

Darrell Road

Stakeholder Involvement Group Meeting #4 Summary

This was the fourth meeting of the Stakeholder Involvement Group (SIG) for the Darrell Road Phase I Study. The meeting was held on Tuesday, September 11, 2018 at the Wauconda Township Office (505 W. Bonner Road, Wauconda, IL 60084) at 5:00 P.M.

The purposes of the meeting were to discuss the recent project developments, present the preferred alternative, discuss the benefits of the preferred alternative, and review the next steps for the project.

SIG Members in Attendance:

- Brian Bartnick (Village of Island Lake Public Works)
- Ed Dagdick (Wauconda Fire Department)
- Scott Schroepfer (Resident)
- Anthony Sciarrone (Island Lake Police Department)
- Randy Seebach (Lake County Forest Preserve District)
- Scott Weisbruch (Wauconda Township Highway Commissioner)
- Wayne Willis (Wauconda Township Resident)

SIG Members Absent:

- George Bellovics (Illinois Department of Natural Resources)
- David Walz (Island Lake Police Department)

Project Study Group (PSG) Members in Attendance:

- Matt Emde (Lake County Division of Transportation)
- Michael Burke (Lake County Division of Transportation)
- Al Giertych (Lake County Division of Transportation)
- Mary Young (Civiltech Engineering)
- Joel Christell (Civiltech Engineering)
- James Tibble (Civiltech Engineering)
- Ben Wilkinson (Ourston Roundabout Engineering)

Others in Attendance:

- Bob Wargaski (Resident)
- Peter Reiland (Oakmont Game Club)
- Jim Kirby (Golden Oaks)
- Jon Schaap (Resident)
- Charles Amrich (Island Lake Mayor)

Project Overview

Mr. Christell began the presentation by explaining the project purpose and need. The project aims to address the existing safety and operational improvement needs along Darrell Road, identify long range travel demand and transportation needs, and develop a

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staged transportation improvement plan. He continued to summarize the existing crash histories in the study area. Crashes were updated between the years 2012 – 2016 show similar patterns to what was observed in the 2010 – 2014 data. Most crashes within the study area are concentrated at the intersections of Case Road, Neville Road, Dowell Road, and Fisher Road with Darrell Road. During the Phase I study, the Lake County Division of Transportation (LCDOT) investigates the opportunity to provide pedestrian and bicyclist facilities. Mr. Christell next discussed the Lake County 2040 Non-Motorized Plan, which includes planned bicycle and pedestrian facilities along Darrell Road.

SIG #3 and PIM #3

Mr. Christell began a summary of SIG #3. At the meeting it was determined that Alternative A was to be carried forward for further study with both traffic signals and roundabouts as potential intersection treatments. The minor street stop-controlled treatment was dropped from further study because it did not improve the safety of the intersections and resulted in unacceptable delay and levels of service by 2040. Alternative B was dropped from further consideration based upon feedback gathered from SIG #2 and PIM #2 and feasible and reasonable alternatives exist with minimal anticipated impacts to the Black Crown Forest Preserve.

PIM #3 was held on February 23, 2017. There were 79 attendees and seven written comments received during the official comment period. Comments received included intersection safety, preference for a particular intersection treatment or alternative, the location of the shared-use path, and impacts of the alternatives.

Project Developments

Mr. Christell discussed recent developments that have occurred. The environmental survey request (ESR), which starts the environmental coordination, was submitted to IDOT in February 2017. The ESR investigates cultural, wetlands, biological and special waste impacts within the project area. The ESR is typically a minimum 12 month process. The topographic survey was completed as well in late 2017.

Through the ESR submittal, it was discovered the two properties within the project area (29940 N. Darrell Road and 30125 N. Darrell Road) warrant National Register of Historic Places (NRHP) consideration. Coordination with the Illinois Department of Transportation Cultural Resources Unit is ongoing and it is anticipated that a “No Adverse Effect” finding will be received. Concurrence from the State Historic Preservation Officer will also be required.

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Preferred Alternative

Mr. Tibble explained that an alternative analysis was completed for the location of the shared-use path because of frequent comments received at SIG #3 and PIM #3. The goal of the analysis was to minimize the impacts to trees, private property, and other environmental factors. The shared-use path on the west side of the roadway resulted in unavoidable impacts to the identified potential historical barns. The shared-use path on the east side resulted in fewer tree and wetland impacts while providing greater connectivity to the planned path to the Singing Hills Forest Preserve. The preferred alternative will feature the shared-use path along the east side of Darrell Road.

Mr. Tibble discussed the relationship between the average daily traffic and the number of travel lanes. A roadway will likely require 4 travel lanes as the average daily traffic nears 14,000 to 16,000 vehicles per day. Between Case/Neville Roads and Dowell Road, the 2040 ADT along Darrell Road is within this range while north of Dowell Road exceeds that range. The operation of an intersection also factors into the need for additional travel lanes. As long as an intersection is operating sufficiently, the additional capacity along the segments may not be required.

Mr. Tibble continued by explaining the proposed typical section for Darrell Road between Case/Neville Roads and Dowell Road. The existing 11-foot lanes are to be resurfaced and shoulders are to be improved to the LCDOT standard of a 4-foot paved shoulder and a 4-foot aggregate shoulder. The 10-foot shared-use path will be located on the east side of Darrell Road. The path will be at a location where the roadway could be expanded to a 3-lane cross section to provide bi-directional turn lanes without needing to reconstruct the path. A drainage swale will likely be located between the shoulder and the shared-use path. The proposed typical section for Darrell Road between Dowell Road and Fisher Road includes a reconstructed roadway with one 12-foot lane in each direction with a 4-foot painted median to provide additional separation with the higher volume of traffic. A full width median is not required due to the lack of future access points to the Black Crown Forest Preserve and Oakmount Game Club Lake. The standard 4-foot paved and aggregate shoulders are included with the 10-foot shared-use path along the east side of the roadway. The path is located where the roadway could be expanded to a 4-lane cross section to provide two lanes in each direction without needing to reconstruct the path. A drainage swale will be located between the shoulder and the path.

