

# Public Involvement Meeting

**WIS 29  
County MMM/Clark Drive Intersection  
Shawano County**

**Project ID: 1058-23-02**



**March 14, 2023  
5 to 6 p.m.**

**Town of Richmond  
Shawano, WI**

**Deaf, hard-of-hearing, deaf-blind, and speech-disabled persons should contact the Wisconsin Relay Service for assistance by dialing 711.**

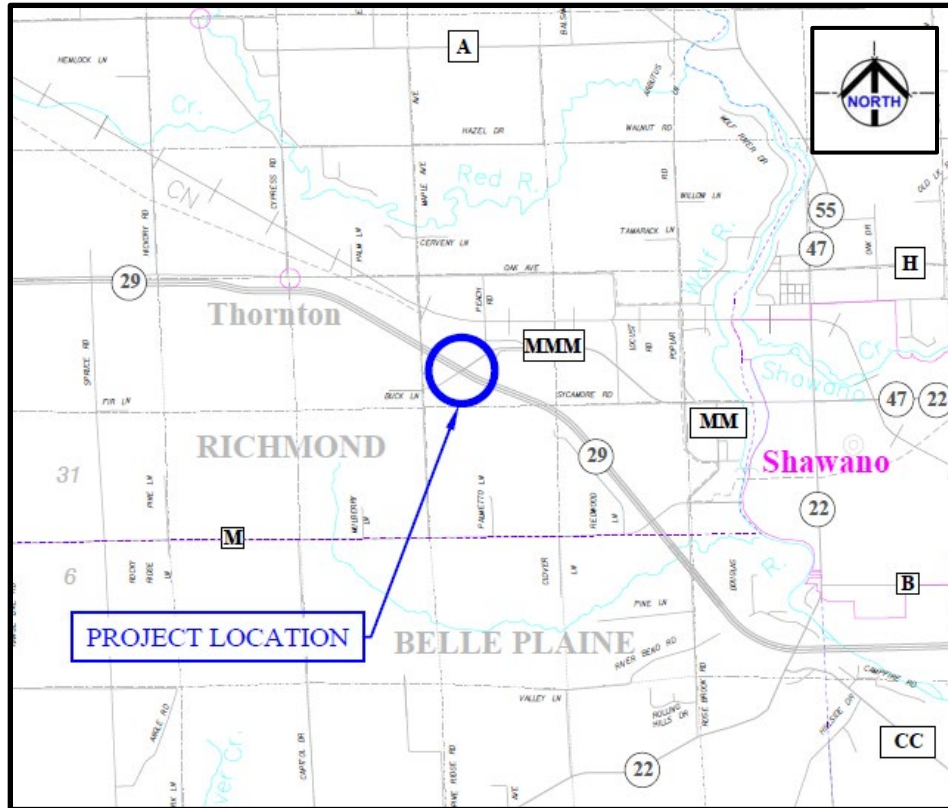
## Purpose

The Wisconsin Department of Transportation (WisDOT) is seeking your input on existing safety and operational issues at the WIS 29 and County MMM/Clark Drive intersection in the town of Richmond, Shawano County and the proposed improvements to address them.

## Project Information

### Location

The intersection of WIS 29 and County MMM/Clark Drive is experiencing ongoing crashes.



**WIS 29 and County MMM/Clark Drive Project Location**

### Roadway and traffic characteristics

WIS 29 is a principal arterial roadway connecting Green Bay to Wausau.

- WIS 29 is a four-lane divided rural highway with a 60-foot median, two 12-foot eastbound and two 12-foot westbound travel lanes and a posted speed limit of 65 miles per hour (mph).
- WIS 29 has an average daily traffic (ADT) of 8,500 vehicles per day (2018).

County MMM is a collector roadway connecting WIS 29 to the city of Shawano.

- County MMM (Business 29) is a two-lane undivided rural highway with 12-foot lanes and 6-foot shoulders, of which 3 feet are paved, and a posted speed limit of 45 mph.
- County MMM (Business 29) is old WIS 29 and has an estimated ADT of approximately 2,400 (2017).

