### To: HONORABLE MAYOR AND CITY COUNCIL.

FROM: Dave Maroney, Director of Economic Development and Planning.

SUBJECT: Safety Assessment (Highway 52).

**DATE:** April 10, 2014.

### BACKGROUND.

On January 15<sup>th</sup> Aaron and I met with representatives from MnDOT concerning a request by various property owners to preserve right-in/right-out access to Highway 52 from CSAH 24 – see the accompanying message from Julie Tietz dated January 17, 2014. From that correspondence forward we have been working with MnDOT officials and others to develop a scope of services and fee proposal to "study" alternatives to retain access to Highway 52 from CSAH 24.

MnDOT and Short Elliot Hendrickson, Inc. (SEH) have agreed to the terms represented by the attached *Safety Assessment (March 25, 2014)*. The Public Works Commission has reviewed the work tasks outlined by the *Safety Assessment* and recommend that the Mayor and City Council do the same. In the event that the Council decides to approve the *Safety Assessment* as proposed, MnDOT and the City of Cannon Falls would share equal responsibility for payment of the \$33,436 fee (\$16,718 each).

The Public Works Commission and Staff have asked MnDOT representatives to also consider and respond to five (5) questions – see my memorandum dated April 7, 2014. We hope that the questions can be discussed and answered by MnDOT personnel on April 15<sup>th</sup>.

### REQUESTED COUNCIL ACTION.

The City Council is asked to review and discuss the *Safety Assessment* and then decide whether to authorize SEH to proceed.

### **Dave Maroney**

From: Tietz, Julie (DOT) < Julie.Tietz@state.mn.us>

**Sent:** Friday, January 17, 2014 12:43 PM

**To:** Aaron Reeves; Dave Maroney; Barnes, Michael (DOT); Vlaminck, Jeff (DOT)

Cc:Ledvina, Deb (DOT)Subject:Meeting Summary

### Good Afternoon,

Thank you all for meeting on Wednesday to discuss the issue. It sounds like both the City and MnDOT would like to work collaboratively moving forward to meet everyone's interests. I outlined the main points out of the meeting below. Please let me know if I have missed anything.

- Both the City and MnDOT agree safety on Highway 52 is important
- Further study is needed on a right-in, right-out at CASH 24
- The study will be led by Cannon Falls and their City Engineer
- MnDOT has done some preliminary design work on right-in/right-out and has agreed to share that information with the City
- The costs associated with the study will be shared 50/50 with the City and MnDOT
- If a safe right-in/right-out is warranted after the study, it will be considered a stand-alone project
- The City and District 6 will work together to develop options for business signing to mitigate impacts

As far as next steps, it sounded like the City is going to notify the council and take the lead on the study process. I am in the process of drafting a response for the area business owners on these next steps.

Thank you,

### Julie Tietz

Deputy Transportation Ombudsman Minnesota Department of Transportation 395 John Ireland Blvd. St. Paul, MN 55155 651-366-3064 http://www.dot.state.mn.us/ombudsman



## Safety Assessment TH 52 Access at existing CSAH 24 Scope of Work and Deliverables 3/25/14

The purpose of this project is to evaluate the viability of maintaining a right turn exit from and entrance to north and southbound TH 52 at existing CSAH 24 (315<sup>th</sup> Street).

The work scope identifies estimated task duration. The duration is the time estimated for that task work to be completed and does not include MnDOT review time.

### 1.0 - Project Management

Under this task, SEH will manage the project scope, schedule and budget. This includes but is not limited to the following subtasks.

- 1.1 In addition to identified task specific meetings, up to three additional meetings to address issues that may arise. These meetings may be in person or by conference call.
- 1.2 Preparing project invoices

### **Deliverables**

- Meeting agendas and minutes
- Invoices

### **Estimated Duration**

Throughout the project

### 2.0 - Data Collection

Collect and gather available data from MnDOT to use as the basis for this evaluation. This includes but is not limited to the following.

- 2.1 Peak hour turning movement counts to use as a basis for redistributing the interchange design volumes.
- 2.2 Design hour volumes from the interchange.
- 2.3 Interchange design.
- 2.4 2008 Corridor Project Tech Memos 5 and 6.
- 2.5 Hospital traffic study.
- 2.6 CSAH 9 gap study data.

MnDOT, at their discretion may collect current traffic volume data in or near the project area.

### Deliverables

None

### **Estimated Duration**

2 weeks

### 3.0 - Traffic Distribution

Using available data, prepare PM Peak Hour turning movements for use in evaluation.

