



INTECH CONSULTANTS, INC.
CONSULTING ENGINEERS/SURVEYORS

October 8, 2008
Job No.2004.024A

Mr. Ron Mentzer
Director of Community Development
City of Warrenville
3S258 Manning Ave.
Warrenville, IL 60555

Re: Sequestria Subdivision

Dear Mr. Mentzer,

This correspondence serves as a response to review comments regarding "Proposed Public Street" on page 2 of the review memo by James Darnell of Benes & Associates dated September 3, 2008.

A stop sign is to be provided for the new street (Garden View Court) at its intersection with Landon Avenue. Local residents have requested that warrants for 3-way stop control at this intersection be investigated. In general and in accordance with the Institute of Transportation Engineers (ITE) and the FHWA "Manual on Uniform Traffic Control Devices" (MUTCD), stop signs should not be installed unless justified by a traffic study, to ensure that they do not cause unnecessary interruptions of traffic flow.

Landon Avenue is currently a two-lane, rural cross-section street with a posted speed limit of 25 mph. It serves a residential area and intersects with Warrenville Road to the north and has no outlet south of the proposed development. Landon Avenue carries a very low volume of traffic and therefore does not meet a stop sign warrant based on traffic volume. We also understand that this location has no history of traffic accidents that could warrant stop control. Consequently, we investigated justification for stop signs on Landon based on sight distance limitations at this intersection.

To achieve a reasonable degree of safety at this intersection, there should be sufficient sight distance to give the driver enough time to exit from Garden View Court and enter onto Landon without requiring north- or south-approaching traffic to reduce speed. Intersection sight distance consists of horizontal and vertical components. Sight distance was measured from a point on the minor street 10 feet back from the edge of the main road pavement and from a driver eye height of 3.5 feet to an object (vehicle) height of 4.25 feet on Landon.

Sight distance requirements are from "A Policy on Geometric Design of Highways and Streets" published by the American Association of State Highway and Transportation Officials (AASHTO). Based on a design speed of 30 mph for Landon Avenue, the suggested minimum sight distance for a driver turning right (south) from Garden View Court is 300 feet. Turning left (north) is 330 feet.

Since Landon Avenue is essentially a straight street in this vicinity, the *horizontal* component of sight distance well exceeds the minimum and therefore is sufficient.

The *vertical* component of site distance was measured along the pavement profile of Landon Avenue. See accompanying exhibit. Vertical sight distance to the south is in excess of 400 feet. However, sight distance to the north is limited by a significant crest in the roadway. Vertical sight distance to the north was measured using criteria noted previously. Sight distance along Landon to a vehicle height of 4.35 feet was measured at 353 feet. We also measured to a height of 3.5 feet that represents a reciprocal sight distance (i.e., if a driver on Landon can see a vehicle at Garden View Court, then the driver of the vehicle on Garden View Court can see the vehicle to the north on Landon Avenue). This sight distance was measured at 331 feet. Both of these distances exceed the minimum.

Because of very low traffic volume on Landon, no history of traffic accidents, and adequate sight distance, we do not recommend placement of stop signs on Landon at Garden View Court. We do however, recommend that existing trees and shrubs in the vicinity of the proposed intersection be trimmed and/or removed within the existing street right-of-way to ensure adequate horizontal sight distance.

Sincerely,
INTECH CONSULTANTS, INC.



Clifford K. Pixler, PE
Vice President

Encl.
cc: Fred Conforti w/encl
Russ Whitaker, DBCW w/encl