



**Ogle County Highway Department**  
**Road & Bridge Committee**  
August 2021 Meeting Minutes

August 10, 2021

- I. Meeting called to order at 8:02 AM by Chairman Hopkins at the Ogle County Courthouse, Room 100.  
Members present: Stan Asp, Dorothy Bowers, Lloyd Droege, Rick Fritz, Lyle Hopkins, Bruce McKinney and Dave Williams.  
Others present: Jeremy Ciesiel (County Engineer)
  
- II. Approval of Minutes
  - A. Reviewed July 13, 2021 Road & Bridge Minutes.
    1. Motion to approve minutes by – Bowers
    2. Motion seconded by – Williams
    3. Vote – All in Favor
  
- III. Reviewed Bills and Payroll
  - A. Motion to approve Highway Dept bills and payrolls by – Bowers
  - B. Motion seconded by – Fritz
  - C. Vote – All in Favor
  
- IV. Received Bids
  - A. None this month
  
- V. Petitions and Resolutions
  - A. Ordinance for Altered Speed Zones, Pine Rock Twp Subdivisions
    1. Motion to approve the ordinance by – McKinney
    2. Motion seconded by – Fritz
    3. Discussion: This ordinance covers all four subdivisions in Pine Rock Township. It only includes the roads within the subdivisions.
    4. Vote – All in Favor
  - B. Petition for County Aid to Build or Repair a Bridge or Culvert – Pine Rock Township Culvert on Prairie Road, Section 21-20128-00-BR.
    1. Motion to approve petition by – Bowers
    2. Motion seconded by – McKinney
    3. Discussion: Pine Rock Township meets all of the requirements set forth in state statute to make the petition. They are petitioning for half of the estimated \$7,200 for the culvert replacement.
    4. Vote – All in Favor
  
- VI. Business & Communications
  - A. Unfinished Business
    1. COVID-19 Update: No positive test results or quarantines since last meeting.

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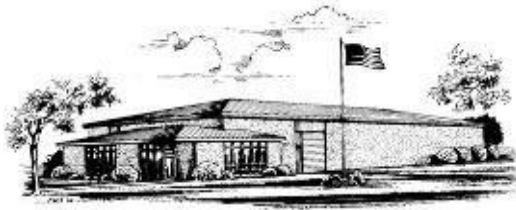
2. Project Status Report (see attached).
3. 2022 Budget Discussion: No large pieces of equipment will be included in the budget. The Highway Department is looking to replace the crack seal equipment with a more efficient wand version in order to get away from hiring contractors to perform this maintenance operation.

B. New Business

1. I.A.C.E. Legislative Committee – Most of the bills discussed last month are still awaiting signature by the governor.
2. I.A.C.E. Policy Committee:
  - a. The FHWA and IDOT are establishing new requirements for bridge rails on all routes. Nothing determined yet, but all newly constructed bridges will likely require crash tested bridge rails.
  - b. Statewide virtual Highway Commissioner training began last week. This is open to all road commissioners, not just those newly elected. There are weekly sessions for the next couple months. Sessions can be viewed online, or the road commissioners can watch them at the Highway Department.
3. Pines Rd / Lowell Park Rd Intersection
  - a. Background: This intersection is a 2-way stop with Pines Rd as the through road and Lowell Park Rd traffic being directed to stop. Pre-2000 due to poor sight distance a 30-mph advisory speed limit and flashing lights were added to the east and west approaches. In 2003, the hill to the west was shaved down several feet to improve sight distance. The advisory speed limit and flashing lights were left up. In 2006, a traffic engineering study was performed that concluded that the existing signage was appropriate (see attached report).
  - b. Accident History: Prior to 2021, there was one accident over the previous 5 years at the intersection that could have been prevented if there was a 4-way stop. However, in 2021, there have been at least 2 accidents at this intersection. County Engineer is trying to get copies of the 2021 accident reports.
  - c. Plan: The Highway Department is in the process of performing an updated traffic engineering study at the intersection based on current conditions.
  - d. Discussion: Chairman Hopkins mentioned that there have been troubles at this intersection for as long as he can remember. People are in too much of a hurry and need to slow down or stop at the intersection as directed by the signage. Stan Asp added that very few people follow the advised speed limit. Chairman Hopkins expressed concern regarding the intersection being a 4-way stop as this may cause more issues.
4. Next Meeting – **Tuesday, September 14, 2021, @ 8:00 AM,**  
Lettings: 2021-22 Ice Abrasives

