



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

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-34/15-16, Dt: 14.12.2015

PRICE BID

Item no.: 1

Name of work:- Civil works related to recirculation of treated water at new STP.

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
1	Dismantling reinforced cement concrete / plain cement concrete and disposing of debris upto a lead of 2 KM including loading, unloading and spreading as directed by Engineer-in-charge etc., complete.	50.00	Cu.m	1,054.10	52,705.00
2	Cutting road and making good the same including supply of extra quantities of materials i.e., aggregate, moorum, screening, red bajri and labour required for bitumen portion etc. complete all as directed by engineer-in-charge.	100.00	cum	1,861.60	1,86,160.00
3	Earth work in excavation in all soils 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 all as directed by engineer-in-charge.	9,400.00	Cu.m	130.80	12,29,520.00
4	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 levelled and neatly dressed for Hard Rock (Blasting prohibited) etc. complete all as directed by engineer-in-charge.	30.00	Cu.M	490.10	14,703.00
5	Filling 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 all as directed by engineer-in-charge.	5,400.00	Cu.M	83.80	4,52,520.00
6	Conveyance of excavated soil up to a lead of 2 Kms, including loading , unloading and spreading etc. complete all as directed by Engineer- in- charge.	4,000.00	Cu.M	93.94	3,75,760.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
7	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 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size) etc. complete all as directed by engineer-in-charge.	60.00	Cu.M	2,583.60	1,55,016.00
8	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 up to plinth level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size) etc. complete all as directed by engineer-in-charge.	66.00	Cu.M	2,748.00	1,81,368.00
9	Reinforcement for R.C.C. work 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.	6.00	M.T	7,306.00	43,836.00
10	Brick work with FPS bricks of class designation 75 in superstructure above plinth level up to ground floor in all shapes and sizes in cement mortar 1:6 (Cement only will be issued on free of cost by BHEL) etc. complete all as directed by engineer-in-charge.	110.00	Cu.M	3,513.00	3,86,430.00
11	Plastering in CM 1:6 , 20 mm thick to internal and external surfaces of walls including the cost of all materials , labour , curing etc., complete -Upto 10.00 M level (Cement only will be issued on free of cost by BHEL) etc. complete all as directed by engineer-in-charge.	600.00	Sq.m	122.60	73,560.00
12	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12,up to plinth level with cement mortar 1:6 etc. complete all as directed by engineer-in-charge.	900.00	Sq.m	2,601.00	23,40,900.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
13	Fabrication of structural steel work including all materials going into the process of fabrication and forming an integral part 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 raw structural steel sections, electrodes, gasses will be issued by BHEL on FREE of cost at BHEL stores. (Dismantled structures can be used) etc. complete all as directed by engineer-in-charge.	10.00	MT	8,871.00	88,710.00
14	Erection of Steel work including the charges for handling, leading and stacking at site at approved locations prior to erection including all site rivetting, bolting, jointing and site welding where ever required etc. complete all as directed by engineer-in-charge.	10.00	MT	3,802.00	38,020.00
15	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. The required paint only will be issued free of cost by B.H.E.L at BHEL stores etc. complete all as directed by engineer-in-charge.	10.00	MT	696.07	6,960.70

