounted on a sturdy steel work station with the relevant accessories for mobile applications.	Mandatory	
s)	Equipment Warranty (Min 24 months).	Mandatory	
t)	CE declaration of conformity	Mandatory	
u)	Operating/maintenance manuals	Mandatory	
v)	Operators training (min. 5 operators)	Mandatory	

15. MANUAL TUBE BENDER

No.	Description	KPLC	Tenderer's Offer
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application – Tube bender	Mandatory	
e)	Operation – Manual	Mandatory	
f)	Capacity – Max 1" Tube bender	Mandatory	
g)	Pipe wall thickness – 0.5 mm – 2 mm	Mandatory	
h)	Complete set of standard die set/bender kit	Mandatory	
i)	Supplied with carry case.	Mandatory	
j)	Equipment Warranty (Min 24 months).	Mandatory	
k)	CE declaration of conformity & test certificate	Mandatory	
l)	Operators training (min. 5 operators)	Mandatory	

PART B (iii): DETAILED TECHNICAL SPECIFICATIONS FOR LOT 2: PART A

TYRE SECTION CIVIL WORKS

The detailed scope of work as outlined in the Section V - Schedule of Requirements under Lot 2: Part A.

PART B (iv): DETAILED TECHNICAL SPECIFICATIONS FOR LOT 2: PART B

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF TYRE SECTION TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

1. FULLY INTEGRATED COMPUTERISED WHEEL ALIGNMENT MACHINE

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application : 3D wheel alignment system	Mandatory	
e)	Operation Mode: Computerised fully integrated Wheel alignment unit.	Mandatory	
f)	HD Camera system with 3D dynamic simulation	Mandatory	
g)	USB interphase system	Mandatory	
h)	4 small target, 2 HD cameras, 3D system.	Mandatory	
i)	Voltages: 220-240, 50/60Hz. Power,800 W.	Mandatory	
j)	Camber,+10°-10° (±2')	Mandatory	
k)	Caster,+20°-20° (±3')	Mandatory	
l)	KPI, +20°-20° (±3').	Mandatory	
m)	Setback,+5°-5° (±2')	Mandatory	
n)	Steering angle,+60°-60° (±0.1°)	Mandatory	
o)	Thrust angle,+5°-5° (±2')	Mandatory	
p)	Min 4.0 ton duo and length extendible electro hydraulic scissor lift with scissor lift control console.	Mandatory	
q)	<u>Computer System</u> Moveable cabinet Computer, Branded PC, Software requirement: Latest Windows operating system. Internal Memory Capacity, 1GB. Hard disk, 500 GB. CPU speed, 3.0 GHz, Dongle: 1pc. Monitor, 19". Latest suitable compatible A4 capable printer with all accessories. Online free software update.	Mandatory	
r)	<u>Clamping/Wheel Lever System</u> Clamp, 12"-24" Brake Fixer. Lock for Steering wheel. Turntables, 2PCS. 2PCS Wedge Block.	Mandatory	
s)	Equipment Warranty (Min 24 months).	Mandatory	

t)	CE declaration of conformity.	Mandatory	
u)	Operating/maintenance manuals and all related accessories.	Mandatory	
v)	Operators training (min. 5 operators)	Mandatory	

2. ASSORTED TYRE SECTION TOOLS AND EQUIPMENT

No.	Tool/Equipment description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
1.	Tyre branding iron		
2.	Branding letters		
3.	Branding numbers		
4.	Tyre tread depth gauge- metal		
5.	Digital wall tyre pressure inflator/gauge c/w 30 ft. hose,2pcs hand remote control,2 pcs twin connector hold on open. Pressure range 0 – 200 psi.		
6.	Analogue wall tyre pressure inflator/gauge c/w 30 ft. hose,2pcs hand remote control,2 pcs twin connector hold on open. Pressure range 0 – 200 psi.		
7.	Valve mounting tool		
8.	Tyre lever for motor cycles		
9.	Rim straitening lever		

PART B (v): DETAILED TECHNICAL SPECIFICATIONS FOR LOT 3

This shall include the supply and installation of two (2) distribution boards as outlined in the schedule of requirements.

