

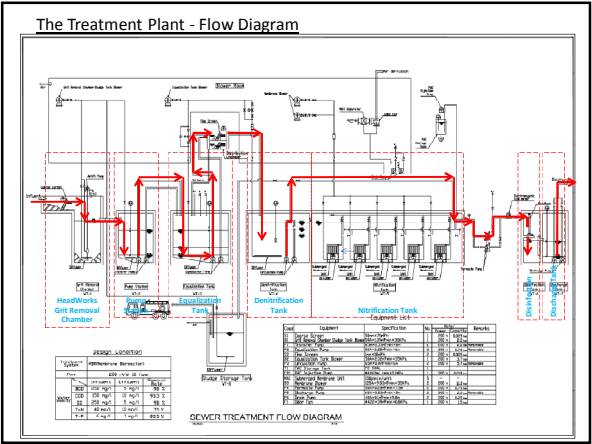
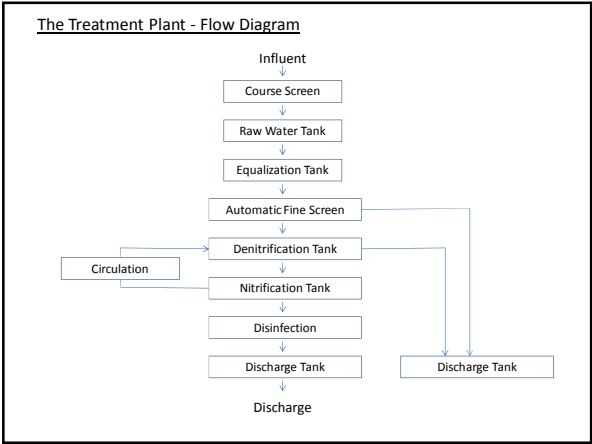
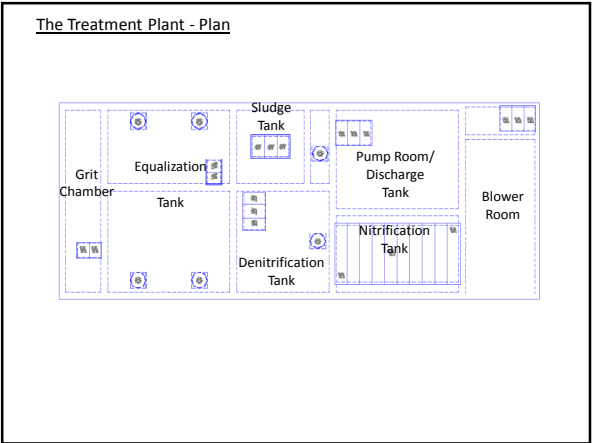
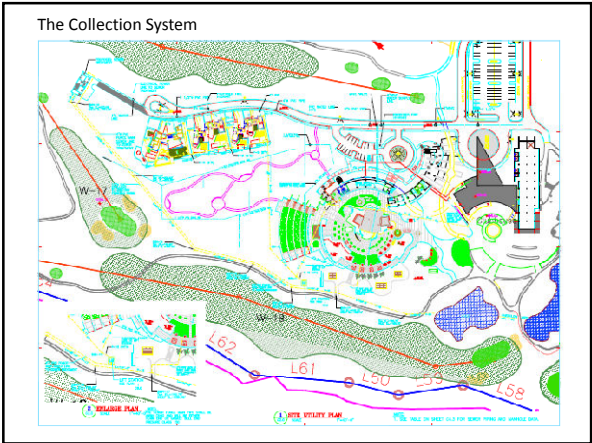


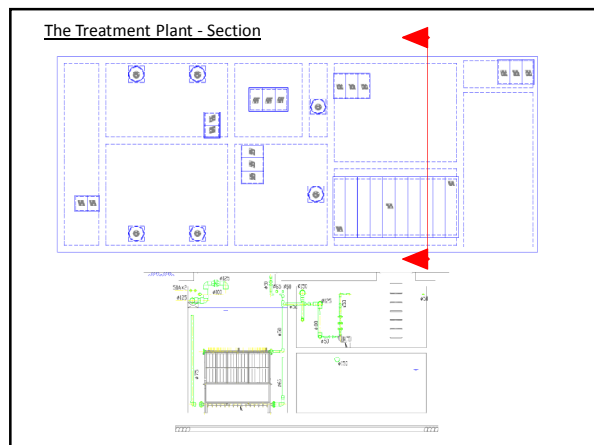
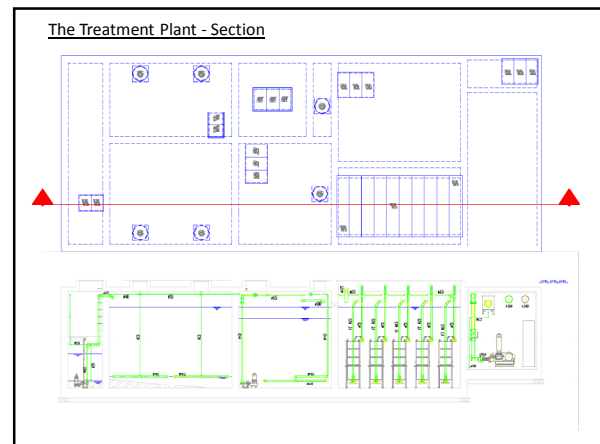
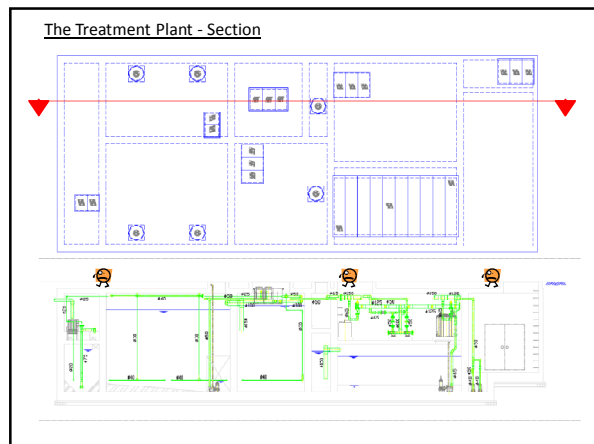
LAOLAO BAY
GOLF & RESORT

Membrane Bioreactor Wastewater Treatment Plant

For
Mariana Islands Water Operator
Association Workshop
(MIWOA)

- ## Plant General Description
- Class III Wastewater Treatment Facility
 - Membrane Bio Reactor Suspended Activated Sludge Treatment
 - Kubota Submerged Membrane Units
 - Designed for Domestic Wastewater
 - Water Re-Use Effluent Disposal





KUBOTA SUBMERGED MEMBRANE UNIT

Standby . . .

Case Study

- High Peak Season
Ave Flow = 24K gpd, Highs @ 35K GPD, Lows @ 16K GPD
Aeration Tank MLSS is High at 12,000mg/l ~ 14,500mg/l
pH > 7
- Low Peak Season
Ave Flow = 8K gpd, Highs @ 18K GPD, Lows @ 4K GPD
Aeration Tank MLSS drops to 8,000mg/l ~ 9,000mg/l
pH drops below 6

WHY?