

DESIGN CRITERIA

MBR Aeration Basin #5

Aeration Basin #5	
Number of units	1
Type	Plug flow
Length to Width Ratio	18
Operating Water Depth	24-feet
Zone 1A - De-Ox Zone Volume	63,950 gallons
Zone 1B – Anoxic Zone Volume	58,550 gallons
Zone 2A – Anoxic Zone Volume	57,900 gallons
Zone 2B – Anoxic Zone Volume	59,250 gallons
Zones 3, 4, 5, 6 – Aerobic Zones	475,850 gallons
Total Aeration Basin Volume	715,500
Design SRT	12 – 30 days
Design MLSS Concentration	6,000 – 8,000
Air Diffusion System	
Type	Fine Bubble Disc
Number – Zone 3	371
Number – Zone 4	402
Number – Zone 5	402
Number – Zone 6	354
Mixed Liquor Recycle Pumps	
Number of units	2
Type	Submerged Wall Fan Pumps

Capacity, each	Up to 15.0 MGD
Horsepower	10
TDH	1
Aeration Basin #5 Dewatering Pump	
Number of units	1
Type	Centrifugal
Capacity, each	920 gpm @ 31 feet TDH
Horsepower	15