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF VEHICLE LIFTING EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.**1. DOUBLE/DUAL ELECTRO HYDRAULIC VEHICLE SCISSOR LIFT**

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Lifting Capacity – 4.0 Ton	Mandatory	
e)	Design: Min 4.0 ton double hydraulic scissor lift with scissor lift console.	Mandatory	
f)	Lifting height raised – Min. 1800 mm, Approx.	Mandatory	
g)	Overall width – 1800 mm, Approx.	Mandatory	
h)	Single platform Length – 1600 mm, Approx.	Mandatory	
i)	Single platform Width – 500 mm, Min	Mandatory	
j)	Overall Length- 2600mm,Approx.	Mandatory	
k)	Overall width – 2000mm,Min.	Mandatory	
l)	Overall width – 2200mm,Max.	Mandatory	
m)	Lowered height – 100 mm. Approx.	Specify	
n)	Lifting Time - <50 Seconds	Mandatory	
o)	Lowering time – <30 Seconds	Mandatory	
p)	Motor power – 2Kw	Specify	
q)	Oil pressure – Approx. 20 bar	Mandatory	
r)	Automatic safety locks (Specify), Safety release overload valves and safety features.	Mandatory	
s)	Lowering operation and speed control	Specify	
t)	Electronic equalization system	Mandatory	
u)	Lift pads and adaptors.	Mandatory	
v)	Durable powder coat finish	Mandatory	
w)	Voltages: 220-240, 50/60Hz, 3Ph	Mandatory	
x)	Equipment Warranty (Min 24 months).	Mandatory	
y)	CE declaration of conformity & test certificate	Mandatory	
z)	Operating/maintenance manuals mandatory	Mandatory	
aa)	Operators training (min. 5 operators)	Mandatory	

PART B (vi): DETAILED TECHNICAL SPECIFICATIONS FOR LOT 4

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF ASSORTED WORKSHOP TOOLS AND EQUIPMENT, USER TRAINING AND AFTER SALES SUPPORT.

1. PORTABLE STEAM VEHICLE WASHER

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application - Vehicle steam cleaning	Mandatory	
e)	Non boiler type	Mandatory	
f)	Power : Electric Approx. 4Kw	Mandatory	
g)	Water consumption – 1.5-2.5L/min (for two guns)	Mandatory	
h)	Steam pressure – Min 5 bar	Mandatory	
i)	Steam temperature – Min 100° C	Mandatory	
j)	Water tank – Min 50 Litres	Mandatory	
k)	Preheating time – 60 seconds/ 1 Minute	Mandatory	
l)	Number of guns – Min 2	Mandatory	
m)	Accessories : 2 steam gun, two (2) 10m steam hose, 2 long nozzle, 2 towels, 1 air break switch and other relevant accessories.	Mandatory	
n)	Water shortage power protection	Mandatory	
o)	Dimensions and weight	Specify	
p)	Voltages: 220-240, 50/60Hz	Mandatory	
q)	Cleaning and maintenance kit	Mandatory	
r)	Equipment Warranty (Min 24 months).	Mandatory	
s)	CE declaration of conformity & test certificate	Mandatory	
t)	Operating/maintenance manuals mandatory	Mandatory	
u)	Operators training (min. 5 operators)	Mandatory	

2. PORTABLE PRESSURE CAR WASH MACHINE

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application - Vehicle cold pressure cleaning	Mandatory	
e)	Power : Electric Min. 5Kw	Mandatory	
f)	Water consumption – 1.5-2.5L/min (for two guns)	Mandatory	
g)	Working pressure – Approx. 200 bar	Mandatory	
h)	Maximum pressure – Approx. 250 bar	Mandatory	
i)	Rated rotation speed – Approx. 1400 rpm	Mandatory	
j)	Flow rate – Min. 15 Lpm	Mandatory	
k)	Accessories: 1 nozzle gun, 1 * 10m hose, 1 long filter hose and other relevant accessories.	Mandatory	
l)	Dimensions and weight	Specify	
m)	Voltages: 220-240, 50/60Hz, 3Ph	Mandatory	
n)	Cleaning and maintenance kit	Mandatory	
o)	Equipment Warranty (Min 24 months).	Mandatory	
p)	CE declaration of conformity	Mandatory	
q)	Operating/maintenance manuals	Mandatory	

