

# AGRICULTURAL IMPACT STATEMENT



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DATCP  
#4357

I-41 Expansion: STH 96 (Wisconsin Ave) to County F (Scheuring Rd)  
Brown and Outagamie Counties  
WisDOT # 1130-63-00



WISCONSIN DEPARTMENT OF AGRICULTURE,  
TRADE AND CONSUMER PROTECTION  
*PUBLISHED AUGUST 6, 2021*

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STH 96 (Wisconsin Ave) to CTH F (Scheuring Rd)

Brown and Outagamie Counties

## **WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION**

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*Published August 6, 2021*

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# MISSION STATEMENT

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Dear Reader,

In the 1970's, Wisconsin farmers and many local governments located between Green Bay and Milwaukee overwhelmingly opposed the planned creation of Interstate 43 (I-43). As originally planned, the I-43 project would run about 2 miles west of and parallel to Hwy-57 and be constructed primarily on farmland, as opposed to utilizing the existing Hwy-57 right of way. These farmers organized and staged protest rallies on the Wisconsin State Capitol grounds, including bringing cows to graze on the capital lawn. The strong opposition these farmers and local governments demonstrated prompted a compromise that would relocate the interstate to run along the US 141 corridor between Milwaukee and Manitowoc. This same opposition also prompted the Wisconsin legislature in 1978 to establish the Agricultural Impact Statement (AIS) statute, Wis. Stat. § 32.035, as part of Wisconsin's Eminent Domain law.

Holding onto the spirit and purpose of the farmer led protests of the 1970's, the mission of the AIS program is ***to provide agricultural landowners and operators an opportunity to be heard in matters that impact their lands and an opportunity to voice for alternatives in order to preserve farmland under the framework of Wis. Stat. § 32.035***. Through the AIS program, agricultural landowners have the opportunity to provide feedback, document impacts, and advocate for alternative solutions any time agricultural lands are significantly affected by an entity with the potential powers of eminent domain. The AIS program also provides affected landowners the time to gather information in order to make well informed decisions before the potential project begins. Lastly, the AIS program makes suggestions and recommendations to project initiators to promote project alternatives and management practices that would reduce the potential impacts to agricultural lands and operations.

The AIS program has responsibilities to both the impacted landowners and the project initiator. The AIS program serves as an advocate to the affected agricultural landowners and will contact each affected landowner and operator in order to listen, learn and document the impacts the project poses to their agricultural lands and operations. Based on this feedback, the program will also identify and recommend project alternatives, best management & oversight practices and remediation practices to the project initiator, landowner(s) and operator(s) to reduce potential agricultural impacts. The AIS program serves the needs of the project initiator by conducting the AIS analysis and publishing the statement within a timely manner as required by Wis. Stat. § 32.035. In addition, the AIS program provides a continuing presence throughout project development and oversight processes in order to advocate for agricultural landowners and support the statewide priority to preserve prime farmland.

The Agricultural Impact Statement program and the WI Department of Agriculture, Trade and Consumer Protection are honored to provide this essential state service to the agricultural landowners and operators of the state.

Thank you

*The figures within this document were created with a colorblind friendly palette*

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## ACRONYMS

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AEA	Agricultural Enterprise Area
AIN	Agricultural Impact Notification
AIS	Agricultural Impact Statement
CREP	Conservation Reserve and Enhancement Program
CRP	Conservation Reserve Program
CSA	Core Statistical Areas
CTH	County Trunk Highway
DATCP	Department of Agriculture, Trade, and Consumer Protection
FP	Farmland Preservation Program
FSA	Farm Service Agency
I-41	Interstate Highway 41
MSA	Metropolitan Statistical Areas
ROW	Right-of-Way
STH	State Trunk Highway
SWEP	Safety and Weight Enforcement Facility
USDA	U.S. Department of Agriculture
WisDNR	Wisconsin Department of Natural Resources
WisDOA	Wisconsin Department of Administration
WisDOR	Wisconsin Department of Revenue
WisDOT	Wisconsin Department of Transportation
WPDES	Wisconsin Pollutant Discharge Elimination System

## SUMMARY OF AGRICULTURAL IMPACT STATEMENT

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The Wisconsin Department of Agriculture, Trade and Consumer Protection (the Department) has prepared Agricultural Impact Statement (AIS) #4357 for the proposed acquisition of agricultural land by the Wisconsin Department of Transportation (WisDOT) along a 23 mile corridor of Interstate Highway 41 (I-41) from State Trunk Highway (STH) 96 in Outagamie County, to County Trunk Highway (CTH) F in Brown County, WI in order to accommodate the expansion of I-41 into a six-lane freeway (Figure 1). WisDOT has indicated the primary reasons for the expansion of I-41 into a six-lane freeway is to improve safety, reduce congestion and correct roadway deficiencies (WisDOT, 2021a). The I-41 expansion project will also address deteriorating pavement and bridges, maintain a key backbone route for the local, state and national transportation network, and replace the functionally obsolete Wrightstown Safety and Weight Enforcement Facility. Through the preferred alternative, WisDOT proposes to construct the additional lanes primarily within the existing WisDOT highway Right-of-way (ROW), as well as new ROWs from non-agricultural lands.

