



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM, HYDERABAD-32
FACTORY CIVIL ENGINEERING DEPARTMENT

Issued to agency:

PRICE BID
SCHEDULE- A

Tender Notice No:
 HY/FCD/OT-4/2009-10, Dt:19.06.09
 Item no: 06

Name of work: Maintenance of external water supply, repairs of submersible pumps in etc., in Factory and Administrative building area.

| PART - A | | | | | | |
|-----------------|---|------------------|----------|------------|------------|--|
| Sl. No. | Description of item | Approx. Quantity | Unit | Rate in Rs | Amount Rs. | |
| 1 a | Earth work in excavation by mechanical means (Hydraulic Excavtors) / manual means in foundations trenches or drains (not exceeding 1.5m in width or 10 Sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed , within a lead of 50m. | 300 | One Cu.M | 103.40 | 31,020.00 | |
| b | ----do---- up to First additional depth of 1.50 M to 3.00 M. | 70 | One Cu.M | 122.30 | 8,561.00 | |
| c | Earth work in excavation by mechanical means (Hydraulic Excavtors) / manual means over areas (exceeding 30 cm in depth , 1.5 m in width as well as 10 Sq.m on plan) including disposal of excavated earth , lead upto 50 m and lift upto 1.5 m, disposing earth to be levelled and neatly dressed for Hard Rock (Blasting prohibited). | 5 | One Cu.M | 332.45 | 1,662.25 | |
| d (i) | Cutting road and making good the same including supply of extra quantites of materials ie, aggregate, murrum, screening ,soling stone and labour required.-butimen road surface | 3 | One Cu.M | 1081.80 | 3,245.40 | |
| d (ii) | ... do .. Water bound macadam | 2 | One Cu.M | 572.45 | 1,144.90 | |
| PART - B | | | | | | |
| 1 a | Dismantling (GI pipe external work) including excavation and refilling trenches after taking out the pipes , manually/ by mechanical means including staking of pipes within 50 metres lead as per direction of Engineer-in - charge : 15 mm to 40 mm nominal bore | 10 | One R M | 24.90 | 249.00 | |
| b | ... do.. Above 40 mm nominal bore | 150 | One R M | 29.05 | 4,357.50 | |

| Sl. No. | Description of item | Approx. Quantity | Unit | Rate in Rs | Amount Rs. |
|---------|---|------------------|---------|------------|------------|
| 2 | a) Same as above for over head pipe lines. a) 1 1/2" (40 mm) dia. Pipes | 10 | One R M | 43.57 | 435.70 |
| | b) 2" (50 mm) dia. Pipes | 50 | One R M | 43.57 | 2,178.50 |
| | c) 3" (75 mm) dia. Pipes | 50 | One R M | 43.57 | 2,178.50 |
| | d) 4" (100 mm) dia. Pipes | 100 | One R M | 43.57 | 4,357.00 |
| 3 | a) Dismantling G.I. over head lines including gas cutting and handing over to stores etc., complete as directed by Engineer-in charge. a) 2" (50 mm) dia. Pipes | 10 | One R M | 63.00 | 630.00 |
| | b) 3" (75 mm) dia. Pipes | 10 | One R M | 98.50 | 985.00 |
| | c) 4" (100 mm) dia. Pipes | 10 | One R M | 98.50 | 985.00 |
| 3 | a) Same as above for pipes lines at or below ground level for the following dia. a) 2" (50 mm) dia. Pipes | 10 | One R M | 171.00 | 1,710.00 |
| | b) 3" (75 mm) dia. Pipes | 10 | One R M | 210.00 | 2,100.00 |
| | c) 4" (100 mm) dia. Pipes | 10 | One R M | 210.00 | 2,100.00 |
| 4 | a) Dismantling the existing pipe lines, replacing and shifting them to other locations within 2 KMs., at or below ground level including earth work excavation and refilling with excavated soils. a) 2" (50 mm) dia. Pipes | 10 | One R M | 330.00 | 3,300.00 |
| | b) 3" (75 mm) dia. Pipes | 10 | One R M | 371.00 | 3,710.00 |
| | c) 4" (100 mm) dia. Pipes | 10 | One R M | 371.00 | 3,710.00 |
| 5 | a) Conveying of C.I. Pipes and specials from stores to site including cost of loading, lowering into trenches, aligning and cutting of pipes to required length where ever necessary including jointing, testing ec., complete. (All C.I. pipes and specials, pig lead, hemp yarn, bolts and nuts, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores) a) 6" (150 mm) dia. Pipes | 10 | One R M | 186.00 | 1,860.00 |
| | b) 8" (200 mm) dia. Pipes | 10 | One R M | 186.90 | 1,869.00 |
| | c) 14" (350 mm) dia. Pipes | 10 | One R M | 253.70 | 2,537.00 |
| | d) 16" (400 mm) dia. Pipes | 10 | One R M | 253.70 | 2,537.00 |
| | e) 600 mm (24") dia. Pipes | 10 | One R M | 304.44 | 3,044.40 |
| 6 | a) Conveying of G.I. Pipes and specials from stores to site including cost of loading, unloading, lowering into trenches, cutting and threading wherever necessary, aligning including jointing and testing etc., complete. all as directed by Engineer-in-charge. (G.I. pipes and specials, pig lead, hemp yarn, bolts and nuts, washers, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores). a) 1 1/2" (40 mm) dia. Pipes | 10 | One R M | 118.00 | 1,180.00 |
| | b) 2" (50 mm) dia. Pipes | 10 | One R M | 118.00 | 1,180.00 |
| | c) 3" (75 mm) dia. Pipes | 10 | One R M | 166.00 | 1,660.00 |
| | d) 4" (100 mm) dia. Pipes | 10 | One R M | 166.00 | 1,660.00 |

