

TENDER

TENDER NOTIFICATION NO. - FCX/23241019

FOR

Civil works for Floor, Boundary Wall, Drains and other associated works at GJB 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 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 Floor, Boundary Wall, Drains and other associated works at GJB inside factory area

SUMMARY

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

Amount in words: Rs.

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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 A : Anneuxre - I**

Name of work: Civil works for Floor, Boundary Wall, Drains and other associated works at GJB inside factory area.

Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
1		Carriage of materials by mechanical transport including loading, unloading and stacking --- 2 Km lead			
a)	1.1.1	Lime, Moorum, building rubbish	5.00	cum	0.0136
b)	1.1.2	Earth	50.00	cum	0.1703
2		Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.			
	2.6.1	All kinds of soil.	113.00	cum	0.6014
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.	113.00	cum	0.3896
4	**	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: (Cement shall be supplied free of cost by BHEL)			
	4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	6.00	cum	0.6360
5		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. (Cement shall be supplied free of cost by BHEL)			
	5.1.3	1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	1.00	cum	0.1138
6		Centering and shuttering including strutting, propping, etc. and removal of form for:			
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	31.00	sqm	0.1983
7	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. (Reinforcement bars will be supplied free of cost from BHEL store).			

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

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
		Thermo-Mechanically Treated bars.	200.00	Kg	0.0609
8		Brick work with non modular fly ash lime bricks (FALG Bricks) conforming to IS:12894, class designation 10 average compressive strength in super structure above plinth level up to floor V level in :. (Cement shall be supplied free of cost by BHEL)			
	6.34.2	Cement mortar 1:6 (1 cement : 6 Coarse sand)	2.00	cum	0.2763
9		Coursed rubble masonry (second sort) with hard stone in foundation & plinth with. (Excluding the cost of Cement which shall be supplied free of cost by BHEL)			
	7.7.1 RA	Cement mortar 1:6 (1 cement : 6 coarse sand).	14.40	cum	1.6319
10	9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	4.00	each	0.1376
11		Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS:1868) transparent or dyed to required colour or shade with nuts and screws, etc., complete.			
	9.96.2	250 x 16 mm.	4.00	each	0.0240
12		Providing and fixing aluminium tower bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws, etc. complete:			
	9.97.4	150x10 mm.	4.00	each	0.0083
13		Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS:1868) transparent or dyed to required colour and shade, with necessary screws, etc. complete.			
	9.101.2	Twin rubber stopper.	4.00	each	0.0100

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
14	9.113	Providing and fixing bright finished 100mm mortice lock with 6 levers without pair of handles of approved quality for aluminium door with necessary screws etc complete as per direction of Engineer - in - charge.	4.00	each	0.0584
15	10.2 Ana	Structural steel work welded /riveted/ bolted 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. (Structural steel will be issued free of cost from BHEL store)	2100.00	Kg	1.1318
16	11.5	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete. (Cement shall be supplied free of cost by BHEL)	1000.00	sqm	12.6275
17	**	12 mm cement plaster of mix: (Cement shall be supplied free of cost by BHEL)			
	13.4.2	1 : 6 (1 cement : 6 coarse sand) .	50.00	sqm	0.2041
18		Pointing on stone work with cement mortar 1 : 3 (1 cement : 3 fine sand): (Cement shall be supplied free of cost by BHEL)			
	13.33.2	Raised and cut pointing.	150.00	sqm	1.1581
19		Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:			
	13.61.1	Two or more coats on new work.	56.00	sqm	0.1157

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Name of work: Civil works for Floor, Boundary Wall, Drains and other associated works at GJB inside factory area.

Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
20		Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sqm and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 metres lead: (Cement shall be supplied free of cost by BHEL)			
	14.1.2	With cement mortar 1 : 4 (1 cement : 4 coarse sand).	10.00	sqm	0.0641
21	Analysis	White washing with lime to give an even shade :			
	14.42.1	Old work (two or more coats)	200.00	sqm	0.0575
22	14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	615.00	sqm	0.1442
23		Finishing walls with Premium Acrylic Smooth exterior paint with Silicon additive of required shade :			
	14.67.1	Old work (One or more coats applied @ 1.43 ltr/10sqm) on existing cement paint surface.	615.00	sqm	1.3709
24		Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-charge.			
	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	1.00	cum	0.0276
25	15.3	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.	1.00	cum	0.0403
26		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.	1.00	cum	0.0233

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
27		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	2.00	cum	0.0556
28	15.19	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	100.00	kg	0.0043
29		Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :			
	21.1.1	For fixed portion.			
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	930.00	kg	12.2039
30		For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)			
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	60.00	kg	0.8976

