

**BHARAT HEAVY ELECTRICALS LIMITED JHANSI
FACTORY CIVIL DEPARTMENT**

Blank Price bid

NAME OF WORK: Civil work for 10MTPH capacity Gas fired Boiler Plant inside factory area.

Tender ENQ No- FCX/TW/22/11

Part (A) -DSR items							
Sl. No.	DSR 2016	Description of Work	% Allocation (Item-wise)	Unit	Quantity	Rate per Unit (in Rs.)	Amount (in Rs.)
1	1.1.2/68	By Mechanical Transport including loading, unloading and stacking Earth upto 1 km .	0.228389%	Cum	80.00	XXXXX	XXXXX
2	2.6.1/76	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 getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.	0.175507%	Cum	48.00	XXXXX	XXXXX
3	2.7.1/76	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 getting out and isposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge. - ordinary rock	0.513375%	Cum	80.00	XXXXX	XXXXX
4	2.7.3/76	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 getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge. - Hard rock (blasting prohibited)	0.575779%	Cum	32.00	XXXXX	XXXXX
5	2.25/79	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.	0.357757%	Cum	98.00	XXXXX	XXXXX
6	2.31/80	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared	0.062706%	Sqm	300.00	XXXXX	XXXXX
7	4.1.3/88	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : "1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size).	1.878609%	Cum	20.00	XXXXX	XXXXX
8	4.1.6/88	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:3:6 (1 Cement : 3 coarse sand (zone-III): 6 graded stone aggregate 40 mm nominal size).	1.317250%	Cum	14.00	XXXXX	XXXXX
9	5.1.2/97	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	6.681066%	Cum	67.00	XXXXX	XXXXX
10	5.1.3/97	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	1.740264%	Cum	17.00	XXXXX	XXXXX

**BHARAT HEAVY ELECTRICALS LIMITED JHANSI
FACTORY CIVIL DEPARTMENT**

Blank Price bid

NAME OF WORK: Civil work for 10MTPH capacity Gas fired Boiler Plant inside factory area.

11	5.2.2/97	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. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size).	0.247539%	Cum	2.00	XXXXX	XXXXX
12	5.3/97	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 above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm	0.133842%	Cum	1.00	XXXXX	XXXXX
13	5.9.1/98	Centering and shuttering including strutting, propping etc. and removal of form for all heights : Foundations, footings, bases of columns, etc. for mass concrete	0.160614%	Sqm	30.00	XXXXX	XXXXX
14	5.9.3/99	Centering and shuttering including strutting, propping etc. and removal of form for all heights : Suspended floors, roofs, landings, balconies and access platform	0.036359%	Sqm	3.00	XXXXX	XXXXX
15	5.9.5/98	Centering and shuttering including strutting, propping etc. and removal of form for all heights : Lintels, beams, plinth beams, girders, bressumers and cantilevers	0.096735%	Sqm	10.00	XXXXX	XXXXX
16	5.22.6/100	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	1.665415%	Kg	5220.00	XXXXX	XXXXX
17	6.1.2/111	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	1.592067%	Cum	14.00	XXXXX	XXXXX
18	6.4.2/111	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	0.964943%	Cum	7.00	XXXXX	XXXXX
19	7.1.1/119	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with : Cement mortar 1:6 (1 cement : 6 coarse sand)	0.096807%	Cum	1.00	XXXXX	XXXXX
20	9.21.1/148	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	0.118239%	Sqm	3.00	XXXXX	XXXXX

BHARAT HEAVY ELECTRICALS LIMITED JHANSI
FACTORY CIVIL DEPARTMENT
Blank Price bid

NAME OF WORK: Civil work for 10MTPH capacity Gas fired Boiler Plant inside factory area.

21	10.2/182	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.	0.063709%	Kg	108.00	XXXXX	XXXXX
22	11.3.1/191	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate.	0.160893%	sqm	22.50	XXXXX	XXXXX
23	11.4/191	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 consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	1.930669%	sqm	169.00	XXXXX	XXXXX
24	11.41.2/197	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 500x500 mm	1.288786%	Sqm	48.00	XXXXX	XXXXX
25	13.1.2/227	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	0.464168%	Sqm	118.00	XXXXX	XXXXX
26	13.2.2/227	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 cement: 6 fine sand)	0.216697%	Sqm	48.00	XXXXX	XXXXX
27	13.26/229	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	1.590680%	Sqm	468.00	XXXXX	XXXXX
28	13.41.1/230	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade New work (two or more coats) over and including priming coat with cement primer.	0.623678%	Sqm	234.00	XXXXX	XXXXX
29	13.44.1/230	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm).	0.381842%	Sqm	234.00	XXXXX	XXXXX
30	13.62.1/233	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	6.775916%	Sqm	2168.00	XXXXX	XXXXX
31	15.2.1/253	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)	0.115779%	Cum	4.00	XXXXX	XXXXX

**BHARAT HEAVY ELECTRICALS LIMITED JHANSI
FACTORY CIVIL DEPARTMENT**

Blank Price bid

NAME OF WORK: Civil work for 10MTPH capacity Gas fired Boiler Plant inside factory area.