| Sl. No. | Description of item | Approx. Quantity | Unit | Rate in Rs | Amount Rs. |
|---------|---|------------------|---------|------------|------------|
| 7 | a) Conveying of G.I. Pipes and specials from stores to site including cost of loading, unloading, lifting into position and fixing over head pipe line (up to 15.00 M height) including cutting and threading wherever necessary including jointing, testing etc., complete. all as directed by Engineer-in-charge. (G.I. pipes and specials, pig lead, hemp yarn, bolts and nuts, washers, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores) a) 1 1/2" (40 mm) dia. Pipes | 25 | One R M | 188.00 | 4,700.00 |
| | b) 2" (50 mm) dia. Pipes | 50 | One R M | 188.00 | 9,400.00 |
| | c) 3" (75 mm) dia. Pipes | 10 | One R M | 259.00 | 2,590.00 |
| | d) 4" (100 mm) dia. Pipes | 50 | One R M | 259.00 | 12,950.00 |
| 8 | a) Conveying, lowering and fixing of C.I. sluice valves, gun metal valves on C.I./G.I pipes lines at or below ground level all as directed by Engineer-in-charge. (Valves, hemp yarn, bolts and nuts, washers, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores). a) 1 1/2" (40 mm) dia. valves | 5 | Each | 243.00 | 1,215.00 |
| | b) 2" (50 mm) dia. valves | 5 | Each | 243.00 | 1,215.00 |
| | c) 3" (75 mm) dia. Valves | 5 | Each | 403.00 | 2,015.00 |
| | d) 4" (100 mm) dia. Valves | 5 | Each | 403.70 | 2,018.50 |
| | e) 6" (150 mm) dia. Valves | 5 | Each | 872.70 | 4,363.50 |
| | f) 8" (200 mm) dia. Valves | 2 | Each | 872.70 | 1,745.40 |
| | g) 12" (300 mm) dia. Valves | 2 | Each | 1274.70 | 2,549.40 |
| | h) 14" (350 mm) dia. Valves | 2 | Each | 1274.70 | 2,549.40 |
| 9 | a) Conveying, lifting into position and fixing non-return valves /C.I sluice valves/ Gun metal valves on C.I./G.I. over head pipe lines all as directed by Engineer-in-charge. (Valves, hemp yarn, bolts and nuts, washers, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores). a) 1 1/2" (40 mm) dia. valves | 2 | Each | 346.00 | 692.00 |
| | b) 2" (50 mm) dia. valves | 2 | Each | 346.00 | 692.00 |
| | c) 3" (75 mm) dia. Valves | 2 | Each | 560.00 | 1,120.00 |
| | d) 4" (100 mm) dia. Valves | 2 | Each | 560.00 | 1,120.00 |

