## Staff Report

# STOP SIGN REQUESTS FOR INTERSECTIONS

January 11, 2011

#### Intersection of Wilder Boulevard and Clemens Boulevard

On November 9, 2010, City Council referred a petition requesting that stop signs be placed at Wilder Boulevard and Clemens Boulevard. Currently the intersection is uncontrolled. Staff then initiated an engineering study of the intersection, in accordance with Federal guidelines, for creating a Two-Way Stop condition. Data collection for this study included intersection sight distances (geometrics) and a 5-year crash history.

This intersection is in a low-density residential section of town, in which the surrounding properties are all single family homes. A site inspection to determine the available sight distances of each approach resulted in critical approach speeds significantly higher than what would be required for the installation of stop signs and higher also for the installation of yield signs.

The Critical Approach Speed is the maximum speed a vehicle can be traveling based upon the driver's ability to see an oncoming vehicle, react to it, and come safely to a stop. If this speed is calculated to be between zero and approximately 15 miles per hour (MPH), a stop sign is typically justified. If it is found to be between approximately 16 and 20 MPH, a yield sign may be justified. At any higher speed, the intersection can operate safely uncontrolled. In the case of Wilder Boulevard and Clemens Boulevard, the Critical Approach speed ranged from 23-28 MPH, and therefore can remain uncontrolled.

A five-year crash history for Wilder Boulevard and Clemens Boulevard showed that there have been no reportable accidents. Staff also conducted a review of the City's comprehensive transportation plan and found that in future years Mortensen Road is anticipated to be extended over to North 500<sup>th</sup> Avenue ("County Line Road"). At that point, it is likely that Wilder Boulevard will connect to Mortensen Road, causing a significant change in traffic patterns for the neighborhood.

Once that connection is completed and undeveloped areas are filled in, more permanent traffic patterns will be established. It would be best at that time to revisit the installation of traffic control at the Wilder Boulevard and Clemens Boulevard intersection. In the future, if signs are warranted, they can be placed in a manner to reinforce right-of-way for the street that naturally becomes the through-street. Therefore, staff recommends that the intersection of Wilder Boulevard and Clemens Boulevard and Clemens Boulevard and Clemens Boulevard and Clemens Boulevard remain uncontrolled.

## Steinbeck Street and Dickinson Avenue Intersection

On December 12, 2010, the Mayor and City Council received an email request from a citizen regarding safety at the intersection of Steinbeck Street and Dickinson Avenue. The person requested two additional stop signs be added to the intersection, thereby making it an All-Way Stop condition. Currently, there is a Two-Way Stop condition stopping vehicles traveling north and south along Dickinson Avenue.

Staff was asked to provide a preliminary assessment of the situation with a recommendation on how to best proceed with the request. In order to change the intersection to an All-Way Stop, staff would conduct a warrant study following the Federal guidelines for stop signs. This involves the collection of various types of data including: five-year accident history, traffic volumes, approach speeds, and intersection geometrics.

After receiving the referral from Council, staff conducted a five-year accident history for the intersection, since this step can be done in the timeliest manner compared to the rest of the field related data collection. There were four accidents reported at the intersection of Steinbeck Street and Dickinson Avenue – two in 2010, and one each in 2009 and 2008. Upon review of the officer narratives provided in the police reports, all four accidents were related to drivers not yielding to the current stop signs. The incidents were related either to driving too fast for conditions, or simply not looking for cross traffic before proceeding into the intersection.

Since the threshold for creating an All-Way Stop condition, which is "five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation" was not met, staff would not recommend conducting a full warrant study given the first criteria was not close to being met. Staff recommends continued monitoring of the intersection for significant changes in safety; and in the interim, installing warning placards underneath the existing Stop Signs that read "Cross Traffic Does Not Stop".

### Additional Staff Comments

After reviewing the current conditions of both intersections, it was found that there is not enough justification at this time to install additional traffic control. It should be noted that this determination was based upon the Federal guidelines for traffic control devices, which are in place to promote the proper use of these signs, therefore ensuring safe and consistent use throughout the community and the nation.