32	15.3/253	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.	3.462556%	Cum	82.00	XXXXX	XXXXX
33	15.7.4/253	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	0.293585%	Cum	12.00	XXXXX	XXXXX
34	15.9.2/253	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	0.262764%	Cum	9.00	XXXXX	XXXXX
35	15.19/255	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.	0.206883%	Kg	4454.00	XXXXX	XXXXX
36	15.28.1/255	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: G.S. sheet	0.012210%	Sqm	6.00	XXXXX	XXXXX
37	15.28.2/255	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: Asbestos sheet	1.416745%	Sqm	1485.60	XXXXX	XXXXX
38	21.1.2.1/374	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)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) Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	0.722590%	Kg	68.00	XXXXX	XXXXX

**BHARAT HEAVY ELECTRICALS LIMITED JHANSI
FACTORY CIVIL DEPARTMENT**

Blank Price bid

NAME OF WORK: Civil work for 10MTPH capacity Gas fired Boiler Plant inside factory area.

39	21.17	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	0.051583%	Kg	5.00	xxxxx	xxxxx
40	DSR-16	Items covered in DSR-2016 but not covered above	0.870915%	DSR-2016	1.00	xxxxx	xxxxx
		Sub Total (A)	39.555912%				#VALUE!

Part(B) Non -DSR items							
S No		DESCRIPTION OF ITEM	% Allocation (Item-wise)	Unit	Quantity	Rate per Unit (in Rs.)	Amount (in Rs.)
41	NS-1	Supply and installation of coated galvalume steel sheet of approved colour (Maximum height up to 30.0 m) 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 AS-1397:1993). 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.	38.98673%	Sqm	1442.00	xxxxx	xxxxx
42	NS-2	Supply & fixing of flashings, ridges, cappings, corner pieces etc. made of 0.5mm TCT galvalume sheet in required shape and size having a yield strength of 550 Mpa (with 150gsm/sqm minimum coating mass total of both side as per AZ 150), SMP colour coating provided on exposed face with 20 microns thick finish and inner face provided with back-coat pre-coating of 5-7 microns & fixed with stitching screw complete.	2.64962%	Metre	175.00	xxxxx	xxxxx
43	NS-3	Providing and fixing fire retardant and U.V. resistant profiled and solid transparent embossed polycarbonate sheet of minimum 3 mm thick with profile to match with that of adjacent galvalume sheets on roof with self drilling/self stitching fasteners with EPDM seal for transmission of light, fixing of the sheet to the existing support system underneath as per the standard practice complete and as directed by engineer-in-charge. The solid transparent polycarbonate sheet shall be free from scratches and other surface damage and it shall be UV treated and tested as per relevant ASTM or DIN or AS etc.as the case may be.	4.03731%	Sqm	45.00	xxxxx	xxxxx

**BHARAT HEAVY ELECTRICALS LIMITED JHANSI
FACTORY CIVIL DEPARTMENT**

Blank Price bid

NAME OF WORK: Civil work for 10MTPH capacity Gas fired Boiler Plant inside factory area.

44	Ns-4	Fabrication and erection of structural steel works at all heights(Maximum height up to 30.0 m) consisting of, railing, clamps, purlins with channels & angles, M.S. flat, M.S. tubes, supports including all connections as per detailed drawings connected steel works etc. cleats, gusset plates all bolts, nuts, washers ,base plates, anchor bolts etc., as per detailed drawings cutting welding and painting 1 coats of red oxide primer before erection & 2 coats of synthetic enamel paint/Aluminium paint of approved brand & colour after erection complete. Advani made electrodes or other approved make electrodes are to be used. All bolts, nuts, washers, gas, electrodes are in contractor's scope. Fabrication to be done as per I.S. codes of latest revision. (All the materials are in contractor scope except the Structural steel. Structural steel shall be provided by BHEL free of cost.) (Make of paint and primer shall be Asian, Berger, Narolac and Shalimar)	0.00000%			XXXXX	XXXXX
	(a)	Only fabrication	5.91024%	Kg	19610.00	XXXXX	XXXXX
	(b)	Only erection	8.86019%	Kg	19610.00	XXXXX	XXXXX
		Total(B)	60.44409%				XXXXX
		Grand Total C=(A+B)	100.00000%				XXXXX
		In words					

GST Shall be paid Extra As applicable.

1. Bidder has to quote in above unlocked cell only. Item rate shall be calculated automatically. Calculated item rates may be adjusted w.r.t. gross total amount and it shall be the itemwise final rate for execution of contract and all other purposes.

2. Quoted gross total amount should be considered only if quoted in this excel sheet and print out of this should only be considered for evaluation. If Price is quoted in any other format other than the Excel Sheet enclosed to the NIT , the offer of the bidder will be rejected

3 During the execution , the quantity of various items may vary to any extent depending on requirement of work/site and as per discretion of BHEL.

Signature and seal of contractor