In addition to the I-41 lane expansion, WisDOT is also proposing to realign and/or redesign and/or reconstruct several interchanges along the I-41 expansion corridor (Appendix A – Figure 1) and construct nineteen new retention ponds. WisDOT will purchase new ROWs from agricultural lands for four of the interchanges (Southbridge Road, CTH E, CTH U and CTH S) and ten of the retention ponds (Figure 1). Therefore, the scope of this analysis is limited to the I-41 Interchanges and retention ponds that purchase new ROWs from agricultural lands. The Department's analysis of the proposed Southbridge Road interchange has already been established as part of the WisDOT South Bridge Connector project (DOT ID 4556-02-00) and published under AIS #3839 (DATCP, 2012).

Prior to selecting the preferred interchange and retention pond alternatives, WisDOT evaluated a range of project alternatives. Based on the alternatives analysis, WisDOT selected the preferred alternative for I-41 interchanges of CTH E, CTH U and CTH S and the retention ponds (Section II: Project Description). WisDOT stated the selected interchange alternatives would provide the safest interchange options, the highest level traffic operations, the best capacity to handle future traffic volumes, and had the support of local municipalities and units of government. As proposed, the selected alternatives will impact 65.68 acres of agricultural lands and ten agricultural landowners.

In accordance with [Wis. Stat. §32.035\(3\)](#), WisDOT has provided the Department with the necessary information and materials to conduct an AIS. The Department has also contacted the agricultural property owners and operators impacted by the selected alternatives. In accordance with [Wis. Stat. §32.035\(4\)\(b\)](#), the Department has reviewed and analyzed WisDOT materials and comments from the affected agricultural property owners and operators of the selected alternatives to assess the agricultural impacts of the proposed I-41 expansion project. Through the AIS analysis, the Department offers a set of recommendations and conclusions to WisDOT and the

agricultural landowners and operators to help mitigate current and future impacts on agricultural lands and agricultural operations at the selected sites.

The set of recommendations are located within the AIS Recommendation Section beginning on page 6. The AIS analysis begins on page 9 with information on the project located in Section II. Information and conclusions on the agricultural setting of Brown and Outagamie Counties and impacted areas can be found in Section III. The agricultural impacts of the project on the impacted land, landowners and operators can be found in Section IV. Appendices for AIS #4357 contain additional project maps from WisDOT (Appendix A), information on the appraisal and compensation process (Appendix B), a copy of Wisconsin's agricultural impact statement statute (Appendix C) and various additional sources of related information for agricultural landowners and operators (Appendix D).

If WisDOT deviates from the selected alternatives or the selected sites, WisDOT shall re-notify the Department. The Department shall review the re-notification for new potential impacts to agricultural lands and may determine to generate an addendum to this AIS.

