ARCHITECTURAL / ENGINEERING QUESTIONS FOR THE ADDITION
TO THE SOUTH BETHANY POLICE DEPARTMENT
11/17/16

1. **Why do we need a soil boring test?**

   A Soil Boring Report provides the following:

   - Bearing pressure requirement to efficiently design the foundation.
   - Identifies shallow soil types to predict potential earthwork problems during construction.
   - Identifies shallow soil types to determine if we can re-use soils as structural fill, or if you need to borrow from off site.
   - Identifies groundwater depths to provide frost protection (GW to be at least 2 feet below grade), and to dewatering is required for the proposed improvements (utility lines, footings, etc.).

   With a history of a high-water table and poor soil conditions at this location, a soil boring test is recommended for this project.

2. **Why are the drawings so expensive?**

   The fees have been established based on the time required to conduct site investigations/measurements, perform calculations, prepare construction drawings, specifications, update the cost estimate and submit documents to the Fire Marshal, Sussex Conservation District and Building Department for approval.

   The fee breakdown for this project is:

Architectural	$10,000
Mech/Elec/Plumb Eng.	$11,000
Structural Eng.	$2,000
Site Engineering	$6,000

   Commercial construction compared to residential, requires compliance with additional codes & regulations and approval from additional agencies.

3. **Why can't use the original drawings?**

   The original drawings did not include the design of the proposed addition. Drawings & specifications are required for the new construction for permitting, bidding and construction.

4. **Where can costs be cut on this project?**

   Remove the mechanical and plumbing engineering design from the project and considering delivering this portion of the project through a design/build process.

5. **Are these cost numbers competitive?**

   The fees represent a reasonable cost for the work effort required to prepare the necessary documents and assist with permitting.

6. **Is this work as modest as can be done?**

   Yes, there are no materials proposed that would be considered excessive or luxury.

7. **How comfortable are you with the $206,000 estimate knowing bids can be lower/higher?**
   The cost estimate for the project was prepared by John L. Briggs & Co., a Georgetown-based General Contractor with more than 50 years of commercial construction experience. I have used their cost estimating services for some 10 years and have found their estimates to be very accurate. Please understand this estimate has been prepared using Preliminary Plans. A more refined estimate will be developed at the end of the Construction Documents Phase and may change.

8. **Can you summarize the inclusion in the estimate for computers, painting, etc.**
   Painting, conduit and boxes for future data & communications equipment are included in the estimate. Your computer vendor/installer should be contacted for the cost of wiring, devices and equipment. You should also contact your vendor for estimates for furniture, fixtures and equipment.

9. **What life cycle costs can we expect?**
   The calculation of life cycle costs for major components of the work such as roofing, windows and HVAC Equipment can be provided near the end of the Construction Documents Phase. This requires energy modeling of the building, and performing mathematical calculations comparing initial, operating/maintenance and salvage costs, then testing various alternative components to determine the component with the lowest life cycle cost. The proposed fee does not include Life Cycle Calculations, but can be provided as additional service.

   The life expectancy of various commercial building components can be viewed at this web site:

   http://www.barrie101.com/life_expectancy.html