

**ESTIMATES FOR THE PROPOSED RESIDENTIAL TOWNSHIP OF SOFTWARE ENGINEERS
EMPLOYEES HOUSING AND WELFARE ASSOCIATION AT KOTHUR VILLAGE ,KANDUKUR
MANDAL,R.R.DISTRICT.**

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
<u>EXTERNAL DRAINAGE WORKS</u>					
1	Earthwork excavation for pipe line trenches in ordinary soils including shoring and strutting danger lighting and using sight rails and boning rods at every 10 mtrs. Wherever necessary with all lead and lift as directed by the Engineer-in-charge.	3800.00	Cum	70.00	266000.00
2	Refilling the pipe line trenches with selected available earth from trench excavation including watering, consolidation in layers of 15 Cm thickness including disposing of the surplus earth with all lead and lift etc. complete as directed by the Engineer- in –charge.	3600.00	Cum	35.00	126000.00
3	Providing laying and joining glazed stone ware pipes as per IS. 651 in trenches for all depths to correct grade,level and alignment including caulking with hemp yarn dipped in tar and jointing with CM 1:1 and testing, including all lead and lift charges etc. complete as per direction of Engineer in Charge.				
a)	150 mm dia	3700.00	RM	170.00	629000.00
b)	200 mm dia	100.00	RM	280.00	28000.00
4	Supplying and laying CC 1:3:6 prop. using 20 mm gauge graded granite metal chips for encasing of SWG pipe line as per drg .				
a)	150 mm dia	200.00	RM	420.00	84000.00
b)	200 mm dia	25.00	RM	530.00	13250.00

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
5	Construction of circular manhole of internal clear dimension of 900 mm dia in 230 mm thick bricks masonry using locally available best bricks in CM 1:5 over a bed of 150 mm thick 1:4:8 (40mm metal) cement concrete, plastering with CM 1:3, 15 mm thick on finished smooth with a floating coat of neat cement, plain cement concrete 1:2:4 for benching. channeling, providing and fixing 500 mm dia light duty S F R C cover confirming to IS:12592, CC 1:2:4 for fixing SFRC cover , encasing sewers connection to chamber in PCC 1:2:4 etc. complete all as specified in drg.upto depth of 1.0 m depth.	150.00	Each	3200.00	480000.00
	Note: CC 1:2:4 in the above item is by using 20mm size graded granite aggregate obtained from approved quarry.				
6	Extra depth for circular type manhole 0.9m internal dia (at bottom)with beyond 1.0m to 1.64m	4300.00	10CM	180.00	77400.00
7	Construction of circular manhole of internal clear dimension of 1200 mm dia in 230 mm thick bricks masonry using locally available best bricks in CM 1:5 over a bed of 150 mm thick 1:4:8 (40mm metal) cement concrete, plastering with CM 1:3, 15 mm thick on finished smooth with a floating coat of neat cement, PVC encapsuled foot rests, plain cement concrete 1:2:4 for benching. channeling, providing and fixing 500 mm dia light duty S F R C cover confirming to IS:12592, CC 1:2:4 for fixing SFRC cover , encasing sewers connection to chamber in PCC 1:2:4 etc. complete all as specified in drg.for depth 1.65 m	16.00	Each	4800.00	76800.00
	Note: CC 1:2:4 in the above item is by using 20mm size graded granite aggregate obtained from approved quarry.				
8	Extra depth for circular type manhole 1.2m internal dia (at bottom)with beyond 1.66m to 2.25m	800.00	10CM	250.00	20000.00

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
9	Construction of circular manhole of internal clear dimension of 1500 mm dia with 300 mm & 230 mm thick brick masonry using locally available best bricks in CM 1:5 over a bed of 200 mm thick 1:4:8 (40mm metal) cement concrete, plastering with CM 1:3, 15 mm thick on finished smooth with a floating coat of neat cement,PVC encapsuled foot rests, plain cement concrete 1:2:4 for benching. channeling, providing and fixing 500 mm dia light duty S F R C cover confirming to IS:12592, CC 1:2:4 for fixing SFRC cover , encasing sewers connection to chamber in PCC 1:2:4 etc. complete all as specified in drg.for depth 2.30 m. Note: CC 1:2:4 in the above item is by using 20mm size graded granite aggregate obtained from approved quarry.	1.00	Each	9700.00	9700.00
10	Extra depth for circular type manhole 1.5m internal dia (at bottom)with beyond 2.31m to 3.0m	10.00	10CM	360.00	360.00
11	Providing drop connection externally for manhole where the difference of invert level between inlet and outlet of sewer exceeds 60 cm including necessary 150 mm dia PVC pipe,tees,bends,cleaning eye etc.,encased alround with C.C.1:3:6 using 20 mm metal including cutting holes in walls and making good the walls,finishing etc.complete as per standard design. Note: CC 1:2:4 in the above item is by using 20mm size graded granite aggregate obtained from approved quarry.	10.00	EACH	1200.00	12000.00
12	Providing and fixing Plastic encapsuled steps including fixing in man holes with C.C.1:3:6 using 20 mm stone aggregate as per standard design.	400.00	EACH	70.00	28000.00