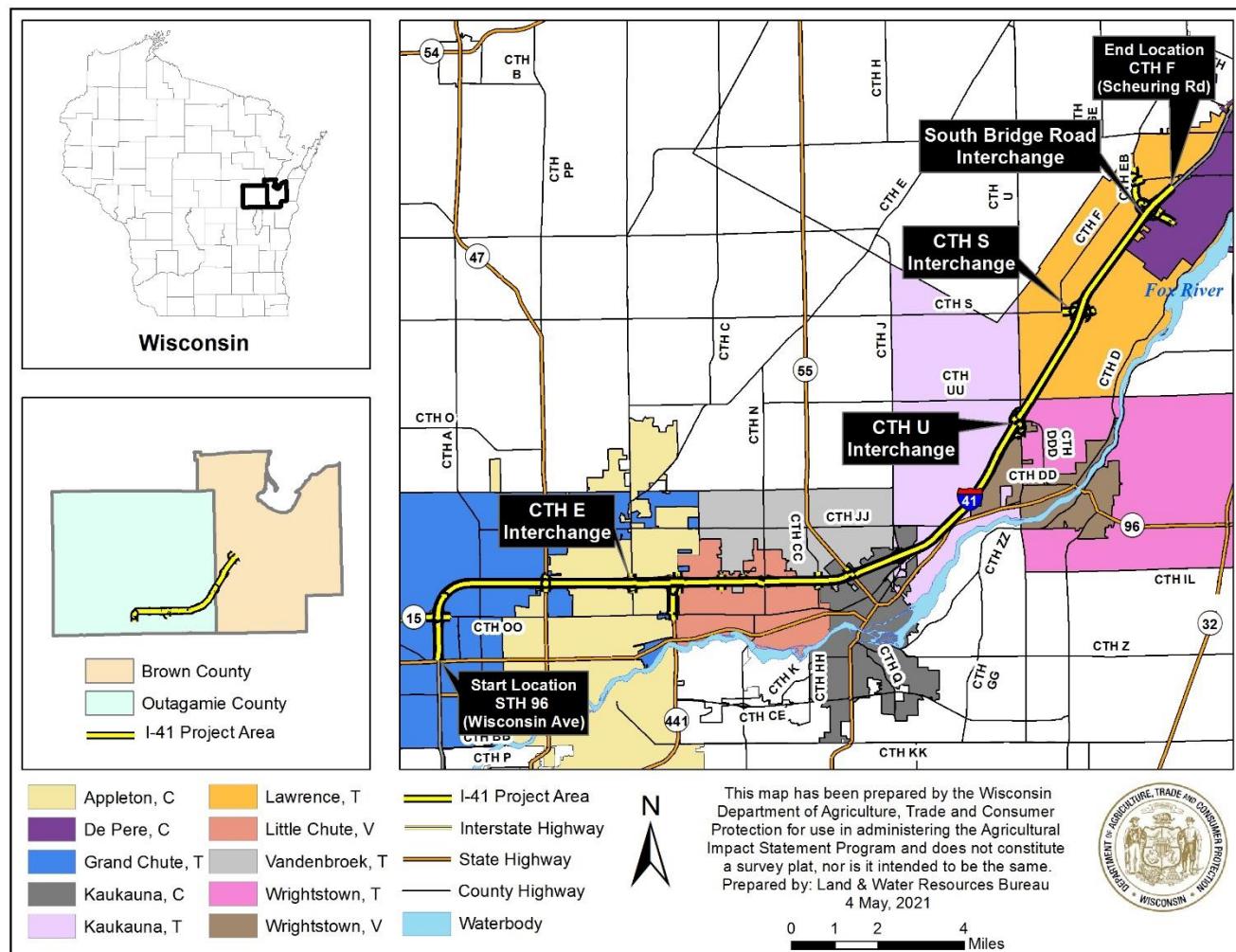


Figure 1: Location of the proposed Interstate Highway 41 (I-41) expansion and I-41 interchanges with agricultural impacts in Outagamie and Brown Counties, WI.

# AGRICULTURAL IMPACT STATEMENT RECOMMENDATIONS

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The Wisconsin Department of Agriculture, Trade and Consumer Protection (the Department) has reviewed and analyzed the materials provided by the Wisconsin Department of Transportation (WisDOT) and comments from the affected agricultural property owners and operators regarding the proposed expansion of Interstate Highway 41 (I-41). In accordance with [Wis. Stat. § 32.035\(4\)\(b\)](#), the Department provides the following recommendations to WisDOT and agricultural landowners and operators to help mitigate impacts on agricultural lands and agricultural operations.

## Recommendations to the WisDOT

- As the proposed project will impact two drainage districts, the Vandenbroek District overseen by the [Outagamie County Drainage Board](#) and Drainage District #5 overseen by the [Brown County Drainage Board](#), WisDOT shall notify and consult with the Board's in order to meet WisDOT's legal obligations under [Wis. Stat. § 86.075](#), [ATCP 48.40](#) and [FDM 5-15-1](#).
- As the proposed project will impact two drainage districts, WisDOT is obligated by a Memorandum of Agreement between WisDOT and the Department, [FDM 5-15-1](#) and [ATCP 48](#) to notify the Department's State Drainage Engineer of the proposed project and provide the Department with the relevant project information required to facilitate a County Drainage Board review of the proposed I-41 expansion project.
- If there is adequate growing season for a crop to mature and be harvested after WisDOT acquires the impacted lands, but before construction along the I-41 corridor begins, WisDOT should allow the current agricultural operators to harvest a crop for that season.
- While not required under its Wisconsin Pollutant Discharge Elimination System (WPDES) permit, during project design WisDOT should consult with the Brown and Outagamie Counties Land Services Departments to assess whether the project design contains sufficient measures and infrastructure to manage increased stormwater runoff, minimizes the potential for stream backwatering, minimizes drainage problems, and mitigates impacts to agricultural lands as well as adjacent properties.
- While not required under its WPDES permit, during project design WisDOT may wish to consult with the Brown and Outagamie County Conservationists for input on whether planned land restoration and planting of the landscape around the new interchange minimize drainage problems, soil erosion and soil compaction on the remaining remnant agricultural lands as well as adjacent properties.

