



# W. E. Quicksall and Associates, Inc.

554 West High Avenue  
P.O. Box 646  
New Philadelphia, Ohio 44663

Civil Engineers

August 1, 2019

Mr. James Zucal  
Director of Public Services  
City of St. Clairsville  
PO Box 537  
St. Clairsville, OH 43950

## Re: Assessment of Existing Conditions of the Water System

Dear Mr. Zucal:

In response to your request for an engineering assessment of the cost for expansion of your existing water treatment plant (WTP) or construction of a new WTP, we have looked at recent costs and investigated industry standards for construction. These costs do not include improvements to the source, storage, or distribution system.

We recommend that you budget \$5.00 to \$7.00 per gallon for expansion. However, we have visited your site and we do not believe that there is space available for expansion at your existing WTP. Also, the existing WTP is located in a flood plain which would make it difficult for expansion.

For a new WTP on a new site, we would suggest that the construction costs would be \$4.00 to \$6.00 per gallon.

Neither of these costs include land acquisition, legal fees, engineering costs, permit fees, or other non-construction costs. It is also our recommendation based on your current operations, that you look at a 2 million gallon a day (MGD) WTP to meet your current and future demands and growth.

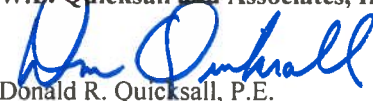
Using this "Rule of Thumb" and assuming 30% to 35% for all non-construction costs, the preliminary estimate for a 2.0 MGD WTP is:

<b>Existing WTP Expansion (adding 1 MGD):</b>	Costs: (Low Range)	Costs: (High Range)
Construction Costs:	\$5,000,000	\$7,000,000
Non-Construction Costs:	\$1,500,000	\$2,450,000
<i>Total Cost:</i>	<i>\$6,500,000</i>	<i>\$9,450,000</i>
<b>New WTP Construction (NEW 2 MGD):</b>	Costs: (Low Range)	Costs: (High Range)
Construction Costs:	\$8,000,000	\$12,000,000
Non-Construction Costs:	\$2,400,000	\$4,200,000
<i>Total Cost:</i>	<i>\$10,400,000</i>	<i>\$16,200,000</i>

Please contact us if you have any questions on your WTP costs.

Sincerely,

W.E. Quicksall and Associates, Inc.

  
Donald R. Quicksall, P.E.  
President

  
Bret E. Norton, P.E.  
Senior Design Engineer

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