Clark Drive is a collector roadway providing access south of WIS 29 to Maple Avenue.

- Clark Drive has the same configuration as County MMM (Business 29) with an assumed statutory speed limit of the 55 mph.
- Clark Drive has an estimated ADT of approximately 330 (2009).

## Purpose and need

### Safety

The **purpose** of the project is to reduce and/or eliminate severe crashes and improve deteriorated pavements within the intersection.

The **need** to improve safety was identified by WisDOT and local emergency officials monitoring crash history at the intersection.

In 2018, WisDOT completed an initial safety study which reviewed crashes that occurred from 2012 to 2016. Ten (10) crashes occurred at the intersection during this period.

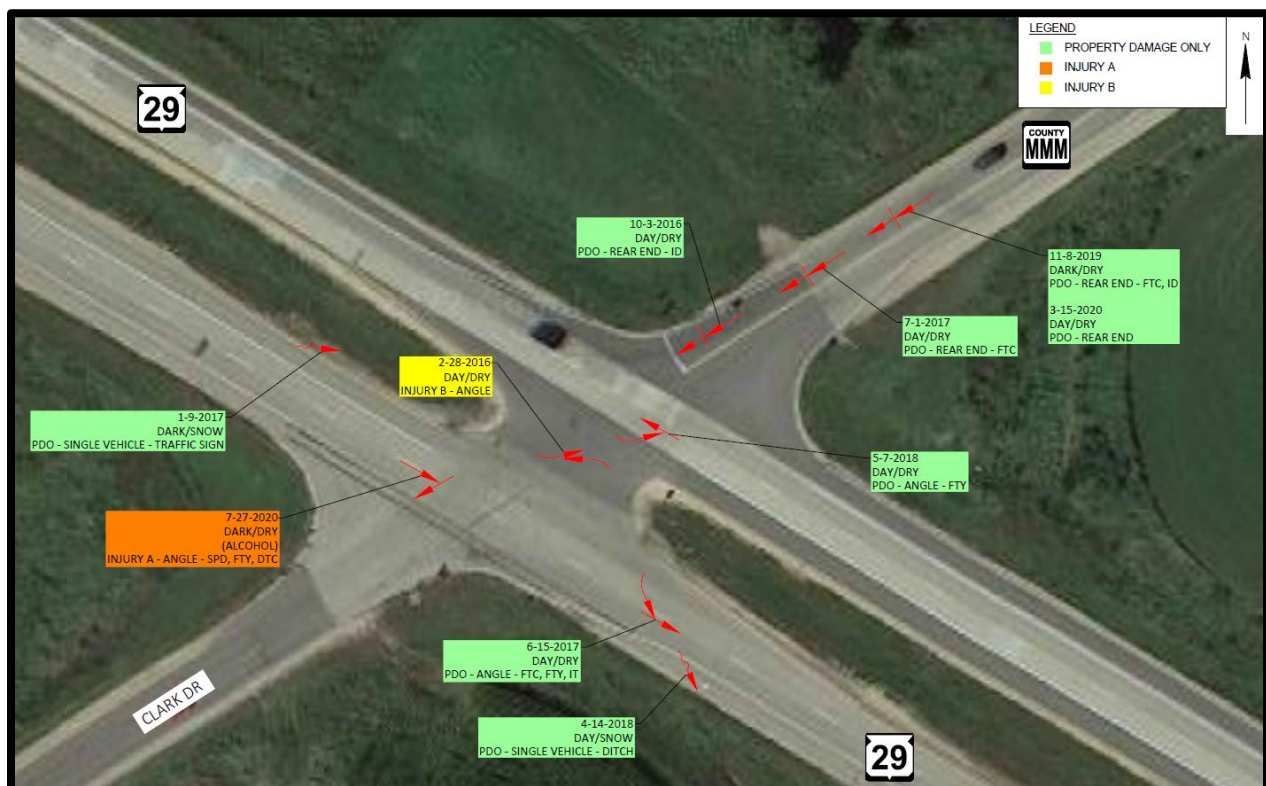
- Half of the crashes (5) were angle type crashes.
- Four (4) of the angle type crashes resulted in severe injuries.