| Sl. No. | Description of item | Approx. Quantity | Unit | Rate in Rs | Amount Rs. |
|---------|---|------------------|---------------|------------|------------|
| 10 | Providing assistance to water supply operators for maintenance of water supply lines of all sizes ranging from 40mm to 300mm dia at all heights of the blocks and buildings, below or above the ground level as desired by the department, the scope of work include repair of valves, replacing gland ropes, cleaning of valve chambers, shifting of pipes and valves etc., from stores to work spot and vice versa wherever necessary etc. complete. All required materials will be issued by BHEL on free of cost at their stores. The rate quoted shall include cost of labour, tools and tackles, safety equipment as directed. The activity requires one skilled service, three semiskilled services and Two Unskilled services are required for carrying out the above job per day for one operation. | | | | |
| a | 1 Skilled service required for carrying out the work mentioned in item 10 above. | 287 | One operation | 340.45 | 97,709.15 |
| b | 3 Semi skilled services required for carrying out the work mentioned in item 10 above. | 287 | One operation | 928.95 | 266,608.65 |
| c | 2 Unskilled services required for carrying out one operation-for assisting the above job listed in item 10a & 10b. | 287 | One operation | 564.70 | 162,068.90 |
| | Part-C | | | | |
| 1 | Maintenance of water storage reservoirs, adjacent areas by sweeping the area, cleaning the floors/removing the weeds, grass cutting and disposal of the debris/garbage at the nearest bins on the daily basis.(One operation requires one Unskilled service per day) | 287 | One operation | 309.65 | 88,869.55 |
| 2 | a) Maintenance of water storage reservoirs by sweeping, cleaning the foors and side walls with coir brushes, removing the clay, silt, scum etc., and cleaning the surface with bleaching powder and finally with fresh water till the full area is cleaned properly and writing the date of cleaning on the walls with synthetic enamel paint neatly including cost of all materials- etc. complete. a) Under ground reservoir 5.00 lakhs gallons capacity. | 6 | One operation | 5505.00 | 33,030.00 |
| b | b) ---do--- 2.50 lakh gallons. | 6 | One operation | 2767.00 | 16,602.00 |
| c | c) ---do--- 1.00 lakh gallons. | 6 | One operation | 1754.00 | 10,524.00 |
| d | d) ---do--- 20,000 gallons (Admn. Bldg. pump house) | 4 | One operation | 1280.00 | 5,120.00 |
| e | e) ---do--- 5,000 gallons capacity. | 4 | One operation | 640.00 | 2,560.00 |
| f | f) over head tank of 40 mt. height and 2.20 lakh gallons capacity (two component of each 1.10 gallons capacity). | 3 | One operation | 14136.00 | 42,408.00 |

