



**BHARAT HEAVY ELECTRICALS LIMITED**  
**RAMACHANDRAPURAM::HYDERABAD::32**  
**FACTORY CIVIL ENGINEERING DEPARTMENT**

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-16/2012-13, Dt: 31.08.2012

PRICE BID

Item no.: 1

**Name of work: Providing shed for coolant recovery system with cement concrete flooring and fencing.**

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
1	<b>Earth work in excavation in all soils</b> by mechanical means (Hydraulic Excavators) / 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 etc. complete as directed by Engineer-in-charge.	55.00	Cu.m	103.40	5,687.00
2	Earth work in excavation by mechanical means (Hydraulic Excavators) / 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 leveled and neatly dressed for <b>Hard Rock</b> (Blasting prohibited) etc. complete as directed by Engineer-in-charge.	5.00	Cu.M	325.25	1,626.25
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with <b>1:4:8</b> (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size) etc. complete as directed by Engineer-in-charge.**	19.00	Cu.M	1,560.50	29,649.50
4	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works <b>up to plinth level</b> with <b>1:1½:3</b> (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size) etc. complete as directed by Engineer-in-charge.**	9.00	Cu.M	1,641.30	14,771.70
5	Providing and laying in position <b>cement concrete</b> of specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works <b>up to plinth level with 1:2:4</b> (1 Cement : 2 Coarse sand : 3 graded stone aggregate of 20 mm nominal size) etc. complete as directed by Engineer-in-charge.**	20.00	Cu. m	1,587.00	31,740.00
6	<b>Reinforcement for R.C.C. work</b> including straightening, cutting, bending, placing in position and binding grills with binding wire all complete by cold twisted bars etc. complete as directed by Engineer-in-charge.**	0.36	M.T	4,003.00	1,441.08

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
7	<b>Centering</b> and shuttering including strutting, propping etc.; and removal of form work, for columns, pillars, piers, abutments, machine foundations, posts and struts etc. complete as directed by Engineer-in-charge.	35.00	Sq.M	180.40	6,314.00
8	Flooring in 25mm thick using 1 cement and 3 parts of granite stone chips of 3 to 10mm gauge (no sand) Ellis pattern first sort including neat finishing , curing, cost of materials etc. complete as directed by Engineer-in-charge.**	120.00	Sq.m	130.40	15,648.00
9	Fabrication of structural steel work including all materials going into the process of fabrication and forming and integral form of steel work together with all shop and site rivets and electrodes for site welding as necessary and all site connections comprising sag rods, floor beams, girders, bracings, trusses and frame work for fixed false ceiling and for movable false ceiling, purlins with channel / angles, MS flat supports including all connections as per detailed drawings connected steel works etc., cleats, gusset plates, all bolts, nuts, washers, base plates, anchor bolts as per detailed drawings, cutting, welding and painting 2 coats of red-oxide primer before erection etc., complete. The rate shall include painting 2 coat of Red-oxide as per IS specifications and all charges for handling, leading and loading at the fabrication yard. The rate includes cost of electrodes, gases etc. complete as directed by Engineer-in-charge. <b>The raw structural steel sections will be issued FREE of cost at BHEL stores. **</b>	3.00	MT	7,563.80	22,691.40
10	Erection of Steel work out lined in item No.15a above including the charges for handling, leading and stacking at site at approved locations prior to erection including all site riveting, bolting, jointing and site welding where ever required etc. complete as directed by Engineer-in-charge.	3.00	MT	3,241.60	9,724.80
11	Painting at site of all structural steel work with 2 coats of aluminium paint / synthetic enamel paint of approved shade to trusses, columns, girders, bracings etc., with aluminium paint or synthetic enamel paint as required etc. complete as directed by Engineer-in-charge. <b>The required paint only will be issued free of cost by B.H.E.L at their stores.</b>	3.00	MT	596.50	1,789.50
12	Fabrication and fixing of <b>M.S holding down bolts</b> , threaded both sides including supply of nuts, washers etc. complete as directed by Engineer-in-charge. <b>(M.S. rounds as per required size will be issued on free of cost at BHEL stores)</b>	0.05	MT	26,476.30	1,323.82