- WisDOT should consult with agricultural landowners and operators who have historical knowledge of flooding and runoff problems, to ensure that new or replacement culverts, ditches, and other runoff management structures for the interchange are adequate for anticipated storm events.
- Where retention pond and roadway construction activities have altered existing drainage patterns or the natural stratification of soils resulting in new wet areas or decreased productivity, WisDOT should work with landowners to determine a means to return the agricultural land either in the ROW or adjoining lands to pre-construction function. New drainage tiles or ditching, de-compaction, regrading, or additional fill may be required to correct problems that arise after construction is complete.
- WisDOT should monitor for the presence of underground drainage tiles when constructing the retention ponds. If an active drainage tile is damaged or broken as a result of construction activities, WisDOT should repair or replace the damaged or broken section.
- WisDOT should consider relocating the proposed CTH J retention pond to the western side of parcel number 322111500, unless WisDOT determines this area to be a farmed wetland. Relocating this pond will preserve productive prime farmland located on the eastern side of the parcel and address the concerns of the Vanepern Family Trust.
- WisDOT should consider relocating the proposed Little Rapids Road retention pond to the southeastern side of parcel number L-460, unless WisDOT determines this area to be a farmed wetland. Relocating this pond will preserve productive prime farmland located on the northwestern side of the parcel and address the concerns of R & R Countryside LLC.
- WisDOT should contact and consult with the Town of Lawrence to determine if WisDOT and the Town may collaborate on the design of shared retention ponds along the I-41 corridor and Larry Lane in order to reduce the overall number of retention ponds in the area and preserve farmland.
- WisDOT should consult with the affected agricultural landowners and operators to ensure any relocated or newly established agricultural land access points are located in areas that provide safe and efficient access to remnant agricultural properties.
- As proposed, realignment of the west I-41 frontage road (Mid Valley Dr.) for the CTH S interchange will sever three agricultural parcels L-20-1, L-21-1 and L-39-3. The remnants of these parcels may no longer be economically viable agricultural lands given its future size, access limitations, and the potential for increased stormwater impacts. Given these circumstances, the remnants of parcel IDs L-20-1, L-21-1 and L-39-3 could be considered uneconomic remnants according to [Wis. Stat. 32.05\(3m\)](#) and WisDOT should consider offering to purchase these remnant agricultural fields.

- As proposed, the retention ponds located near Birchwood Road and Little Rapids Road in Brown County will sever agricultural parcel L-1978 and L-460, respectively. The remnants of this parcels may no longer be economically viable agricultural lands given its' future size, access limitations, composition of subprime soils and the potential for increased soil moisture. Given these circumstances, the remnants of parcel IDs L-1978 and L-460 could be considered uneconomic remnants according to [Wis. Stat. 32.05\(3m\)](#) and WisDOT should consider offering to purchase these remnant agricultural fields.
- WisDOT should provide agricultural landowners and operators advanced notice of acquisition and construction schedules so that agricultural activities can be adjusted accordingly.

### **Recommendations to Agricultural Landowners and Operators**

- The affected agricultural landowners should fully describe and discuss property improvements and agricultural operations with appraisers so that the appropriate value of the affected property can be established.
- Given the proposed project may create uneconomic remnants defined by [Wis. Stat. §32.05\(3m\)](#) of parcel IDs L-20-1, L-21-1, L-39-3, L-1978 and L-460, WisDOT may be obligated to extend an offer to purchase the affected agricultural land. Should the affected agricultural landowner be interested in selling the remnant agricultural field(s) to WisDOT, the landowner should consider opening a dialogue now so that the property valuation reflects its current condition.
- Prior to the start of construction, landowners should identify for WisDOT where construction activities may interfere with farm operations, farm building/facilities or farming infrastructure including but not limited to drain tiles, wells, watering systems, drainage ditches, drainage tile, culverts, fencing, farm access roads, or grain bins.
- After construction is complete the Outagamie and Brown County Drainage Boards, landowners and WisDOT should carefully monitor for the emergence of drainage problems. If problems are observed that can be attributed to roadway construction, the Drainage Board(s), landowner(s) and WisDOT should work together to develop a mutually agreeable solution.
- The affected farmland owners should inform the tenant agricultural operators if the WisDOT has made a jurisdictional offer, under the power of eminent domain.

# AGRICULTURAL IMPACT STATEMENT

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## I. INTRODUCTION

The Wisconsin Department of Agriculture, Trade and Consumer Protection (the Department) has prepared Agricultural Impact Statement (AIS) #4357 in accordance with [Wis. Stat. §32.035](#) for the proposed expansion of Interstate Highway 41 (I-41) into a six-lane freeway from State Trunk Highway (STH) 96 (Wisconsin Ave) in Outagamie County, to County Trunk Highway (CTH) F (Scheuring Rd) in Brown County, WI (Figure 1) by the Wisconsin Department of Transportation (WisDOT). The expansion of I-41 will occur within the Towns of Grand Chute, Kaukauna, Lawrence, Vandenbroek and Wrightstown; the Cities of Appleton, Kaukauna and De Pere; and the Villages of Little Chute and Wrightstown. In Brown County, the design of the proposed of I-41 and Southbridge Road interchange has been established as part of the WisDOT South Bridge Connector project (DOT ID 4556-02-00) and the Department published has already published the agricultural impacts of the South Bridge Connecter project under AIS #3839 (DATCP, 2012).

In Wisconsin, WisDOT is responsible for planning, building and maintaining Wisconsin's network of state highways and Interstate highway system. WisDOT also collaborates with counties to share the costs of building and operating Wisconsin's county highways. In order to achieve its responsibilities to the residents of Wisconsin, WisDOT may be required to draw upon its vested authority of condemnation granted under [Wis. Stat. §84.09](#). Vested with the power of condemnation, WisDOT projects that impact agricultural lands are also subject to Wisconsin's AIS statute [Wis. Stat. §32.035](#).

