

**GENERAL ARRANGEMENT LAYOUT PLAN**

Unit No.	Description	Qty.	Size (Meters)
01	Sea Water Intake Chamber with Screen & Pump House	1	9.7 x 20.0 x 13.1 TD
02	Receiving Chamber	1	6.5 x 6.5 x 3.1 LD + 0.5 FB
03	Flash mixing Tank	3	3.3 x 3.3 x 3.3 LD + 0.5 FB
04	Flocculation Tank	4	14.0 x 14.0 x 4.1 LD + 0.5 FB
05	Lamella Clarifier	4	14.0 x 14.0 x 3.6 LD + 0.5 FB
06	Sludge Holding Tank	1	11.0 x 10.0 x 2.5 LD + 0.5 FB
07	Thickener	1	Ø30.0 x 4.0 LD + 0.5 FB
08	Dual Media Filter	12	9.0 x 6.8 x 4.35 TD
09	Filter house (Dual Media Filter)	1	77.0 x 29.0 x 7.0
10	Filtrate Collection Tank	1	Ø48.5 x 4.2 LD + 0.5 FB
11	UF Permeate Tank	1	Ø48.0 x 4.2 LD + 0.5 FB
12	SWRO Permeate Tank	1	Ø18.0 x 3.9 LD + 0.5 FB
13	Product Water Storage Tank	1	75.0 x 61.0 x 4.2 LD + 0.5 FB
13A	Product Water Pump House	1	25.0 x 10.2 x 6.0
14	Reject Tank	1	31.0 x 30.5 x 4.2 LD + 0.5 FB
15	Backwash Waste Collection Tank	1	31.0 x 17.0 x 4.2 LD + 0.5 FB
16	Plant Security Gate Complex	1	10.0 x 6.0 x 3.65
17	FeCl3 Storage Dyke Wall	1	11.0 x 8.0 x 0.75
18	NaOCl Storage Dyke Wall	1	14.0 x 8.0 x 0.75
19	H2SO4 Storage Dyke Wall	1	7.0 x 4.0 x 0.75
20	Caustic Storage Dyke Wall	1	4.0 x 4.0 x 0.75
21	Blower Room	1	6.0 x 5.0 x 4.0

Unit No.	Description	Qty.	Size (Meters)
22	Instrument Compressor Room	1	10.0 x 5.0 x 5.0
23	Workshop	1	10.0 x 10.0 x 6.0
24	Out Door Switchyard	1	20235 Sq.m.
25	MRSS 11 kv Substation	1	30.0 x 14.0 x 9.5
26	Electrical Control Building	1	30.0 x 14.0 x 7.5
27	UF Building	1	70.0 x 54.0 x 8.5
28	RO Building	1	67.0 x 50.0 x 8.5
29	UF Feed Pump Shed	1	7.0 x 4.0 x 5.0
30	SWRO Feed Pump Shed	1	10.0 x 4.0 x 5.0
31	SMBS Dosing Shed	1	7.0 x 5.0 x 3.5
32	Antiscalant Dosing Shed	1	7.0 x 5.0 x 3.5
33	Chemical Storage Room	1	10.0 x 5.0 x 5.0
34	Conference Room	1	8.0 x 7.0 x 5.0
35	Lab	1	8.0 x 7.0 x 5.0
36	Membrane Storage Room	1	7.0 x 5.0 x 5.0
37	Lime Stone Feed Pump Shed	1	6.0 x 4.8 x 4.5
38	CO2 Storage Area	1	10.0 x 10.0 x 6.0
39	Lime Handling Building	1	16.0 x 10.0 x 5.0
40	Administration Building	1	20.0 x 10.0 x 4.0
41	Canteen Building	1	15.0 x 10.0 x 4.0
42	Parking Area	1	500 Sq.m.
43	Sewerage Treatment Plant	1	150 Sq.m.

Description	Area (Sq.m)
Total Buildup Area (Present)	25340.0
Total Buildup Area (Future)	470.0
Hard Paved Area	14830.0
Green Belt Area	31800.0
Out Door Switchyard (As pre TANGEDCO Requirement)	20235.0
Future Area	43200.0
Offset / OTS Area	20875.0
Total Plot Area (Sq.m.)	156750.0
Total Plot Area (Acre)	38.733
Total Plot Area (Hectare)	15.675

**Legend :**

01	Plant Units & Numbers
F	Future Provision
	Road
	Pathway
	Land Scapping & Tree Saplings

Client:



**TWAD BOARD**  
**TamilNadu Water Supply And Drainage Board**  
(Under Municipal Administration & Water Supply Department - MAWS)

Consultant:



**Tamilnadu Water Investment Company Limited**  
'Polyhose Towers' No.86, First Floor, Mount Road, Guindy, Chennai - 600 032

Name of Work:

**Consultancy Assignment for Feasibility study and Preparation of Detailed Project Report for setting up of 60 MLD SWRO Desalination Plant near Marakanam in Villupuram District.**