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
13	Supply and Fixing of <b>Non - colour Coated aluminium zinc alloy coated metallic hirib profile sheet of nominal 1015-1020mm effective cover width and 28-30 mm</b> deep ribs with subtle square fluting in the five pan at nominal 202-205mm center-to-center. The end rib shall be designed for anti-capillary action, to avoid any seepage of water through the lateral overlap. The feen material is manufactured out of nominal 0.45mm base metal thickness (BMT) or 0.5 mm TCT, Hi-Strength steel with minimum 550 MPa yield strength metallic hot dip coated with aluminium -Zinc alloy (55 % Aluminium ,45 % Zinc)as per AS 1397-Zincalume AZ150 (Min 150 Grams / Sq.Mt) Total on both sides). The steel Manufacturers test certificate for the chemical and mechanical properties of steel must be submitted for approval by the engineer-in-charge.	175.00	sqm	672.40	1,17,670.00
14	Supply & Installation of 0.5 mm thick colour galvalume sheet flashings hood / ridges/ triangular portion closers to require shape with self threaded screws etc. complete as directed by Engineer-in-charge.	12.00	RM	900.00	10,800.00
15	Providing and fixing barge boards in required girth (200 mm horizontal, 200 mm vertical) with 0.50 mm color galvalume sheets upto a length of 2.50 M, fixed to steel members with self drilling / self stitching fasteners at maximum 500 mm c/c along the length of capping, flashing etc., complete as directed by Engineer-in-charge including the cost of galvalume sheets, fixtures, fittings etc. complete as directed by Engineer-in-charge.	30.00	Sq.m	800.40	24,012.00
16	<b>Filling</b> with available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidation each deposited layer by ramming and watering, lead upto 50.00 m and lift upto 1.50 m etc. complete as directed by Engineer-in-charge.	18.00	Cu.M	45.70	822.60
17	<b>Conveyance</b> of excavated spoil up to a lead of 2 Kms, including loading, unloading and spreading etc. complete as directed by Engineer- in- charge.	40.00	Cu.M	56.41	2,256.40
18	Providing and fixing G.I chain link fabric fencing of required width in mesh size 50 X 50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge made of G.I wire of dia 4 mm.	60.00	Sq.m	373.45	22,407.00
19	Supplying, laying and jointing 40 mm nominal bore GI pipe medium grade properties and weight as per IS 1239 , ISI marked with GI fittings, including cost of pipe and its fittings, labour charges, testing, etc. complete as directed by Engineer-in-charge.	20.00	RM	219.60	4,392.00
20	Supply & fixing of Gunmetal Gate (GM peet) valve as per IS -778 class-I, Indian make heavy type 25 mm (1/2") dia NB size etc. complete as directed by Engineer-in-charge.	2.00	Each	482.00	964.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
21	Construction of brick masonry chamber of dimension 0.914 x 0.457 x 0.914 m (3' x 1'6" x 3') with brick in CM 1:6 including plastering over both sides with CM 1:4, 20 mm thick and fitted with light weight CI frame and cover of size 0.914 x 0.457 m in CM 1:4 including bed concrete of CC 1:4:8 as required, supplying and fixing one CI steps in brick masonry if necessary including earth work excavation in all soils, refilling around the chamber removing the surplus earth etc. complete as directed. CI frame and cover of 40 kgs etc. complete as directed by Engineer-in-charge.**	2.00	Each	2,742.00	5,484.00
22. a	Providing, laying and jointing <b>glazed stone ware</b> pipes <b>150 mm dia.</b> class SP-I with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete as directed by Engineer-in-charge.	10.00	RM	151.65	1,516.50
b	.. .do ...230mm dia	190.00	RM	269.90	51,281.00
23. a	Construction of brick circular Manhole of 0.91 M at bottom and 0.56 m dia in cement mortar 1:4 (1 cement: 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1;3 (1 cement: 4 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6( 1 cement: 3 coarse sand: 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 finished with a floating coat of neat cement all complete as per standard design, complete. 0.91 m deep with SFRC cover and frame, 560 mm internal diameter conforming to IS 12592, total weight of cover and frame to be not less than 182 kg fixed in cement concrete 1:2:4 including centering shuttering all complete. With FPS brick class designation 75 etc. complete as directed by Engineer-in-charge.**	5.00	Each	3,238.08	16,190.40
b	Extra depth for circular type manhole 0.91 mm internal dia(at bottom) beyond 0.91m to 1.67 m etc. complete as directed by Engineer-in-charge.**	5.00	Each	1,431.67	7,158.35
24	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand: 4 graded stone aggregate 40mm nominal size) cement plastered on both side with cement mortar 1: 3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement and making necessary channel for the drain etc. complete. for pipes 100mm to 230 mm diameter etc. complete as directed by Engineer-in-charge.	1.00	each	164.30	164.30
25	Making connection of G.I distribution branches with G.I. main of 25 to 40 mm nominal bore by providing and fixing tee, including cutting and threading the pipe etc. complete as directed by Engineer-in-charge.	1.00	Each	166.05	166.05
26	Dismantling reinforced cement concrete / plain cement concrete and disposing of debris upto to a lead of 2 KM including loading, unloading and spreading as directed by Engineer-in-charge etc., complete.	6.00	Cu.m	582.68	3,496.08

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
27	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches removing the roots and stacking of serviceable materials and disposal of unserviceable materials - upto 0.6 M etc. complete as directed by Engineer-in-charge.	10.00	Each	81.70	817.00
28	Preparation of subgrade by excavation earth to an average of 22.5 cm, dressing to camber and consolidation with road roller including making good the undulations etc. and disposal of surplus earth lead upto 50 m etc. complete as directed by Engineer-in-charge.	170.00	Sq.m	33.90	5,763.00
<b>Total</b>				₹	<b>4,17,767.73</b>
<b>Add increase in Vat 1% over the material cost (70% of contractor scope)</b>				₹	2,924.37
<b>Total value of work</b>				₹	<b>4,20,692.10</b>
<b>Total : ₹ Four lakhs twenty thousand six hundred ninety two and ten paise only</b>					

**Note:** \*\*Cement, structural steel, MS reinforcement steel will be issue by BHEL on free of cost at BHEL stores.

1	A penalty of 0.5% of the gross value of work will be levied for every week's delay of work or part there of subject to a maximum penalty of 10% of the gross value of work executed after the schedule period of completion.
2	The rates are inclusive of all taxes and duties except Service tax, which is extra as per service tax norms will be paid by BHEL to the agency after submission of necessary documents

**Note :** The bidders are required to quote the tender value on percentage (%) basis at excess or less or on par with estimate value in figures and words.

Tender %	In figure	In words
Excess		
Less		
Estimated value		

Name of the Contractor :

Signature of the Contractor