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- VII. Public Comment – None.
- VIII. Meeting adjourned at 8:36 A.M. by Chairman Hopkins.  
Minutes submitted by Jeremy A. Ciesiel, PE



**Ogle County Highway Department**  
**Road & Bridge Committee**  
Project Status

**August 2021**  
**Project Status**

1. 2020/21 Structure Repairs – Various Roads (19-00323-01-BR) (Contr: Martin & Co)
  - a. Lowell Park Rd & Mt. Morris Rd bridges complete.
  - b. Work complete: \$131,214. Remaining work: \$0.
2. Maple Grove Rd Culvert Replacement (Section 19-16120-00-BR) (Contr: Martin & Co)
  - a. New structure is in place. Need to backfill and perform road work.
  - b. Work completed: ~\$260,000. Remaining work: ~\$10,725.
3. Kennedy Hill Rd Gutter Improvement (Section 21-00338-00-CG) (Contr: Stenstrom Exc.)
  - a. Work to take place late Summer 2021.
  - b. Work completed: \$0. Remaining work: \$123,530.
4. Flagg Rd Culvert Structural Upgrade (Section 20-00335-00-BR) (Contr: Martin & Co)
  - a. Westbound side of culvert is complete. Traffic has been shifted for work on the eastbound side of the culvert. Concrete has been poured on eastbound side.
  - b. Work completed: \$56,030. Remaining work: \$49,430.
5. Meridian Rd Culvert Extensions (Section 20-00336-00-BR) (Contr: O'Brien Civil Works)
  - a. Project complete. A utility conflict required force account work to resolve the issue that resulted in a 6% increase.
  - b. Work completed: \$27,628. Remaining work: \$0.
6. Meridian Rd Overlay (Section 17-00317-00-RS) (Contr: William Charles Construction)
  - a. Project is complete.
  - b. Work completed: \$949,615. Remaining work: \$0.
7. Flagg Rd Overlay (Section 20-00329-00-RS) (Contr: Martin & Co)
  - a. Contracts in place. Start of project to be determined.
  - b. Work completed: \$0. Remaining work: \$538,440.
8. Highway Department Salt Shed Paving (Contr: Martin & Company Excavating)
  - a. Work complete.
  - b. Work completed: \$50,874. Remaining work: \$0.
9. County Seal Coat (Section 21-00000-02-GM) (Contr: Steffens 3-D Construction)
  - a. Seal coat placement complete. Some sweeping remaining.
  - b. Work completed: ~\$435,200. Remaining work: \$0.
10. Twp/Village Seal Coat (Section 21-XX000-00-GM) (Contr: Steffens/Civil/AC Pavement)
  - a. All seal coat placement by Civil Constructors, Steffens 3D and A.C. Pavement Striping is complete. Some sweeping remains.
  - b. Steffens work completed: ~\$794,570. Remaining work: \$0.
  - c. Civil work completed: ~\$728,410. Remaining work: \$0.
  - d. A.C. Pavement Striping work completed: ~\$39,950. Remaining work: \$0.
11. County Crack Sealing (Sec 21-00000-04-GM) (Contr: Denler, Inc.)
  - a. Work completed on May 14<sup>th</sup>. Due to additional pavement distress noted in Spring, approximately 15% to the project.
  - b. Work Completed: \$112,544. Remaining work: \$0

