Transportation - Energy - Land Developmen

January 5, 2018

Ms. Pennie Zucco Purchasing Agent City of Torrington 140 Main Street, Room 206 Torrington, CT 06790

RE: Proposal for Contract Amendment - Transportation Services Main Street / East Main Street Intersection

Dear Ms. Zucco:

BSC Group – Connecticut, Inc. (BSC) is pleased to submit this proposal to the City of Torrington (the City) for an amendment to our existing contract "Agreement Between the City of Torrington, Connecticut and BSC Group-Connecticut, Inc. for Professional Services". This amendment is intended to address transportation engineering services associated with the Main Street/East Main Street/Franklin Street/Water Street/Litchfield Street/South Main Street intersection.

BSC has prepared this proposal based the following understanding of your needs and circumstances, which have affected the scope of services:

- 1. BSC's scope of services under the amendment generally includes traffic data collection, traffic analysis, and development of conceptual level design plans for proposed improvements to the project intersection.
- 2. Our scope of services includes four (4) coordination/progress meetings with the City, CTDOT, or additional stakeholders as needed.
- 3. The City will make available recent studies and plans that are pertinent to the proposed intersection improvements.
- 4. We have assumed that mapping of the intersection is available from the City. Alternatively, if mapping is not available, BSC will utilize a compilation plan, compiled from aerial photography and other publicly-available sources, to develop the conceptual level design plans.
- 5. New turning movement traffic counts will be required and have been included in our scope of services.

1.0 SCOPE OF SERVICES

Task 1 - Traffic Data Collection

- 1. BSC will obtain and review all applicable studies and plans prepared for the project area. BSC will perform intersection turning movement counts for weekday morning, evening, and Saturday midday peak hours at the following locations:
 - Main Street at Water Street,
 - Main Street at East Main Street/Franklin Street

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- Main Street at Litchfield Street/South Main Street/Torrington Plaza Driveway (North)
- South Main Street at Torrington Plaza Driveway (South)
- 2. The City will provide the latest traffic signal timing and phasing programmed in the traffic signal controller.
- 3. BSC will visit the site to observe traffic operations and will utilize video recordings from the traffic counts to determine vehicle queue lengths for all approaches during a typical weekday morning and evening peak hours, and Saturday midday peak hour. BSC will also record any parking regulations and restrictions within 200 feet of the project location.

Task 2 - Traffic Operation Analysis

- 1. BSC will prepare an existing traffic volume network for weekday morning, afternoon and Saturday midday peak hours based on the intersection turning movement counts.
- 2. BSC will utilize Synchro\Simtraffic traffic analysis software to evaluate existing conditions. The software will be calibrated based on observed queue lengths and delay, geometric layout and existing traffic volume data.
- 3. Based on the existing traffic volumes and crash history, BSC will develop and evaluate up to three (3) alternatives including traffic signal timing and sequence changes, lane use changes such as one-ways or closure of certain approaches to simplify existing traffic operations.
- 4. BSC will develop future year horizon traffic volumes based on annual growth rates coordinated with ConnDOT and trips from planned/approved projects yet to be constructed based on data provided by the City.
- 5. BSC will perform intersection capacity analysis for the existing and the alternatives using Synchro\Simtraffic software. The capacity analysis will include an assessment of volume-to-capacity ratios, level of service, and vehicle queuing for existing and future no build and build conditions. The traffic analysis will be based on the existing street system and conceptual roadway improvement alternatives. The extent and nature of any system deficiencies will be identified.

Task 3 - Conceptual Design Development

- 1. Based on the data obtained from the Traffic Operation Analysis, BSC will prepare three conceptual design plans for proposed improvements to the project intersection. These plans will utilize either City-provided mapping or compilation plans as a base. The plans will be prepared at an appropriate scale with dimensional information to the accuracy limitations of the base mapping. The plans will generally depict the following:
 - Curb lines



- Lane delineation and designation
- Crosswalk locations
- Sidewalk locations
- Anticipated Sue Grossman Greenway location
- 2. BSC will submit draft version of the plans to the City for review and comment. We will also meet with you to present the plans, along with the associated rationale for the configurations shown. Following this meeting, BSC will make one round of revisions to the alternative selected by the City and submit a final plan. We will submit the plan in hard copy and as a digital file in Portable Document Format (.pdf).

2.0 ADDITIONAL SERVICES

The following services are not included as a part of our scope of services under the proposed amendment. These services may become necessary based upon the conclusions derived from the performance of the proposed scope above. If required, these services will be performed for an additional fee under a subsequent amendment.

- 1. Land surveying.
- 2. Hydraulic or hydrologic analyses.

3.0 SCHEDULE FOR SERVICES

BSC proposes to begin the services identified in Section 1.0 upon execution of an amendment. Upon initiating services, we will work with the City to derive an appropriate project schedule.

4.0 FEES FOR SERVICES

BSC is proposing an amendment in the amount of \$38,500 to complete the scope of services described in Section 1.0. This proposed amount is inclusive of labor and anticipated expenses.

We appreciate the opportunity to be considered by the City of Torrington for these services. If you have any questions, please contact me at 860-652-8227 Extension 4552 or by e-mail at rpinckney@bscgroup.com.

Sincerely, BSC Group - Connecticut, Inc.

Robert L. Pinckney, PE Manager of Transportation

Kurt A. Prochorena, P.E., LEED AP Principal