APPENDIX I EXISTING WWTF ENGERY USAGE



Description	Quantity Installed	Operating	Motor Size	Total Operating	Operating Load	Run Time, hrs			Annual Energy Use	Unit Cost	Annual Electricity Cost
			(HP)	(HP)	(HP)	(kW)	(hr/day)	(hr/yr)	(kWh/yr)	(\$/kWh)	(\$/yr)
Fine Screen	1	1	1.0	1.00	0.80	0.6	24	8760	5,228	\$0.090	\$471
Grit Pump	1	1	5.0	5.00	4.00	3.0	4	1460	4,357	\$0.090	\$392
Grit Classifier	1	1	0.5	0.25	0.20	0.1	4	1460	218	\$0.090	\$20
New Anoxic Mixers	2	2	4.0	8.00	6.40	4.8	24	8760	41,824	\$0.090	\$3,764
Anoxic 1 Mixer	1	2	2.5	5.00	4.00	3.0	24	8760	26,140	\$0.090	\$2,353
IMLR Pumps/Selector Pump	3	2	5.0	10.00	8.00	6.0	24	8760	52,280	\$0.090	\$4,705
Anoxic 4b Mixer	1	1	2.5	2.50	2.00	1.5	24	8760	13,070	\$0.090	\$1,176
Carbon Dosing Pump	1	1	0.1	0.10	0.08	0.1	24	6570	392	\$0.090	\$35
Aeration Blowers	6	5	15.0	75.00	60.00	44.8	24	8760	392,098	\$0.090	\$35,289
Clarifier Mechanism	2	2	1.0	2.00	1.60	1.2	24	8760	10,456	\$0.090	\$941
Tertiary Filter Feed Pump	2	1	10.0	10.00	8.00	6.0	24	8760	52,280	\$0.090	\$4,705
Tertiary Filter Coagulant Pump	1	1	0.1	0.10	0.08	0.1	24	8760	523	\$0.090	\$47
New WAS Pump	1	1	1.5	1.50	1.20	0.9	24	8760	7,842	\$0.090	\$706
RAS Pump	1	1	3.0	3.00	2.40	1.8	24	8760	15,684	\$0.090	\$1,412
Headworks Building Air Handling/Heating/Hot Water Units		1	7.0	7.00	5.60	4.2	24	6570	27,447	\$0.090	\$2,470
Main Treatment Building Heating/Air Handling/Hot Water Units		1	15.0	15.00	12.00	9.0	24	6570	58,815	\$0.090	\$5,293
Dewatering Building Air Handling/Heating Units		1	4.0	4.00	3.20	2.4	24	6570	15,684	\$0.090	\$1,412
UV Units	2	2	2.5	5.00	4.00	3.0	24	8760	26,140	\$0.090	\$2,353
Total Operating HP 119 Total Annual Electricity									Electricity	\$67,600	
UV Units	2 Certain equ	Total Opera	ating HP as propa	119			1	1	,	Electricity	\$67

VTSV Existing WWTP Estimated Energy Usage