

Exhibit "A"



Richard D. Payne, P.E., S.E.  
President

Michael T. Dooley, P.E., S.E.  
Senior Vice President

Eric L. Henkel, P.E., S.E.  
Senior Vice President

October 12, 2021

City of Monticello  
210 North Hamilton Street  
Monticello, IL 61856

Attn: Mr. Terry Summers  
City Administrator

Re: Regulatory Signage for the Intersection of Lone Beech Road and North Union Drive

Dear Mr. Summers:

Per our discussion we have reviewed the existing conditions at the intersection of Lone Beech Road with North Union Drive (Lone Beech & North Union). We will provide our observations and offer an engineering opinion about the use of regulatory signage at this location.

**Existing conditions** – Currently Lone Beech and North Union is a controlled intersection with a yield sign on the North Union approach. The approximate average daily traffic (ADT) information for Lone Beech was obtained from the Illinois Department of Transportation (IDOT) website. Lone Beech has an ADT of 600 vehicles to the west of North Union and an ADT of 275 vehicles to the east of North Union. No ADT data was published for North Union, but based on this information North Union probably has an ADT of 325 vehicles per day.

Lone Beech and North Union are residential streets. Lone Beech is on a curve at the intersection with North Union, and the ADTs suggest the main traffic movement is the east / west traffic on Lone Beech west of North Union, to the to the north / south traffic on North Union. The trees and bushes at the intersection could limit the sight distance for vehicles (and bicyclists) approaching the intersection for northbound North Union and westbound Lone Beech. Lone Beech Road's street approaches are on relatively flat profile grades and the pavements are in good condition. North Union has an upward grade as it approaches the yield sign at the intersection.

The City coordinated with their police department and reported there have been no accidents reported at this intersection that resulted in any injuries or tickets issued.

Lone Beech and North Union  
Regulatory Signage

**Site Observations** – We observed vehicular traffic on a typical day from approximately 8:30 a.m. to 9:00 a.m., and we did not witness any pedestrians or cyclists on these streets.

Vehicular traffic on Lone Beech was higher than on North Union as the published ADT information suggests. Most vehicles traveling on Lone Beech did not slow down when approaching the intersection. The trees and bushes at the intersection, and the difference in the approach grades, limits the available sight distance for vehicles approaching the intersection for northbound North Union and westbound Lone Beech.

**Conclusions and Engineering Opinion** – The question as proposed to us was whether or not a stop condition should be used at this intersection and we will provide our opinion of the preferred way to control traffic.

The Manual on Uniform Traffic Control Devices (MUTCD) provides guidance on the right-of-way at intersections and the use of stop signs and yield signs. Factors to be considered to establish intersection control include traffic volumes, pedestrian and bicycle volumes, approach speeds, sight distance available and reported crash experience. The existing yield sign for northbound North Union follows the guidance in the MUTCD for the use of a less restrictive measure of control at the intersection. However, Section 2B.06 of the MUTCD suggests stop signs should be considered for minor street approaches if a restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street. Based on the configuration of the intersection, we consider Lone Beech Road to be the through street. The MUTCD generally recommends placement of the stop signs on the roadway with less traffic and the current conditions would not typically require an all way stop.

Based on these observations and opinions we believe the **preferred intersection control would be a stop sign with the sign controlling traffic on North Union Drive, and the existing yield sign should be removed. A Cross Traffic Does Not Stop plaque (MUTCD W4-4P) should be placed below the stop sign.**

Please let me know if you have any comments or questions about the information provided.

Sincerely,

ESCA CONSULTANTS, INC.



James M. Sullivan, P.E.  
Senior Engineer