

DEPARTMENT OF PUBLIC SERVICE

June 21, 2004

Roger H. Rouse Director

Mr. Gasper Cario President – Heatherwood Village Homeowner’s Association 743 Bolinger Rd. Rochester Hills, MI 48307

Telephone 248.656.4685 FAX 248.656.4758

Billing / Account Information 248.656.4688

Re: Heatherwood Village Traffic Study Request – Section 14

Engineering Services 248.656.4640

Dear Mr. Cario:

Pathways 248.656.4640

The City of Rochester Hills’ Traffic Division has reviewed your request to install 4-way “Stop Signs” at the intersections of Arlington & Bolinger and at Arlington & Whitney due to claims of excessive speeding within the subdivision. The warrants for the installation of traffic control devices, such as stop signs, are based upon the criteria as set forth by the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

Roads 248.656.4685

The following criteria are reviewed, as outlined by the MMUTCD, when analyzing warrants for “Stop Sign” installation:

Water / Sewer 248.656.4685

- Sight distance clearances – There are no existing corner sight clearance obstructions at the aforementioned intersections that adversely affect safe approach speeds.
• Traffic volume data - Traffic volumes are required to meet a minimum of 200 vehicles per hour for an 8-hour period of the day. The average vehicle per day (vpd) volumes and greatest 1-hour vehicle per hour (vph) volumes are as follows:

Intersection of Arlington & Bolinger

Table with 3 columns: Location, Daily Volume, Greatest 1-hr Vol. Rows include Arlington W of Bolinger, Arlington E of Bolinger, Bolinger N of Arlington, Bolinger S of Arlington.

Intersection of Arlington & Whitney

Table with 3 columns: Location, Avg. Daily Vol., Greatest 1-hr Vol. Rows include Arlington N of Whitney, Arlington S of Whitney, Whitney E of Arlington, Whitney W of Arlington.

City Hall General Information 248.656.4600

Pat Somerville Mayor 248.656.4664

The values fall below the required 200-vph for 8-hours of the day. The greatest 1-hour volumes **do not** meet 200-vph for even a one-hour period of the day.

- **Crash history data** - The intersection crash history requires that five (5) crashes, of types that are correctable with the installation of a 4-way "Stop Sign", must have occurred during a 12-month period. Based upon the attached crash history data, the warrants **are not** met. Traffic crash data was obtained during the period of January 1, 2001 through December 31, 2003, and revealed the following information:

<u>Intersection</u>	<u>Total # of Crashes 01/01/01 to 12/31/03</u>	<u># of Crashes During 12-month Period</u>
Arlington & Bolinger	5	4
Arlington & Whitney	0	0

Of the four (4) crashes that occurred over the 12-month period, two (2) were due to speeding vehicles running off road and hitting fixed objects, one (1) was due to a vehicle backing a trailer into a driveway, and finally one (1) was due to a vehicle failing to yield the necessary right-of-way to another. Only the last crash may have been corrected through the use of a 4-way "Stop Sign" control.

Additionally, speed data was collected along Arlington between Whitney & Whitney and again along Whitney between Parsons & Parsons. The 85<sup>th</sup> percentile speed, which means that 85% of the drivers are driving either at or below this speed, is used when performing traffic studies. The following is a summary of findings:

<u>Street</u>	<u>85<sup>th</sup> Percentile Speeds</u>		
	<u>EB</u>	<u>WB</u>	<u>Bi-directional</u>
Arlington	29-mph	29-mph	29-mph
Whitney	29-mph	25-mph	27-mph

These values indicate no unusual speeding problems within Heatherwood Subdivision, and are below the typical 85<sup>th</sup> percentile speeds within the City of Rochester Hills' residential streets. The typical 85<sup>th</sup> percentile speed along subdivision streets is 32-mph.

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After reviewing the information above, the determination was made that the required traffic warrants at the intersections of Arlington & Bolinger and Arlington & Whitney **are not** met for the installation of a 4-way "Stop Sign" control. However, the installation of advanced "Intersection Ahead" signs along northbound and southbound Bolinger would assist in alerting motorists of the approaching intersection with Arlington. If you are interested in having the City install the advanced "Intersection Ahead" signs, please submit the association's request in writing.

If you have any further questions or would like to learn about traffic calming measures such as speed humps, please feel free to contact me at (248) 841-2489. If you would like to pursue this matter further, you are welcome to request to be added to an agenda of the Advisory Traffic & Safety Board. Their meetings are held at City Hall on the second Tuesday of the month at 7:30 P.M.

Sincerely,

Paul G. Shumejko, P.E., PTOE  
Transportation Engineer

PGS/jfd

Attachments: One (1) copy of the traffic volume data, one (1) copy of the crash history data, and one (1) copy of the speed data

c: Roger H. Rouse, DPS Director  
Paul M. Davis, City Engineer  
Marc G. Matich, Traffic Technician  
Advisory Traffic and Safety Board Members  
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