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
16	Supply and Fixing of non colour coated aluminium zinc alloy coated metallic hirib profile sheet of nominal 1015-1020mm effective cover width and 28-30 mm deep ribs with subtle square fluting in the five pan at nominal 202-205mm centre-to-centre. 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) with colour bond steel quality paint coat as per AS/NZS 2728 type 3-4.The paint shall have a total coating thickness of nominal 35 µm, Comprising of nominal 20µm exterior coat on top surface and nominal 5 µm reverse coat on back surface over nominal 5µm primer coat on both surfaces of approved colour shade by concern authority. The steel manufactures test certificate for the certificate for the chemical and mechanical properties of steel must be submitted for approval by the engineer-in-charge.	50.00	Sq.m	529.00	26,450.00
17 a	Supply and fixing of 20 HP centrifugal pump with motor of reputed brand (Kirlosker/crompton/ksb) with base frame, fully automatic starter, 100 Amps main switch, pannel board, fuse box, relay 22-32 Amps etc. complete all as directed by Engineer-in-charge.	2.00	Each	1,06,000.00	2,12,000.00
b	Supply and fixing of 25 HP centrifugal pump with motor of reputed brand(Kirlosker/crompton/ksb) with base frame, fully automatic starter, 100 Amps main switch, pannel board, fuse box, relay 22-32 Amps etc complete all as directed by Engineer-in-charge.	4.00	Each	1,18,231.00	4,72,924.00
18	Supply and fixing of chicken mesh including cost of screws, nails, reapers etc. as directed by engineer-in-charge.	120.00	sqm	50.00	6,000.00
19	Casting and placing in position of R.C.C cable trench covers of 75 mm thick in mix of 1:1.5:3 using 20 mm down graded metal including cutting, welding of Angle iron frame, cutting bending , neat finishing ,cost of labour, etc. complete as directed. (MS angles, electrodes, cement, and MS Reinforcement shall only will be issued on free of cost by BHEL at BHEL stores) etc. complete all as directed by Engineer-in-charge.	20.00	Sqm	383.00	7,660.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
20	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement :2 fine sand) including testing of joints etc. complete - 250mm dia R.C.C pipe etc. complete all as directed by Engineer-in-charge.	40.00	RM	342.45	13,698.00
21	Supplying and fixing of HDPE pipes with 4.0 kg/sq.cm of OD 200 mm conforming to IS 4984-1995 including transportation of approved quality with specials, accessories and approved sealing /jointing compound on the exterior of the inserted portion of the fitting and fixing in position and joining including cost of all materials, sealing compound, labour etc., for all heights etc. complete all as directed by Engineer-in-charge.	400.00	RM	1,052.70	4,21,080.00
b	---- do---- 180 mm dia	250.00	RM	867.90	2,16,975.00
c	---- do---- 140 mm dia	400.00	RM	545.60	2,18,240.00
d	---- do---- 75 mm dia	350.00	RM	182.60	63,910.00
e	---- do---- 50 mm dia	400.00	RM	117.70	47,080.00
22	Supply & fixing 25 mm dia Nominal Bore GI pipe medium Grade properties and weight as per IS 1239 ISI mark with GI fittings including the cost of GI pipe & its fittings, chasing brick work/concrete and making good the same ,cost of labour, all materials etc. complete all as directed by Engineer-in-charge.	30.00	RM	243.15	7,294.50
(b)	.. Do... 20mm dia (3/4")	30.00	RM	188.05	5,641.50
c	Supplying , laying and jointing 100 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 all as directed by engineer-in-charge.	60.00	RM	659.41	39,564.60
d	Supplying , laying and jointing 150 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 all as directed by Engineer-in-charge.	20.00	RM	758.32	15,166.40
23	Supply & fixing of CI sluice valve(with cap) with bolts, nuts, rubber insertions valve including all specials to be arranged by the agency to fix the sluice valve in the HDPE pipe line as directed by engineer in charge				-
a	.. Do .. 200mm dia	4.00	Each	10,714.93	42,859.72
b	.. Do .. 180mm dia	8.00	Each	10,714.93	85,719.44
c	.. Do .. 140mm dia	4.00	Each	5,834.08	23,336.32

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
24	Supply and fixing of CI foot valve of 150 mm nominal dia with required specials like bolts, nuts, rubber packings and leather etc. all complete as per ISS, as directed by Engineer-in-charge.	1.00	Each	4,487.75	4,487.75
25	Supply & fixing of Gunmetal Gate (GM peet) valve with CI wheel as per IS -778 class-I, Indian make heavy type is to be fixed in the HDPE pipes and the required specials are to be arranged by the agency etc. complete all as directed by Engineer-in-charge.				
a	65 mm dia NB size.	30.00	Each	1,073.25	32,197.50
b	40 mm dia NB size	10.00	Each	546.05	5,460.50
26a	Supply & fixing of ball valve(brass) of approved quality with high or low pressure with plastic floats complete. 25 mm nominal bore etc. complete all as directed by Engineer-in-charge.	50.00	Each	421.65	21,082.50
b	..do ...20mm dia	50.00	Each	482.00	24,100.00
27	supply and fixing at site GI flanges including cutting, drilling of holes, welding etc. complete all as directed by Engineer-in-charge.				
a	3" (80 mm) dia. flanges	30.00	Each Pair	250.00	7,500.00
b	4" (100 mm) dia. flanges	20.00	Each Pair	299.00	5,980.00
	Total Value of work			₹	76,52,576.43

Note:

1	A penalty of 0.5% of the gross value of work shall be levied for every weeks or part there of non-execution/delay in the execution of work subjected to maximum penalty of 10% of the gross value of total part executed.
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		