Additional Services Authorization (ASA) # 1

Project:	New 6-8 Middle School and New Multi-Purpose Turf Field
Date:	March 18, 2019
Client:	Conestoga Valley SD Attn: Mrs. Phyllis Flesher, Chief Finance and Operations Officer
K&W Project Number:	2265.006

This supplemental authorization is issued as an amendment to the Agreement and attached Exhibits dated July 16, 2018 between Kurowski & Wilson LLC (K&W) and Conestoga Valley School District (CVSD). The Scope of Work, General Provisions, and all other requirements, conditions, fees, exclusions, billing rates, reimbursable expense costs, etc. contained in the aforementioned Agreement shall continue to apply unless specifically noted to change within the scope of this Authorization.

Reason for Additional Services

K&W understands that the Township is requiring performance of a Traffic Impact Study for the project.

Description of Work

A. Traffic Impact Study

K&W will contract with a Traffic Engineering subconsultant for the following scope of work:

TASK I. PRELIMINARY INVESTIGATION AND SCOPING LETTER

1. Prepare a Scoping Letter for submission to the Township with the preliminary trip generation, site plan and other information to confirm scope, details of analysis and overall requirements of the study.
2. Consult with the Township regarding any proposed construction project in the study area.

TASK II. FIELD DATA COLLECTION

1. Conduct manual counts for the weekday morning (6:00-9:00 A.M.) and weekday evening (2:00-6:00 P.M.) peak hour time periods at the following intersections:
   - Horseshoe Road (SR 1003) & Mount Sidney Road (SR 1005);
   - Horseshoe Road (SR 1003) & Existing Access (Student Parking);
   - Horseshoe Road (SR 1003) & Existing Access (Staff/Visitor Parking);
   - Horseshoe Road (SR 1003) & Existing Access (District Admin Access);
   - Horseshoe Road (SR 1003) & Existing Access (Overflow Parking Access);
   - Mount Sidney Road (SR 1005) Existing Access (Parent drop-off/pick-up);
   - Mount Sidney Road (SR 1005) Existing Access (Bus Loop);
   - Internal Access Drive and proposed Middle School Connection.
2. Describe the external road system in the study area as defined by the intersections listed in Task II.
3. Measure the existing sight distances at the proposed access drive location in accordance with PennDOT sight distance measurement methodology (10 feet back for driveways at a driver's eye height of 3.5 feet above the proposed elevation at this point per the site plan). Confirm the access drive meets PennDOT's desirable sight distance values for the posted speed limit, the grade of the road per the site plan and the type of vehicle utilizing the access point if truck percentages at the access drive exceed 5%.

TASK III. EXISTING & BASE YEAR VOLUME DEVELOPMENT

1. Develop Existing Condition traffic volumes for the intersections listed in Task II.
2. Determine the projected increase in traffic at the study area intersections due to background growth, based on the methodology outlined in the Assumptions section of this proposal and supplied by the PennDOT Bureau of Planning and Research (BPR).
3. Based on discussions with the Township, determine the projected increase in traffic in the study area due to developments which are not currently operating but which will be operating by the build-out year for the above-referenced project.
4. Develop 2022 and 2032 Base Condition traffic volumes for the intersections listed in Task II.

TASK IV. TRIP GENERATION/DISTRIBUTION AND PROJECTED VOLUME DEVELOPMENT

1. Determine the trip generation of the proposed development on a daily and peak highway hours basis utilizing the Institute of Transportation Engineers Trip Generation Manual.
2. Using trip distribution rates developed from an analysis of existing traffic patterns in the study area, distribute and assign the site-generated traffic to the driveways and the intersections on the local road network identified in Task II.1.
3. Determine 2022 and 2032 Projected Condition traffic volumes for intersections listed in Task II.