| Sl. No. | Description of item | Approx. Quantity | Unit | Rate in Rs | Amount Rs. |
|---------|---|------------------|---------------|------------|------------|
| | PART - D | | | | |
| 1 | Fabrication and fixing at site M.S flanges including cutting, drilling of holes and welding to M.S pipe etc., as directed by Engineer-in-charge (M.S. materials will be supplied by BHEL free of cost). 4" (100 mm) dia. flanges | 10 | Each | 299.00 | 2,990.00 |
| 2 | a Making connection of GI distribution branch with GI main of following sizes by providing and fixing 'T' including cutting threading the pipe etc., complete. 25 mm to 40 mm nominal bore | 6 | Each | 166.05 | 996.30 |
| | b ... do.. 2" (50 mm) dia. | 6 | Each | 423.20 | 2,539.20 |
| | c ... do.. 3" (75 mm) dia. | 6 | Each | 423.20 | 2,539.20 |
| | d ... do... 4" (100 mm) dia. | 6 | Each | 423.20 | 2,539.20 |
| 3 | Repairing the existing level indicator at a height of 40 M of the over head tank.... | 3 | One operation | 1174.80 | 3,524.40 |
| | PART - E | | | | |
| 1 | a Servicing of the submersible pump sets ranging from 7.5 to 12 HP including replacing the required spares (both Electrical & Mechanical), rewinding wherever required, testing and commissioning. The depth of the bore wells on an average of 150 Rft. The rate shall include lifting, erection, transportation from & to water works, to site, erection, testing & commissioning etc., complete. (The rate quoted shall include all materials for repairs, rewinding, required tools such as chain pulley, pipe wrenches, labour etc. and warranty for the bore should be 12 Months from the date of commissioning or completion of work which ever is later. | 12 | One operation | 8250.00 | 99,000.00 |
| | b Servicing of the submersible pump sets ranging from 1 to 2HP including replacing the required spares both Electrical and Mechanical. | 4 | One operation | 2500.00 | 10,000.00 |
| 2 | a Servicing / overhauling of centrifugal pumps including replacement of required spares and placing in position, testing and commissioning and with a warranty of 12 months period. The rate quoted shall include dismantling, transportation, servicing and re-erection at site). a) 5 to 15 HP | 5 | Each | 3500.00 | 17,500.00 |
| | b 25 to 40 HP | 5 | Each | 4000.00 | 20,000.00 |
| | c Spider washers | 10 | Each | 1020.00 | 10,200.00 |
| | d 63 amps 415 V ICTP switch. | 5 | Each | 420.00 | 2,100.00 |
| | e 100 amps 415 V ICTP switch. | 5 | Each | 960.00 | 4,800.00 |
| 3 | Laying of PVC insulated and aluminium armoured cable ranging from 35 Sq. mm to 70 Sq. mm | 50 | One R M | 14.40 | 720.00 |
| 4 | Supplying and spreading of sand all around the cable to a thickness of 10cms, supply and laying bricks all along the cable on both sides, supply and laying of rough shahabad stone of 30 cms width and 12 mm thick on top of the brick and refilling the cable trench up to a level of 250 mm above ground level and providing cable markers at every 25 mtrs. | 50 | One R M | 18.00 | 900.00 |

| Sl. No. | Description of item | Approx. Quantity | Unit | Rate in Rs | Amount Rs. |
|---------|---|------------------|---------------|------------|---------------------|
| 5 | Supplying and fixing 3 core copper flexible submersible cable for 2.50 sq mm of ISI make (Finolex make) | 250 | One R M | 40.80 | 10,200.00 |
| 6 | PVC insulation tape of standard width (of ISI make) | 100 | Each | 12.00 | 1,200.00 |
| 7 | a) Supplying and fixing the spares for the control panel for the submersible pump sets of the make (L&T), cutter hammer or Siemens. a) Contractor kit 32 Amps, Model ML1.5/MI 3. | 50 | Each | 480.00 | 24,000.00 |
| | b) H R C Fuse base 100/125 Amps, bus bar type | 50 | Each | 150.00 | 7,500.00 |
| | c) H R C Fuse links (TCP 100) 100 Amps | 50 | Each | 150.00 | 7,500.00 |
| 8 | Checking the Eletrical switch boards , panels, replacement of spares, laying and joining cables, repairing of motors at site and routine check up power points at all bore wells , Main water works , bore well water works at LIG and 09 Block reservoir and any other allied electricasl works in connection with water supply etc. complete. The electrician shall have necessary tools for checking and repairing at heights. All required materials will be issued by BHEL at free of cost at their stores . The rate quoted shall include cost of labour , tools and tackles, Safety equipments as directed. The activity requires one Skilled service and one Semi-skilled services are required for carrying out the above job per day for one operation. | | | | |
| a | 1 Skilled worker required for carring out the work mentioned in item no. 8 above. | 287 | One operation | 340.45 | 97,709.15 |
| b | 1SSW required for carring out the work mentioned in item no. 8 above. | 287 | One operation | 309.65 | 88,869.55 |
| | Total: | | | | 1,289,909.60 |
| | Rupees: Twelve lakh eighty nine thousand nine hundred ten only | | | | |

Note: SERVICE TAX is extra which will be paid by BHEL to the agency after submission of valid documents.

Note : The Tenders are required to quote the tender value on percentage (%) basis at excess or less or on as per estimate value

| Tender % | In figure | In words |
|---------------------|-----------|----------|
| Excess | | |
| Less | | |
| Estimated Rate only | | |

Name of the Contractor:

Signature of the contractor

Accounts Representative

Opening officer