Rs. 1850510.00

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
<u>EXTERNAL WATER SUPPLY WORKS</u>					
1	Earthwork excavation for pipe line trenches in ordinary soils including shoring and strutting danger lighting and using sight rails and boning rods at every 10 mtrs. Wherever necessary with all lead and lift as directed by the Engineer-in-charge.	2000.00	Cum	80.00	160000.00
2	Filling the pipe line trenches with sand brought from outside for a depth of 15 cm including watering, consolidation including all lead and lift etc. complete as directed by the Engineer- in –charge.	240.00	Cum	300.00	72000.00
3	Refilling the pipe line trenches with selected available earth from trench excavation including watering, consolidation in layers of 15 Cm thickness including disposing of the surplus earth with all lead and lift etc. complete as directed by the Engineer- in –charge.	1800.00	Cum	30.00	54000.00
4	Providing , laying , jointing, fixing, testing, commissioning of HDPE 80 grade 6 Kg pipe conforming to IS 4984-1995 of grade PE 80 including cost of fittings(viz Tees,bends,reducers,end cap), cutting the pipes to the required lengths, jointing the pipes, saddles,boring and tapping the main for service connections etc complete.				
a)	63 mm dia (2" dia)	300.00	RM	120.00	36000.00
b)	75 mm dia (2 1/2" dia)	2650.00	RM	175.00	463750.00
c)	90 mm dia (3" dia)	400.00	RM	225.00	90000.00
d)	110 mm dia (4" dia)	430.00	RM	350.00	150500.00
e)	160 mm dia (6" dia)	190.00	RM	675.00	128250.00
5	Providing , laying , jointing, fixing, testing, commissioning of double flanged CI pipes Class LA conforming to IS including cost of fittings, cutting the pipes to the required lengths, jointing materials(bolts,nuts & gasket),clamps etc complete.				
a)	150 mm dia	40.00	RM	1250.00	50000.00
b)	100 mm dia	20.00	RM	850.00	17000.00

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
c)	75 mm dia	100.00	RM	700.00	70000.00
6	Providing ,fixing double flanged CI sluice valve/scour valve/non return valve/butterfly valve of specified size below at specified location conforming to IS including jointing materials,testing the joints at required pressure etc complete.				
a)	50 mm dia	6.00	EACH	3000.00	18000.00
b)	63 mm dia	16.00	EACH	3500.00	56000.00
c)	75 mm dia	8.00	EACH	4000.00	32000.00
d)	100 mm dia	2.00	EACH	4500.00	9000.00
e)	150 mm dia	1.00	EACH	6000.00	6000.00
7	Earthwork excavation for pipe line trenches in hard rock including disposal Wherever necessary with all lead and lift as directed by the Engineer-in-charge.	5.00	Cum	350.00	1750.00
8	Providing and fixing first quality single ball air valve including making boring and tapping theDI Main including jointing material tested to Hydraulic pressure complete in all respects as directed .				
a)	20 mm upto100 mm main	3.00	EACH	900.00	2700.00
9	Construction 600 x 600 mm size valve chamber with 230 mm th.brick masonry in CM 1:6 upto a depth of 750 mm including earth work excavation in all types of soils,150 thick bed of CC 1:5:10 prop. and 15 mm thick plastering in CM 1:4 to inside and outside faces and fitted with light weight SFRC frame and cover of size 600 x 600mm etc, complete.	25.00	Each	1800.00	45000.00
10	Providing and laying P.C.C.1 : 2 : 4 for thrust blocks / anchor blocks	5.00	CUM	1800.00	9000.00

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
11	Providing , laying , jointing, fixing, testing of 20 mm dia GI pipes for service connections including cost of fittings, cutting the pipes to the required lengths, jointing materials etc complete.	500.00	RM	160.00	80000.00
12	Supplying,installing,testing and commisioning of mono block pumps (2 working and 1 standby) with operating parametres of Q =259 Lpm,H = 35 M including cost of controlling panel,foundation bolts, fittings, cutting the pipes to the required lengths, jointing materials etc complete including all taxes.	3.00	Each	35000.00	105000.00

