



Building a Better World
for All of Us®

January 4, 2022

Greg Minikel, PE
Engineering Division Manager
City of Manitowoc
900 Quay Street
Manitowoc, WI, 54220

Dear Mr. Minikel:

Short Elliott Hendrickson Inc. (SEH®) is pleased to submit this proposal for the preparation of a traffic study at three (3) intersections in the City of Manitowoc. Per the City's request each intersection is looked at as an independent study. In addition, a cost to execute all studies at the same point in time is included. Please review, and if this proposal is acceptable, this letter can be utilized as an exhibit for the agreement.

Project Understanding:

The City of Manitowoc is proposing to perform traffic studies at three (3) intersections. The following intersections are to be studied:

Dewey Street and S. 35th Street – Collect 16-hour turning movement counts (6:00am to 10:00pm) that classifies cars, trucks, and pedestrians. Perform a traffic signal warrant analysis and prepare a memo summarizing the collected data and findings/recommendations.

Calumet Avenue and S. 35th Street – Collect 16-hour turning movement counts (6:00am to 10:00pm) that classifies cars, trucks, and pedestrians. Utilize collected data to determine the need for modified left turn phasing and prepare a memo summarizing the collected data and findings/recommendations.

Calumet Avenue and S. 30th Street – Collect 16-hour turning movement counts (6:00am to 10:00pm) that classifies cars, trucks, and pedestrians. Utilize collected data to determine the need for modified left turn phasing and prepare a memo summarizing the collected data and findings/recommendations.

Scope:

Based on our understanding of the project, SEH will complete the following tasks:

Dewey Street and S. 35th Street

- Collect 16-hour turning movement counts (6:00am to 10:00pm). The counts will be collected utilizing video equipment. The count will include 3 vehicle classifications (passenger cars, small trucks, and large trucks) as well as pedestrians and bicycles. Final count data will be provided in standard Wisconsin Department of Transportation (WisDOT) format.
- Review latest 5-years of crash data at the intersection.
- Analyze traffic signal warrants based on collected data and existing geometrics.

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 6808 Odana Road, Suite 200, Madison, WI 53719-1137

608.620.6199 | 800.732.4362 | 888.908.8166 fax | sehinc.com

SEH is 100% employee-owned | Affirmative Action–Equal Opportunity Employer

- Create a Synchro/SimTraffic model to compare existing vs proposed conditions if warrants are met.
- Prepare a signal investigation study following WisDOT procedures. Study will include summary of analysis and findings as well as any potential recommendations.

Calumet Avenue and S. 35th Street

- Collect 16-hour turning movement counts (6:00am to 10:00pm). The counts will be collected utilizing video equipment. The count will include 3 vehicle classifications (passenger cars, small trucks, and large trucks) as well as pedestrians and bicycles. Final count data will be provided in standard WisDOT format.
- Review latest 5-years of crash data at the intersection.
- Analyze left turn phasing based on volume warrants by time of day.
- Create a Synchro/SimTraffic model to compare existing vs proposed conditions if a change in phasing is recommended.
- Prepare a memo summarizing the analysis and findings and discuss any potential recommendations.

Calumet Avenue and S. 30th Street

- Collect 16-hour turning movement counts (6:00am to 10:00pm). The counts will be collected utilizing video equipment. The count will include 3 vehicle classifications (passenger cars, small trucks, and large trucks) as well as pedestrians and bicycles. Final count data will be provided in standard WisDOT format.
- Review latest 5-years of crash data at the intersection.
- Analyze left turn phasing based on volume warrants by time of day.
- Create a Synchro/SimTraffic model to compare existing vs proposed conditions if a change in phasing is recommended.
- Prepare a memo summarizing the analysis and findings and discuss any potential recommendations.

Schedule:

At this time the official schedule for the study/studies have not been defined. It is anticipated that data collection will occur in Spring 2022. A draft study/studies will be completed within 3 weeks of collecting the traffic counts.

Fee:

The following is a breakdown of fees for the proposed scope:

Dewey Street and S. 35th Street

The lump sum fee for the proposed scope is **\$5,500**, including expenses and equipment.

Calumet Avenue and S. 35th Street

The lump sum fee for the proposed scope is **\$4,500**, including expenses and equipment.

Calumet Avenue and S. 30th Street

The lump sum fee for the proposed scope is **\$4,500**, including expenses and equipment.

If all studies were to be completed at the same time the lump sum fee for the proposed scope is **\$11,500**, including expenses and equipment. That is a reduction of \$3,000 from performing each study at different times.

Greg Minikel, PE
January 4, 2022
Page 3

Thank you for the proposal request. I look forward to discussing our proposal with you. Please let me know if you need any additional information. I can be contacted directly at 608.772.0140 or jwoller@sehinc.com.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

A handwritten signature in black ink, appearing to read 'J Woller', with a stylized flourish at the end.

Josh Woller, PE
Project Manager
(Lic. WI, IL, IN, MI)

jmw

[https://sehincazure-my.sharepoint.com/personal/jwoller_sehinc_com/documents/desktop/proposals/city of manitowoc traffic studies proposal.docx](https://sehincazure-my.sharepoint.com/personal/jwoller_sehinc_com/documents/desktop/proposals/city%20of%20manitowoc%20traffic%20studies%20proposal.docx)