

ECONOMICAL ANALYSIS FOR RISING MAIN OF M/S AISL & MSPL LTD.

RISING MAIN FROM TUNGABHADRA DAM FORSHORE HEAD WORKS TO HILL TOP BREAK
PRESSURE TANK WITH OUTLET RL558m AND GROUND LEVEL RL559m.

Sl No	DESCRIPTION			
	Pipe Material	MS Pipe	MS Pipe	MS Pipe
	Outer Dia of Pipe- in mm	1118.00	1219.00	1422.00
	Internal Dia of Pipe- in mm	1076.40	1175.00	1373.00
1	DISCHARGE (LPH)	7210800	7210800	7210800
2	PUMPING HOURS	20	20	20
3	LENGTH OF RISING MAIN (m)	4400	4400	4400
4	DESIGNED LENGTH OF RISING MAIN (m)	4840	4840	4840
5	TOTAL FRICTIONAL LOSS (m)	13.86	9.05	4.24
6	LOWEST WATER LEVEL AT PUMPING POINT OR JN-GL RL(m)	479.95	479.95	479.95
7	STATIC HEAD	82.05	82.05	82.05
8	DRIVING HEAD	1.50	1.50	1.50
9	COMMON FRICTIONAL HEAD	0.00	0.00	0.00
10	TOTAL GROSS HEAD	97.41	92.60	87.79
11	BHP REQUIRED	3469	3297	3126
12	KW REQUIRED	2588	2460	2332
13	ANNUAL ELECTRICITY CHARGES	51002819	48481152	45963449
14	COST OF PUMPING MACHINERY	34687159	32972166	31259869
15	PUMP DEPRECIATION CHARGES	2601537	2472912	2344490
16	O & M CHARGES	53604356	50954064	48307939
17	RATE OF PIPE / m (in Rs)	16213	19783	28675
18	COST OF PIPE (in Rs)	71337200	87045200	126170000
19	TOTAL CAPITAL COST	106024359	120017366	157429869
20	CAPITALISED COST of O & M	407714732	387556613	367430186
	Total Capitalised Cost + Capitalised Cost of O & M	513,739,091	507,573,979	524,860,055