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12. Flagg Twp Paving – Deer Creek Estates (Section 21-06000-01-GM) (Contr: Martin & Co)
  - a. Paving complete.
  - b. Work completed: ~\$60,390. Remaining work: \$0.
13. Rockvale Twp Paving – Town Hall Rd & Silver Creek Rd (Section 21-21000-00-GM)
  - a. Contractor: Martin & Company Excavating.
  - b. Paving complete.
  - c. Work completed: \$434,298. Remaining work: \$0.
14. Oregon-Nashua Twp Paving – Oregon Trail Rd (Section 21-26000-00-GM)
  - a. Contractor: Martin & Company Excavating.
  - b. Contracts executed. Start date to be determined.
  - c. Work completed: \$0. Remaining work: \$87,590.
15. Leaf River Twp Paving – Mt. Morris Rd (Section 21-10122-00-FP)
  - a. Contractor: Helm Civil
  - b. Paving complete.
  - c. Work completed: \$43,240. Remaining work: \$0.
16. Flagg Twp Microsurfacing – Skare Rd (Section 21-06000-02-GM) (Contr: Struck & Irwin)
  - a. Project to be performed the week of August 1<sup>st</sup>.
  - b. Work completed: \$0. Remaining work: \$56,240.
17. County Striping (Contractor: America’s Parking Remarketing)
  - a. Work to take place in August and/or September. Still waiting on paint deliveries.
  - b. Work completed: \$0. Remaining work: \$50,140
18. Various County Pipe Culverts & Grading (Day Labor) – (Supplier: Metal Culverts)
  - a. Pipe letting in February 2021.
  - b. Pipe Delivered: \$33,550. Remaining: \$0.
19. Union Road Milling – Contractor: Martin & Company Excavating
  - a. Profile milling of Union Rd from IL Route 64 to Haldane Rd.
  - b. Work completed: 11,100. Remaining: \$0.
20. County Patching (Day Labor)
21. 2021/2022 Bridge Inspections
  - a. Inspections currently being performed.

Total work under contract: \$5,084,708

Total contracted work completed: \$4,168,613 (~82%)

Remaining 2021 contracted work: \$916,095 (~18%)

# Ogle County Highway Department

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## **Intersection Traffic Study Pines Road / Lowell Park Road Ogle County, IL February 16, 2006**

The intersection of Pines Road, County Highway 6, and Lowell Park Road, County Highway 35, is located in Pine Creek Township, Ogle County. Both roads are major collectors on the Ogle County highway system. Both roads are bituminous concrete surfaces with centerlines and edgelines. The intersection of these roads was improved in 2003 with 2 major changes. First, the roadway alignment of the west approach was lowered to increase sight distance. Second, the intersection was widened on the northeast, northwest, and southwest corners.

Recently, the Ogle County Highway Department has received requests to modify the traffic control at this intersection. Based upon the guidelines set in the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), a traffic engineering study should be performed to justify the requested changes.

The following details the guidelines and requirements set by the MUTCD and the Bureau of Local Roads and Streets Manual, published by the Illinois Department of Transportation, Division of Highways. Following the guidelines and requirements, each point is considered relative to the traffic conditions with the most recent data available at the time of this report. The report concludes with a summary of the findings and the recommendations for the intersection.

In Section 2B.05, STOP Sign Applications, of the 2003 version of the MUTCD, the following guidance is provided:

“STOP signs should be used if engineering judgment indicates that one or more of the following conditions exist:

- A. Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
- B. Street entering a through highway or street;
- C. Unsignalized intersection in a signalized area; and/or
- D. High speeds, restricted view, or crash records indicate a need for control by the STOP sign.”

Evaluating these conditions resulted in the following:

- A. The most recent traffic count data (2003) shows the Average Daily Traffic (ADT) for the intersection as follows:

Traffic Count Data:  
(Vehicles/Day)

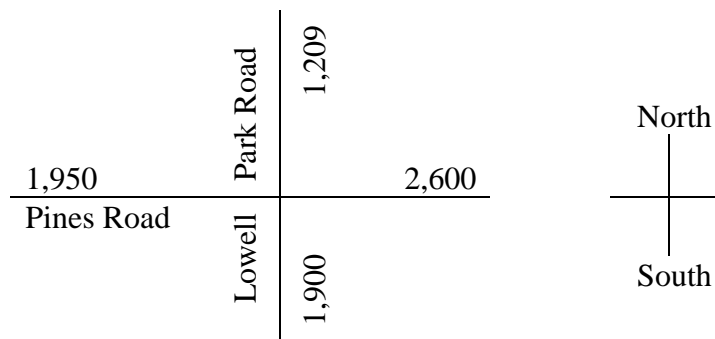


Fig. 1

The sum of both legs of Pines Road is almost 50% greater than the sum of the legs of Lowell Park Road. Based on the guidance of Part A, stop signs shall be placed for the north and south legs of the intersection.

