

**SL.NO.**

**TENDER FOR DRILLING 165MM DIA BOREWELL  
ON "NO WATER NO MONEY BASIS" & SUPPLY,  
ERECTION AND ENERGISATION OF  
SUBMERSIBLE PUMPSETS ON TURNKEY BASIS IN \_\_\_\_\_  
DISTRICT FOR THE PERIOD \_\_\_\_\_**

**NOTIFICATION NO. ....  
DATE: .....  
ESTIMATED COST.....**

**FINANCIAL BID DOCUMENT**

**ISSUED TO M/S: .....**

**RECEIPT NO. :.....DATE :.....**

**OFFICE OF THE MANAGING DIRECTOR,  
DR. B.R. AMBEDKAR DEV. CORPORATION  
BANGALORE**

SCHEDULE -B

A) RATES FOR UNDERTAKING DRILLING OF BOREWELLS AS PER SPECIFICATION FOR VARIOUS WORKS.

(Rates to be quoted should be inclusive of all taxes and duties)

1	Cost towards drilling of 165 mm borewell including Geo physical survey & transportation of rig and other equipments.	Per Mtr ( in words)	Rs..... Rs.....
2	Cost of B Class M.S ERW Casing pipe suitable for 165 mm Dia borewell as per specification IS 3601/84 with 4.50 mm wall thickness including cutting, threading, fixing collors, welding, transportation, fixing well cap etc.,	Per Mtr ( in words)	Rs..... Rs.....
3	Cost of uPVC Blue casing pipe suitable for 165 mm dia borewell as per IS 12818-1992 ( with latest amendments) with minimum 5.7 and maximum of 6.5 mm wall thickness including collers, Transportation , fixing well cap.	Per Mtr ( in words)	Rs..... Rs.....
4	Cost of 2 <sup>nd</sup> Yield Test by airline method.	Per borewell ( in words)	Rs. .... Rs.....

**Note: After drilling is completed, the contractor will get the registration done with ESCOM by the beneficiary for sanction of power. Cost of registration fee, YMD/MSD shall be paid by the contractor and this amount is to be claimed along with the bills by submitting the receipts issued by ESCOM.**

**B) SPECIFICATION OF SUBMERSIBLE PUMPSETS & ACCESSORIES & RATES UNDER GANGA KALYAN SCHEME**

**SPECIFICATION**

Brand new suitable HP deep well submersible pump set suitable for vertical installation in 165 mm dia borewells comprising of centrifugal multistage pump coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and (wet type) squirrel cage submersible induction motor suitable for operation on 3 Phase, 50Hz, 380/440 volts AC supply fitted with required accessories such as casing, strainers, sand guard, non-return valve etc., complete and overall efficiency should be equivalent to 5 star rating and satisfying performance characteristics for pumps and motor as declared to the BIS.

SUBMERSIBLE PUMP: The submersible pump IS 8034 (2002) with latest amendment shall comprise of the following:

1. Bowl assembly with required number of closed grained cast iron castings hydraulically tested with its inner passage smooth finished and coated with zinc chrome to ensure better efficiency and less wear. Every sage bowl shall be provided with a bronze wear ring.
2. Mixed flow "OR" radial flow impeller shall be made of bronze/Stainless steel and shall be balanced both statically and dynamically.
3. A stainless steel pump shaft provided with bearings sleeves made of leaded bronze.
4. Close grained cast iron suction casing shealathed with strainer to avoid ingress or bigger particles.
5. Top pump casing shall be provided with non-return valve fully streamlined to prevent back flow of water. The non-return valve shall be suitable for flanged connections.

**SUBMERSIBLE MOTOR:**

Totally enclosed water filled squirrel cage induction motor as per IS 9283-1995 with latest amendment shall be of wet type design suitable for water cooling and water lubricating. The submersible motor shall be fitted with the following:

- 1) Seamless heavy duty stainless steel tube outer motor casing.
- 2) The stator shall be made of steel and shall be statically and dynamically balanced
- 3) The motor laminations shall be chemically tested and pressed under high pressure.
- 4) The stator shall be vacuum impregnated with varnish from inside and epoxy painted outside shall be backed to ensure long life.
- 5) The stator winding wire shall be of high quality electrical grade electrolytic copper provided with heat resistant coating and water proof, water resistant, hard PVC insulated tested of high voltage for longer life. The winding wire shall be of adequate current carrying capacity.

