



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

Issued to agency:

## SCHEDULE- A

Tender Notice No:

**PRICE BID**

HY/FCD/OT-01/2010-11 , Dt:- 15.04.2010

Item no : 01

**Name of work : - Civil Works for Re-Routing of Cooling Water lines at New Balancing Tunnel ( Providing HDPE pipes).**

S. No	Description	Approx Qty	Unit	Rate in Rs	Amount (Rs)
1a	Earth work in excavation 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.	700.00	Cu.m	103.40	72380.00
b	----do---- up to First additional depth of 1.50 M to 3.00 M.	200.00	Cu.M	122.30	24460.00
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 levelled and neatly dressed for <b>Hard Rock</b> ( Blasting prohibited).	87.00	Cu.M	325.25	28296.75
3	Supplying and filling in plinth with <b>river sand</b> under water supply pipe lines including , watering , ramming consolidating and dressing complete.	90.00	Cu.M	985.00	88650.00
4	Manufacture, Supply & Delivery of HDPE Pipes conforming to IS 4984 - 1995,pre-compounded raw material of PE-100 Garde specification ,including Transportation to BHEL site , Excluding Excise duty , sale tax etc; complete.				
a	400 mm PN 6 PE 100 HDPE PIPE	140.00	mtrs	3186.55	446117.00
b	355 mm PN6 PE100 HDPE PIPE	140.00	mtrs	2412.89	337804.60
c	250 mm PN 6 PE 100 HDPE PIPE	120.00	mtrs	1212.00	145440.00

S. No	Description	Approx Qty	Unit	Rate in Rs	Amount (Rs)
5	Manufacture, Supply & Delivery of HDPE Fittings conforming to IS 4984 -1995 including Transportation to BHEL Site Excluding Excise Duty and Sale Tax and Specials etc; Complete.				
a	400 mm PN 10 90 BEND HDPE	2.00	NOS.	12946.00	25892.00
b	355mm PN 10 90Bend HDPE	2.00	NOS.	8583.00	17166.00
c	250 mm PN 1090 Bend HDPE	4.00	NOS.	3105.00	12420.00
d	400 mm long neck pipe end HDPE	4.00	NOS.	3224.00	12896.00
e	355 mm long neckpipe end HDPE	4.00	NOS.	2419.00	9676.00
f	250 mm long neckpipe end HDPE	6.00	NOS.	897.00	5382.00
6	<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 50m.	910.00	Cu.M	45.70	41587.00
7	Manufacture & supply and delivery of CI specials and fittings suitable to AC and CI Pipes including cost and conveyance of all material to work site etc as per IS- 5531.				
a	400 mm CI Tail piece	1.00	NOS	4140.00	4140.00
b	355 mm CI Tail piece	1.00	NOS	3036.00	3036.00
c	250 mm CI Tail piece	2.00	NOS	2139.00	4278.00
d	400 mm CID Joints	1.00	set	2497.50	2497.50
e	350 mm CID Joints	1.00	set	2092.50	2092.50
f	250 mm CID Joints	2.00	set	1113.75	2227.50
g	600X600X400 M.S.TEE	1.00	NOS	26325.00	26325.00
h	500x500x350 M.S.TEE	1.00	NOS	20250.00	20250.00
i	600 mm M.S .Collers	1.00	NOS	4000.00	4000.00

S. No	Description	Approx Qty	Unit	Rate in Rs	Amount (Rs)
j	500 mm M.S .Collers	1.00	NOS	2500.00	2500.00
k	400 mm M.S .flanges	4.00	NOS	1768.00	7072.00
l	350 mm M.S .flanges	4.00	NOS	1552.00	6208.00
m	250 mm M.S .flanges	6.00	NOS	945.00	5670.00
8	Providing Lowering ,laying ,jointing ,and testing of HDPE pipeline laid to alignment by butt fusion welding as per IS:7634-part-II/2003 as amended from time to time and gradient and testing the pipe line to the required pressure (Hydraulic field test) complete.				
a	400 mm PN 6PE 80 HDPE PIPE	140.00	mtrs	194.40	27216.00
b	355 mm PN 6PE 80 HDPE PIPE	140.00	mtrs	174.00	24360.00
c	250 mm PN 6PE 80 HDPE PIPE	120.00	mtrs	72.00	8640.00
9	Manufacture , Supply and fixing C.I. D/F sluice valves conforming to IS 14846/2000 with amendments no 1&2 heavy duty with CI grade FG 260 as per IS 210. Two coats of primer suitable for epoxy paint finsh shall be applied to all metal surface and finally two coats of epoxy pait. The valves shall be tested for (closed end test) against hydrostatic test requirement. The rates are inclusive of trasporation, operating wheel , flanged joints rubber insertion with bolts, nuts and washers and exlcuding excise duty and sale tax. ..PN-1.0				
a	400 mm CI Sluice valve PN-1.0	1.00	NOS	77955.84	77955.84
b	350 mm CI Sluice valve PN-1.0	1.00	NOS	65764.13	65764.13
c	250 mm CI Sluice valve PN-1.0	1.00	NOS	21304.94	21304.94
10 a	Providing flanged joints to double flanged C.I/ D.I pipes and specials including testing of joints ---for--350mm dia pipe as per IS 5531/2002-1988	4.00	Each joint	335.05	1340.20
b	----do---for ---400 mm dia pipes	4.00	Each joint	564.20	2256.80