3. ANGLE GRINDER - 7"

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application – Cut, grind and rubbing metal	Mandatory	
e)	Power source - Electric	Mandatory	
f)	Input Power – Approx. 2 Kw	Mandatory	
g)	Disk diameter - Min. 7"	Mandatory	
h)	Rated voltage – 220/240 50/60 Hz	Mandatory	
i)	No load speed – Min 6000 rpm	Mandatory	
j)	Speed – 10 level	Specify	
k)	Tool Warranty (Min 24 months).	Mandatory	
l)	CE declaration of conformity	Mandatory	

4. ANGLE GRINDER - 9"

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
m)	Brand	Mandatory	
n)	Model	Mandatory	
o)	Country of origin	Mandatory	
p)	Application – Cut, grind and rubbing metal	Mandatory	
q)	Power source - Electric	Mandatory	
r)	Input Power – Approx. 2 Kw	Mandatory	
s)	Disk diameter - Min. 9" mm	Mandatory	
t)	Rated voltage – 220/240 50/60 Hz	Mandatory	
u)	No load speed – Min 6000 rpm	Mandatory	
v)	Speed – 10 level	Specify	
w)	Tool Warranty (Min 24 months).	Mandatory	
x)	CE declaration of conformity	Mandatory	

5. PORTABLE MIG WELDING MACHINE SET

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Supply, installation, testing and commissioning of complete set of MIG welding machine set.	Mandatory	
e)	Machine set to include MIG welding machine unit, welding gun, wire feed unit, welding power supply connection, welding electrode wire and shielding gas supply complete with all the accessories c/w replacement nozzles (2).and testing and installation.	Mandatory	
f)	Welding Current – 40-170A Wire capacity 5-15Kg Gas type: CO2 7 Argon mix. Cooling- Forced air		
g)	Maximum wire diameter – 2 mm	Mandatory	
h)	Minimum material thickness – 0.3 mm	Mandatory	
i)	Integrated Wire Feeder With Single Drive Wire Feeder	Mandatory	
j)	Rated voltage – 220/240 50/60 Hz	Mandatory	
k)	With Wheels, Easy To Move, Welding	Mandatory	
l)	Equipment Warranty (Min 24 months).	Mandatory	
m)	CE declaration of conformity	Mandatory	
n)	Operators training (min. 5 operators)	Mandatory	

6. COMBINED PIN AND HOOK SPANNER WRENCH TOOL SET

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Application – automotive ,machine repair & assembly	Mandatory	
e)	Set description - Fixed Pin spanner, Hook for Side Spanner Wrenches, collet chuck fixed wrench spanner wrenches, ER type UM, adjustable pin and hook wrenches – Sizes 30-200 mm complete with carry case/cabinet.	Mandatory	
f)	Material – Chrome Vanadium	Mandatory	
g)	Spanner and wrench set – Min. 50 pieces	Mandatory	
h)	Round pin size – 4 – 8 mm	Mandatory	
i)	Handle: with and without anti-slip plastic as applicable.	Mandatory	
j)	Tool Warranty (Min 24 months).	Mandatory	
k)	CE declaration of conformity	Mandatory	

7. PNEUMATIC IMPACT WRENCH -1/2" DRIVE LONG ANVIL

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand	Mandatory	
b)	Model	Mandatory	
c)	Country of origin	Mandatory	
d)	Fitted with twin hammer in compact design. Features three position torque/air control in forward and reverse.	Mandatory	
e)	Drive – ½" Sq Working torque - 540Nm Maximum torque – 650 Nm Ultimate torque – 670 Nm Free Speed – 7500rpm Air consumption – 7.0 cfm Operating Pressure – 90psi Supplied with related accessories and 15m air hose with connectors. CE Declaration of conformity.	Mandatory	

8. PNEUMATIC IMPACT WRENCH - 1" DRIVE LONG STRAIGHT ANVIL AND SOCKET SET

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify
a)	Brand	Mandatory	
b)	Country of origin	Mandatory	
c)	Fitted with twin hammer in compact design. Features three position torque/air control in forward and reverse. Suitable for heavy tyre shop use.	Mandatory	
d)	<p>Drive – 1" Sq.</p> <p>Maximum torque - 1900Nm</p> <p>Free Speed – 3500rpm</p> <p>Air consumption – 10.0 cfm</p> <p>Operating Pressure – 90psi</p> <p>Quantity of sockets 10. (25mm – 50 mm)</p> <p>Supplied with related accessories and 15m air hose with connectors.</p> <p>CE Declaration of conformity.</p>	Mandatory	

