

# TENDER

TENDER NOTIFICATION NO. - FCX/22231036

FOR

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

**PRICE BID**



**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION**

**BHARAT HEAVY ELECTRICALS LIMITED**

**(A Government of India Undertaking)**

**BHOPAL – 462 022 (M.P)**

## PREAMBLE OF PRICE BID

**1.0** This Price Bid consists of Three Schedule:

### **1.1 Schedule A**

Schedule A combining of Two Annexure:

The evaluation currency for this tender shall be INR. Total price of the package combining of Annexure I & Annexure II to be quoted by the bidders which shall form the basis for comparison for deciding lowest bid. For further processing and award, total quoted amount by the L1 (lowest) bidder for the package shall be used for deriving individual item rate by BHEL based on % (percentage) weightage specified at Annexure I & Annexure II of Price Schedule.

### **1.2 Schedule B**

It consists of details of free issue materials by BHEL.

### **1.3 Schedule C**

It consists of details of tools & tackles provided by BHEL either on higher basis or on free of cost basis which are mentioned in price bid.

**2.0** The work to be carried out under the contract shall, except as otherwise provided in tender conditions, include all labour, materials, tools, plant, equipment, and transport which may be required in preparation of and for full & entire execution and completion of the Works. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles as laid down in Technical Specification & elsewhere in Tender Specification.

**3.0** The price bid should not contain any condition. Conditional price Bids shall be summarily rejected.

**4.0** The bidder should not leave any column blank in Price Schedules.

**5.0** Price Quoted shall include all taxes, & duties except GST.

**6.0** Unless otherwise specified in the items involving cement, reinforcement steel or structural steel, these items shall be issued free of cost by BHEL.

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

**SUMMARY**

	Details ANNEXURE	Total Amount (Rs.)
	Total price of the package combining of Annexure-I & Annexure-II.	

Amount in words: Rs.

.....

.....

**NOTE:**

- 1** The evaluation currency for this tender shall be INR. Total price of the package combining of Annexure-I & Annexure-II to be quoted by the bidders which shall form the basis of comparison for deciding lowest bid.  
For further processing & award total quoted Amount for the package by the L1 (lowest) bidder shall be used for deriving Individual item rate by BHEL based on % (percentage) weightage specified at Annexure-I & Annexure-II of Price Schedule.
- 2** In case of “discrepancy in words and figures”, the same shall be adjusted in accordance with following rule:
  - (a)** If, in the price structure quoted for the required goods/ services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
  - (b)** If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.
  - (c)** If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.
  - (d)** If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule : Anneuxre - I**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
1	Carriage of materials by mechanical transport including loading, unloading and stacking -1 km lead			
	(a) Lime, Moorum, Building rubbish	1.00	cum	0.0166
	(b) Earth	2.00	cum	0.0414
2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.			
	All kinds of soil.	100.00	cum	3.2744
3	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil.			
	a) Pipes, cables etc. not exceeding 80 mm dia.	20.00	metre	0.5077
	b) Pipes, cables, etc. exceeding 80 mm dia but not exceeding 300 mm dia.	50.00	metre	2.0728
4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	100.00	cum	2.0978
5	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.			
	All kinds of soil.	20.00	cum	0.1732
6	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like.	150.00	kilo litre	2.7243

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule : Anneuxre - I**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
7	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	1.00	cum	0.1680
8	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	2.00	cum	0.4901
9	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar.	1.00	cum	0.1418
10	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge : In cement mortar	2.00	cum	0.3385
11	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	1.00	sqm	0.0184
12	Dismantling manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge :			
	(a) Water bound macadam road	5.00	sqm	0.0772
	(b) Bituminous road	5.00	sqm	0.1501
13	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :			

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule : Anneuxre - I**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
	(a) 15 mm to 40 mm nominal bore.	100.00	metre	1.1040
	(b) Above 40mm nominal bore.	50.00	metre	0.6296
14	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge:			
	(a) Up to 150 mm diameter	20.00	metre	0.7783
	(b) Above 150 mm diameter up to 300 mm dia	5.00	metre	0.2487
15	Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.			
		10.00	each	0.4963
16	Dismantling of C.I. sluice valve including stacking of useful materials within a lead of 50 metres			
	(a) Upto 150 mm diameter	1.00	each	0.0238
	(b) Above 150 mm diameter	1.00	each	0.0831
17	Dismantling of spindle fire hydrant including stacking of useful materials within 50 metres lead.	10.00	each	0.4979
18	Fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. <b>(Excluding Cost of GI Pipe)</b>			
	External work			
	50 mm dia nominal bore	100.00	metre	1.3781
19	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :			
	25 to 40 mm nominal bore.	5.00	each	0.3360
20	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :			
	(a) 25 mm nominal bore.	10.00	each	0.7975