Because of the severity of crashes, a preliminary study using this crash information qualified an improvement project for safety improvement funding.

Crashes have continued to occur at the intersection. As part of the current study phase, crashes from 2016 to 2020 have been summarized. Ten (10) crashes occurred.

- Four (4) angle type crashes resulting in severe injuries in two (2) of the crashes.
- Four (4) crashes were rear-end type crashes on County MMM.

A crash diagram showing the crashes from 2016 to 2020 is shown below.



**Intersection Crash Diagram (2016 to 2020)**

In 2021 and 2022, crashes have continued to occur. On Aug. 23, 2022, a pickup truck was crossing from County MMM to Clark Drive and struck a motorcycle traveling in the eastbound direction on WIS 29. The crash resulted in a fatality of the motorcyclist.

### **Geometric conditions**

The existing intersection also has some geometric deficiencies which may also be contributing to intersection safety:

- The intersection has a sharp skew angle of 63 degrees (75 to 90 degrees is desirable).
- The intersection has short turn lanes ranging from 25 to 350 feet (300 to 550 feet is desirable).

### **Pavement conditions**

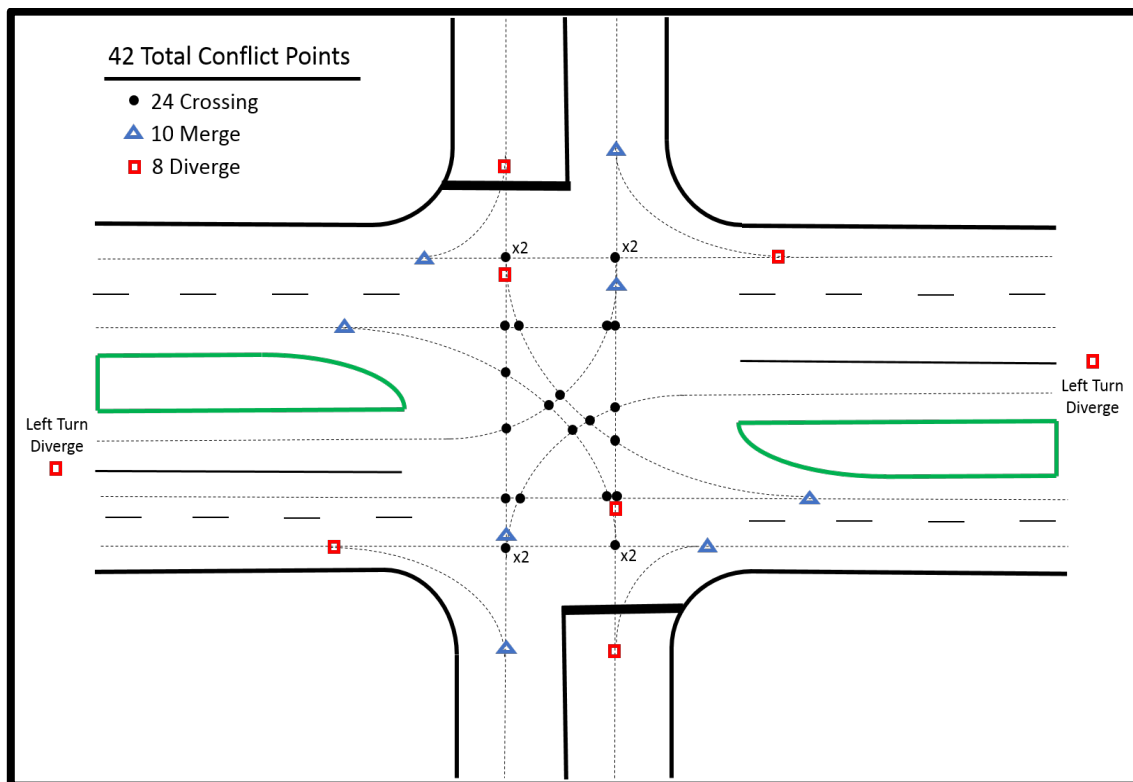
WIS 29 and the County MMM/Clark Drive intersection were constructed in 1999. The existing concrete pavement on WIS 29 is experiencing some cracking and requires maintenance.

