



Stantec Consulting Services Inc.  
2335 Highway 36 West, St. Paul MN 55113

January 4, 2018

Ms. Shelley Pauly  
20221 Sand Creek Drive  
Jordan, MN 55352

**Reference:** TH 169 Corridor Study  
Stantec Project No.: TBD

Dear Ms. Pauly,

**Background**

Sand Creek Township is seeking professional engineering services for a special study of the TH 169 Corridor within Sand Creek Township to evaluate the corridor needs, and to provide preliminary concepts for improved safety and usability for users under the existing conditions and considering a 20-yr potential growth scenario in this high traffic commercial district within the Township.

Sand Creek Township has been awarded a \$100,000 Economic Development Incentive grant from the Scott County Community Development Agency (CDA). This grant requires a local 2:1 match, which has been approved by Sand Creek Township and Scott County in the amounts of \$12,500 from the Township and \$37,500 from the County. This is based on a proposed project budget of \$150,000.

**Scope of Services**

Below is the anticipated scope and budget for the study.



## Scope and Fee Estimate – TH 169 Corridor Study – Sand Creek Township

### Scope Overview (see detailed project scope for further information)

Project Management	\$10,000
• Manage consultant staff for project delivery	
• Correspondence and meetings with owner, agencies, and stakeholders for project input and updates	
Base Mapping/Data Gathering	\$5,000
• Environmental GIS Layers (Wetlands, floodplains, bluff lines, etc.)	
• Land Use GIS Layers	
Public Involvement	\$14,000
• Meeting with Businesses	
• Meeting with Residents	
• Other outreach (surveys, website postings, etc.)	
Traffic Analysis	\$37,000
• Existing Traffic Counts (including turning movements and truck counts)	
• Traffic Analysis	
◦ Gap analysis	
◦ Safety analysis	
◦ Data collection	
◦ Analyze 3 alternatives	
Geometric Design Development	\$62,000
• Develop concept level designs for 3 alternatives	
• Conduct design workshop with state agency, local, and peer design team	
• Develop critical cross section (vertical alignment) for 3 alternatives	
• Provide construction limits and rough earthwork to demonstrate feasibility of 3 alternatives	
• Develop order of magnitude cost estimates for 3 alternatives	
• Outline various potential funding sources	
Report	\$22,000
• Write a summary report of the findings	
• Address comments from agencies	
<b>Total</b>	<b>\$150,000</b>

### Potential Scope Additions

- Topographical surveys
- Research and applying for project funding
- Study or assessment of hydrology of hydraulics



Ms. Shelley Pauly, Township Clerk  
Reference: TH 169 Corridor Study

January 4, 2018  
Page 3 of 3

**Schedule**

If approved at the January 4, 2018 Township Board Meeting, we can provide deliverables by December 31, 2018, as requested by the CDA in the grant application process.

**Compensation**

We propose to complete the work scope above under the Master Services Agreement (dated March 3, 2016) between Sand Creek Township and Stantec for an hourly, not to exceed, fee of \$150,000. Work beyond the scope listed above can be completed on an hourly basis according to our approved rate schedule.

We thank you for the opportunity to provide these services and if you have questions, please call Pat McGraw at (651) 967-4655 or me at (651) 604-4735.

Respectfully,

**STANTEC CONSULTING SERVICES INC.**

Kyle Renneke, P.E.  
Township Engineer  
Phone: (651) 604-4735  
Fax: (651) 636-1311  
[Kyle.Renneke@stantec.com](mailto:Kyle.Renneke@stantec.com)

Pat McGraw, P.E.  
Associate, Senior Project Manager  
Phone: (651) 967-4655  
Fax: (651) 636-1311  
[Pat.McGraw@stantec.com](mailto:Pat.McGraw@stantec.com)

Attachment: Project Scope and Budget  
c: Pat McGraw, Stantec

**Authorization to Proceed:  
Township of Sand Creek**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Chad Sandey, Chairman of the Board

## Sand Creek Township – TH 169 Corridor Study – Stantec Scope of Work

### 1. Project Management: [\$10,000]

This task is to manage Consultant staff and project delivery to deliver the tasks within scope, on time, within budget, meeting client and industry standards of care, and in coordination with Township. Invoices will be submitted monthly with labor hours broken down by task. At project completion, the following will be provided to both Sand Creek Township and to Scott County: two (2) hard copies and one electronic copy of the final report, all traffic counts, any synchro model files, CAD files and excel spreadsheet files of all final cost estimates prepared for the design alternatives upon completion of the Study

### 2. Base Mapping/Data Gathering: [\$5,000]

- a. Data collection: Review readily available geographic information. It is anticipated that review of information available on the following agencies web sites will be conducted: Scott County, Sand Creek Township, MPCA, U.S. Army Corps of Engineers, MnDOT and MnDNR. Telephone and/or email contact will also be made with each of these agencies to establish a point of contact for the project and to identify any additional available information.
- b. Draft base map: The information gathered under Task 1.a. will be mapped as unique GIS and or CADD (AutoCAD) layers.
- c. Agency review of base mapping: The draft base mapping will be emailed as a PDF to the agencies noted under Task 1.a. for comment. Agencies will be provided fifteen days for comment.
- d. Final base map: The base mapping will be revised to reflect any pertinent information received through Task 1.c. After incorporating any applicable information, the base mapping will be deemed final.