- B. Since both highways are through highways, Part B does not apply at this intersection.
- C. This intersection is not in a signalized area. The nearest signalized area is 7 miles to the north in the city of Mount Morris.
- D. The speed limit on both Pines Road and Lowell Park Road is the statutory 55 mph. There are existing 30 mph supplemental warning plaques and flashing yellow beacons on advance warning signs (Intersection Ahead) on Pines Road east and west of the intersection. These signs meet advance placement distance specified in the Guidelines for Advance Placement of Warning Signs table in the MUTCD. These distances are based on the 2001 American Association of State Highway and Transportation Officials (AASHTO) Policy, Stopping Sight Distance, providing a PIEV (Perception, Identification, Emotion, Volition) time of 2.5 seconds, a deceleration rate of 11.2 ft/second<sup>2</sup>, and a sign legibility distance of 175 ft. There are also existing flashing yellow beacons on advance warning signs (Stop Ahead) north and south of the intersection on Lowell Park Road. Additionally, supplemental regulatory signs (Cross Traffic Does Not Stop) are posted below the Stop signs.

The required stopping sight distance is 495 feet for a vehicle traveling at 55 mph, including a PIEV time of 2.5 seconds, as per the Bureau of Local Roads and

Streets Manual, published in April, 2005. This value of 495 feet does not figure in the sign legibility distance. The accepted sign legibility distance given in the MUTCD for a potential stop situation is 175 feet. This reduces the stopping sight distance to 320 feet past the advance warning sign.

Based on the standards in the Bureau of Local Roads and Streets Manual, intersection sight distance is measured with the height of eye being 3.5 feet and the height of object being 3.5 feet. Based on the same standards, stopping sight distance is measured with the height of eye being 3.5 feet and the height of object being 2 feet. The existing sight distances at the intersection are as follows:

Existing Intersection  
Sight Distance (ft):

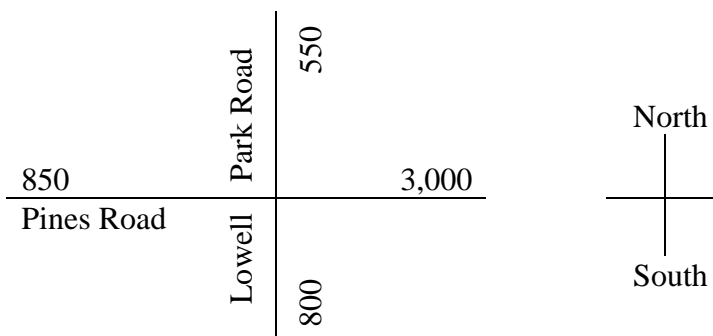


Fig. 2

Existing Stopping  
Sight Distance (ft):

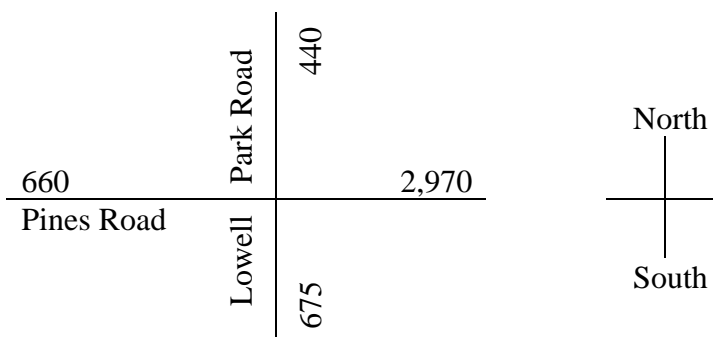


Fig. 3

Based upon this data, a restricted view of the intersection does not exist in this situation.