S. No	Description	Approx Qty	Unit	Rate in Rs	Amount (Rs)
11a	Labour charges for cutting C.I. pipe with steel Saw ----for ----250 mm dia	2.00	Each Cut	92.65	185.30
b	-----do----for 350 mm dia	2.00	Each Cut	129.10	258.20
c	-----do----for 400 mm dia	2.00	Each Cut	147.70	295.40
d	-----do----for 500 mm dia	2.00	Each Cut	184.20	368.40
e	-----do----for 600 mm dia pipes	2.00	Each Cut	218.55	437.10
12a	Dismantling old C.I pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes at site lead up to 50mtre.- for-225 mm dia pipe	60.00	100 RM	109.30	6558.00
b	-----do----for--- 350 mm dia pipe	60.00	100 RM	124.60	7476.00
c	-----do---for -- 400 mm dia pipe	60.00	100 RM	131.15	7869.00
13	Supply of pig lead	100.00	Kg	58.00	5800.00
14	Supply of hemp yarn	10.00	Kg	30.00	300.00
15	Providing and Laying non-pressure NP2 class (light duty) RCC pipes with collars jointed with stuff mixture of cement mortar in the proportion of 1:2 (1 cement :2 fine sand) including testing of joints etc. complete - 800mm dia RCC pipe.	50.00	RM	1167.40	58370.00
16	<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.	145.00	Cu.M	56.41	8179.45
17	Providing and laying in position plain cement concrete of specified garde, consolidation by <b>vibration</b> excluding the cost of centering and shuttering - all work up to plinth level with <b>1:2:4</b> (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size ).	18.00	Cu.M	3257.45	58634.10

S. No	Description	Approx Qty	Unit	Rate in Rs	Amount (Rs)
18	Construction of chamber of size 3.00M x 3.00 Mx2.00 M( inside dimensions) with CRS masonry 2nd sort in C.M (1:6) , for walls of thickness 45 cm, 60 cm and 100 cm high each respectively over bed concrete 1:2:4 – 100 mm thick and providing slab in RCC 1:1½ :3 of 120 mm thick including an opening of size 600x600 mm size for fixing MS cover, roof top shall be plastered with CM 1:4, 20mm thick mixed with water proof compound, pointing to CRS masonry in CM 1:4 for internal external surfaces of masonry before refilling the sides.The opening shall be covered with MS cover 6 mm thick made out of MS angles, MS plates with necessary locking arrangements.A fabricated ladder of suitable size is to be erected inside the chamber for inspection purpose, as directed by the Engineer - incharge. The rate quoted shall include the cost of all materials, MS reinforcement steel for RCC slab, shuttering, fabrication and labour etc., complete in all aspect (M.S. Angles/plates, will be issued free of cost by BHEL at their stores ).	1.00	Each	67445.50	67445.50
<b>Total Rs.</b>					<b>1,809,478.21</b>
<b>Total : Rs. Eighteen Lakhs nine thousand four hundred seventy eight only.</b>					

**Note: - (1)** The Service tax as applicable is extra on all items which will be paid by BHEL to the agency after submission of necessary valid documents by the agency and also excise duty and VAT are extra as applicable for item No. 4 and item no. 9 as mentioned in the respective items. (HDPE PIPES, CI Sluice valves items) . **(2) The Maintenance period is 5 years.**

**Note :** The Tenders are required to quote the tender value on percentage (%) basis at excess or less or on par with estimate value

Tender %	In figure	In words
Excess		
Less		
Estimated Rate only		

Name of the Contractor :

Signature of the Contractor

Accounts Representative

Opening officer