According to [Wis. Stat. §32.035](#), the AIS is designed to be an informational and advisory document that describes and analyzes the potential effects of a proposed project on agricultural operations and agricultural resources, but it cannot stop a project. The Department is required to prepare an AIS when the actual or potential exercise of eminent domain powers involves an acquisition of any interest in more than five acres of land from any agricultural operation. The term agricultural operation includes all owned and rented parcels of land, buildings, equipment, livestock, and personnel used by an individual, partnership, or corporation under single management to produce agricultural commodities.

The AIS reflects the general objectives of the Department in its recognition of the importance of conserving vital agricultural resources and maintaining a healthy rural economy. The Department is not involved in determining whether or not eminent domain powers will be used or the amount of compensation to be paid for the acquisition of any property.

As established under [Wis. Stat. §32.035\(4\)\(d\)](#), if WisDOT intends to actualize its powers of condemnation at any point during the project through a jurisdictional offer(s), WisDOT may not negotiate with an owner or make a jurisdictional offer until 30 days after the agricultural impact

statement has been published. If WisDOT deviates from the selected alternative or the selected sites, WisDOT shall re-notify the Department. The Department shall review the re-notification for new potential impacts to agricultural lands and may determine to generate an addendum to this AIS.

The full text of [Wis. Stat. §32.035](#) is included in Appendix C. Additional references to statutes that govern eminent domain and condemnation processes and other sources of information are also included in Appendices B and D.

## II. PROJECT DESCRIPTION

### Project Summary

The Wisconsin Department of Transportation (WisDOT) has provided the Wisconsin Department of Agriculture, Trade and Consumer Protection (the Department) with an agricultural impact notification (AIN) and requested spatial materials for analysis for the proposed project (WisDOT, 2021a). The AIN and requested materials serve as the main reference documents for the project, the existing roadway, the project need and alternatives. The proposed project presented here represents WisDOT's pre-selected preferred alternative along the preferred route.

WisDOT has proposed expanding Interstate Highway 41 (I-41) into a six-lane freeway (three lanes in each direction) from State Trunk Highway (STH) 96 (Wisconsin Ave) in Outagamie County, to County Trunk Highway (CTH) F (Scheuring Rd) in Brown County, WI (Figure 1). WisDOT's three primary reasons for the expansion of I-41 into a six-lane freeway are to improve safety, reduce congestion and correct roadway deficiencies (WisDOT, 2021a). The I-41 expansion project will also address deteriorating pavement and bridges, maintain a key backbone route for the local, state and national transportation network, and replace the functionally obsolete Wrightstown Safety and Weight Enforcement Facility. The additional lanes from the proposed I-41 lane expansion will primarily be sited within the existing WisDOT highway right-of-way (ROW), as well as new ROWs from non-agricultural lands.

In addition to lane expansion, WisDOT is also proposing to realign and/or redesign and/or reconstruct several interchanges along the I-41 expansion corridor (Appendix A – Figure 1) as well as nineteen retention ponds. Of these I-41 interchanges, WisDOT indicated that four (Southbridge Road, CTH E, CTH U and CTH S) and ten of the retention ponds will purchase new ROW's from agricultural lands. As the acquisition of agricultural lands are a pre-requirement to conduct an AIS, this analysis will only analyze and evaluate the I-41 interchanges and retention ponds that acquire new ROW's from agricultural lands. The Department's analysis of the proposed Southbridge Road interchange has already been established as part of the WisDOT South Bridge Connector project (DOT ID 4556-02-00) and published under Agricultural Impact Statement (AIS) #3839 (DATCP, 2012).

As proposed, the preferred alternatives will impact ten agricultural landowners and 65.68 acres of agricultural lands through a combination of permanent easements and fee-simple purchases (i.e to purchase full ownership and rights). WisDOT is currently preparing the Environmental Assessment for the project and anticipates beginning land acquisitions in 2023 – 2024. A tentative date to start construction has not yet been provided. A full list of the impacted acres for each agricultural landowner is provided in Table 4 (Section IV: Agricultural Impact).

## Project Design

WisDOT has proposed expanding Interstate Highway 41 (I-41) from State Trunk Highway (STH) 96 (Wisconsin Ave) in Outagamie County, to County Trunk Highway (CTH) F (Scheuring Rd) in Brown County, WI (Figure 1). Under WisDOT Project ID 1130-63-00, WisDOT's preferred design alternative is to expand I-41 into a six-lane freeway (three lanes in each direction) along the entire project corridor from STH 96 to CTH F in Brown County. Following the selected alternative, the proposed expansion of I-41 will begin within the Town of Grand Chute in Outagamie County at the I-41 and STH 96 interchange (Figure 1). The proposed I-41 expansion will conclude within the Town of Lawrence in Brown County at the intersection of I-41 and CTH F.