The condition requirement for crash records indicating a need for control by a stop sign will be covered later in this study in Part B of Multiway Stop Applications.

Additional guidance given in the MUTCD for stop sign applications states “STOP signs should not be used for speed control” and “STOP signs should be installed in a manner that minimizes the numbers of vehicles having to stop.” This is taken from Section 2B.05, Stop Sign Applications, of the 2003 Edition of the MUTCD.

In Section 2B.07, Multiway Stop Applications, of the 2003 version of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), specifies that safety concerns associated with multiway stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Also stated is that multiway stop control is used where the volume of traffic on the intersecting roads is approximately equal. The following guidance is provided:



“The decision to install a multiway stop control should be based on an engineering study. The following criteria should be considered in the engineering study for a multiway STOP sign installation:

- A. Where traffic control signals are justified, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
- B. A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multiway stop installation. Such crashes include right- and left-turn collisions as well as right-angle collisions.
- C. Minimum volumes:
  - 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and
  - 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hours, but
  - 3. If the 85<sup>th</sup>-percentile approach speed of the major-street traffic exceeds 65km/h or exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values.
- D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values, Criterion C.3 is excluded from this condition.”

Each of these criteria is evaluated as follows:

- A. Traffic signals are not being installed; therefore a multiway stop as an interim measure does not apply.
- B. Collision Diagram Information and Summary data have been reviewed from 1999-2003, the 5 most recent years of available data. The collisions include 1 in 1999, 0 in 2000, 1 in 2001, 3 in 2002, and 2 in 2003. Of these, 2 collisions in 2002 are not susceptible to correction by a multiway stop installation as they were rear end collisions. The adjusted number of collisions does not meet the minimum of 5 reported crashes in a 12-month period.
- C. The minimum volumes are based on the hourly traffic volume for any 8 hours of an average day. Based on the 2001 AASHTO Policy, the Design Hourly Volume (DHV) is 10% of the ADT. Therefore, the minimum volumes are based on the following numbers:

Design Hourly Volume:  
(Vehicles/Hour)

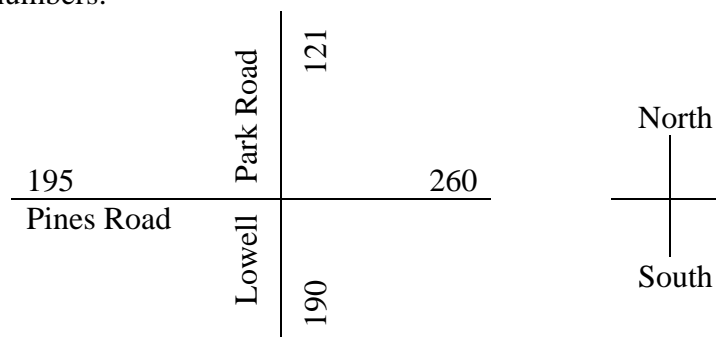


Fig. 4

The pedestrian and bicycle volume at this intersection per hour for any 8 hours of an average day is negligible.

1. The vehicular volume entering the intersection from the major street approaches (Pines Road) is  $195 + 260$ , or 455 vehicles per hour. This volume is greater than the required 300 vehicles per hour. Criterion C1 is therefore satisfied.
2. The pedestrian and bicycle volume entering the intersection from the minor street approaches is 0. Thus, the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches is the vehicular volume for this intersection. The total of both approaches is  $190 + 121$ , or 311 units per hour. This volume is greater than the required 200 units per hour. Additionally, an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour is also required. This delay is not met for this intersection based on observations made February 15, 2006. Although minimum traffic volumes are met, the minimum traffic delay is not. Therefore, Criterion C.2 is not satisfied.
3. Since the 85<sup>th</sup>-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants required are 70% of the above values in Criteria C.1 and C.2. The vehicular volumes are already met without applying the 70% adjustment. The 70% adjustment does not alter the 30 second delay in Criterion C.2; therefore the 30 second delay requirement is still not met.

Since Criterion C.2 is not met, Criterion C is not met.