**PUMPS TYPE OFFERED AND ITS DUTY CONDITIONS AS DECLARED TO B.I.S. confirming to above specifications.**

SL. NO	HP	STAGE	MAKE / MODEL	DECL HEAD IN MTRS	DECL DIS-CHARGE IN LPM	DECLAR E EFFICI-ENCY	Basic Price (Excluding of VAT & duties)	Taxes VAT & Duties	TOTAL PRICE QUOTED including taxes and duties
01	5	10							
02	7.5	12							
03	10	16							

**Other Accessories:**

<b>SL NO</b>	<b>ACCESSORIES</b>	<b>Basic Price (Excluding of VAT)</b>	<b>All Taxes</b>	<b>Total Price Quoted</b>
<b>01</b>	50mm NB G.I Pipes Class B as per ISI 1239 / 90 with heavy duty collar with ISO Certification .	Rs..... per metre.	Rs.....	Rs.....
02 (i)	50mm NB Submersible uPVC column Pipes both end Square Thread with coupler of length 3.050 mtrs. Tensile strength at yield should not be less than 53.00 N/mm <sup>2</sup> . Pullout strength with adaptor should not be less than 33000 Newtons. Wall thickness should be above 4.00mm Sulphated ash content should be less than 5.00% Vicat softening point should be above 85 ° c.	Rs..... per metre.	Rs.....	Rs.....
ii)	GI adaptor suitable for 50mm NB submersible uPVC column pipes with pullout strengths not less than 33000 newtons.	Rs..... per set	Rs.....	Rs.....
03	PVC insulated Submersible cable of flat 3.00 core (sheathed) of nominal cross sectional area 2.5/4 mm as per IS:694-1990 with latest amendments with ISO Certification.	Rs..... per metre	Rs.....	Rs.....
i)	1 X 3 X 2.50 sqmm.	Rs..... Per meter	Rs.. . . . .	Rs.....
ii)	1X3X4 sqmm.			
04	Gate valve of size 50mm as per IS:778-84 with latest amendments.	Rs..... per piece	Rs.....	Rs.....

05	Non Return valve of size 50mm as per IS:778-84 with latest amendments.	Rs..... per piece	Rs.....	Rs.....
06	GI bend 50 mm NB Class B	Rs..... per piece	Rs.....	Rs.....

**07. Panel Board Unit- Outdoor Type.**

Consists of two units, Meter Board unit and Panel Board unit:

i) Meter Board Unit:

The Meter board unit shall be fixed with hylamsheet of 6mm to accommodate energy meter, MCB's Capacitors, and fuse cutouts.

The entire unit shall be mounted within outdoor panel boards.

ii) Panel Board Unit :

Panel board of size 350 x 380 x 150mm fabricated out of 1.6mm thick sheet metal to operate on 3 ph/4 wire 50HZ/400/440 volts AC supply. The unit consists of the following :

- 1 No. Flush Type Motor Control Switch as per IS 6875.
- 1 No. Single Phase Preventor
- 1 No. Volt Meter as per IS 1248
- 1 No. Ammeter upto 50amps as per IS 1248.
- 3 Nos. Indicator Lamps for visual indication of electrical power.
- 1 No. DP Switch as per IS 9224/1979.
- Rewirable fuse units 16 / 30 Amps.
- 1 No. Push button operated Starter as per IS:5124
- Danger Board conforming to KPTCL standard should be provided on the panel and outdoor panel.