### **Feasible and reasonable at-grade intersection alternatives**

The preferred alternative is subject to public input and environmental document approval.

All alternatives would include any necessary concrete pavement repair on WIS 29 since repairs can be effectively completed during lane closures when the intersection is under construction.

All alternatives would reduce the potential for crashes by reducing the number of conflict points. A standard intersection has 42 conflict points as shown below.



**Intersection Conflict Points**

### **Alternative A: J-turn Intersection (full access at intersection with modified turning movements)**

This alternative would improve intersection safety by allowing drivers to focus on one direction of traffic at a time to make their decision. A J-turn alternative would provide full access at the County MMM/Clark Drive intersection, while redirecting the County MMM/Clark Drive through and left-turn movements to a designated U-turn opening on either side of the intersection.

- Reconfiguring the existing intersection would create two additional U-turn openings in the median with turn lanes extending to County MMM/Clark Drive.
- Islands on the approaches of County MMM/Clark Drive would direct through and left-turning movements into the U-turn turn lane to remove mainline weaving and reduce wrong way maneuvers.
- The WIS 29 mainline left-turn lanes would be offset to provide improved sight distance at the County MMM/Clark Drive intersection.
- The right-turn lanes are proposed to be parallel and would provide more deceleration distance for right-turning traffic over the existing condition.
- This alternative would also address the less than desirable intersection skew by realigning the side road approaches.

### **Alternative B: Median U-turn Intersection (full access at intersection with modified turning movements)**

This alternative would improve intersection safety by allowing drivers to focus on one direction of traffic at a time to make their decision. A median U-turn alternative would provide full access at the County MMM/Clark Drive intersection while redirecting the County MMM/Clark Drive through and left-turn movements and the WIS 29 left-turns to a designated U-turn opening on either side of the intersection.

- Reconfiguring the existing intersection would create two U-turn openings in the median with turn lanes extending through the County MMM/Clark Drive intersection.
- Islands on the approaches of County MMM/Clark Drive would direct through and left-turning movements into the U-turn turn lane and improve sight distance when combined with offset right-turn lanes on WIS 29.
- The right-turn lanes are proposed to be parallel and would provide more deceleration distance for right-turning traffic over the existing condition.
- This alternative would also address the less than desirable intersection skew by realigning the side road approaches.

### **Alternative C1: Access Control (right-in/right-out/left-in access)**

This alternative would improve intersection safety by restricting some of the turning movements. This alternative would restrict access to right-in/right-out/left-in for movements at County MMM/Clark Drive.

- Islands on the approaches of County MMM/Clark Drive would direct vehicles away from the slotted left-turn lanes to reduce wrong way maneuvers.
- The WIS 29 mainline left-turn lanes would be offset to provide improved sight distance at the County MMM/Clark Drive intersection.
- The right-turn lanes are proposed to be parallel and would provide more deceleration distance for right-turning traffic over the existing condition.
- This alternative would address intersection skew by realigning the side road approaches.

### **Alternative C2: Access Control (right-in/right-out/left-in access) with Clark Drive Closure**

This alternative is the same as Alternative C1 except it would remove access to the south leg of the intersection by constructing a cul-de-sac on Clark Drive.

