

# Council Communication

Office of the City Manager

Date: February 24, 2014

Agenda Item No. 55

Roll Call No. <u>14-0333</u> Communication No. <u>14-072</u>

Submitted by: Jeb E. Brewer, P.E.,

City Engineer

### **AGENDA HEADING:**

On approving Traffic Safety Committee recommendation to remove the temporary four-way stop at the intersection of 50th Street and Meredith Drive and return it to a two-way stop condition.

# **SYNOPSIS:**

Recommend approval of Alternate A which is the Traffic Safety Committee recommendation to remove a temporary four-way stop at the intersection of 50th Street and Meredith Drive and return it to a two-way stop condition, or Alternate B which is the denial of the Traffic Safety Committee recommendation, and have the temporary four-way stop at 50th Street and Meredith Drive be made permanent, and amend Chapter 114 of the Municipal Code regarding traffic regulation changes to add Meredith Drive at 50th Street as a location of a four-way stop intersection.

### **FISCAL IMPACT:**

Amount: Minor costs for signing modifications.

Funding Source: 2013-2014 Operating Budget, Page 80 Engineering Department Traffic &

Transportation - Sign Installation and Maintenance, EG062080

### **ADDITIONAL INFORMATION:**

As part of the Beaver Avenue Widening Project between Aurora Avenue and Lower Beaver Drive, Beaver Avenue was closed to traffic during much of the 2012 construction season. Because of expectation of additional traffic flows on Meredith Drive and on 50th Street during this closure, a temporary four-way stop was installed at the intersection of 50th Street and Meredith Drive in April 2012. This traffic change was intended to be temporary for the duration of the Beaver Avenue construction, and was planned to be changed back to a two-way stop once Beaver reopened to traffic.

The construction project was completed and Beaver Avenue was reopened to traffic in late 2012. At that time, Des Moines City Council received a request that the four-way stop at 50th and Meredith be made permanent. City Council directed that the four-way stop stay in place until staff could complete a traffic study for this location, in order to recommend what the permanent traffic control for this intersection should be. City staff identified that this study should be completed after (1) the traffic signal at Beaver and Aurora was installed, and (2) the public schools were fully back in session. Because of this, the study was not conducted until September of 2013.

The Manual on Uniform Traffic Control Devices (MUTCD) is the approved document that identifies the procedure to follow in determining when multi-way stop control is warranted. A stop sign is an effective traffic control device when used at the proper place under appropriate conditions. Stop signs are used at intersections to assist drivers and pedestrians in determining who has the right-of-way. Installing stop signs where they are not needed can cause significant disruption of traffic flow and increase the intersection delay for drivers. This delay increases travel time and annoys drivers. The MUTCD indicates that multi-way stop control is considered at intersections when one of the following conditions (also known as warrants) are met: (1) when traffic volumes on all approaches are approximately equal, (2) where sight distance is severely restricted, or (3) at lower volume intersections that have a high incidence of collisions of a type potentially preventable by the installation of a multi-way stop.

Drivers frequently violate stop signs if they are installed in unwarranted locations. Because of this, stop signs should only be placed if they meet the MUTCD warrants.

In September and October 2013, Staff conducted a study to see how the intersection of 50th Street and Meredith Drive compares to the warrants presented in the MUTCD. The intersection of 50th Street and Meredith Drive does not meet warrants 1, 2, or 3 for installation or retention of a multi-way stop. Intersection delays are over four (4) times greater for all drivers with the four-way stop compared to the previous two-way stop condition. There is no demonstrated high crash history at this location. Therefore, a multi-way stop is not recommended for this intersection. It was also noted that during the temporary installation of the four-way stop, there was no significant increase in accidents at the intersection.

On December 11, 2013, City staff presented the study results to the Traffic Safety Committee at a meeting held at the Meredith Drive Reformed Church, which is in the Meredith Neighborhood. The Traffic Safety Committee normally meets at City Hall, but in order to get maximum public input, the meeting was held in the neighborhood. There were approximately 60 residents and interested parties in attendance. A summary of comments received before and after that meeting from residents regarding this four-way stop is attached with the roll call. Based on comments made, it appeared the majority of those in attendance requested the four-way stop to remain in place. Traffic Safety Committee members heard the comments from the residents and the results of the study presented from Traffic and Transportation Engineering Staff and voted to support the staff recommendation to remove the temporary four-way stop and return it to the original two-way condition that it was prior to construction.

If Alternative B is chosen, the following Municipal Code changes will be put into place.

Sec. 114-319.03. Location of four-way stop intersections.

(52) Not Used Meredith Drive at Fiftieth Street.

Sec. 114-2287.05 Meredith Drive.

Meredith Drive, from the west line of Beaver Avenue to the east line of 50th Street, stop. Meredith Drive, from the west line of 50th Street to the east line of Merle Hay Road, stop.

# **PREVIOUS COUNCIL ACTION(S):**

Date: November 19, 2012

Roll Call Number: 12-1789

<u>Action</u>: <u>From</u> Council Member Halley Griess to speak regarding stop signs at the intersection of 50th Street and Meredith Drive. Moved by Griess to maintain the signs on an interim basis; refer to the City Manager to conduct a traffic study and report back to Council. Motion Carried 7-0.

# **BOARD/COMMISSION ACTION(S):**

Board: Traffic Safety Committee

Date: December 11, 2013

Resolution Number: N/A

<u>Action</u>: A motion was made by Scott Galenbeck to approve staff recommendation for removal of the temporary four-way stop and return to the original two-way stop condition; seconded by Jim Windsor. Motion passed.

# ANTICIPATED ACTIONS AND FUTURE COMMITMENTS: NONE

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