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**City of Rochester Hills
Department of Public Service**

**Traffic Study Summary
Speed Study Request
Hunter's Creek Subdivision – Section 7**

September 30, 2005

Background

On April 4, 2005, the City of Rochester Hills' Engineering Department received a traffic survey request (see attached correspondence) from Ms. Jill Laubach, of the Hunter's Creek Homeowner's Association (HOA), regarding speeding concerns and cut through traffic within the subdivision.

Summary

The study included reviewing intersection sight clearance distances, placing speed/volume counters (at several agreed upon locations), and obtaining traffic crash data. The speed/volume data was collected from Tuesday, September 6 through Thursday, September 8, 2005 along Plum Ridge Drive (in front of house #672), along Antoinette (in front of house #400), and along Rose Brier Drive (in front of the houses at #272 and #117).

Safe Intersection Sight Distance Clearances

Based upon our field review, the following intersections have inadequate sight distance:

- Old Ridge Court at Rose Brier Drive
- Middlebury Lane at Plum Ridge Drive
- Pepper Tree Lane at Rose Brier Drive
- Worthington Court at Pepper Tree Lane

Traffic Speed Data

The following is a summary of the 85th percentile speed findings:

85th Percentile Speeds

<u>Street</u>	<u>Speed</u>
Plum Ridge Drive	28-mph
Antoinette	28-mph
Rose Brier Drive (house #272)	28-mph
Rose Brier Drive (house #117)	30-mph

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These values are either within or below the typical 85th percentile speed range of 30 to 32-mph for residential streets within Rochester Hills and indicate no unusual speeding problems.

Traffic Volume Data

<u>Street</u>	<u>Daily Volume</u>	<u>Greatest 1-hr Vol.</u>
Plum Ridge	293-vpd	34-vph
Antoinette	295-vpd	34-vph
Rose Brier (house #272)	241-vpd	31-vph
Rose Brier (house #117)	750-vpd	82-vph

These traffic volumes **do not** indicate a cut through problem. Typical trip generations for residential homes within Oakland County average between 12 and 15 per household. Previous vehicle trip studies performed within the City of Rochester Hills have been as high as 17 trips per home per day.

Crash History Data

Traffic crash history was provided by the Traffic Improvement Association (TIA), was obtained for the period of January 1, 2002 through December 31, 2004. There was no crash data available for these locations.

Conclusion / Recommendations

Staff recommends approving **TCO SS-132** to replace the existing “*Yield*” signs at Old Ridge Court at Rose Brier Drive, Middlebury Lane at Pepper Tree Lane (south intersection), and Pepper Tree Lane at Rosebrier Drive with “*Stop Signs*”. The limited sight distance at Worthington Court is correctable by the removal of several shrubs. Additionally, the landscaping at house #134 Rose Brier Drive, at the intersection of Rose Brier Drive and Pepper Tree Lane, is obstructing the line of sight for both northbound Rose Brier Drive and southbound Pepper Tree Lane. The City will notify the property owners to remove these sight obstructions. Additionally, in reviewing the previous TCO for Hunter’s Creek it was discovered that TCO YS-5.15 was incorrectly described. Staff recommends approving **YS-94** for Old Tree Court to Yield for Antoinette.

The HOA was also notified that if interested, the Oakland County Sheriff’s Department (OCSD) can place speed trailers followed by selective enforcement along Rose Brier, as OCSD staff resources permit. Staff recommends placing the speed trailers, followed by selective enforcement, during the hours of 4:00 to 6:00 pm. Staff also forwarded information to the HOA regarding speed humps and the *Neighborhood Traffic Safety Program* for their review.

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PGS/pgs