

# TENDER

TENDER NOTIFICATION NO. - **FCX/19201037**

FOR

**Civil works for addressing safety related points in various blocks & other locations 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 consists of **Two** Annexure:

Total price of the package combining **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 : Civil works for addressing safety related points in various blocks & other locations inside factory area.

**SUMMARY**

	Details ANNEXURE	Total Amount (Rs.)
	Total price of the package combining of <b>Annexure-I &amp; Annexure-II.</b>	

Amount in words: Rs.

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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.

## FACTORY CIVIL CONSTRUCTION &amp; MAINTENANCE DIVISION

## Price Schedule : Anneuxre - I

Name of work : Civil works for addressing safety related points in various blocks & other locations inside factory area.

Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
1		Carriage of material by Mechanical transport including, loading, unloading & stacking of..			
(a)	1.1.1	Lime, moorum, building rubbish 1 km lead	20.00	cum	0.3832
(b)	1.1.2	Earth - 1 Km lead	40.00	cum	0.9579
(C)	1.1.11	Steel - 1 Km lead	4.00	tonne	0.0681
2		Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth upto 50 m and lift upto 1.5 m, disposed soil to be levelled and neatly dressed :			
(a)	2.1.1	All kinds of soil.	100.00	sqm	1.0955
		Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m; disposed earth to be levelled and neatly dressed.			
(b)	2.6.1	All kinds of soil.	10.00	cum	0.3742
3	2.25	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.	5.00	cum	0.1212
4		Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.			
	2.28.1	All kinds of soil	100.00	sqm	0.2705
5		Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:( <b>cement which shall be supplied free of cost by BHEL</b> )			
(a)	4.1.2	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size ).	10.00	cum	7.4691
(b)	4.1.5	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size ).	5.00	cum	3.8513

## FACTORY CIVIL CONSTRUCTION &amp; MAINTENANCE DIVISION

## Price Schedule : Anneuxre - I

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
6		Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work upto plinth level. <b>(cement which shall be supplied free of cost by BHEL)</b>			
	5.1.3	1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	35.00	cum	28.0075
7		Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement : <b>(Cement free issue by BHEL)</b>			
	5.2.3	1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	2.00	cum	1.9712
8	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size). <b>(cement which shall be supplied free of cost by BHEL)</b>	2.00	cum	2.0579
9		Centering and shuttering including strutting, propping etc. and removal of form for :			
	5.9.1 ana*	a) Foundations, footings, bases of columns, etc. for mass concrete. <b>(Excluding the cost of material which shall be issued free of cost by BHEL)</b>	20.00	sqm	0.5155
	5.9.1	b) Foundations, footings, bases of columns, etc. for mass concrete.	40.00	sqm	1.7993
	5.9.2	c) Walls (any thickness) including attached pilasters, buttresses, plinth and string courses, etc.	20.00	sqm	1.5850
	5.9.3	d) Suspended floors, roofs, landings, balconies and access platform.	12.00	sqm	1.0459
	5.9.5	e) Lintels, beams, plinth beams, girders, bressumers and cantilevers.	10.00	sqm	0.7270
	5.9.6	f) Columns, pillars, piers, abutments, posts and struts.	10.00	sqm	1.0111
10	Ana. 5.22A.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. <b>(Reinforcement bars will be supplied free of cost from BHEL store).</b>			
		Thermo-Mechanically Treated bars.	800.00	Kg	1.7125

## FACTORY CIVIL CONSTRUCTION &amp; MAINTENANCE DIVISION

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
11	Ana 6.15	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry. <b>(Excluding cost of M.S. bars) (Reinforcement bars will be supplied free of cost from BHEL store).</b>	20.00	sqm	0.0026
12		Coursed rubble masonry (second sort) with hard stone in foundation & plinth with <b>(Excluding the cost of cement which shall be supplied free of cost by BHEL):-</b>			
	7.7.1	Cement mortar 1:6 ( 1 cement : 6 coarse sand).	8.00	cum	4.2766
13	8.2	Providing and fixing 18 mm thick gang saw cut mirror polished premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1 : 4 (1 cement : 4 coarse sand) joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. <b>(Excluding the cost of cement which shall be supplied free of cost by BHEL):-</b>			
	8.2.2	Granite of any colour and shade			
		<b>Note: The colour of granite shall be zed black. Contractors are advised to see the sample lying at divisonal office of FCX before quoting their rates.</b>			
	8.2.2.2	Area of slab over 0.50 sqm	20.00	sqm	15.0951
14	Ana. 10.1	Structural steel work in single section fixed without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. <b>(Structural steel &amp; primer will be issued free of cost from BHEL stores).</b>	200.00	Kg	0.4600
15		Structural steel work riveted ,bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. <b>(Structural steel &amp; primer will be issued free of cost from BHEL stores).</b>	500.00	Kg	1.8875