### 3. Public Involvement: [\$14,000]

- a. Meeting with Businesses: Stantec will hold an on-site meeting with adjacent businesses with business specific logistical concerns such as By The Yard, Cemstone Concrete Products, Herman's Landscape Products, Producers Choice, Noble RV of Minneapolis, Sport Wheels, Shakopee Mdewakanton Sioux Community, Union Pacific Railroad and Minneapolis Southwest KOA. The Sand Creek Township Board will be apprised of the meetings in advance to allow Board member attendance as desired. Up to nine (9) meetings will be held to discuss the individual business' history of transportation functionality or safety issues as well as their current visions for reconfiguration or expansion of their operations, or desires for improved accommodations. Stantec will provide a record of each meeting.
- b. Public open house: One open house will be facilitated to gather general public concerns regarding the existing transportation system and suggested improvements. Stantec will prepare and distribute a project flier and meeting invitation approximately four weeks prior to the meeting. The flier will establish the project goals or objectives, provide project leadership contact information and serve as the invitation for the open house. Stantec will prepare a summary of the input received through the open house. It is anticipated that the SCALE Regional Training Facility, Minnesota Valley Electric or public library, located in Jordan may be utilized at no cost to the project.
- c. Project Website: Stantec will provide project materials to the County and/or Township in a website compatible format upon request. Development of special materials for website use is not anticipated.

4. Traffic Analysis: [\$37,000]

- a. Traffic data collection: 48-hour turning movement and heavy vehicle counts will be collected at the following intersections:
  - i. US 169 & Bluff Drive
  - ii. US 169 & West 166<sup>th</sup> Street
  - iii. US 169 & Jordan Avenue
  - iv. US 169 & CR 65/173<sup>rd</sup> Street West
- b. Safety Analysis: Stantec will utilize the Minnesota Crash Mapping Tool to identify historic corridor or intersection areas of concern. Relevant input received from routine users of the roadway current system will also be addressed. The affect geometric concepts may have on the identified safety concerns will be quantified or qualified in the final report.
- c. Previously compiled traffic data and analysis: The County will provide all traffic data collected and analysis performed in support of planning and design efforts associated with the intersection of US 169 & CR 14.
- d. Traffic reassignments: For each conceptual geometric design alternative traffic will be reassigned from the existing intersections. Rationale for reassignments will be documented in the final report.
- e. Traffic analysis: Synchro will be utilized to analyze traffic at the existing at-grade intersections. Analysis will be on a node to node basis. Conceptual alternatives will be analyzed on a node by node basis using Synchro as well. Conceptual alternatives will be evaluated under current and projected (20-year) traffic conditions. If roundabouts are proposed, RODEL will be utilized to for capacity analysis. VISSM or other tools may be utilized as the scenario may demand.

5. Geometric Design Development: Once traffic, safety and potentially other needs have been identified, three conceptual geometric alternatives will be developed. [\$62,000]

- a. Develop concepts:
  - i. Designer workshop: With the existing condition safety and traffic analysis, business meetings and open house completed the project needs will be identified. Up to three unique concepts will be developed to address the needs. Initial concepts will be developed through a workshop. Lead designer, Tom Fidler will work with senior level transportation engineers, railway engineers, traffic engineers and transportation planners to identify potential solutions. MnDOT staff from the Geometric Design Support Unit and Metro South Area will also be invited. Additionally, due to their recent efforts immediately north of the project, staff from WSB & Associates staff will also be invited to participate. It is anticipated that up to six initial concepts may be developed.
  - ii. Township & County workshop briefing: Township and County staff will be briefed on the results of the designer workshop.
  - iii. Final set of alternatives: Following the township & county workshop the designer group will determine the final three alternatives.
- b. Develop concept level designs for 3 alternatives
- c. Develop critical vertical alignments for 3 alternatives

## Sand Creek Township – TH 169 Corridor Study – Stantec Scope of Work

- d. Provide construction limits and rough earthwork to demonstrate feasibility of 3 alternates
  - e. Identify and where feasible quantify property and environmental impacts of 3 alternates. Note: Hydrological or hydraulic analysis will not be conducted
  - f. Develop engineer's opinion of probable cost: Most recent year bid abstracts from MnDOT will be used to set unit prices for curb and gutter, pavement and earthwork. Pavement quantities will be based on the pavement width multiplied by an assumed depth. Anticipated retaining walls will be estimated on a square foot of wall face basis. All other ancillary items will be accounted for using a contingency.
6. Report: [\$22,000]

The primary report components will include an executive summary; study purpose; project needs (traffic and safety needs); brief synopsis of the need for further hydrologic/hydraulics study; public involvement summary; design workshop summary; alternatives selection summary; comparison of alternatives; and next steps section, including suggested interim or prioritized projects.

- a. Draft report: The initial complete draft report will be submitted to the Township and County for review.
- b. Revised draft report: The report will be revised and resubmitted to the County and Township, and MnDOT.
- c. Final report: The report will be revised and distributed to the County, Township and MnDOT as final.

*d. Next steps; Grant opportunities*

Potential scope items not included:

- a. Topographical surveys
- b. Researching and applying for project funding
- c. Study or assessment of hydrology or hydraulics