SL. NO	<u>ACCESSORIES</u>	Basic Price (Excluding of VAT)	All Taxes	TOTAL PRICE QUOTED
	<p>The two units 7 (i) &amp; 7(ii) complete shall be mounted on outdoor box of size 1200X900X350 mm mechanically strong vermin proof and water proof. The box shall have two detachable doors &amp; two numbers of spring loaded latch locking devices with keys. Ribs should be provided with door, canopy, apron &amp; loyvery, ventillation shall be provided fabricated out of 1.6mm thick steel sheet. The metallic name plate covering the details of the beneficiary should be fixed on the outdoor panel board box.</p> <p>i) Up to 6 HP</p> <p>ii) Up to 10 HP</p>	<p>Rs..... per unit Rs..... Per unit</p>	<p>Rs.....  Rs.....</p>	<p>Rs.....  Rs.....</p>
08	Power Capacitor as per IS 2834/86 and approved by KPTCL.	Rs..... per KVAR	Rs.....	Rs.....
09	M.C.B (Miniature Circuit Breakers) of 6/10/16/20/25/40 amps with sealable box as per IS 8828/78	Rs ..... per 3 poles	Rs.....	Rs.....
10	<p>PVC insulated, sheated steel/wire/steel tape, armoured UG cable with PVC outer sheeting 1.1 K.V. conforming to IS:1554/1988, from KPTCL pole to meter board unit.</p> <p>i) 3 ½ X 10 sq.mm</p> <p>ii) 3 ½ X 16 sq.mm</p>	<p>Rs ..... per mtr.</p> <p>Rs ..... per mtr.</p>	<p>Rs.....</p> <p>Rs.....</p>	<p>Rs.....</p> <p>Rs.....</p>
11	G.I.Pipe: 40mm dia 'A' class with necessary clamps, bolts, nuts, washers etc., for fixing the pipe on the pole and connecting the UG cable upto meter board.	Rs ..... per mtr.	Rs.....	Rs.....
12	Pot Head: Cast iron pot heads suitable for 1.1KVclassUG cables filled with necessary bitumen/insulation etc.,for the following size cable: 3 ½ X 25 sq. mm	Rs ..... each	Rs.....	Rs.....

**C) ERECTION, ELECTRIFICATION & COMMISSIONING WORKS OF PUMPSETS:**

1. **Pumpset Installation :** (Including aligning and balancing with all necessary erection of materials and labour including supply and erection of two pair of supporting clamps, borewell cap, cable clips and water tight gland cable protectors, bolts, nuts, valve gauges etc., involved in the job.)

Note: The contractor has to arrange all erection tools at his own cost.

Rs.....per unit

2. **Panel Board Erection (Outdoor Type) :**

Erection of panel board and meter board units with all materials and labour including providing Cement concrete foundation bed etc., complete.

Rs. ....per unit

**3. Electrification :**

- a) **Main Connection:**

Fixing of PVC 1.1 K.V. UG cable from KPTCL pole to meter board unit.

i) 3 ½ X 10 sq.mm Rs.....per meter

ii) 3 ½ X 16 sq.mm Rs.....per meter

- b) **Trench:** The work shall include digging of trench of 0.5mtr width & 0.5mtr deep laying the cable in trench refilling and consolidating the soil.

Rs.....per meter

- c) **Erection of G.I.Pipe:** 40mm dia 'A' class with necessary clamps, bolts, nuts, washers etc., for fixing the pipe on the pole and connecting the UG cable upto meter board.

Rs.....per meter

- d) **Fixing of Pot Head:** Cast iron pot heads suitable for 1.1KVclass UG cables filled with necessary bitumen/insulation etc., for the following size cable: 3 ½ X 25 sq. mm

Rs.....each

4. **Earthing** : Supplying, fixing and wiring earth electrode for grounding circuit IC cut-outs and equipments on the meter board in the pit. The pits should be filled –up with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduits etc., is to be established through G.I Wire of sizes as per clause 7.3.3. of IS: 732 using 12 mm bolts, nuts, washers and check-nuts etc., the pipe shall have 16 through holes of 12mm dia.

Rs.....per unit

**(The Price quoted shall include all taxes and duties, third party inspection charges & handling charges, packing and transportation to the borewell sites etc.).**

Signature of the tenderer -----

Name in Capital letters -----

On behalf of and in the capacity of -----

**Seal of the Firm**