



**MOORE & BRUGGINK, INC.**  
consulting engineers

July 7, 2016

*Proposal –Chemical Building  
Option Review*

Ms. Amy Gilson, Director of Public Works  
City of Charlotte  
111 E Lawrence Avenue  
Charlotte, Michigan 48813

Dear Ms. Gilson:

Moore & Bruggink, Inc., is pleased to submit a proposal for the **Charlotte Chemical Building Project – Option Review** to the City of Charlotte. Our understanding, based on our on-site meeting with you, your staff, Mr. Guetschow, and Mr. Mitchell, is that the City would like to review an option to renovate the existing chemical storage area of the existing control building to house new tanks and ferric pumping equipment. The option would include a removable cupola section of the roof to allow for placement and removal and potentially larger tanks. Also included would be “blocking off” the chemical room from the rest of the building to prevent the corrosive vapors from further damaging any ancillary equipment. We will review this at a schematic design level to assure an appropriate budget level estimate can be developed and compared to the existing proposed option. Costs and benefits to the alternative will also be determined.

In addition, the City has requested that a review of the existing stand-alone building design be completed to determine if there is a more cost-effective alternative to the proposed block building. Due to the extreme corrosive nature of the ferric chemical, it should be noted that these alternatives will be limited.

The evaluation tasks would include:

1. Developing an initial scope of work and schematic for the renovated building alternative.
2. Reviewing the stand-alone building type for alternatives.
3. Developing budget level cost estimates.
4. A short technical memorandum report detailing these items and the recommendation of which option should be selected moving forward.

These tasks can be accomplished for a not-to-exceed price of \$6,900. We can start on the Option Review immediately upon authorization, and expect that it will take three to five weeks to complete, subject to response time of equipment vendors.

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We look forward to working with the City of Charlotte and the Wastewater Staff on this review.  
Please call me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brian Hannon", with a stylized, flowing script.

Brian Hannon, P.E.  
Vice President