

**CITY COUNCIL COMMUNICATION 97-519  
OCTOBER 20, 1997 AGENDA**

**SUBJECT:**

**REQUEST FOR FOUR-WAY STOP AT  
NORTH UNION STREET AND  
SHERIDAN AVENUE**

**SUBMITTED BY:**

**HAROLD SMITH  
CITY ENGINEER**

**SYNOPSIS —**

A four-way stop request at North Union Street and Sheridan Avenue has been reviewed by staff and the Traffic Safety Committee and is recommended for approval.

**FISCAL IMPACT —**

N/A

**RECOMMENDATION —**

**Refer to Legal Department for preparation of ordinance revisions.**

**BACKGROUND —**

On September 22, 1997, the City Council received a request on behalf of the Union Park Neighborhood Association asking for a four-way stop at the intersection of North Union Street and Sheridan Avenue. By Roll Call No. 97-3258, City Council referred this item to the Traffic Safety Committee for review.

Staff has conducted a study of this location including a review of accidents, traffic volumes, speed information, and a field-check of the area. Traffic counts taken in October 1997 indicate volumes of 1,540 vehicles per day on Sheridan Avenue, and 1,025 vehicles per day on North Union Street. There have been four reported accidents since January 1994. All of these were right-angle type, three of which occurred in 1996. Speed data collected on Sheridan Avenue indicated an 85th percentile speed of 33 miles per hour. There is a six-foot offset in the Sheridan

Avenue pavement at this intersection.

This intersection is currently controlled by a two-way stop, with traffic on Sheridan Avenue having the right-of-way. Although both streets are considered local residential streets, they appear to serve somewhat as collectors for a larger neighborhood area.

The average right-angle accident rate for two-way stops on residential streets within Des Moines is approximately one accident every six years. This location has had four accidents since January 1994, which is considerably higher than the average rate.

Staff has reviewed the area and considers the intersection a potential candidate for traffic calming as this program develops. In the interim, a four-way stop is an appropriate measure to distinguish to motorists that Sheridan Avenue is not a desired through route through the area. Consideration was given to reversing the two-way stop so that Sheridan Avenue would stop for North Union Street. However, this would create similar difficulties for north-south traffic.

We have obtained information from the City of San Diego, which has adopted four-way stop warrants for residential areas based on a 50-point system. In comparing this location to their warranting process, it received 23 of the required 25 points to warrant a four-way stop.

The Traffic Safety Committee at its meeting on October 14, 1997, recommended approval of a staff recommendation for installation of a four-way stop based on the number of right-angle accidents and the desire to decrease non-local traffic. The following ordinance changes are needed to implement the installation of the four-way stop.

#### **SEC. 27-319.03. FOUR WAY STOP INTERSECTIONS– LOCATIONS DESIGNATED.**

The following intersections are hereby designated as four-way stop intersections. Stop signs shall be installed and maintained at the following intersections, and the driver of vehicles approaching these intersections from all directions shall stop in accordance with this chapter before entering the intersections:

(29a) North Union Street and Sheridan Avenue

#### **SEC. 27-1384. NORTH UNION STREET.**

North Union Street, from the south line of Wisconsin Avenue to the south north line of Hull Avenue Arthur Avenue —Stop.

North Union Street, from the south line of Morton Avenue to the south line of Hull Avenue — Stop.