## **Technical Specifications**

## **Backhoe Loader-1 unit**

S.N	CRITERIA	DEPARTMENTAL REQUIREMENT	Offered Specifications
	Name of Manufacturer		
	Offered Model(Specific provided by OEM)		
	Country of origin		
	Year of Manufacture		
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 of 2000 m and ambient temperature varying between -5°C to 50°C.	
2	Capacity	1. Operating weight not less than 8000 kg	
		2. Loader: General purpose bucket with (6 in1) bolt on teeth of SAE rated capacity nominally heaped approx. 1 cu.m with shovel break out force not less than 6600 kgf.	
		• Dump Height: ≥ 2900 mm	
		• Load over height: ≥ 3350 mm	
		• Pin Height : ≥ 3600 mm	
		3. Back hoe bucket with bolt on teeth of SAE rated capacity approx. <b>0.3 cu.m</b> with tear out force <b>5650 kgf</b> and following working ranges:	

		Minimum working heights > 6000
		● Minimum working height: ≥ 6000 mm
		• Minimum digging depth: ≥5000 mm
		Minimum digging reach: ≥6900
		mm (Ground Level to rear wheel center)
		<ul> <li>Minimum Lifting capacity : ≥1480f kgs</li> </ul>
3	Engine	Turbocharged Water Cooled diesel Engine,
		developing SAE rated Gross HP not less
		than 92 HP with minimum 405 NM
		Torque with engine displacement of 4.4
		litres (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.
4	Gauges	To include ammeter, water temperature,
		fuel, oil pressure, transmission and
		hydraulic gauges as necessary for efficient
		operation and maintenance.
5	Transmission	Torque converter with four speed power
		shift type of synchroshuttle transmission.
6	Axles	Four wheel drive with fixed rear axle and
		at least 15° oscillating front axles.
7	Tires	Suitable four tires with tubes for
		operating machine in rough road conditions
		shall be provided.
8	Ground Clearance	Minimum 300 mm

9	Steering	Power/Power assisted Hydrostatic steering.	
10	Brakes	Hydraulically actuated, wet multiple disc/caliper disc type service brake and separate parking brake.	
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	Hydraulics	Suitable hydraulic pumps flow not less than 117 LPM and system pressure PSI (bar) not less than 3300(228) for smooth operation of all attachments smoothly.	
13	Essential Accessories	<ol> <li>Road lights, work lights and fog lights</li> <li>Cabin Lights</li> <li>Service hour meter</li> <li>Service hour meter</li> <li>Fan for operator</li> <li>MP3/DVD/FM Player</li> <li>A heavy duty grease gun</li> <li>Tyre pressure indicator gauge</li> <li>Equipped with all accessories offered in Standard Model manufactured by OEM but not limited to the above items.</li> </ol>	
14	Instructions	All signs and instructions in the equipment shall be in English	
15	Manuals	<ol> <li>One copy of the Operator's and Owner's Instructions and Maintenance manual in English shall be supplied with the each equipment.</li> <li>Spare parts catalogue.</li> </ol>	

1.0	<b>T</b> 1		
16	Tools	A set of tools as required for general	
		maintenance shall be supplied with in a	
		lockable tool box for each unit	
17	Initial Service/Spare parts	Supplier shall provide first three free	
		servicing of backhoe loader.	
		-	
		Supplier shall provide necessary air filters,	
		fuel filters, oil filters, lubricants and other	
		necessary consumables for first three	
		servicing of backhoe loader.	
		-	
18	Proven Performance	1.The machine offered shall be of current	
		model under standard production by the	
		manufacturer.	
		2. The bidder shall provide the	
		manufacturer's data of the performance of	
		the unit to include the fuel consumption,	
		performance curve of the engine etc.	
19	Color	Orange / Standard Construction equipment	
		color.	
	<b>XX</b> 7		
20	Warranty	Manufacturer shall provide a <b>minimum of</b>	
		one year warranty against	
		manufacturing defects from the delivery	
		and acceptance of the Backhoe Loader.	
21	Delivery	The <b>Backhoe loader-1 unit</b> shall be	
		delivered to Rampur Municipality, Office	
		of the Municipal Executive.	

<u>Note:</u> The major items are indicated by bold and highlighted letters/ alphabets/figures in the technical specifications. Non-compliance of these major items will result in non-responsiveness of the bid offered.