January 27, 2020

Mr. John A. Elsesser
Town Manager
Town Hall
1712 Main Street
Coventry, CT 06238

Re: Preparation of LOTCIP Application Concept Plans
Sections of South Street, Swamp Road & Swamp Road Ext.
Coventry, Connecticut

Dear Mr. Elsesser:

As requested, we are pleased to submit this proposal to provide concept plans and conceptual opinions of probable cost in support of a Local Transportation Capital Improvement Program (LOTCIP) grant application that is being prepared by the Town of Coventry. Based on our recent meeting, it is our understanding the LOTCIP application will include the following sections of South Street, Swamp Road and Swamp Road Extension.

Section 1 – This section includes the reconstruction of South Street, Swamp Road, and Swamp Road Extension at and between their respective intersections. Reconstruction will convert the east end of Swamp Road Extension into a dead-end road serving the existing residential dwellings. The principal design objective for Section 1 is to improve the horizontal sight distance on South Street between the two aforementioned intersections and to correct existing storm drainage deficiencies.

Section 2 – This section includes the reconstruction of South Street from the Swamp Road Intersection westerly approximately 1,800-feet to the easterly end of the existing farm fields, including a roadside drainage channel along the remaining existing section of South Street to the Hop River. The principal design objective for Section 2 is to improve the horizontal sight distance within the existing “S” curve located at the western end of Section 2, to improve the pavement condition, and to correct existing storm drainage deficiencies.

Section 3 – This section includes the reconstruction of an approximate 400-foot section of Swamp Road beginning approximately 2,500-feet northeasterly of its intersection with Brewster Street. The principal design objective for Section 3 is to improve the sight distance that is currently limited as a result of a sharp vertical curve within the existing road profile.

Section 4 – This section includes the reconstruction of the Swamp Road and Love Lane intersection. Reconstruction will include an approximate 550-feet section of Swamp Road extending approximately 200-feet to the north and 350-feet to the southwest of its intersection with Love Lane. Reconstruction on Love Lane will be less than 200-feet. The principal design objective for Section 4 is to improve the horizontal sight distance on Swamp Road and to correct existing storm drainage deficiencies.
Our scope of work is based on the following assumptions:

- Design standards will be based on the Town of Coventry Road Regulations modified as required to accommodate existing conditions.
- No subsurface investigations will be conducted to determine the extent and location of rock or unsuitable materials.
- No wetland delineations or investigations will be conducted.
- No environmental investigations or hazardous waste assessments of any kind are included in the scope of work.
- No hydrologic or hydraulic analysis will be performed.
- Base mapping will utilize field topographic surveys of South Street previously obtained by Nathan L. Jacobson & Associates, Inc. in the 2004-2006-time frame, and CTDEEP 2016 orthophoto's with LIDAR contours. No additional field topographic surveys will be performed.

Based on the assumptions noted above, our proposed Scope of Services is as follows:

**Task I – Preparation of LOTCIP Application Concept Plans**

A. Prepare one Index Sheet using the CTDEEP 2016 orthophoto's showing the locations and limits of proposed Sections 1 through 4.

B. Prepare concept design plan & profile base sheets utilizing the base mapping information identified in our assumptions above. Base maps will be prepared at a scale of 1”=40’.

C. Make a site inspection with Town Engineer of each section to review existing site conditions, obtain digital photographs and to formulate improvement options.

D. Utilizing the base sheets prepared in Task I.B. above, prepare concept plan & profile drawings. The concept plan & profile drawings will identify the following:
   
   a. Stationed road centerline including horizontal geometry.
   
   b. Approximate limits and extent of any pavement widening or realignment.
   
   c. Profiles showing existing ground and proposed grades along the centerline of road, including vertical geometry.
   
   d. Conceptual grading.
   
   e. Schematic storm drainage system (plan view only).
   
   f. Retaining wall and guide rail locations if deemed necessary.
   
   g. Approximate limits and extent of any anticipated ROW acquisitions (based on available South Street ROW information and online mapping sources).
h. Typical cross sections including lane and shoulder widths, pavement structure, etc.

E. Send the concept plan & profile drawings to the Town Manager, Town Engineer and Director of Public Works for review and comment.

F. Attend one meeting with the Town Manager, Town Engineer and Director of Public Works to discuss the concept drawings and finalize the concept layouts.

G. Make minor adjustments to the drawings prepared in Task I.D. above.

H. Prepare quantity takeoffs for the applicable CTDOT items to be included in a conceptual opinion of probable construction costs. Approximate quantities of rock and unsuitable materials are to be based on the engineer’s judgement including field observations, input from the Town Engineer and Director of Public Works, and NRCS Soil Survey mapping. The approximate sizes of storm drainage system piping will also be based on the engineer’s judgement.

I. Prepare a conceptual opinion of probable construction cost utilizing the CRCOG Construction Cost Estimate Template. Unit prices will generally be from the CTDOT “English Item Master File”. Remaining unit prices will be from NLJA files, engineering judgement, or previous years CTDOT English Item Master File with a 4%/year inflation adjustment.

J. Submit a set of plans and a conceptual opinion of probable construction cost to the Town of Coventry in PDF format.

It is our understanding that you will provide and/or pay for the following:

1.1. Information in your possession, or which you can reasonably obtain, that is pertinent to the proposed work described herein above and that would be helpful in performing our services.

We propose to provide our services a lump sum total amount of $25,400 based on the Scope of Services and the assumptions identified above.

We propose to provide any Additional Services authorized by you for work beyond the Scope of Services identified above, on an hourly rate basis plus reimbursement for out of pocket expenses (with no markup). Services shall be based on the hourly rates listed below for the type of personnel involved in performing the services, multiplied by the total hours devoted to performing said services by each member of our staff.
Mr. John A. Elsesser  
Town Manager  
Town of Coventry  
Re: Preparation of LOTCIP Application Concept Plans  
   Sections of South Street, Swamp Road & Swamp Road Ext.  
   Coventry, Connecticut  
January 27, 2020  
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Our 2020 Municipal Hourly Rate billing schedule is as follows:  

<table>
<thead>
<tr>
<th>Personnel Category</th>
<th>Hourly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Assistant</td>
<td>$60/hr.</td>
</tr>
<tr>
<td>CADD Technician</td>
<td>$95-$100/hr.</td>
</tr>
<tr>
<td>Construction Inspector</td>
<td>$86-$109/hr.</td>
</tr>
<tr>
<td>Geologist/Environmental Analyst</td>
<td>$119-$129/hr.</td>
</tr>
<tr>
<td>Licensed Surveyor</td>
<td>$141.20/hr.</td>
</tr>
<tr>
<td>Staff Engineer</td>
<td>$86-$97/hr.</td>
</tr>
<tr>
<td>Senior Engineer</td>
<td>$113-$125/hr.</td>
</tr>
<tr>
<td>Principal Engineer</td>
<td>$144-$152/hr.</td>
</tr>
</tbody>
</table>

The hourly rates listed herein will remain in effect through 2020.

Mileage Cost: Mileage is billed at the established IRS rate, which is $0.57/mile for 2020.

Thank you for providing us the opportunity to provide engineering services on this project. We look forward to being of continued service to the Town of Coventry.

If this proposal is acceptable, please sign both copies of this proposal letter and return one copy to our office to serve as our Notice to Proceed. Should you have any questions or need any additional information, please feel free to contact me.

Sincerely,

NATHAN L. JACOBSON & ASSOCIATES, INC.

Geoffrey L. Jacobson, P.E.
Accepted: _______________________

(Authorized Signature)

_________________________  Date: __________________

(Please Type or Print Name)