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule : Anneuxre - I**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
	(b) 50 mm nominal bore.	5.00	each	0.8321
21	Laying in position centrifugally cast (spun) iron S&S or flanged pipes ( <b>excluding cost of pipe</b> ).	2.00	quintal	0.0509
22	Laying in position S & S or flanged C.I. Special such as tees, bends, collars, tapers and caps, etc. ( <b>excluding cost of specials</b> ).	150.00	quintal	6.9882
23	Providing lead caulked joints to spun iron or C.I. Pipes and specials, including testing of joints, but <b>excluding the cost of pig lead</b> :			
	a) 100 mm diameter pipe.	20.00	each	0.7327
	b) 150 mm diameter pipe.	20.00	each	1.0999
	c) 200 mm diameter pipe.	20.00	each	1.4600
	d) 250 mm diameter pipe.	5.00	each	0.4557
	e) 300 mm diameter pipe.	5.00	each	0.5483
24	Providing flanged joints to double flanged C.I./D.I. pipes and specials including testing of joints.			
	a) 100 mm diameter pipe	5.00	each	0.1733
	b) 150 mm diameter pipe	5.00	each	0.2143
	c) 200 mm diameter pipe	5.00	each	0.2204
25	Fixing C.I. Sluice valves (with cap) complete with bolts , nuts, rubber insertions etc. ( <b>the tail pieces if required will be paid separately</b> ).only C.I. Sluice valve will be free issue from BHEL store.			
	(a) 150 mm diameter			
	Class I	10.00	each	1.2113
	(b) 200 mm diameter			
	Class I	10.00	each	1.4754
	(c ) 250 mm diameter			
	Class I	5.00	each	1.0941
	(d) 300 mm diameter			
	Class I	5.00	each	1.2664

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule : Anneuxre - I**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
26	Dismantling old C.I. Pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead up to 50 metre:			
	(a) 100 mm diameter C.I. Pipe.	5.00	metre	0.1947
	(b) 150 mm diameter C.I. Pipe.	50.00	metre	2.0603
	(c ) 200 mm diameter C.I. Pipe.	50.00	metre	2.2768
	(d) 250 mm diameter C.I. Pipe.	10.00	metre	0.4973
	(e ) 300 mm diameter C.I. Pipe.	50.00	metre	2.6674
27	Labour for cutting C.I. Pipe with steel saw:			
	(a) 100 mm diameter C.I. Pipe.	5.00	each cut	0.0697
	(b) 150 mm diameter C.I. Pipe.	10.00	each cut	0.2621
	(c ) 200 mm diameter C.I. Pipe.	5.00	each cut	0.1748
	(d) 250 mm diameter C.I. Pipe.	10.00	each cut	0.4333
	(e ) 300 mm diameter C.I. Pipe.	5.00	each cut	0.2604
<b>Total : Annexure I</b>				<b>45.39</b>



**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule : Anneuxre - II**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
1	Laying and jointing flanged GI pipe in all direction including transportation, clamping of pipe, making leak proof at joints with necessary rubber gasket etc. complete upto a maximum height of 20 metre from ground level. <b>(GI pipe shall be issued free of cost from BHEL)</b>			
	GI Pipe of size 100 mm dia	100.00	metre	4.3559
2	Fixing of GI pipes complete with GI fittings including transportation, clamping of pipe, threading (if required) with necessary teflon tape etc. complete upto a maximum height of 20 metre from ground level. <b>(GI pipe and fittings shall be provided by BHEL free of cost)</b>			
	a) GI Pipe of size 15 mm dia	150.00	metre	3.5771
	b) GI Pipe of size 20 mm dia	100.00	metre	2.5677
	c) GI Pipe of size 25 mm dia	100.00	metre	2.5990
	d) GI Pipe of size 50 mm dia	50.00	metre	1.3204
3	Repair of lead caulked joints to spun iron or C.I. pipes and specials to stop the leakage including cost of excavation and refilling complete but <b>excluding the cost of pig lead only.</b>			
	a) 100 mm dia	5.00	each	0.3514
	b) 150 mm dia	25.00	each	1.9648
	c) 200 mm dia	10.00	each	0.8202
	d) 250 mm dia	10.00	each	0.8864
	e) 300 mm dia	15.00	each	1.3832
4	Repair of Fire Hose Reels including dismantling from various locations inside factory premises, disassembly of unit after cutting welded joints, taking out both the discs and drum, pipe assembly and valves etc, cleaning all the pipe fittings internally by wire brushing/sand blasting, re-threading and providing new glands on each moving joint, 8 mm dia M.S. studs, lubrication and re-fitting total assembly, balancing hose reel drum before welding and pressure testing to ensure water tightness under required pressure etc. replacement of defective valves etc.if required, including re-fitting at site, making connections and transportation complete.			
		5.00	Each	2.0377

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION****Price Schedule : Anneuxre - II**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factoy area.**

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
---------	------------------	------	------	---

- 7 Hiring of 3D Model Excavator with Loader of make JCB/ Escorts/CAT/Mahindra or equivalent including cost of services of operating staff, supply of lubricating oil and diesel for all type of works like earth work,dismantaling & demolishing, development of rain waterharvesting structure above & below ground level with collection of material, loading of material,building rubbish etc including all running expenses as par the direction of Engineer incharge (Work to be executed on different location inside factory)

		260.00	Hrs	32.7504
Total : Annexure II				<b>54.61</b>
Total : Annexure I + Annexure II				<b>100.00</b>

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION**

**Price Schedule : B**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

The following material free issue from BHEL stores.

- 1 C I Pipes and specials
- 2 Sluice valve
- 3 Pig lead
- 4 GI pipe of size 15 mm, 20 mm , 25 mm & 50 mm and fittings

**Price Schedule : C**

**Name of Work: Maintenance & Repair of water supply lines, fire hydrants, fire hose reels inside factory area.**

- |   |   |   |                           |
|---|---|---|---------------------------|
| 1 | Hire charges.<br>i) Drill machine @ 252.00/- per day<br>ii) Jack Hammer @108.00/- per day | } | (Subject to availability) |
| 2 | Drill machine/jack hammer rod Rs. 100.00 per rod  |   |                           |
| 3 | Electricity charges at Rs.66/- per M.T. of fabrication of structural steel                |   |                           |