According to WisDOT, this project is considered a Major Highway Project. Major Highway Projects are considered complex and expensive highway projects which require a capacity expansion of over five miles or the creation of two and half miles of highway on a new location. As a Major Highway Project, this project requires an environmental review and public involvement. While this project was budgeted for within the 2019-2021 state biennial budget, the proposed project may still require approvals from the Transportation Projects Commission, the State Legislature and the Governor (WisDOT, 2021a).

### *I-41 Lane Expansion*

WisDOT indicated within the AIN to the Department that adding an additional lane to I-41 in each direction was the preferred alternative (WisDOT, 2021a). The additional lanes for the proposed expansion of I-41 will be sited within the existing WisDOT highway ROW and no agricultural lands will be impacted in order to accommodate the lane expansion. As no agricultural lands are impacted by the I-41 lane expansion, the proposed additional lanes are beyond the scope of this AIS and are excluded from further analysis.

### *I-41 Interchanges*

Beyond the expansion of traffic lanes, WisDOT is also proposing to realign and/or redesign and/or reconstruct several of interchanges along the I-41 project corridor as seen in Appendix A – Figure 1. According to WisDOT, these interchanges would see a variety of new design elements including:

- Diverging Diamond Interchanges
- System Interchange with Designed 55 mph Speed Flyover Ramps

- Diamond Interchanges with Traffic Signals
- Diamond Interchanges with Roundabouts

Of the various I-41 interchanges that are part of the I-41 expansion project, WisDOT has indicated that only four interchanges (South Bridge Road, CTH E, CTH U and CTH S) will acquire new ROW's from agricultural lands. As the acquisition of agricultural lands are a pre-requirement to conduct an Agricultural Impact Statement, this analysis will only analyze and evaluate the four I-41 interchanges and ten retention ponds that acquire new ROW's from agricultural lands.

#### South Bridge Connector Project (WisDOT ID 4556-02-00)

The I-41 and Southbridge Road interchange is the only new interchange proposed as part of the project. This new interchange is also part of a larger existing WisDOT project (ID 4556-02-00) known as the "South Bridge Connector" project first proposed in 2012. In general terms, the South Bridge Connector project will create a new transportation corridor south of the City of De Pere that connects I-43 to I-41. Among other design features, the project includes the construction of a new bridge over the Fox River and the creation of the I-41 and Southbridge Road interchange. For full project design information, visit the [South Bridge Connector](#) website maintained by the Brown County Department of Planning and Land Services (Brown County, 2021).

In 2012, the Department analyzed the agricultural impacts of the South Bridge Connector Project and published the findings and recommendations in AIS #3839 *Transportation Improvements in the Southern Portion of the Green Bay Metropolitan Area* in accordance Wis. Stat. §32.035 (DATCP, 2012). Since the publication of AIS #3839, the Department has continually monitored WisDOT design modifications to the South Bridge Connector Project. To date, South Bridge Connector project modifications have generally occurred within the Tier 1 corridor the Department evaluated in AIS #3839. Following the guidelines of the 2019 Department and WisDOT Cooperative Agreement, the Department determined the project revisions, to date, occurring outside of the Tier 1 corridor were non-significant revisions and released the modifications from an addendum to AIS #3839 on February 23, 2021. As the agricultural impacts of the I-41 and Southbridge Rd interchange were already analyzed as part of AIS #3839 and modifications to project ID 4556-02-00, to date, were determined to be non-significant, the Southbridge Rd interchange is beyond the scope of this AIS. Please refer to AIS #3839 and the [South Bridge Connector](#) website for information on the I-41 and Southbridge Rd interchange.

#### CTH E Interchange

The I-41 and CTH E interchange is located within the City of Appleton municipal boundary (Figure 1). According to WisDOT's selected alternative, this interchange will be realigned, reconstructed and widened (Figure 2). The on/off ramps will also be realigned to accommodate the additional lanes on I-41 and a diverging diamond interchange will be constructed for the intersections of CTH E and the I-41 on/off ramps. WisDOT selected the diverging diamond interchange with traffic lights

as the preferred alternative for the CTH E interchange as it is the safest interchange option, has the best traffic operations, and has the support of Outagamie County and local municipalities (WisDOT, 2021a).