9. PANEL PULLER SPOTTER

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify
a)	Brand	Mandatory	
b)	Country of origin	Mandatory	
c)	Application: Spot welding machine with dent puller for auto spotter for Auto body repair	Mandatory	
d)	<p><u>Panel Puller Spotter Features</u></p> <p>The welder to be used for a wide variety of applications, such as dent pulling, carbon heating and shrinking, single-sided spot welding, stud bolt welding, sheet plate cutting and sheet metal welding.</p> <p>Input voltage: 240V 50/60Hz</p> <p>Max rated input power: 10.0KVA</p> <p>Max rated input current: 20-60A</p> <p>Max output current: 200-3500A</p> <p>Output voltage: 1-11.5V</p> <p>Quantity of sockets 10. (25mm – 50 mm)</p> <p>CE Declaration of conformity.</p>	Mandatory	

10. INVERTER DC ARC WELDING MACHINE 200 AMPS.

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify
a)	Brand	Mandatory	
b)	Country of origin	Mandatory	
c)	Application: Inverter DC arc welding	Mandatory	
d)	<p>Welding Current:20-200A Electrode Capacity: Ø1.6-5mm Absorbed Power:7kW Supply:240V</p> <p>Unit can arc weld a variety of rods including rutile, basic and stainless from Ø1.6mm up to Ø5mm. Supplied with 2m 25mm² cable with electrode holder and 2m 25mm² earth clamp and cable. Has optional conversion to TIG.</p> <p>CE Declaration of conformity.</p>	Mandatory	

11. SINGLE SIDE SPOT WELDING MACHINE C/W SINGLE SIDED SPOT GUN

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify
a)	Brand	Mandatory	
b)	Country of origin	Mandatory	
c)	Application: Single spot welding machine complete with single sided spot gun.	Mandatory	
d)	<p>Supply:240V,50/60 HZ Welding Current:20-200A Electrode Capacity: Ø1.6-5mm Power:4kW</p> <p>Unit can arc weld a variety of rods including rutile, basic and stainless from Ø1.6mm up to Ø5mm. Supplied with 2m 25mm² cable with electrode holder and 2m 25mm² earth clamp and cable. Has optional conversion to TIG.</p> <p>CE Declaration of conformity.</p>	Mandatory	

12. ASSORTED BODY SHOP TOOLS AND EQUIPMENT

No.	Tool/Equipment description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
1.	<p><u>Panel Beating Set 9pc with wooden shafts</u> Drop-forged steel hammers, dollies and spoons. • Hickory handled hammers. • Supplied in storage case.</p> <p><u>Contents</u> Hammers; 4 Pcs. Bumping, Skinning, Pein/Finish, Pick/Finish. Dollies; 3 Pcs. Toe, Universal, Heel, Spoons; 2 Pcs. Dinging, Surfacing</p>	Mandatory	
2.	<p><u>Body Panel Levering/Separating Tool Set 13pc</u> • Assortment of body shop tooling, designed for levering, separating and reforming of panels. • Maximum Bar Length: 900mm. • Supplied in storage case. • Supplied in storage case.</p>	Mandatory	
3.	<p><u>Sledge Hammers with wooden shafts</u> Drop forged steel, Constructed to BS 876 standards. Set of 3 pcs; 3Kg, 4 Kg and 6 Kgs.</p>	Mandatory	
4.	<p><u>Ball Pein hammers with wooden handles</u> Drop forged steel head hammers made to BS 876 Standards. Set of 4 Pcs 300g, 400g, 650g and 1000g.</p>	Mandatory	
5.	<p><u>Club hammers with wooden handles</u> Drop forged steel head hammers made to BS 876 stds. Set of 2 Pcs 1100g and 1700g</p>	Mandatory	
6.	<p><u>Heavy Duty Pry Bar Set</u> Chrome molybdenum 16 mm steel shafts with chrome finish and textured handles with carry case. 4 pcs set. Length/Type – 900mm/25°, 900mm/straight, 600mm/75°, 600mm/90°</p>	Mandatory	
7.	<p><u>Wrecking Bar Set 5pc</u> Chisel, swan neck, pointed and cranked ends. Ideal for all forms of force work, including opening packing cases, removing nails and aligning heavy equipment.</p> <p><u>Contents:</u> Pry bar; 175, 300, 380, 455, 610mm</p>	Mandatory	
8.	<p><u>Heel Bar Set 4pc 150, 300, 410, 510mm</u> Drop-forged steel shafts with blackened finish. Hand-ground heels and faces. Tapered shaft suitable for lining up components prior to assembly. Heel design maximizes leverage.</p>	Mandatory	

