



1. Purpose:

This document sets out the protocol for the WWTP, Horticulture Service & Golf Course Management to follow, in case of over production and/or under production of TSE water



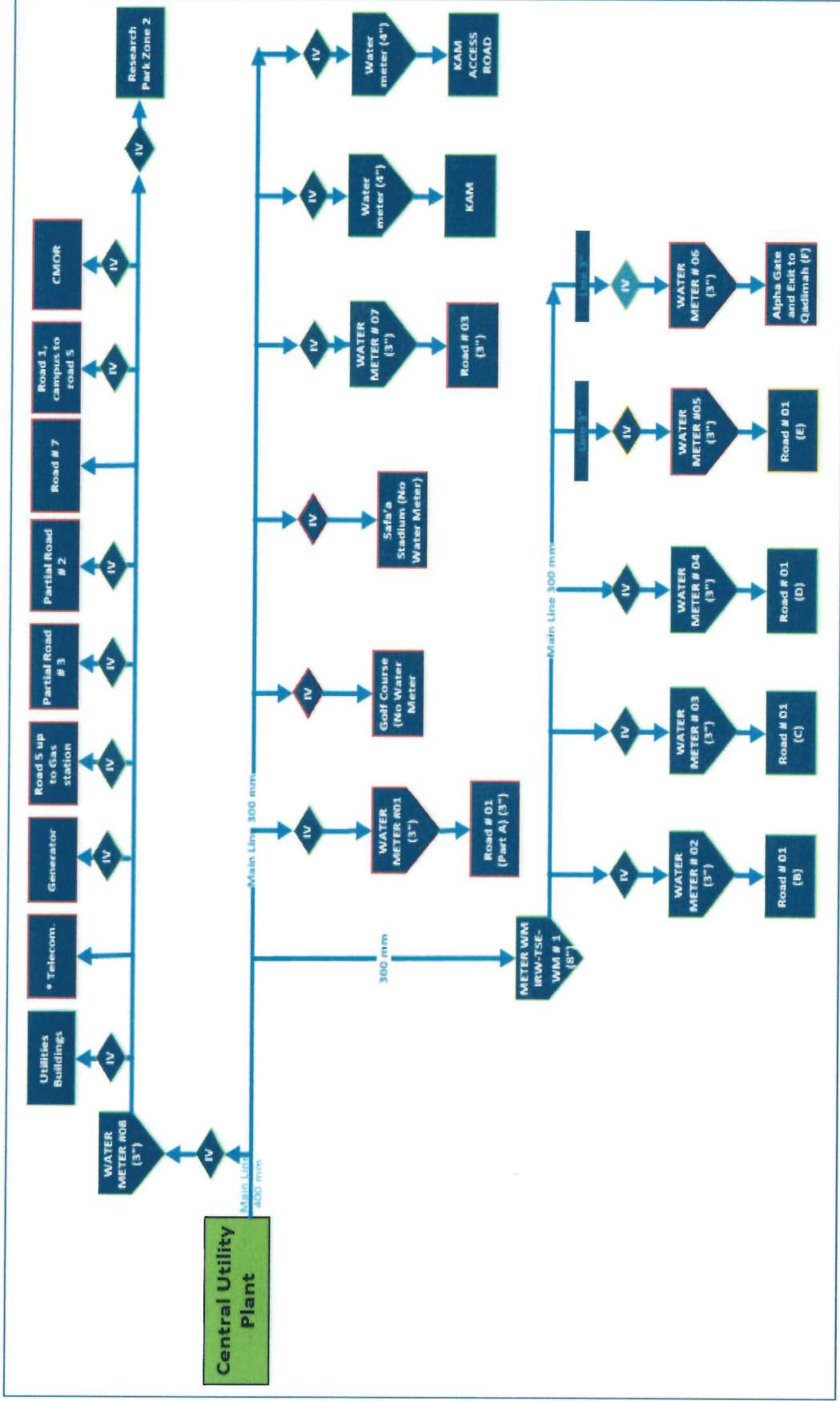
2. TSE Irrigation water Network Map

3. Daily TSE Water Consumption*

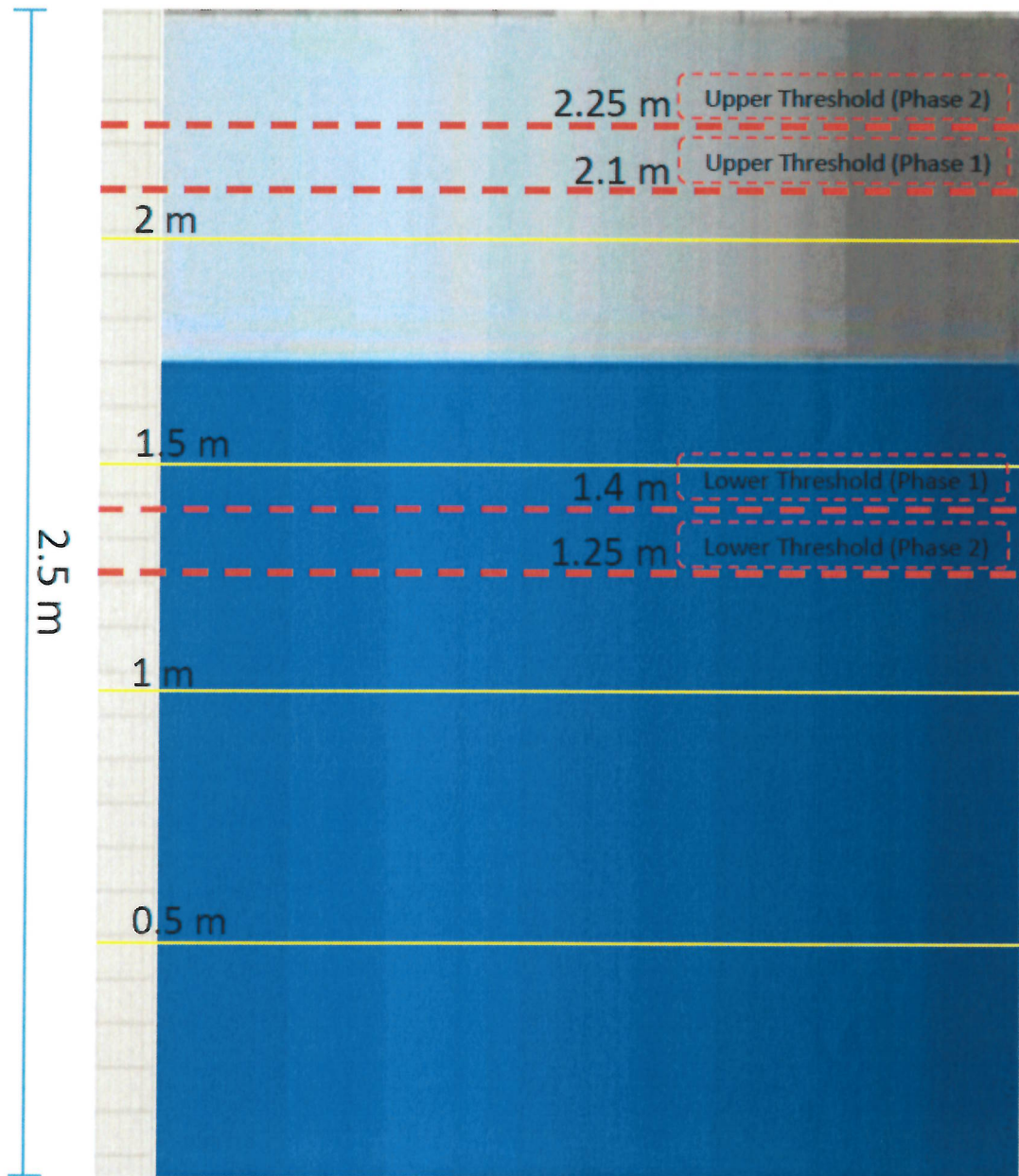
SL. #	Location	Water Consumption m ³ / day
1	Golf Course	3301
2	R & F , Research Park and CMOR	2235
3	Safaa Stadium	306
4	KAM Including Access Road	95
	Total	5937

*Detailed studies shall be conducted to check the possibility of modification of the Irrigation timing schedules to operate in 16 hrs. /day rather than 24 hrs. /day for energy saving

4. TSE Irrigation Network – Single Line Diagram



5. Trigger values for reduction/increase of TSE water



TSE Water Tank

Upper threshold will trigger e-mails followed by phone calls to increase the use of TSE in 2 phases:

- 2.10 meters tank levels triggers emails followed by phone calls to detailed persons in the Communication Chart to increase use of TSE water
- 2.25 meters tank levels triggers emails followed by phone calls to assigned persons in the Communication Chart to dump TSE water in the Golf Course Irrigation Lake