- 3.1 Work with MnDOT to review design year traffic forecasts to assure that the forecasts include the new hospital's traffic and is also consistent with the City's Land Use Plan. Adjust forecasts if needed.
- 3.2 Prepare PM Peak Hour turning movements for the following years.
  - 3.2.1 Opening year, assume 2015.
  - 3.2.2 Up to 2 additional years as determined by findings from opening year analysis. Likely to be 2020 and 2025.
- 3.3 Prepare PM Peak Hour turning movements for the following intersections.
  - 3.3.1 Northbound TH 52 at 315<sup>th</sup> Street
  - 3.3.2 Southbound TH 52 at 315<sup>th</sup> Street
  - 3.3.3 TH 52 / CSAH 24 East Ramp
  - 3.3.4 TH 52 / CSAH 24 West Ramp
  - 3.3.5 315<sup>th</sup> Street / 65<sup>th</sup> Avenue
- 3.4 Meet with MnDOT to review PM Peak Hour turning movements.

### **Deliverables**

- PM Peak Hour turning movements
- Meeting agenda and minutes

### **Estimated Duration**

3 weeks

### 4.0 - Safety Analysis

Determine the overall crash related impacts of allowing the additional access to and from TH 52.

- 4.1 With assistance from MnDOT, identify similar right-in / right-out locations in Minnesota and determine their crash rate, severity rate, crash location, and crash type.
- 4.2 Study crash patterns relative to the existing right-in / right-out locations to differentiate the crash locations as relative to the right-in, right-out, and the interchange entrance and exit.
  MnDOT may review actual crash reports for more detailed analysis.
- 4.3 Calculate intersection crash and severity rates for two roadway networks.
  - 4.3.1 The no-build network includes the two CSAH 24 ramp intersections and the intersection of 315<sup>th</sup> Street / 65<sup>th</sup> Avenue.
  - 4.3.2 The build network, which includes the intersections above plus the right-ins / right-outs at 315 Street, with reassigned traffic.

- 4.3.3 From the crash and severity rates, calculate the total crashes expected for the two networks.
- 4.4 Meet with MnDOT to review crash results.

### **Deliverables**

- Expected crash results
- Meeting agenda and minutes

### **Estimated Duration**

3 weeks

### 5.0 - Concept Development

Develop concepts for the right-in / right-out access. This may include full right-in / right-out access for north and southbound TH 52, or based on analysis, a modified version with limited access. Determine the appropriate lengths of a right turn lane, acceleration lane, exit ramp, and entrance ramp based on current MnDOT guidance, the TH 52 traffic speed, and the volume of traffic. Also include interchange/access spacing recommendations and design standards from MnDOT Access Management Manual, MnDOT Road Design Manual, the AASHTO Policy on Geometric Design of Highways and Streets, and MnDOT research / literature search.

- 5.1 Prepare drawings of up to 3 concepts.
  - 5.1.1 Right turn lane exit with acceleration lane entrance.
  - 5.1.2 Modified interchange type entrance exit to better define an exit point.
  - 5.1.3 Auxiliary exit lane with acceleration lane entrance.
- 5.2 Provide up to 2 revisions of each concept as directed by MnDOT.

### **Deliverables**

Concept drawings

### **Estimated Duration**

2 weeks

### 6.0 - Operational Analysis

Use the Highway Capacity Manual to evaluate the traffic operations with regard to merging onto and exiting from TH 52. MnDOT may conduct a gap study at this location based on a previous gap study at CSAH 9.

6.1 Conduct the analysis for each concept and compare.

### **Deliverables**

• Traffic operations comparison

### **Estimated Duration**

1 week

### 7.0 - Summary

Summarize the findings from above.

Safety Assessment March 25, 2014 Page 4

- 7.1 Prepare a Technical Memorandum with Executive Summary of the study findings and analysis.
- 7.2 Submit a draft to MnDOT and the City for review and comment.
- 7.3 Prepare a final Technical Memorandum based on comments.
- 7.4 Meet with the City Council and Public Works Committee to present the study findings.

### **Deliverables**

- Draft Technical Memorandum
- Final Technical Memorandum

### **Estimated Duration**

2 weeks

# TH 52 Access Safety Assessment

### MnDOT / Cannon Falls Cost Proposal

		77	П	П										\$32,095	436	
10	SUBTOTAL								\$4.344					\$3	\$33,436	
OTHER COSTS (\$)	(\$3/hr)	\$126	930	\$114	\$174	\$96	\$30	\$111	7000	1000						
	SEH Expenses	\$360	\$0	\$120	\$120	\$0	\$0	\$60		\$660				Same Albertain		
SEH PERSONNEL AND HOURS	SUBTOTAL	42	10	38	58	32	10	37	227		\$11,222	\$17,955	\$32,095			
	Clerical	4						9	10		\$23.55		\$673.53	· · · · · · · · · · · · · · · · · · ·		
	Design Engineer					24			24		\$48.65					
	Analysis Engineer		8	24	42	2		γ (α	51 90	30 30 30 30 30 30 30 30 30 30 30 30 30 3	\$44.53			-		
	Senior Engineer			6	3	,	1		4	8	\$49.78		\$103.54			
	Project Manager / Senior Engineer	38	2	(,	7	16	4	2	15	89	\$64.94	\$5,779.00	\$1,502.71	410,025.00		
# Nocompany	y Assessment	Task	1.0 Project Managemen.	2.0 Data Collection	3.0 Traffic Distribution	4.0 Safety Analysis	5.0 Concept Development	6.0 Operational Analysis	7,0 Summary	SEH Total Staff Hours SFH Total Other Costs	Rate/hour	Labor Total Overhead (1.6)	Fee (10%)	SEH Total Staff Cost	SEH Total Staff Costs SEH Total Other Costs	PROJECT TOTAL COST



To: Jeff Vlamick, MnDOT District 6.

