Cost Estimate for the Purchase of Backhoe Loader

The major technical specification of the Backhoe Loader that is intended to be purchased by Barekot Rural Municipality, Limsa, Jajarkot, Nepal is as follows:

1) Type: 4WD with bottom dump (6-1) Bucket

2) Loader Break our force: Minimum 5700 kgf.

3) Loader Minimum dumping height: Min 2800mm

4) Backhoe Bucket Breakout Force: Minimum 5500 kgf

5) Backhoe Maximum Cutting Height: 6500 kgf

6) Gross Power at Governed RPM: Not less than 96 HP.

7) Loader Bucket Capacity: 1.0 cu.m Appx. (Bottom Dump (6-1))

8) Backhoe Bucket Capacity: 0.03 cu.m Approx

9) Transmission: 4 Forward and 2 Reverse Speed

10) Axle: 4WD

11) Hydraulic: System Pressure: 225 bar and Max. pump flow: 117 lpm.

12) Make model under 2023 is mandatory.

S.No	Description	Qty	Total Estimated Cost	Remarks
1,.	Backhoe Loader	1 Unit	55,00,000.00	Vat Not applicable in this cost. i.e include
				with Custom duty and
				other tax.

The product catalogue/technical specification of the above make model considered for preparation of cost estimate which is easily available in Nepal Market.

080104110 Prepared By:

Er Deepak Kumar Jha 2480 "Mechanical" "A" Category

Deepak Kumar Jha Mechanical Engineer NEC No. :- 2480 "A" Category

S.N	CRITERIA		. Nos Offered Specification
1	General	All wheel drive, rigid frame back hoe loader with Steel	
		cab, suitable for operation under rough working conditions,	
		and adverse climate condition at operating altitude ranging	
		from 80 m to 2500 m and ambient temperature varying	
		between -5°C to 50°C.	
		Equipment is latest with model 2023.	
2	Capacity	Operating weight not less than 8400 kg	
	/Size	Loader: Multi-Purpose bucket with (6-in-1, to	
		facilitatedozing, digging, grading, backfilling,	
		grabbing and loading application) bolt on teeth of SAE	
		rated capacity nominally heaped approx. 1 cu.m with	
		shovel break out force not less than 5700 kgf.	
		Dump Height: $\geq 2800 \text{ mm}$	
		Loader Capacity: Min 1900 kg	
		Load over height: \geq 3500 mm	
		0 -	
		Pin Height: \geq 3700 mm Back has bugket with bolt on tooth of SAE rated encoder	
		Back hoe bucket with bolt on teeth of SAE rated capacityapprox. 0.3 cu.m and following working ranges:	
		Maximum Reach from Slew Center: \geq 5650 mm	
		Maximum cutting height : $\geq 6500 \text{ mm}$	· · · ·
		Minimum Lifting capacity: ≥1400 kgs	
		Buokot toon out former $> 5500 \text{kgs}$	
		Bucket tear out force: \geq 5500kgf	
3	Engine	Out triggers with controls from cabin shall be provided.	
3	Engine	Water Cooled diesel Engine, developing SAE rated Gross HP	
		not less than 96 HP with minimum 400 NM Torque	
		(engine fully equipped with accessories) at governed RPM	
		for efficient full load operation.	
		Back hoe shall be equipped with heavy duty radiator, cold	
		starting device, direct electric starting system, heavy duty	
		battery, heavy duty air cleaner, heavy duty fuel filter, with	
		water trap and drainage in fuel line and drain tap in fuel tank.	
		To include ammeter, water temperature, fuel, oil pressure,	
4	Gauges	transmissionand hydraulic gauges as necessary for efficient	
	8	operation and maintenance.	
5	Transmission	Torque converter with power shift/shuttle type (At	
U	1 10113111351011	least 4forward)	
6	Axles	Four-wheel drive with fixed rear axle	· · · · · · · · · · · · · · · · · · ·
7	Tires	Suitable four tires with tubes for operating machine in	
		rough road conditions shall be provided.	
8	Steering	Power assisted.	
9	Brakes	Hydraulically actuated, wet multiple disc/caliper disc type	
~	Drakes	service and separate parking brake.	

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11			
11	Cab	All steel enclosed cab with laminated glass windscreen	
		insulated roof, suitably located controls for back hoe and	,
		loader operation, rear view mirror, cabin light, wiper and	
		adjustable cushioned seat for operator shall be provided.	
12	Essential	1. Road lights, work lights and fog lights	х.
	Accessorie	2. Cabin Lights	
	S	3. Service hour meter	
		Equipped With all accessories offered in standard model	
		butnot limited to the above items	
13	Instructions	All signs and instructions in the equipment shall be in English	
14	Manuals	1. One copy of the Operator's and Owner's Instructions and	
		Maintenance manual in English shall be supplied with	
		each equipment	
		2. Eight copies of following manuals in English shall be	
		supplied with equipment:	
		Spare parts catalogue	
		Comprehensive workshop manual	1 M
15	Tools	A set of tools as required for general maintenance	
		shall besupplied with in a lockable tool box for each unit	
¢.		besupplied with in a lockable tool box for each unit.	
16	Color	Standard.	
17	Warranty	Manufacturer shall provide a minimum of one year	
		warranty after acceptance.	
18	Delivery	Supplier should deliver one unit of Backhoe Loader to	
		Barekot Rural Municipality, Limsa, Jajarkot.	
		F	

Note: The major items are indicated by bold highlighted letter or alphabets/figures in the technical specification. Non compliance of the major items will result in non-responsiveness of bid letter.

Bidder's Signature

Date 10/04/2080

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