

**Part-IV Bill of Quantities for External Connectivity for
Underground Reservoir -7.5 MLD in Handicraft Zone at Mahindra**

SNO.	Description	Unit	Quantity	Rate	Amount
1	Excavation for trenches in all types of soils and materials such as murum, sand, sandy silt, clay, black cotton soil, kankar etc. including manually dressing of sides and compacting & dressing of bottom using earth compactor, Conveying Ductile Iron/UPVC Pipes to site, for all depth upto 1.5 mt & lifts i/c back filling, ramming, watering after laying of pipe line.				
a	600 mm Dia DI Pipes	Rmt	11		
b	500 mm Dia DI Pipes	Rmt	252		
c	350 mm Dia DI Pipes	Rmt	22.0		
d	300 mm Dia. DI Pipe	Rmt	66.0		
e	315 mm Dia. UPVC Pipe	Rmt	1125		
f	225 mm Dia UPVC Pipes	Rmt	275		
g	150 mm Dia DI Pipes	Rmt	RO		
2	Laying and jointing Ductile Iron pipes/UPVC, including all fittings (plain or door) e.g. bends, junctions, flanges, adapters, adhesives/solvent, fixtures etc. , to the alignment and gradient and testing the pipeline to the required pressure, complete, in all respect. (Pipes shall be free issue by MWCJ).				
a	600 mm Dia DI Pipes	Rmt	11		
b	500 mm Dia DI Pipes	Rmt	252		
c	350 mm Dia DI Pipes	Rmt	22.0		
d	300 mm Dia DI Pipe	Rmt	66.0		
e	315 mm Dia. UPVC Pipe	Rmt	1125		
f	225 mm Dia UPVC Pipes	Rmt	275		
g	150 mm Dia DI Pipes	Rmt	RO		
3	Supplying and Fixing EPDM Rubber Ring in Distribution network as per direction of Engineer-inCharge.				
a	600 mm Dia DI Pipes	Each	2		
b	500 mm Dia DI Pipes	Each	50		
c	350 mm Dia DI Pipes	Each	4		
d	300 DI Pipe	Each	13		
e	315 UPVC Pipe	Each	225		
f	225 mm Dia UPVC Pipes	Each	55		
g	150 mm Dia DI Pipes	Each	RO		
4	Disinfecting C./D.I./G.I./UPVC water mains by flushing with water containing bleaching powder at 0.5gm per liter of water and cleaning the same with the fresh water operation to be repeated three times including getting the samples of water from the disinfected main tested in the laboratory designated by the Construction Manager.				
a	600 mm Dia DI Pipes	Rmt	11		
b	500 mm Dia DI Pipes	Rmt	252		
c	350 mm Dia DI Pipes	Rmt	22.0		
d	300 DI Pipe	Rmt	66.0		
e	315 UPVC Pipe	Rmt	1125		
f	225 mm Dia UPVC Pipes	Rmt	275		
g	150 mm Dia DI Pipes	Rmt	RO		
5	Extra for every operation of disinfecting C./D.I / G.I. /UPVC main by flushing with water containing bleaching powder at 0.5gms per liter of water and cleaning the same with the fresh water, including getting the samples of water tested in the laboratory designated by the Construction Manager.				
a	600 mm Dia DI Pipes	Rmt	11		
b	500 mm Dia DI Pipes	Rmt	252		
c	350 mm Dia DI Pipes	Rmt	22.0		

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d	300 DI Pipe	Rmt	66.0		
e	315 UPVC Pipe	Rmt	1125		
f	225 mm Dia UPVC Pipes	Rmt	275		
g	150 mm Dia DI Pipes	Rmt	RO		
6	Supplyng and Fixing of soft seated sluice valves, wafers end type class PN - 1.0 as per IS : 5155, including necessary nuts, bolts, rubber insertions etc., complete. (one 600 mm DI Valve shall be free issue by MWCJ.)				
a	600 mm CI	Each	2		
b	500 mm CI	Each	2		
c	300 mm CI	Each	1		
d	200 mm CI	Each	2		
7	Fixing of 450mm water meter in 600mm DI line, wafers end type class PN - 1.0 as per IS : 5155, including necessary nuts, bolts, rubber insertions etc., with required electrical connections and display unit including cables fixtures, protection etc. as per approved manner by engineering in charge. <i>(Meter shall be free issue by MWCI)</i>	Each	1		
8	Providing & fixing non return valves, wafers end type class PN - 1.0 as per IS : 5155, including necessary nuts, bolts, rubber insertions etc., complete without gear box.				
a	600 mm CI	Each	2		
b	500 mm CI	Each	1		
c	300 mm CI	Each	1		
d	200 mm CI	Each	1		
9	Providing and fixing MS flanges class PN - 1.0 as per IS 5155, including necessary nuts, bolts, rubber insertions etc. complete.				
a	600 mm Dia MS Pipes	Each	4		
b	500 mm Dia MS Pipes	Each	4		
c	350 mm Dia MS Pipes	Each	4		
d	300 MS Pipe	Each	4		
e	200 mm Dia MS Pipes	Each	4		
10	Providing and laying approved sand for bedding of pipes etc., complete as per drawing and as directed.	Cum	276.00		
11	Providing and Fixing MS specials	Kg	2000.00		
12	Providing and Fixing DI specials	Kg	2000.00		
13	Making Interconnections with existing lines				
a	600mm DI	Lot	1.00		
b	300/350mm UPVC	Lot	1.00		
c	200 mm DI /MS	Lot	1.00		
13	Constructing brick masonry chamber 150x150x100cm inside with bricks of class designation 75 in cement mortar 1:5 (1 cement: 5 fine sand) for sluice valve/butterfly valve with excluding cost of MS cover frame with open able and locking arrangement as shown in the drawing, anchored in and with RCC top slab 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate, 20mm nominal size) necessary earth excavations and backfilling, foundation concrete 1:5:10 (1 cement: 5 fine sand: 10 graded stone aggregate 40mm nominal size) including necessary shuttering/formwork inside plastering with cement mortar 1:3 (1 cement: 3 coarse sand) 12mm thick finished with a floating coat of neat cement, complete in all respect as per drawing and as directed..	Each	6.00		