9.	<u>Retractable Snap-Off Knife Heavy-Duty</u> Composite handle with rubber comfort grip and steel reinforced blade holder. Eight section blade automatically retracts and locks into position. Length:165mm	Mandatory	
10.	<u>Random Orbital Sander Variable Speed</u> Dust-Free Ø150mm 750W/230V Variable speed control ranging from 4000 to 7000rpm. Rotating self-contained dust extraction port with dust collection bag. Alloy bevel gear head with composite motor housing. Supplied with Ø150mm hook-and-loop backing pad and side handle. Supplied with a set of 10 sanding discs for each machine.	Mandatory	
11.	<u>Flexible heavy duty Electric Extension Cables</u> Voltage 415v, cable length 50mtr., cable section 16 mm ² ., cable type pvc, drum size large, drum type composite, capacity wound 1000w, capacity unwound 3500w.	Mandatory	
12.	<u>Hydraulic Body Pull Rams</u> 5 tone male and female pool rums. Capacity:5tonne Ram Length Extended:660mm Stroke:130mm	Mandatory	
13.	<u>Chain Kit 2 x 2m Chains 2 x Clamps</u> The kit contains 2 x 2m chains each with 1 hook and 2 heavy-duty pull clamps	Mandatory	
14.	<u>Pull Hook Kit Large</u> • Suitable for reaching over wide obstructions. • Ideal for inside boot recesses. • Reduces marking due to chains. Capacity:6tonne	Mandatory	
15.	<u>Door Restraining Bars Pack of 2</u> Steel tube and heavy jaw assemblies. Designed to triangulate and strengthen door apertures whilst performing pulling operations. Supplied with tommy bar. Jaw Width:90mm Maximum Length:1160mm Minimum Length:830mm	Mandatory	

16.	<p><u>Air Suction Dent Puller Set</u></p> <p>Air activated suction pad keeps firm hold of panel while slide hammer is used to ease out dents and depressions without damage to the paint surface.</p> <ul style="list-style-type: none"> • Ideal for initial panel reshaping. • Supplied with Ø75, 100 and 125mm suction pads and hook. <p>Hook Length:90mm Overall Length:590mm Recommended Air Pressure:72.5-116psi Suction Pads: Ø75, 100, 125mm Working Pressure:90psi</p>	Mandatory	
17.	<p><u>HVLP Gravity Feed Spray Gun 1.3mm Set-Up</u></p> <p>Suitable for applying various materials including adhesives, base coats and finishing coats. Round/flat fan control allows spray pattern to be adjusted for any job. Brass air cap with steel needle and nozzle.</p> <p>Air Consumption:4cfm Standard Set-Up: 1.3mm Pot Capacity:600ml Recommended Air Pressure:40psi</p>	Mandatory	
18.	<p><u>Spray Gun Standard Gravity Feed 1.4mm Set-Up</u></p> <p>Ideal for applying base coats. Features adjustable paint flow and fan width controls. Supplied with spun aluminum gravity feed pot and comfortable composite gun handle.</p> <p>Air Consumption:4.5-9cfm Pot Capacity:700ml Recommended Air Pressure:50psi Standard Set-Up:1.4mm</p>	Mandatory	
19.	<p><u>Spray Gun Gravity Feed 2.2mm Set-Up</u></p> <p>Ideal for applying undercoats, primers and adhesives. Features adjustable paint flow and fan width controls. Supplied with composite gravity feed pot.</p> <p>Air Consumption:4.5-8cfm Pot Capacity:600ml Recommended Air Pressure:50psi Standard Set-Up:2.2mm</p>	Mandatory	