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
16	11.4	52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener concrete consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume. Hardening compound is mixed @ 2 litre per 50 kg of cement or as per manufactures specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete. <b>(Excluding cost of cement which shall be supplied free of cost by BHEL)</b>	20.00	sqm	1.6254
17	**	12 mm cement plaster of mix: <b>(excluding cost of cement which shall be supplied free of cost by BHEL)</b>			
	13.4.2	1 : 6 (1 cement : 6 coarse sand) .	25.00	sqm	0.7174
18	**	20 mm cement plaster of mix: <b>(excluding cost of cement which shall be supplied free of cost by BHEL)</b>			
	13.6.2	1 : 6 (1 cement : 6 coarse sand).	20.00	sqm	0.7839
19		Painting with synthetic enamel paint of approved brand and manufacture to give an even shade. <b>(Synthetic paint free issue by BHEL store)</b>			
	Ana. 13.61.1	Two or more coats on new work.	100.00	sqm	1.0255
20	**	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks with cement concrete 1 : 3 : 6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground within 50 metres lead: <b>(excluding cost of cement which shall be supplied free of cost by BHEL)</b>			
	14.2.1	Door chowkhats.	4.00	each	0.6467

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
21		Painting with synthetic paint of approved brand and manufacture of required colour to give an even shade:(Synthetic paint free issue by BHEL store)			
	Ana 14.54.1	One or more coats on old work.	20.00	sqm	0.1397
22		Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-charge:			
a)	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	10.00	cum	1.9412
b)	15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	5.00	cum	0.5983
23	15.3	Demolishing RCC 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.	15.00	cum	4.2478
24		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 :			
	15.7.4	In cement mortar.	10.00	cum	1.6390
25		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:			
	15.9.2	In cement mortar	10.00	cum	1.9557
26		Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts, etc. complete and stacking within 50 metres lead:			
	15.12.1	a) Of area 3 sqm and below.	4.00	each	0.1177
	15.12.2	b) Of area beyond 3 sqm.	4.00	each	0.1618
27		Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead:			
	15.13.1	a) Of area 3 sqm and below.	4.00	each	0.0459
	15.13.2	b) Of area beyond 3 sqm.	4.00	each	0.0607

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
28		Dismantling steel work in single sections including dismembering and stacking within 50metres lead in:			
	15.17.1	a) R.S. Joists	100.00	kg	0.0275
	15.17.2	b) Channels, angles, tees and flats	100.00	kg	0.0188
29	15.19	Dismantling steel work manually / by mechanical means in built up sections without dismembering and stacking within 50 meters lead. as per direction of Engineer-in-charge.	1000.00	Kg	0.3037
30	15.36	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	50.00	kg	0.1468
31	Ana 16.18.1	Fencing with angle iron post placed at required distance embedded in cement concrete blocks and every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only, provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire 9.38 kg per 100 metres (minimum) between the two posts fitted and fixed with G.I. staples etc. complete.(cost of posts, struts, earth work and concrete work to be paid for separately):Payment to be made per metre cost of total length of barbed wire used. <b>(Excluding cost of barbed wire which shall be supplied free of cost by BHEL)</b>	1000.00	Metre	0.5641
32	** 18.77	Cutting holes up to 15x15 cm in RCC floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof. <b>(excluding cost of cement which shall be supplied free of cost by BHEL)</b>	6.00	each	0.2432
Total :					93.7565

## FACTORY CIVIL CONSTRUCTION &amp; MAINTENANCE DIVISION

## Price Schedule : Anneuxre - II

Name of work : Civil works for addressing safety related points in various blocks & other locations inside factory area.

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
1	Brick work with Ghol bricks of class designation 50 and above in foundation and plinth in cement mortar 1:6 (1 cement : 6 coarse sand) : <b>(Cement free issue by the Deptt.)</b>	5.00	cum	5.6192
2	Half brick masonry with Ghol bricks of class designation 50 and above in foundations and plinth in:Cement mortar 1 : 4 (1 cement : 4 coarse sand) . <b>(Cement free issue by the Deptt.)</b>	5.00	sqm	0.6243
	Total :			6.2435
	Total = Annexure-I & Annexure-II.			100.0000

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION**

**Price Schedule B**

Name of work : Civil works for addressing safety related points in various blocks & other locations inside factory area.

The following material free issue from BHEL stores.

- 1 Cement
- 2 Reinforcement Steel.
- 3 Structural Steel
- 4 Red oxide zinc chromate primer
- 5 Synthetic enamel paint
- 6 A.C. Sheets / Non-A.C. Sheets
- 7 Barbed wire

**SCHEDULE-C**

Name of work : Civil works for addressing safety related points in various blocks & other locations inside factory area.

- 1 Electricity charges at Rs.66.00/- per M.T. of fabrication of structural steel

Hire charges.

- i) Drill machine @ 252.00/- per day
- ii) Jack Hammer @108.00/- per day



Drill machine/jack hammer rod Rs. 100.00 per rod