FROM: Dave Maroney, Director of Economic Development and Planning.

SUBJECT: April 15, 2014 City Council Agenda - Safety Assessment (March 25, 2014 Version).

**DATE:** April 7, 2014.

Staff are hearing from several Councilors and citizens and we believe that it will be helpful if MnDOT representatives can be prepared to respond to the following questions on April 15<sup>th</sup>:

- 1. SEH has provided a timeline (*Estimated Duration*) to complete their work. In the event that the City Council approves the proposed Safety Assessment on April 15<sup>th</sup>, what is MnDOT's anticipated schedule to: (a) authorize the Safety Assessment to begin (including the cost-share agreement); (b) review and accept the deliverables submitted by SEH (Sections 3.0, 4.0, 5.0 and 6.0); and (c) approve or reject the final Technical Memorandum (Section 7.0)?
- 2. We understand that the two existing signals are scheduled for removal in 2014 and that MnDOT is unwilling to amend this contract provision. Consequently, what is the latest date that the existing signal at CSAH 24 will be removed and the access closed?
- 3. MnDOT has stated if a right-in and/or right-out access is to be permitted and constructed at CSAH 24 that it will be considered a *separate project outside of the current interchange project* what exactly does that mean to the City of Cannon Falls in terms of engineering, finance, right-of-way and construction?
- 4. In the event that MnDOT and the City of Cannon Falls agree to a plan that provides for the existing access at CSAH 24 to be replaced, does MnDOT anticipate that the new access will be operational in 2014, next year or by 2016?
- 5. In the event that access to TH 52 is permitted at or near the existing CSAH 24 intersection, does MnDOT believe that an overpass would ever be constructed at this location?

Let me know if you have any comments, additional questions and/or suggestions. Thanks!

To: Jeff Vlaminck, MnDOT District 6.

FROM: Dave Maroney, Director of Economic Development and Planning.

SUBJECT: April 15, 2014 City Council Agenda – Safety Assessment (March 25, 2014 Version).

**DATE:** April 7, 2014.

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District 6 Traffic Office has reviewed, provided inputs and accepted the current scope of work for the study. MnDOT has made a commitment to pay 50% of the total study cost (currently at \$33,436). If the City approves the scope of work and agrees to pay the remaining 50% of the total cost, MnDOT can execute a contract between the State, City and the consultant and authorize the study to begin by May 15th.

(b) review and accept the deliverables submitted by SEH (Sections 3.0, 4.0, 5.0 and 6.0);

MnDOT would like up to five working days to review and comment on each of the intermediate stages. Each stage will require unique analyses and recommendations which will take time to review, process, and comment.

and (c) approve or reject the final Technical Memorandum (Section 7.0)?

For the final stage, the Draft Final Report, MnDOT would like 10 working days for review and comment and consent on agreement.

2. We understand that the two existing signals are scheduled for removal in 2014 and that MnDOT is unwilling to amend this contract provision. Consequently, what is the latest date that the existing signal at CSAH 24 will be removed and the access closed?

The contract calls for closing the intersection at CSAH 24 when the new interchange is opened. We do not have specific dates in the contract for this work, but the contractor's schedule indicates that it may take place in late August or early September. This date may change as the project progresses.

3. MnDOT has stated if a right-in and/or right-out access is to be permitted and constructed at CSAH 24 that it will be considered a *separate project outside of the current interchange project* - what exactly does that mean to the City of Cannon Falls in terms of engineering, finance, right-of-way and construction?

This would be a City led project. The City would be responsible for engineering, finance, right of way and construction. It would have to be done under an agreement with MnDOT oversight. As you know the current project took several years to develop with input from stake holders and the public.

4. In the event that MnDOT and the City of Cannon Falls agree to a plan that provides for the existing access at CSAH 24 to be replaced, does MnDOT anticipate that the new access will be operational in 2014, next year or by 2016?

That really depends on the result of the study and what the city decides to pursue. What will project be? right in? right out? accel/decal or auxiliary lanes? Will it require additional right of way?

2014 is unlikely even 2015 seems very aggressive to me.

5. In the event that access to TH 52 is permitted at or near the existing CSAH 24 intersection, does MnDOT believe that an overpass would ever be constructed at this location?

MnDOT has taken a performance based approach to projects. We will wait to construct components until they are needed for the performance of the trunk highway. The need for the overpass will be driven by increasing traffic demands. The bridge will remove local crossing trips form the adjacent interchange relieving the demands on the interchange. We have not established any specific criteria for "triggering" the need for the overpass and is something that would be good to establish.

Let me know if you have any comments, additional questions and/or suggestions. Thanks!