## ***Preliminary valuation of alternatives***



		ALTERNATIVES				
		No Build Alternative	Build Alternative A	Build Alternative B	Build Alternative C1	Build Alternative C2
		Do nothing	J-Turn Intersection	Median U-Turn Intersection	Access Control	Access Control with Clark Drive Closure
FACTORS OF EVALUATION	Total Conflict Points	42	24	18	18	8
	Crossing Conflicts (Typically Results in Severe Crashes)	24	4	0	4	2
	Probability of Reducing Severe Angle Crashes (High is Most Favorable)	Low	High	High	High	High
	Probability of Reducing Confusion for Motorists Using the Median (High is Most Favorable)	Low	Moderate	Moderate	High	High
	Requires Local Traffic Diversion (Low is Most Favorable)	Low	Low	Low	Moderate	High
	Environmental Impacts (Minimal is Most Favorable)	None	Large (Wetland Impact +/-1 acre)	Minimal (Wetland Impact +/- 0.1 Acre)	Large (Wetland Impact +/-1 acre)	Minimal (Wetland Impact +/- 0.1 Acre)
	Utility Impacts (None is Most Favorable)	None	None	None	None	None
	New Right of Way (None is Most Favorable)	None	None	None	None	None
	Approximate Construction Cost (Based on Current Level of Design)	\$60K*	\$2.72 M	\$1.65 M	\$2.17 M	\$1.54 M

\* Concrete pavement maintenance along WIS 29 without intersection safety improvements

### August/September 2022 public input

A public involvement comment period was held between Aug. 22 and Sept. 16 to gather initial public input on the at-grade intersection alternatives described above.

- Approximately 47 comments were received (general public, businesses, local officials)
- 2 responses supported a no-build alternative
- 23 responses supported one of the at-grade intersection alternatives
  - Alternative A: 11
  - Alternative B: 7
  - Alternative C1: 4
  - Alternative C2: 1
- 4 responses supported some limited intersection modification with turn lanes and realignment of side road with no changes in access control
- 4 responses supported a diamond interchange at County MMM/Clark Drive
- 11 responses supported a local interchange concept at the Maple Avenue overpass

### Future freeway conversion and interchange alternatives

#### Future freeway conversion

Currently WIS 29 within Shawano County is not scheduled to be converted to a freeway. The existing WIS 29 expressway and the County MMM/Clark Drive at-grade intersection was constructed in 1999.

- Right of way acquired in the 1990s accommodates a future interchange.
- WIS 29 is an expressway west of the intersection with at-grade access points.
- East of the intersection, WIS 29 is access controlled with grade separated access.

Freeway conversions are assessed throughout the country and compete for funding based on:

- Existing and future land uses
- Traffic growth and patterns
- Operational (traffic flow) issues

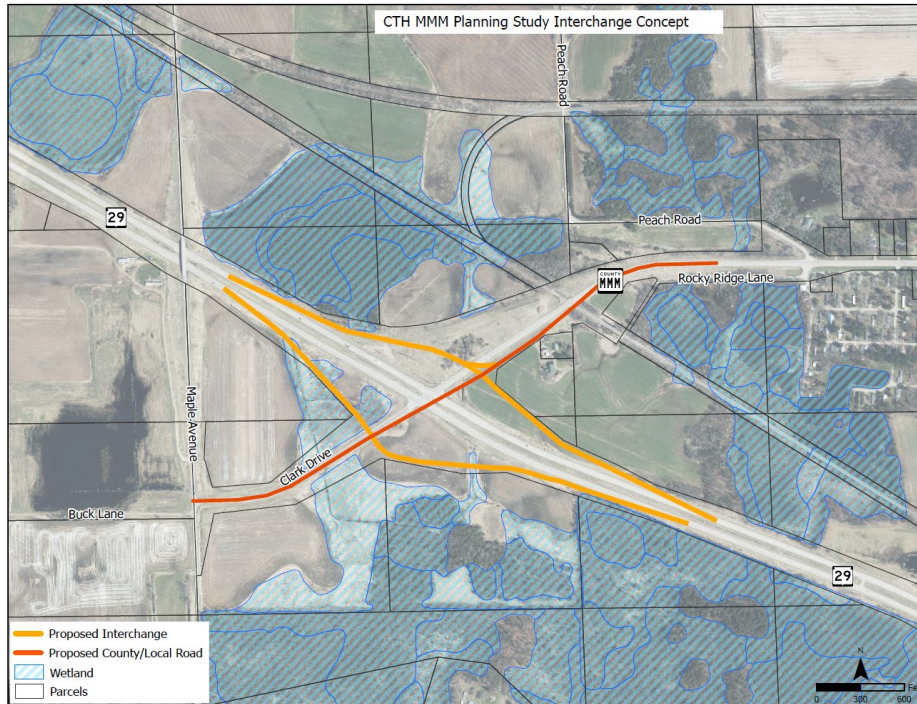
When WIS 29 requires full conversion to a freeway, an interchange would be warranted at this location as documented in the 2010 freeway conversion environmental planning study completed by WisDOT in cooperation with local officials.

