



October 24, 2017

Mr. Steven R. Calla, Director  
Department of Public Works  
100 Kennedy Drive  
Winthrop, MA 02152

Re: Peer Review and Value Engineering of Town Center Improvements- Phase 1 Final Report  
Task #1 Utility Review - Contract Documents by Woodard & Curran, April 2017

Dear Mr. Calla:

As you are aware, Coughlin Environmental Services, LLC (CES) has conducted several reviews of the Woodard & Curran (W&C) progress plans, specifications and cost estimates associated with the above referenced project. The first plan set was a Preliminary Plan dated April 2017. We met with W&C and identified several utility conflicts and also made design recommendations moving forward relative to drainage sizing, general layout and potential construction stage "extra" cost items which could arise based upon plan and spec contents.

More detail and revised plans and specifications, dated June 2017, were later prepared by W&C and distributed to CES for a second review. These documents rectified most of the original CES comments and issues but the greater plan detail and subsequent changes also helped to reveal additional recommended modifications similar in nature as the first review but to a more limited degree. CES was also able to identify additional drain pipe size anomalies which were reflective of over-conservative hydraulic sizing and hydrology estimation methods. Technical specifications available at that time were also reviewed for general consistency with plans and construction details. Later that month, front end specifications were also received and recommendations were made to more precisely define materials and quantities as well as further clarifying potential bidder instructions.

In early August, we were able to review an Engineer's Estimate and found the pricing structure generally reasonable but identified potential items which could be impacted by adjusting petroleum prices. Although an independent detailed quantity take-off was not prepared by CES, a general review was conducted to try to identify any divergent quantities which were not consistent with the contract drawings. CES questioned some of the larger "lump sum" items given that a detailed breakdown of those items was not available at that time such as Sewer By-pass Pumping and Electrical and Site Improvements. The potential for significant public utility relocation back-charges and related costs was also discussed as well as potential unforeseen costs based upon actual utility service vertical locations which were somewhat

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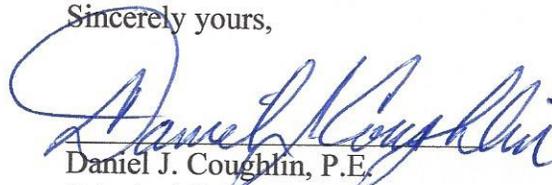
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ambiguous based upon as-built data. Given the concentration of work in the Town Center, CES also questioned the quantification of potential Traffic Control and Policing costs which would ultimately be part of the project. Also in August, CES also provided a cursory review of hydrology simulations to better define anomalies in the drainage piping. This led to W&C revising some values to be more reflective of actual field conditions.

A "final" contract document set was received by CES at the end of August which had incorporated additional changes and revisions. All prior issues with addressed by W&C in part or in whole based primarily upon designer preference but in conclusion, irrespective of more recent minor design edits the contract documents are believed to have a suitable form and content for procurement purposes.

Overall, CES was able to identify several areas for plan, specification and cost estimate refinement throughout its multiple review of the contract documents so as to enable the development of an improved contract package with less potential for cost extras and over-runs. We appreciate this opportunity to serve the Town of Winthrop and feel free to contact the undersigned if additional reviews or services are deemed needed.

Sincerely yours,



Daniel J. Coughlin, P.E.  
Principal Engineer