20.	<u>Swivel Head Riveting Kit</u> Pressed steel body with cast swivel head and Chrome Molybdenum steel jaws. Supplied with four rivet nozzles to accept 2.4mm (3/32"), 3.2mm (1/8"), 4mm (5/32") and 4.8mm (3/16") rivets. Suitable for aluminum rivets. Fitted with non-slip rubber grip handles and supplied with nozzle spanner and selection of approximately 100 rivets.	Mandatory	
21.	<u>Threaded Nut Riveter</u> Suitable for the following Rivet Types: Aluminum - Yes, Steel - Yes, Stainless Steel. Includes: M3 x 0.5, M4 x 0.7, M5 x 0.8, M6 x 1mm	Mandatory	
22.	<u>Caulking Gun 220mm - Heavy-Duty</u> Suitable for 310ml cartridges up to 220mm length. Includes tip cutter, just insert the nozzle of the cartridge and squeeze the handle. Tip piercer/cleaner for clearing sealant from dried nozzles	Mandatory	
23.	<u>Tinman's Shears 250mm Spring Loaded</u> <ul style="list-style-type: none"> • One-piece, drop-forged blades with spring loaded handles. • Suitable for cutting thin gauge ferrous and non-ferrous metal sheet Cutting Capacity:0.8mm Length:250mm	Mandatory	
24.	<u>Offset Tin Snips 280mm</u> Offset head for easier cutting. Drop-forged Chrome Molybdenum steel blades for greater strength and durability. Electrodeposition finish to prevent the onset of rust and composite handles for added comfort. Cuts up to 1mm cold rolled steel or 0.6mm stainless steel. Cutting Capacity:1mm Length:280mm	Mandatory	
25.	<u>Sanding Block Hook-and-Loop kit 6pc</u> Comprehensive kit of resilient rectangle style concave and convex sanding blocks with hook-and-loop surfaces and a flexible tear drop sanding block. Sanding Blocks; Size: Sanding Blocks; RE4015 - Concave 85 x 155mm, RE4016 - Convex 80 x 155mm, RE4017 - Convex 85 x 160mm, RE4019 - Flexible Tear Drop 90 x 135mm, RE4020 - Concave 90 x 155mm & RE4022 - Convex Hook-and-Loop 90 x 150mm	Mandatory	
26.	<u>Professional Adjustable Hand File Holder</u> Simple screw adjustment flexes file either concave or convex to suit the job in hand. • Features a 2-position swivel lock handle. • Suitable for use in professional body shops. c/w with a total of 10 pieces of files for each.	Mandatory	

27.	<p><u>Scraper Set with Hammer Cap 3pc</u> 1.8mm Ultra-stiff stainless steel scraper blades suitable for numerous workshop and body shop applications, including gasket scraping and windscreen preparation. Soft grip handles and broad hilt design give maximum control.</p> <p><u>Contents:</u> Scrapers; 32, 50mm, 32mm Angled Scraper (20°</p>	Mandatory	
28.	<p><u>Butt Welding Clamp Set 4pc</u> • An effective method for creating an evenly spaced butt weld joint. • Built-in level adjustment of 0-3mm either side allows different thickness materials to be accurately aligned.</p>	Mandatory	
29.	<p><u>Panel Stand - Door, Wing, Bonnet & Bumper</u> Features fully adjustable arms to fit many styles of bonnets, wings, doors and bumpers. Main frame can adjust through 180°, to give required angle. Fitted with two fixed Ø180mm wheels and two braked castors for maneuverability.</p>	Mandatory	
30.	<p><u>Folding Bumper Stand</u> Ideal for storage of bumpers prior to preparation and spraying. Adjustable stand width with extendable arms suitable for holding various types and styles of bumpers. Folds away for easy storage.</p>	Mandatory	
31.	<p><u>Rotating Universal Panel Stand</u> Ideal for bonnets, bumpers, wings, spoilers and trims. Eight adjustable bars and 360° rotation make this stand suitable for almost any panel types. • Portable for easy maneuvering of application from preparation to spray booth. • Built-in tool tray/storage for easy and convenient selection. Overall Length:1600mm Short Adjustable Bar (x4):450mm Long Adjustable Bar (x4):750mm Height (Without Bars):1070mm Maximum Capacity:90kg</p>	Mandatory	
32.	<p><u>Adjustable Transport Car Trolley 2tonne Capacity</u> Heavy-duty steel frame suitable for supporting partly dismantled or badly damaged vehicles. Enables easy movement around body shop. The supports are interchangeable between V-crutches and sill clamps. Supports and clamps adjustable for height and overall width. Minimum Height:250mm Maximum Height:310mm Using with Sill Clamps: Minimum Height:330mm Maximum Height:390mm Minimum Width*:1035mm Maximum Width*:1430mm</p>	Mandatory	