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

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Sr. No.	Based on DSR' 2012	Item Description	Qty.	Unit	% Weightage of item amount against total amount
31		Providing and fixing 12 mm thick prelaminated particle board flate pressed three layer or graded wood particle board conforming to IS:12823 Grade I Type II in panelling fixed in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass/stainless steel screws, etc. complete as per architectural drawings and directions of Engineer-in-charge.			
	21.2.2	Pre-laminated particle board with decorative lamination on both sides.	150.00	sqm	4.8487
32		Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-Charge. (Cost of aluminium snap beading shall be paid in basic item):			
	21.3.1	With float glass panes of 4.0 mm thickness	14.00	sqm	0.3674
33		Providing of aluminium round shape handle of outer dia 100mm with SS screws etc.complete as per direction of Engineer-in-charge.			
	21.16.2	Powder coated minimum thickness 50 micron aluminium	8.00	each	0.0187
Total : Annexure I					39.69

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

Name of work: Civil works for Floor, Boundary Wall, Drains and other associated works at GJB inside factory area.

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
1	Supply and installation of coated galvalume steel sheet having maximum of pitch of 205 mm c/c and minimum 28 mm crest depth in length for roofing / side cladding as per site requirement. The supplied material is to be manufactured out of 0.50 mm TCT (Total coated thickness) and 550 MPA tensile strength, with zinc aluminium alloy of AZ-150 (As per IS-15961:2012). The sheet shall have a hot dip metallic zinc aluminium alloy coating of zinc (43%), silicon (1.5%) and aluminium (55%) with total mass coating of 150 gms/sqm considering both sides together , self drilling/self tapping screws with EPDM seal fixed to the existing MS purlins/MS runners complete as per drawing and as directed by engineer-in-charge.	90.00	sqm	2.9356
2	Supplying and filling in plinth with stone dust under floors, including watering, ramming, consolidating and dressing complete.	84.00	cum	2.3270
3	Providing and fixing in true horizontal level 600 mm x 600 mm false ceiling system manufactured by M/s. Armstrong World Industries using hot dipped galvanized steel section, exposed surface with pre-coated capping, main tee of size 15 x 32 mm., having 0.27 mm gauge at every 1200 mm. centre to centre maximum and rotary stitched cross tee of size 15 x 32 mm, having 0.27 mm gauge at every 600 mm. c/c. and sub cross tee of size 15 x 32 mm, having 0.25 mm gauge at 1200 mm c/c. and wall angle of size 19 x 19 mm., having 0.35 mm gauge fixed to the periphery of the wall. The above grid is suspended at every 1200mm c/c. in both directions using 2.0 mm. thick pre-straightened GI wire laying ORCAL LAY-IN STANDARD PERFOARTED MICROLOOK EDGE METAL TILE WITH ACCOUSTICAL FLEECE manufacture and punched in single process by M/s. Armstrong world Industries, of size 600mm x 600mm x 0.5 mm having NRC 0.70 , light reflectance of >61% (WT), with standard Perforation of 2.5 mm dia. (16% open space), having fire performance CLASS 0 / CLASS 1 (BS 476), surface having global white- baked polyster paint over the formed grid complete.SPECIFICATION FOR ACCOUSTICAL FLEECE- The Acoustical Fleece(Fabric Backing) to be used in case of perforated metal ceiling system should be "Soundtex" acoustic nonwoven C 1986 SP as manufactured by M/s. Freudenberg, Germany.	95.00	sqm	6.1271

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

Name of work: Civil works for Floor, Boundary Wall, Drains and other associated works at GJB inside factory area.

Sr. No.	Item Description	Qty.	Unit	% Weightage of item amount against total amount
4	Providing and laying 40mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of stone dust, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	510.00	sqm	15.1076
5	Providing and laying 80mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of stone dust, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	315.00	sqm	11.9231
6	Application of epoxy bonding agent (Material Make - Sika-Hibond & DR. FIXIT Epoxy Bonding Agent, or equivalent) as per manufacturer specification over existing cement concrete for bonding with new concrete layer and drilling of holes in floor of dia 10 mm to 12 mm and fixing of dowel bars in required length appx 150 mm at a distance of 500 mm c/c in both direction including all tools & tackles as per direction of Engineer-in-charge. (Note- Only reinforcement steel will be supplied by the dept.)	1000.00	sqm	21.8879
Total : Annexure II				60.31
Total : Annexure I + Annexure II				100.00

FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION

Price Schedule B

Name of work: Civil works for Floor, Boundary Wall, Drains and other associated works at GJB inside factory area,

The following material free issue from BHEL stores.

- 1 Cement
- 2 Structural Steel
- 3 Reinforcement Steel

Price Schedule C

Name of work: Civil works for Floor, Boundary Wall, Drains and other associated works at GJB inside factory area,

- | | | | |
|---|---|---|---------------------------|
| 1 | Hire charges.
i) Drill machine @ 252.00/- per day
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.66.00/- per M.T. of fabrication of structural steel | | |