

TENDER

(NIT NO. TA/TCL/**26**/22-23)

FOR

**LIFTING OF TRUNK WATER MAINS UNDER
SUBMERGENCE IN DIRTY NALLAH FROM BHEL WATER
TREATMENT PLANT TO CHAR VALVE OFFICE BHEL
BHOPAL.**

PRICE BID

SECTION - VI



**TOWNSHIP CIVIL MAINTENANCE
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 Schedules:

1.1 Schedule A

Schedule A consists of two Annexures:

1) Annexure-I includes items based on GST Compliant DSR-2012, Rate Analysis & Budgetary offers.

Bidders are requested to quote their rate in Percentage above/below/at Par for Annexure-I.

2) Annexure-II - Scope of work.

1.2 Schedule B

Schedule B gives the details of free issue materials given by BHEL.

1.3 Schedule C

Schedule C gives the details of Tools & Tackles provided by BHEL on Chargeable Basis.

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 cement or reinforcement steel, these items shall be issued free of cost by BHEL.**

**TOWNSHIP CIVIL MAINT. & CONST. DIVISION****SCHEDULE 'A'****Annexure: I**

Name of work : Lifting of trunk water mains under submergence in dirty nallah from BHEL Water Treatment Plant to Char valve office BHEL Bhopal.

S.No	It. Code	Description of items	Qty.	Unit	Rate	Amount
1	1.1.17.9	Carriage of materials by mechanical transport including loading, unloading and stacking R.C.C. pipe, A.C. pipes, steel cylinder, R.C. pipes, C.I. pipes, C.I. pipes and unreinforced cement pipes 450 mm & 500 mm Dia, Upto 5 Km	500.00	100 m	2446.62	12233.10
2	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed.				
	2.6.1	All kinds of soil	1000.00	Cum	129.35	129350.00
3	2.9	Excavation work by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains not exceeding 1.5m in width or 10 sqm on plan including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.				
	2.9.1	Ordinary rock	50.00	Cum	212.00	10600.00
4	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 up to 1.5 m.	500.00	Cum	83.80	41900.00
5	2.31	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.	2000.00	Sqm	4.82	9640.00
6		Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material.				
a)	2.33.1	Beyond 30 cm girth up to and including 60 cm girth	2.00	Each	148.20	296.40
b)	2.33.2	Beyond 60 cm girth up to and including 120 cm girth	2.00	Each	654.95	1309.90
c)	2.33.3	Beyond 120 cm girth up to and including 240 cm girth	2.00	Each	3026.30	6052.60
d)	2.33.4	Above 240 cm girth	2.00	Each	6071.30	12142.60

7		Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.10 RA	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	50.00	Cum	2525.19	126259.50
8	4.20	Providing and laying in position ready mixed plain cement concrete, with cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying and curing, excluding the cost of centering, shuttering and finishing, including cost of curing, admixtures in recommended proportions as per IS : 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.				
		Note : 1) Excess/less cement used than specified in this item is payable/ recoverable separately				
	4.20.1	All works upto plinth level :				
	4.20.1.1 RA	M-15 grade plain cement concrete (cement content considered @ 240 kg/cum)	30.00	Cum	3608.13	108243.90
9		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 :				
	5.1.1 RA	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size).	100.00	Cum	2715.15	271515.00
10		Centering and shuttering including strutting, propping etc. and removal of form for :				
a)	5.9.1 RA	Foundations, footings, bases of columns, etc. for mass concrete.	500.00	Sqm	155.49	77745.00
b)	5.9.6 RA	Columns, Pillars, Piers, Abutments, Posts and Struts.	400.00	Sqm	349.52	139808.00
11	RA 5.22.6/ 5.22.6A	Reinforcement for RCC work i/c straightening, cutting, bending, placing in position and binding all complete : Thermo mechanically treated steel bars.(Excluding the cost of steel bar).	9000.00	Kg	7.40	66600.00
12	5.35 RA	Add/deduct for using extra/less cement in the items of design mix over and above the specified cement content therein.	500.00	Quintal	9.05	4525.00