	Capacity:2tonne Closed Length:600mm		
33.	'C' Clamp & Welding Clamp Set 3pc Heat treated steel grips and jaws with bright nickel-plated finish. 'C' Clamp features swivel pads. Knurled adjusting screw with lever type release. Contents: 248mm Sheet Metal Clamp, 225mm Welding Clamp, 280mm Locking C-Clamp.	Mandatory	
34.	Thread Tapping Spanners Inner Sizes- 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 & 20MM	Mandatory	
35.	Thread Tapping Spanners Outer Sizes- 6, 7, 8, 9, 10,11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 & 24mm	Mandatory	
36.	Heavy Duty Electric Kettle 1.8 – 2.5 Litres capacity Stainless steel body 1800-2500 W heavy duty	Mandatory	
37.	Air Gas hose pipes - $\frac{1}{2}$ Rubber industrial grade 200 meters	Mandatory	
38.	Auto workshop Acetylene gas industrial hose – 10 Meters	Mandatory	
39.	Auto workshop Oxygen gas industrial hose – 10 Meters	Mandatory	
40.	A set of Oxygen and Acetylene regulators	Mandatory	
41.	Auto workshop oxy-acetylene Gas welding nozzles	Mandatory	
42.	Oxy-Acetylene Gas cutting torch	Mandatory	

13. OTHER VEHICLE DIAGNOSTIC AND REPAIR EQUIPMENT

No.	Tool/Equipment description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
1.	<p><u>Fuel pressure testing kit</u> Tool for accurately measuring the high pressure fuel circuit of diesel common rail systems.</p> <ul style="list-style-type: none"> • C/w 2,000bar gauge, pressure relief valve and high pressure flexible hoses. • The kit to include a set of dummy pump regulator and injector pipe blanks. • Kit shall be able to carry the following test conducted: <ul style="list-style-type: none"> - Engine cranking/running pressure test - Maximum pump pressure test - Pump pressure regulator test - Injector leakage test 	Mandatory	
2.	<p><u>Compression testing kit</u> A comprehensive kit for testing the compression and leakage on both diesel and petrol vehicles.</p> <ul style="list-style-type: none"> • C/w 600psi gauge with rubber bumper, straight and right angled quick connect fittings and an extensive range of spark/glow plug and injector adaptors. • Includes TDC finder, ideal for use when the engine has no crankshaft timing marks. • Supplied in storage case. 	Mandatory	
3.	<p><u>Nozzles testing and configuration Kit</u> Enables the testing of injectors under pressure.</p> <ul style="list-style-type: none"> • Fitted with Ø88mm gauge with rubber bumper reading both psi and bar. • Ideal for checking of atomization pattern and opening pressure. • Transparent reservoir fitted with fine filter. • Supplied with two injector connection pipes. 	Mandatory	
4.	<p><u>Timing light</u> Composite cased Xenon timing light with inductive impulse pick-up and four-digit LED read-out.</p> <ul style="list-style-type: none"> • Includes mode for two-stroke and distributorless 'lost spark', four-stroke engines. • Supplied with 1.5m coiled 12V power lead, inductive coupler and operating instructions. 	Mandatory	Mandatory

PART B (vii): DETAILED TECHNICAL SPECIFICATIONS FOR LOT 5

EXISTING AIR GRID REFURBISHMENT (THE SUPPLY, INSTALLATION, TESTING OF THE VARIOUS FITTINGS AND COMMISSIONING OF THE SYSTEM)

AIR GRID REFURBISHMENT FITTINGS

No.	Description	KPLC Requirements	Tenderer's Offer (Yes/No /Specify)
a)	Brand (s) – List the various brands	Mandatory	
b)	Country (ies) of origin	Mandatory	
c)	Quick release couplings - ½" complete set	Mandatory	
d)	Manual gate valve - ½" complete set	Mandatory	
e)	Nipples - ½" male male	Mandatory	
f)	Filter regulator with automatic drains – 40 micron	Mandatory	
g)	Sockets - ½" female female	Mandatory	
h)	Aluminium/G.I bends - ½"	Mandatory	
i)	Other items as may be deemed necessary	Specify	