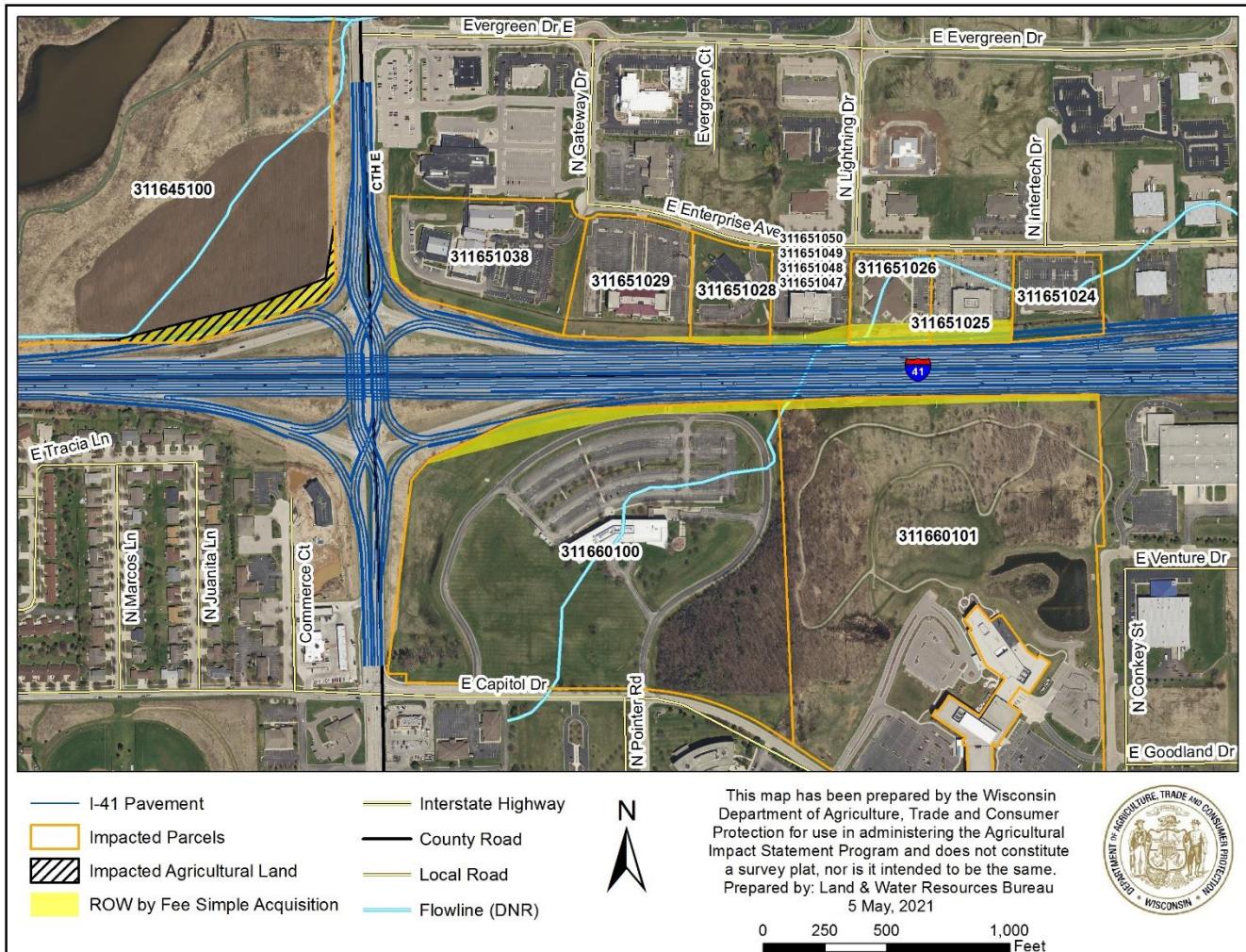


Figure 2: WisDOT preferred design, *diverging diamond interchange*, for the I-41 and CTH E interchange located in the City of Appleton, Outagamie County, WI. Newly proposed Right-of-Ways from agricultural and non-agricultural lands, as well as DNR flowlines are also shown.

#### CTH U Interchange

The I-41 and CTH U interchange is located within the Town of Kaukauna in Outagamie County (Figure 1). According to WisDOT's selected alternative, this interchange will remain on its original alignment. Diamond interchanges with roundabouts will be constructed for the intersections of CTH U and the I-41 on/off ramps and the on/off ramps will be realigned to accommodate the roundabouts (Figure 3). WisDOT selected the diamond interchange with roundabouts as the preferred alternative for the CTH U interchange due to its ability to handle future traffic volumes and has the support of Outagamie County and the Village of Wrightstown.

In addition to the CTH U interchange, under the selected alternative WisDOT will realign east (French Rd) and west (Mid Valley Dr) I-41 frontage roads and at-grade intersections with CTH U

(Figure 3). The realigned segment of French Rd is located in the Village of Wrightstown, while Mid Valley Drive is located within the Town of Kaukauna. The two four-way frontage road intersections with CTH U would be reconstructed as four separate three-way intersections with CTH U. The reconstructed French Rd three-way intersections with CTH U would be realigned approximately 270 ft to 590 ft southward to allow for more space between these intersections and the I-41 northbound on/off ramp roundabouts. The reconstructed Mid Valley Dr three-way intersections would be realigned 410 ft to 750 ft northward to lessen the curvature Mid Valley Dr and to allow for more space between these intersections and the I-41 southbound on/off ramp roundabouts.