Rs. 1655950.00

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
<u>TREATED WASTE WATER SUPPLY WORKS</u>					
1	Earthwork excavation for pipe line trenches in ordinary soils including shoring and strutting danger lighting and using sight rails and boning rods at every 10 mtrs. Wherever necessary with all lead and lift as directed by the Engineer-in-charge.	300.00	Cum	80.00	24000.00
2	Filling the pipe line trenches with sand brought from outside for a depth of 15 cm including watering, consolidation including all lead and lift etc. complete as directed by the Engineer- in –charge.	40.00	Cum	300.00	12000.00
3	Refilling the pipe line trenches with selected available earth from trench excavation including watering, consolidation in layers of 15 Cm thickness including disposing of the surplus earth with all lead and lift etc. complete as directed by the Engineer- in –charge.	280.00	Cum	30.00	8400.00
4	Providing , laying , jointing, fixing, testing, commissioning of UPVC 6 kg pipe conforming to IS:4985-88 including cost of fittings, cutting the pipes to the required lengths, jointing the pipes, PVC saddles,boring and tapping the main for necessary sprinkler connections etc complete.				
a)	110 mm dia (4" dia)	150.00	RM	315.00	47250.00
b)	90 mm dia (3" dia)	600.00	RM	225.00	135000.00
c)	75 mm dia (2 1/2 " dia)	15.00	RM	160.00	2400.00
d)	50 mm dia (1 1/2 " dia)	300.00	RM	70.00	21000.00
e)	40 mm dia (1 1/4" dia)	3340.00	RM	45.00	150300.00

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
5	Providing ,fixing double flanged Non return valve/Butterfly valve of specified size below at specified location conforming to IS including jointing materials,testing the joints at required pressure etc complete.				
a)	32 mm dia	16.00	EACH	2200.00	35200.00
b)	40 mm dia	2.00	EACH	2800.00	5600.00
c)	63 mm dia	1.00	EACH	3500.00	3500.00
d)	100 mm dia	2.00	EACH	4500.00	9000.00
6	Providing and fixing first quality single ball air valve including making boring and tapping the Main including jointing material tested to Hydraulic pressure complete in all respects as directed .				
a)	20 mm on 3 " main	2.00	EACH	1200.00	2400.00
7	Providing and laying P.C.C.1 : 2 : 4 for thrust blocks / anchor blocks	5.00	CUM	1800.00	9000.00
8	Supplying,installing,testing and commisioning of submersible pump with operating parametres of Q =6 lps,H = 36 M.The cost should also includes screen filter.	1.00	SET	30000.00	30000.00
9	Add for 250 pop up sprinklers with Automation system,fittings etc.	LS			125000.00
					Rs. <u>620050.00</u>

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
<u>Storm water drainage system</u>					
1	Earthwork excavation for pipe line trenches in ordinary soils including shoring and strutting danger lighting and using sight rails and boning rods at every 10 mtrs. Wherever necessary with all lead and lift as directed by the Engineer-in-charge.	1050.00	Cum	70.00	73500.00
2	Refilling the pipe line trenches with selected available earth from trench excavation including watering, consolidation in layers of 15 Cm thickness including disposing of the surplus earth with all lead and lift etc. complete as directed by the Engineer- in –charge.	1000.00	Cum	35.00	35000.00
3	Providing , lowering, laying in position, jointing, testing, commissioning of RCC NP2 pipes conforming to IS including cost of collars, jointing with stiff mixture of C.M. 1:1, etc complete.				
a)	300 mm dia	800.00	RM	350.00	280000.00
b)	450 mm dia	225.00	RM	600.00	135000.00
5	Construction of horizontal road gully chamber of size 900 X 600 mm in 230 mm thick brick masonry using locally available best bricks in CM 1:5 over a bed of 150 mm thick 1:4:8 (40mm metal) cement concrete, plastering with CM 1:3 of 15 mm thick on finished smooth with a floating coat of neat cement, providing and fixing perforated precast R.C.C.Cover , CC 1:2:4 for fixing cover , encasing the pipe connection at chamber walls in PCC 1:2:4 etc. complete all as specified in drg.for depth 0.75m.	48.00	Each	3000.00	144000.00

S.No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
6	Extra for constructing additional depth of chamber beyond the initial depth of 0.75 m for the size of chamber 0.9m x 0.6m	2200	10 cm	300.00	66000.00
7	Supplying and laying CC 1:3:6 prop. using 20 mm gauge graded granite metal chips for encasing of RCC pipe line as per drg .				
a)	300 mm dia	45.00	RM	510.00	22950.00
				Rs	756450.00

Rain Water Harvesting system

1	Providing 300 mm dia bore of 2 m deep and installing the 200 mm dia PVC percolation pipe filled with filter material i.e stone aggregate.The cost includes gravel packing around the pipe,perforated cap etc., complete for finished item of work as shown in drawing.	82.00	Each	600.00	49200.00
2	<u>Rain water harvesting pits1.0m x 1.0 m x1.5m</u> Providing and filling the pit with 40 mm HBG metal upto 50 % depth & 20 mm metal 25% depth,Balance with coarse sand including earth work excavation in all kinds of soils,115 mm th.brick ledge around pit etc., complete for finished item of work as shown in drawing.	92.00	Each	1200.00	110400.00
				Rs	159600.00