- The 2010 planning study proposed a diamond interchange at the existing intersection when the freeway conversion is warranted.

### **Diamond interchange**

During development of the Phase I Intersection Control Evaluation in August 2018, an interchange alternative from the 2010 planning study was considered.

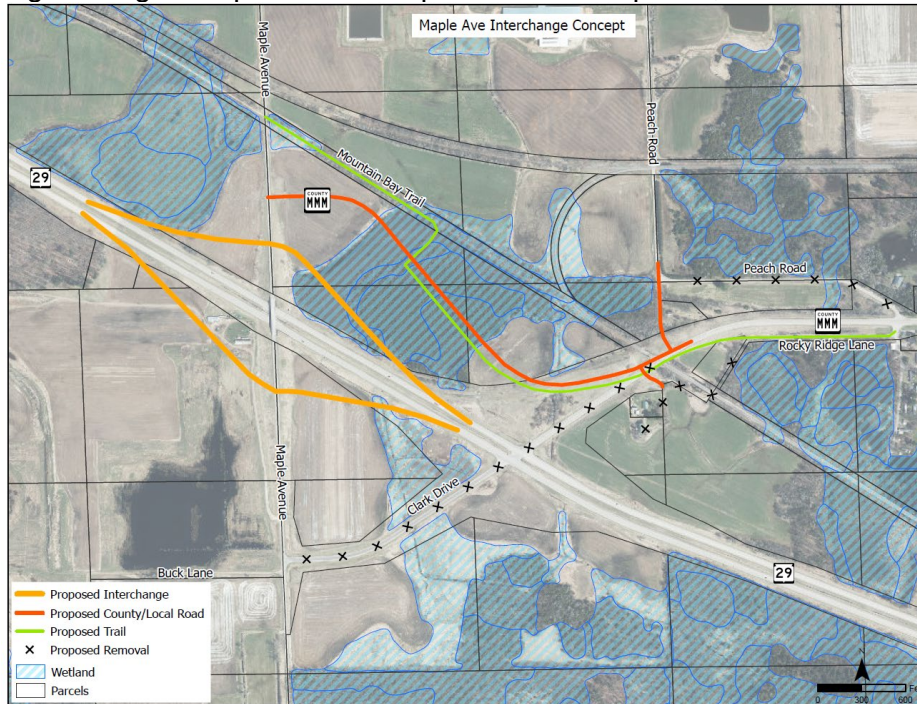
- An interchange at the existing intersection would address all safety issues with an estimated cost of \$10 to \$15M.



**2010 Planning Study Diamond Interchange Alternative at County MMM/Clark Drive**

### **Local interchange**

A local interchange alternative was recommended for consideration as part of the public input received during the August/September 2022 public comment period, as noted above.



**2022 Local Interchange Alternative at Maple Avenue**

This interchange option would be located at the existing Maple Avenue overpass.

- An interchange at this intersection would address all safety issues with an estimated cost of \$12 to \$15 M.
- Relocating County MMM and constructing an interchange at Maple Avenue would also require the acquisition of approximately 13 acres of new right of way, most of which is currently wetland or farmland.
- It would also require acquisition of the Shawano School Forest property and necessitate relocation of several farm buildings.