TASK V. ANALYSES

1. Conduct capacity analyses at the intersections identified in Task II. for Existing, Base, and Projected Conditions, and at the driveway intersections for Projected Conditions.
2. Compare Base Condition and Projected Condition LOS to determine the traffic impact at the study area intersections attributable to the site.
3. For roadways and intersections within the study area, determine roadway improvements necessary to mitigate the traffic impacts (if any) attributable to the site.
4. Conduct analyses to determine the need for (and, if necessary, the length of) separate turn lanes at the driveway intersections and the intersections identified in Task II. for Projected Conditions. Should the Township require that analyses be conducted for years between the opening and design years to determine when warrants are met, these analyses will be conducted on an out-of-scope basis.
5. Conduct traffic signal warrant analyses based on peak hour and four-hour traffic volumes at any deficient unsignalized intersections identified in Task V. for Base and Projected Conditions. It should be noted that PennDOT requires that other warrants be satisfied prior to approving a traffic signal, however, peak and four-hour warrants provide a basis for evaluating the need to investigate further warrants. If required by PennDOT and directed to do so by the client, the subconsultant will complete the additional data collection and perform the additional studies as a separate task on an out-of-scope basis.
6. For the proposed driveway location, conduct analyses to compare the existing (measured) sight distances to the applicable sight distance standards.

TASK VI. REPORT PREPARATION

- Prepare schematic figures illustrating the results of Tasks I-V.
- Prepare a report of findings discussing the results of Tasks I-V.
- Submit a draft report to Client for review.
- Schedule a conference call to discuss the results of the TIS.
- Submit the TIS to the Township for review.

TASK VIII. ALTERNATIVE ACCESS CONCEPT PLAN (AS NEEDED)

- In the event roadway improvements are warranted on the state route, a concept plan showing the necessary roadway improvements will be provided.

ASSUMPTIONS

This Agreement has been prepared under the following assumptions, which reflect the current understanding of the project:

- Development – The project involves the addition of a new Middle School on the site of their existing main campus. The new school is sized for a student capacity of 532.
- Access – The concept design of the access roads incorporates two internal connections to the existing on-campus roadway network.
- Transportation Impact Study (TIS) – The scope of the TIS was based on a conversation with Township Staff. A formal scoping memo will be submitted for approval.
- Highway Occupancy Permit (HOP) – Since the proposed access is to connect to an existing (on-campus) access point and the project is not proposed to modify any access point within the ROW for the state-maintained roadway, a PennDOT HOP will **not** be required for this project. This proposal does not include HOP plan preparation and submission or any submission to PennDOT.
- Study Area – It is assumed the study area will consist of the intersections identified in Task II.
- Study Years – The study outlined in this proposal is intended to address the traffic concerns during the Township's Land Development process. As such, an analysis of (1) existing conditions, (2) full build-out year conditions without the development, (3) full build-out year conditions with the development, (4) design year conditions without the development, and (5) design year conditions with the development. Therefore, this proposal includes the analysis of existing conditions, the opening year with and without the development and the design year with and without the development. The Township SALDO defines the design year as ten (10) years after the development is fully built and occupied. Assuming the development will open in 2022, the design year for this project would be 2032.
- Study Times – The subconsultant recommends that the following time periods be studied: weekday A.M. peak hour and weekday P.M. peak hour. Base (future "no-build")
- Conditions – The subconsultant will assume a background growth factor based on PennDOT statistics and U.S. census data. In addition, The subconsultant will include traffic due to the nearby developments in the vicinity of the proposed development.
- Trip Generation – The trip generation analysis for this study will be conducted utilizing the Trip Generation Manual, 10th Edition, 2017, from the Institute of Transportation Engineers (ITE).
- Submissions - This proposal covers the following: one TIS submission to the Township. There are no provisions for response letters or subsequent submissions. The subconsultant will correct any mathematical, analytical, or typographical errors in the study without further cost to the client. Any changes due to enlarged or changed scope, reviewer preference, or client preference will be performed on an out-of-scope basis.

Proposed Fee

K&W proposes to perform the additional services described herein for the lump sum fee of Seventeen-Thousand Eight-Hundred Forty Dollars and Zero Cents ($17,840.00) plus any reimbursable expenses incurred (as outlined on previously provided Exhibit C).

Authorization: In order to indicate your acceptance of these additional services and to authorize K&W to proceed with the work, please sign where indicated below and return one (1) copy to our office.

Initiated By: _____ March 18, 2019

J. Marc Kurowski, PE – President and CEO — Date

Accepted By: _____ _____

Authorized Client Representative – Printed Name — Title

_____ _____

Signature — Date