

Project Title: Sample Project  
 Project ID: 130206  
 Project Manger: T.M.

Prepared By: W.T      Sheet: 1 of 1  
 Checked By: D.W.      Date: 7/3/2016

**FAN ENERGY CONSUMPTION & OPERATING COST ESTIMATES**

**Notes:**  
 Annual Energy Cost Calc.

$$EnergyCostPerYear = \frac{(HP) \times (0.746kW / HP) \times (hr / yr) \times (\$/ kWh) \times (LF)}{MotorEfficiency}$$

Annual Cost = (BHP x 0.746kW per HP x 1/Eff x Operating hrs per yr x Cost per kW/hr)

Fan Annual Operating Cost				
	Existing	Proposed		Remarks
Fan Airflow	25,000	25,000	CFM	
Total Static Pressure	3.2	3.2	inches	
Motor Efficiency	85%	90%	%	Typical: 85% to 95%
Fan BHP =	14.81	13.99	BHP	
Cost per kW/hr	\$0.13	\$0.13	\$/kW	
Operating hours per year	8,760	8,760	hrs	24/7 all year
<b>Annual Fan Operating Cost =</b>	<b>\$14,802</b>	<b>\$13,203</b>		

<b>Existing vs. Proposed =</b>	<b>\$1,599</b>
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**REMARKS:**  
 Fan operating cost comparison.