### ***Recommended at-grade intersection alternative – Alternative A: J-Turn***

**The recommended alternative is subject to the additional public input collected during this public involvement period and the environmental document review and approval.**

Alternatives C1 and C2 are proposed to be eliminated from further consideration since other local roads in the project area are not in a condition to handle diversion of local traffic. This alternative was not supported by local officials.

While Alternative B is a feasible and reasonable alternative, based on the safety evaluation and public input, WisDOT is recommending that Alternative A: J-Turn be adopted.

Influencing factors for the recommendation include the following:

#### **Safety**

- This alternative would improve intersection safety (primary need) by allowing drivers to focus on one direction of traffic at a time to make their decision. A J-Turn would reduce the potential for severe injury crashes. Safety would be improved by reducing the total conflict points from 42 to 24 and reducing the crossing conflict points from 24 to 4.
- The WIS 29 mainline left-turn lanes would be offset to provide improved sight distance at the County MMM/Clark Drive intersection.
- The WIS 29 mainline right-turn lanes would be parallel to provide proper deceleration distance and to safely accommodate the low right-turn volumes at the intersection.
- This alternative would also address the less than desirable intersection angle by realigning the side road approaches to 75-degrees.

#### **Local Access**

- A J-turn alternative would provide full access at the County MMM/Clark Drive intersection, while redirecting the County MMM/Clark Drive through and left-turn movements to a designated U-turn opening on either side of the intersection.
- This alternative would not require any local traffic diversion or impacts to emergency circulation.

#### **Corridor Consistency**

- In 2022, WisDOT constructed a J-Turn at County U approximately 5.7-miles west of the County MMM/Clark Drive intersection. Alternative A would provide for an intersection configuration along the WIS 29 expressway corridor that is consistent and familiar to drivers with similar offset turn lanes, islands to direct traffic, and lighting as County U.

#### **Economics**

- While this alternative is the most expensive of all at-grade alternatives evaluated, in terms of the magnitude of cost, all at-grade alternatives are on the same order of magnitude and the cost is a limited differentiating factor for selection.



## Proposed traffic impacts

Construction is currently scheduled to begin in summer 2024. Construction is anticipated to take three to four months to complete.

During construction, crews will manage traffic using single-lane closures. Motorists can expect some delays and width restrictions to occur, but delays and restrictions will be managed through limiting contractor operations at critical times. Flagging and periodic closures may need to occur on the side roads of County MMM and Clark Drive during construction of the intersection improvements along each side road.

Access to the adjacent farmlands will be maintained during construction.

## Real estate

All work is anticipated to occur within the existing right of way.

## Project update/next steps

Local officials meeting #1	March 30, 2022
Local officials meeting #2	Aug. 8, 2022
Public involvement comment period	August and September 2022
Local officials meeting #3	Feb. 20, 2023
Public involvement meeting #2	March 14, 2023
Environmental document	Spring 2023
Preliminary plans of selected alternative	Summer 2023
Final plans	Feb. 1, 2024
Construction currently scheduled	2024

## Public input/comments

Your comments assist us in developing a project that will serve the needs of the traveling public as well as the needs of the local community. Your input is welcome and appreciated throughout the design process.

There are several ways to submit your input by **March 28, 2023**:

1. Fill out the comment form attached to this handout and mail it to WisDOT.
2. Complete the comment form on the project website - <https://wisconsin.gov/Pages/projects/by-region/nc/wis29countymmm/default.aspx> – and mail it to WisDOT.
3. Email comments or questions to the contacts listed below.

Deaf, hard-of-hearing, deaf-blind and speech-disabled persons should contact the Wisconsin Relay Service by dialing 711.

For more information, please contact:

Andrew Casper, P.E.  
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Wisconsin Rapids, WI 54495  
(715) 365-5713  
[andrew.casper@dot.wi.gov](mailto:andrew.casper@dot.wi.gov)

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Attn.: Andrew Casper, P.E.  
WisDOT North Central Region  
1681 2<sup>nd</sup> Ave. S.  
Wisconsin Rapids, WI 54495

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