- D. None of Criteria A, B, nor C are individually met. Criterion D allows an adjustment to Criteria B and C, but requires both to be met at 80% of their minimum values, excluding Criterion C.3. Revisiting Criterion B, 80% of the 5 minimum collisions is 4 collisions in a 12 month period. The numbers of collisions not susceptible to correction by a multiway stop installation were 1 in 1999, 0 in 2000, 1 in 2001, 1 in 2002, and 2 in 2003. The adjusted minimum of 4 collisions is still not met. Applying the 80% to Criteria C.1 and C.2 does not change the result in vehicular volumes since the minimum volumes are previously met. Applying the 80% to the minimum average delay changes the 30 second delay to a 24 second delay. This adjusted value is still not met for this intersection. Because Criteria B and C.2 do not meet the minimum requirements after the adjustments, Criterion D is not satisfied.

Other criteria to apply a multiway stop application may be considered in an engineering study. They include:

- A. The need to control left-turn conflicts;
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and

- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection.

Addressing each of these options gives the following results:

- A. The reported crashes for the most recent 5 years of data showed 3 turning collisions. 1 turning collision occurred in 2001 while 2 occurred in 2003. No turning collisions were reported in 1999, 2000, or 2002. With an average of less than 1 per year and irregularly occurring, modifying the traffic control would likely not affect the quantity of this type of accident.
- B. Since the pedestrian volume at this intersection is negligible and no vehicle/pedestrian collisions have been reported in the 5 year data period, no need exists to control vehicle/pedestrian conflicts.
- C. As indicated earlier in this report, sight distances at this intersection meet or exceed the minimum requirements for the design speed of the road. No modifications to the traffic control based on sight distance are needed.
- D. This intersection is not the intersection of two residential neighborhood collector streets. Therefore, Option D does not apply to this study.

Based on traffic counts for Pines Road and Lowell Park Road at their intersection, Pines Road is considered the major road and Lowell Park Road is considered the minor road. In the case of a two-way stop control, Lowell Park Road should have stop signs installed to direct its vehicles to yield the right of way to vehicles on Pines Road.

Required sight distance at the intersection is based on the speed of the vehicles. Both roads at this intersection have speed limits of 55 mph. This speed requires a stopping sight distance of 495 feet. On each approach leg of the intersection, the current sight distance is greater than the required 495 feet.

The requirements to change the intersection to a multiway stop control are based primarily on these factors: crash data, traffic volumes, and vehicular delays. The reported crash data listed 7 collisions during the most recent 5 years of data. A minimum of 5 reported crashes in a 12-month period are needed to require multiway stop control. Additionally, only crashes which are susceptible to correction by a multiway stop installation are counted. The greatest number of these crashes in any 12-month period was 2.

The vehicular volumes are based on an hourly rate for any 8 hours of an average day. Both Pines Road and Lowell Park Road met the minimum vehicles per hour for this requirement. However, Lowell Park Road did not meet the minimum average delay of 30 seconds required for minor-street vehicular traffic. Because of the number of crashes and the average vehicular delays were not met, a multiway stop control is not warranted at this intersection.

The current signage approaching the intersection include advance warning Intersection signs with 30 MPH supplemental warning plaques and flashing yellow beacons on the major road and advance warning Stop Ahead signs with flashing yellow beacons on the minor road. Both sets of signs are appropriately placed to provide adequate warning to motorists. The current signage at the intersection includes Stop signs with "Cross Traffic Does Not Stop" supplemental warning plaques on the minor road. Both signs are appropriately placed for motorists.

The MUTCD states "Warning signs call attention to unexpected conditions on or adjacent to a highway or street and to situations that might not be readily apparent to road users. Warning signs alert road users to conditions that might call for a reduction of speed or an action in the interest of safety and efficient traffic operations....The use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs."

Following this support and guidance, it is the conclusion of this traffic engineering study that the existing signage approaching and at the intersection of Pines Road and Lowell Park Road in Ogle County is appropriate for the current traffic conditions and no modifications are necessary at this time.

Nathan F. Schwartz, P.E.  
Asst. Ogle County Engineer