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SNO.	Description	Unit	Quantity	Rate	Amount
14	Constructing brick masonry chamber 120x120x100cm inside with bricks of class designation 75 in cement mortar 1:5 (1 cement: 5 fine sand) for sluice valve/butterfly valve with excluding cost of MS cover frame with open able and locking arrangement as shown in the drawing, anchored in and with RCC top slab 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate, 20mm nominal size) necessary earth excavations and backfilling, foundation concrete 1:5:10 (1 cement: 5 fine sand: 10 graded stone aggregate 40mm nominal size) including necessary shuttering/formwork inside plastering with cement mortar 1:3 (1 cement: 3 coarse sand) 12mm thick finished with a floating coat of		5.00		
15	Constructing brick masonry chamber 100x100x100cm inside with bricks of class designation 75 in cement mortar 1:5 (1 cement: 5 fine sand) for sluice valve/butterfly valve with excluding cost of MS cover frame with open able and locking arrangement as shown in the drawing, anchored in and with RCC top slab 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate, 20mm nominal size) necessary earth excavations and backfilling, foundation concrete 1:5:10 (1 cement: 5 fine sand: 10 graded stone aggregate 40mm nominal size) including necessary shuttering/formwork inside plastering with cement mortar 1:3 (1 cement: 3 coarse sand) 12mm thick finished with a floating coat of neat cement, complete in all respect as per drawing and as directed..	Each	3.00		
16	Constructing brick masonry chamber 2000x2000x2000cm inside with bricks of class designation 75 in cement mortar 1:5 (1 cement: 5 fine sand) for sluice valve/butterfly valve with excluding cost of MS cover frame with open able and locking arrangement as shown in the drawing, anchored in and with RCC top slab 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate, 20mm nominal size) necessary earth excavations and backfilling, foundation concrete 1:5:10 (1 cement: 5 fine sand: 10 graded stone aggregate 40mm nominal size) including necessary shuttering/formwork inside plastering with cement mortar 1:3 (1 cement: 3 coarse sand) 12mm thick finished with a floating coat of	Each	3.00		
17	Providing and fixing MS cover with frame	kg	600.00		
18	Providing and laying in position plain cement concrete including curing, compaction etc. complete including the cost of centering, shuttering and strutting etc. in foundations and rafts at all level 1:4:8 (1 Cement : 4 coarse sand :8 graded stone aggregate 40 mm nominal size crusher broken)	Cum	80.00		
19	Providing and fixing Spring Loaded Dismantling Joint as per direction of				
a	600 mm Dia DI	Each	2.00		
b	500 mm Dia	Each	1.00		
c	400 mm Dia DI	Each	1.00		
d	300 mm Dia. DI	Each	1.00		
e	200 mm Dia DI	Each	1.00		

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SNO.	Description	Unit	Quantity	Rate	Amount
20	Providing Brick masonry using 1st class burnt brick with min 75 kg crushing strength in columns,walls in superstructure in cement sand mortar 1 : 6 (1 cement : 6 sand)	CUM	10.00		
21	Providing cement plaster on brick walls and RCC (beams columns coping)surface in cement sand mortar 1:4/1:6 (1 cement : 4/6 fine sand 50% coarse + 50% fine) including raking of joints etc. complete fine finish and as under : 12-15mm thick (in one layes 1:6) over even and uneven faces brick wall, sill and making	SQM	20.00		
22	Reinforced cement concrete work 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) from RMC excluding the cost of centring, shuttering, finishing and reinforcement	CUM	20.00		
23	Providing Centring and shuttering including strutting, propping etc. and removal of form for: Footing, raft, pedestals. Column coping plinth	SQM	100.00		
24	Charges for Testing of Free Issue Material to be paid as per actual as approved by MWCJ.(Max. amount to be capped at Rs.50,000.)	LS	1.00		
	Total				
	VAT Considered %/ Amount	%			
	WCT considered %-Amount	%			

Note:-

- Contractor rate shall be inclusive of cess and applicable taxes,except Service Tax which is exempt against A-1 and A-2.
- Bill of Quantities should comply all the Technical parameters as mentioned in Part-II Technical Specifications or as approved by Engineer-in-charge.