If both does not fulfill the requirement of WWTP, then extra TSE water will be dumped to the sea

Lower threshold will trigger emails followed by phone calls to decrease the use of TSE in 2 phases:

- 1.4 meters tank levels triggers e-mails followed by phone calls to detailed persons in the Communication Chart to shut down the use of TSE water as per TSE Water Load Shedding Scheme shown below
- 1.25 meters tank levels triggers e-mails followed by phone calls to assigned persons in the Communication Chart to continue with the TSE shut down process as detailed in the TSE Water Load Shedding Scheme shown below (Isolation priority 2 and Isolation Priority 3)

6. TSE WATER LOAD SHEDDING SCHEME

SL #	Location	Water Consumption m ³ / day	Isolation Priority 1 (triggered at 1.4 m TSE Tank Level)	Isolation Priority 2 (triggered at 1.25 m TSE Tank Level)	Isolation Priority 3
1	Golf Course	3301	*Notified	Close water - other than turf areas	Reduce 50 % TSE Water use
2	R & F , Research Park and CMOR	2235	Reduce 40% TSE Water use	Full TSE Water Closure	Full TSE Water Closure
3	Safaa Stadium	306	*Notified	Full TSE Water Closure	Full TSE Water Closure
4	KAM Including Access Road	95	*Notified	Full TSE Water Closure	Full TSE Water Closure
	Total	5937			

7. COMMUNICATION CHANNEL CHART