Mr. Tibble explained a topographic survey was conducted and confirmed the location of the underground utilities. Near the Dowell Road intersection, three underground gas pipelines cross Darrell Road. In February 2018, the 36" Nicor pipeline, 16" Kinder Morgan pipeline and the 24" Kinder Morgan pipeline were potholed to determine the depths of the utilities. It was discovered that the pipelines were located at undesirable depths, so the

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preferred alternative roadway profile will be raised in the area of the pipelines to provide sufficient clearance and avoid pipeline relocation.

Mr. Tibble continued discussing the intersection treatments. After PIM #3, both roundabouts and traffic signals were carried forward for further study. At Case/Neville Roads, alternatives were presented with Neville Road re-aligned to the south and Case Road re-aligned to the north. In both alternatives, a traffic signal required a greater project limit due to longer approach tangents. The increased project limits results in greater costs and environmental impacts. The northern roundabout results in fewer impacts and costs. The preferred alternative includes the re-alignment of Case Road to the north to intersect Neville Road at Darrell Road with a roundabout. At Dowell Road, a roundabout at the existing alignment was eliminated due to the presence of multiple utilities. Dowell Road is to be re-aligned to intersect Darrell Road closer to 90 degrees. The re-alignment results in the displacement of one resident, who has been made aware of the preferred alternative. The re-aligned roundabout is the preferred alternative at Dowell Road, providing the corridor with consistent intersection treatments. At Fisher Road, the traffic signal results in greater impacts and costs compared to the roundabout. Two roundabout alternatives were presented at PIM #3. One alternative featured the roundabout located at the existing intersection while the other alternative shifted the roundabout south. The shifted roundabout resulted in fewer impacts to the Black Crown Forest Preserve. The shifted roundabout is the preferred intersection treatment at Fisher Road. All three of the roundabouts will be designed such that they can easily be expanded to multilane roundabouts.

Benefits of Roundabouts

Mr. Wilkinson began with a brief summary of the safety of roundabouts. A typical 4-legged roundabout contains only 8 points of conflict, while a conventional intersection contains 32 points of conflict. The LCDOT statistics for crash reduction at the LCDOT roundabouts are consistent with national statistics. When crossing the road at a roundabout, a pedestrian only needs to focus on vehicles approaching from one direction, compared to three directions when at a traffic signal. Bicyclists within the area will have the opportunity to navigate the roundabout on street as a vehicle or they may exit the roadway and walk on the crosswalks.

Next Steps

Mr. Christell explained the next steps for the project. The information presented at SIG #4 will be shown to the public at PIM #4 to gather input. The design will then be finalized and a Public Hearing will be held once the required approvals are received. Following the Public Hearing, design approval is expected in 2019.

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The following summarizes the group discussion held throughout the meeting:

- Mr. Kirby asked what is to happen to the property owner at the southeast corner of Fisher Road and Darrell Road. Will the County acquire “the lake bottom”. The property owner likely won’t want the remainder of the property if it is only a section of the lake. Mr. Christell explained that negotiations for property acquisition cannot begin until after Phase I design approval has been received. However, it is helpful gather information/comments such as this from the SIG members.
- Mr. Kirby asked if LCDOT had acquired the traffic study completed for the Woodman’s, and if the traffic generated will change the projected numbers. Mr. Emde stated LCDOT will request the traffic study to provide additional background information for this project. Mr. Christell explained that the traffic projections come from the Chicago Metropolitan Agency for Planning (CMAP). CMAP uses potential development plans, local land-use maps, and other resources to develop the 2040 projections, so it is not likely the development would change the 2040 projections received for this project.
- Mr. Schaap asked why the alternative to connect Fisher Road to Dowell Road was eliminated. Mr. Christell explained that because the land is now owned by the Lake County Forest Preserve District, in order to use Federal funds for the project, if a feasible and reasonable alternative exists with minimal impacts to the 4(f) property, the alternative with the greater impact to the property should be eliminated.
- Mr. Willis asked how much traffic can a roundabout handle. There’s a roundabout in Wisconsin along Route 83 that is near capacity, and he doesn’t want Darrell Road to result in the same issue. Mr. Wilkinson explained that a single lane roundabout can handle approximately 25,000 vehicles per day. If traffic growth does occur, the Darrell Road roundabouts will be expanded to provide additional capacity.
- Mr. Schroepfer asked why bicycles will be on the roadway if a path is provided. Mr. Wilkinson explained that some bicyclists prefer to ride on the shoulder of roadways, especially if the shared-use path network is incomplete.
- Mr. Weisbruch asked if the jurisdiction of the roadways will be changing. Mr. Emde explained that the jurisdictions will remain the same. Similar to a standard intersection, there will be a logical end to the LCDOT jurisdiction.
- Mr. Schroepfer expressed concern regarding the profile of Dowell Road. There is currently a high point on Dowell Road, and raising the Darrell Road profile at the

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utilities will cause that high point to be even higher and grades to be steeper. Mr. Wilkinson stated that it is good practice to design a roundabout at the high point. Mr. Christell added that the profiles of both roadways are being improved at the intersections, and the roadway profiles are approximately 3% or less.