13		Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.				
		(Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately).				
	5.37.1 RA	All works upto plinth level	160.00	Cum	3587.71	574033.60
14		Coursed rubble masonry (second sort) with hard stone in foundation & plinth with :				
	7.7.1 RA	Cement mortar 1:6 (1 cement : 6 coarse sand)	30.00	Cum	2754.46	82633.80
15	10.20' RA	Providing and fixing bolts including nuts and washers complete.	1000.00	Kg	76.93	76930.00
16		Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/sq mm), counter sunk head, comprising of 10 m dia polyamide PA 6 gradesleeve, including drilling of hole in frame, concrete/ masonry, etc. as per direction of Engineer-in-charge.				
	10.27.5 RA	10 x160 mm	50.00	Each	93.03	4651.50
17		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)	20.00	Cum	671.05	13421.00
18	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50metres lead as per direction of Engineer - in- charge.	30.00	Cum	978.95	29368.50
19		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	20.00	Cum	676.05	13521.00

20		Dismantling manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50metres lead as per direction of Engineer-in-charge :				
	15.43.2	Bituminous road	50.00	Sqm	119.95	5997.50
21		Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge:				
	15.45.3	Above 300 mm diameter	500.00	Metre	221.13	110565.00
22	15.60'	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all loads including all lifts involved.	500.00	Cum	101.75	50875.00
23		Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moorum screening, red bajri and labour required.				
a)	16.13.1 RA	bituminous portion	20.00	Cum	1783.62	35672.40
b)	16.13.2 RA	Water bound macadam.	20.00	Cum	982.22	19644.40
24		Providing lead caulked joints to spun iron or C.I. pipes and specials including testing of joints but excluding the cost of pig lead :				
	18.28.9 RA	450 mm diameter pipe	20.00	Each	662.51	13250.20
25	18.29 RA	Supplying pig lead at site of work.	1.00	Quintal	28930.40	28930.40
26		Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately) :				
		100 mm diameter				
	18.31.1.1 RA	Class I	4.00	Each	5474.05	21896.20
27		Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc if required will be paid separately) :				
	18.59.3 RA	100 mm dia	4.00	Each	7492.69	29970.76
28		Providing and laying D.I. specials of class K-12 suitable for push-on jointing as per IS : 9523				
	18.68.1 RA	Up to 600 mm dia	10.00	Quintal	14597.76	145977.60
29	18.72.22 RA	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329 :				
		450 mm dia Ductile Iron Class K-9 pipes	450.00	Metre	7664.10	3448845.00

30		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 :				
	19.6.7 RA	600 mm dia. R.C.C. pipe	10.00	Metre	927.27	9272.70
31	14.23	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like.	2000.00	K.Ltr	72.55	145100.00
32		Providing and laying D.I. Specials of Class K - 12 suitable for mechanical jointing as per IS : 9523 :				
	18.69.1 RA	Up to 600 mm dia	1.00	Quintal	14597.76	14597.76
33	18.70	Providing push-on-jointing to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket.				
	18.70.8 RA	450 mm dia pipes.	85.00	Each	367.30	31220.50

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		ANNEXURE-II
SCOPE OF WORK		
Name of work : Lifting of trunk water mains under submergence in dirty nallah from BHEL Water Treatment Plant to Char valve office BHEL Bhopal.		
Scope of work is inclusive of but not limited to the following activities:-		
S. No.	Description of Activities	Description of activities
1	Jila Udyog Karyalaya	Joints which are partially submerged in surface nallah to be covered by concrete blocks.
2	Rachna Nagar Culvert site & Map Taul Vibhag	Lifting of submerged nallah pipes near Rachna Nagar Culvert & Map Taul Vibhag in between Water Treatment Plant to Char Valve office Govindpura
3	Map Taul Vibhag site to Charvalve office, GPC	Exposed submerged joints (wherever necessary) to be covered with concreting
The above work can be executed in other location of the BHEL Bhopal Township as per requirement.		
Signature of Contractor		

SCHEDULE – “B”								
Name of work : Lifting of trunk water mains under submergence in dirty nallah from BHEL Water Treatment Plant to Char valve office BHEL Bhopal.								
1. Cement				}	Issued free of cost at Gadia Store/			
2. Reinforcement Steel					sub-division			
Note: If the contractor fails to return to the department unconsumed portion of total quantities of respective free issue material after completion of work or as and when instructed by Engineer-incharge, recovery at twice the respective material cost of the item as procured/decided by BHEL shall be made from the contractor's bill(s).								
SCHEDULE – “C”								
----- NIL -----								
Signature of Contractor								