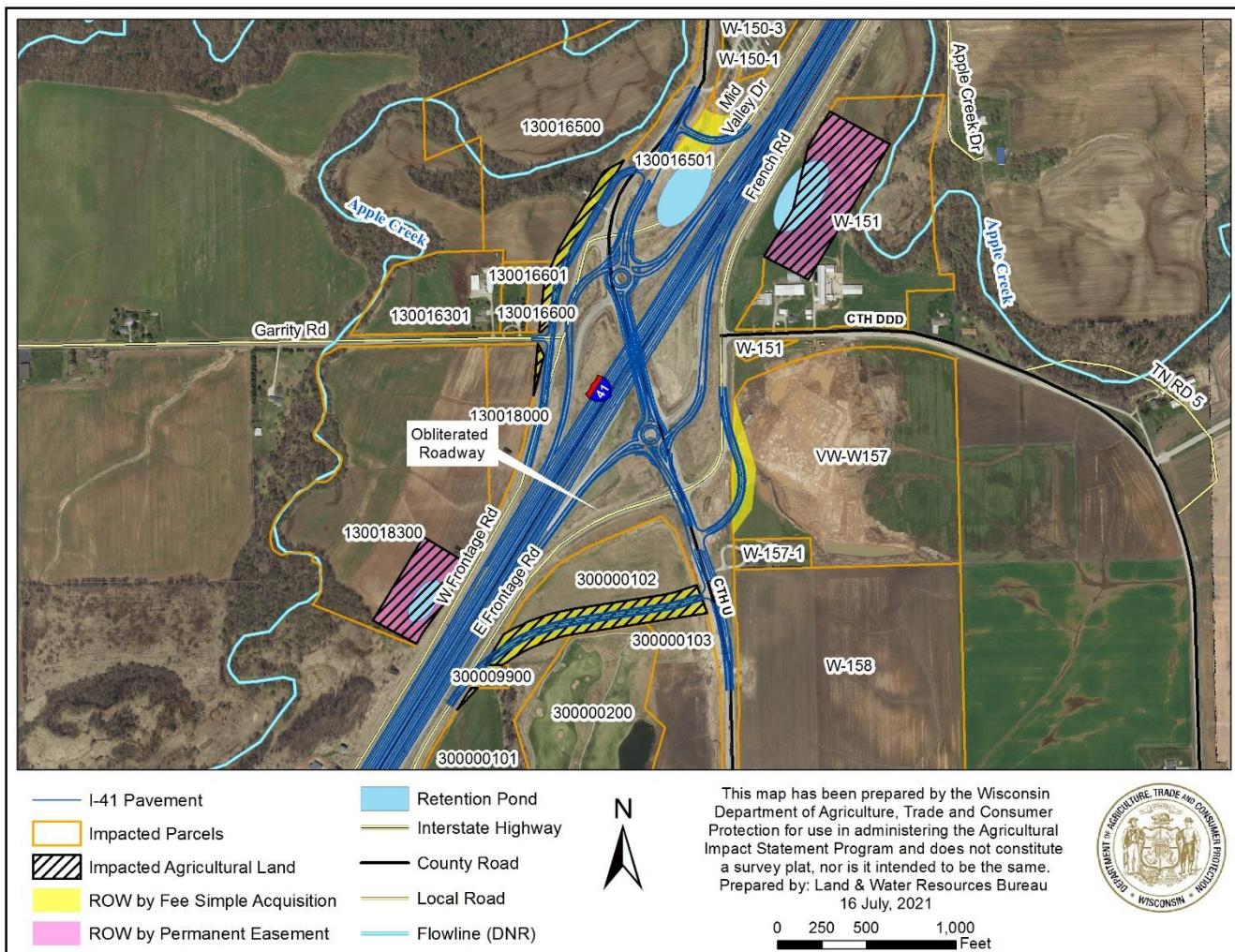


Figure 3: WisDOT preferred design (*diamond interchanges with roundabouts*) and retention ponds, for the I-41 and CTH U interchange located in the Town of Kaukauna, Outagamie County, WI. Newly proposed Right-of-Ways from agricultural and non-agricultural lands, as well as DNR flowlines are also shown.

#### CTH S Interchange

The I-41 and CTH S interchange is located within the Town of Lawrence in Brown County (Figure 1). According to WisDOT's selected alternative, this interchange will remain on its original alignment and the deck of the bridge may be replaced. Diamond interchanges with roundabouts will be constructed for the intersections of CTH S and the I-41 on/off ramps and the alignment of the

on/off ramps will remain essentially unchanged (Figure 4). WisDOT selected the diamond interchange with roundabouts as the preferred alternative for the CTH S interchange as it provides the best capacity to handle future traffic volumes, reduces new ROW acquisitions in comparison to the alternatives, and has the support of local municipalities.

In addition to the CTH S interchange, under the selected alternative WisDOT will realign east (French Rd) and west (Mid Valley Dr) I-41 frontage roads and at-grade intersections with CTH S (Figure 4). The existing frontage road intersections with CTH S would be realigned and reconstructed as roundabouts. The Mid Valley Dr and CTH S roundabout will be shifted roughly 200 ft to the west to provide more space between it and the I-41 on/off ramps roundabout.

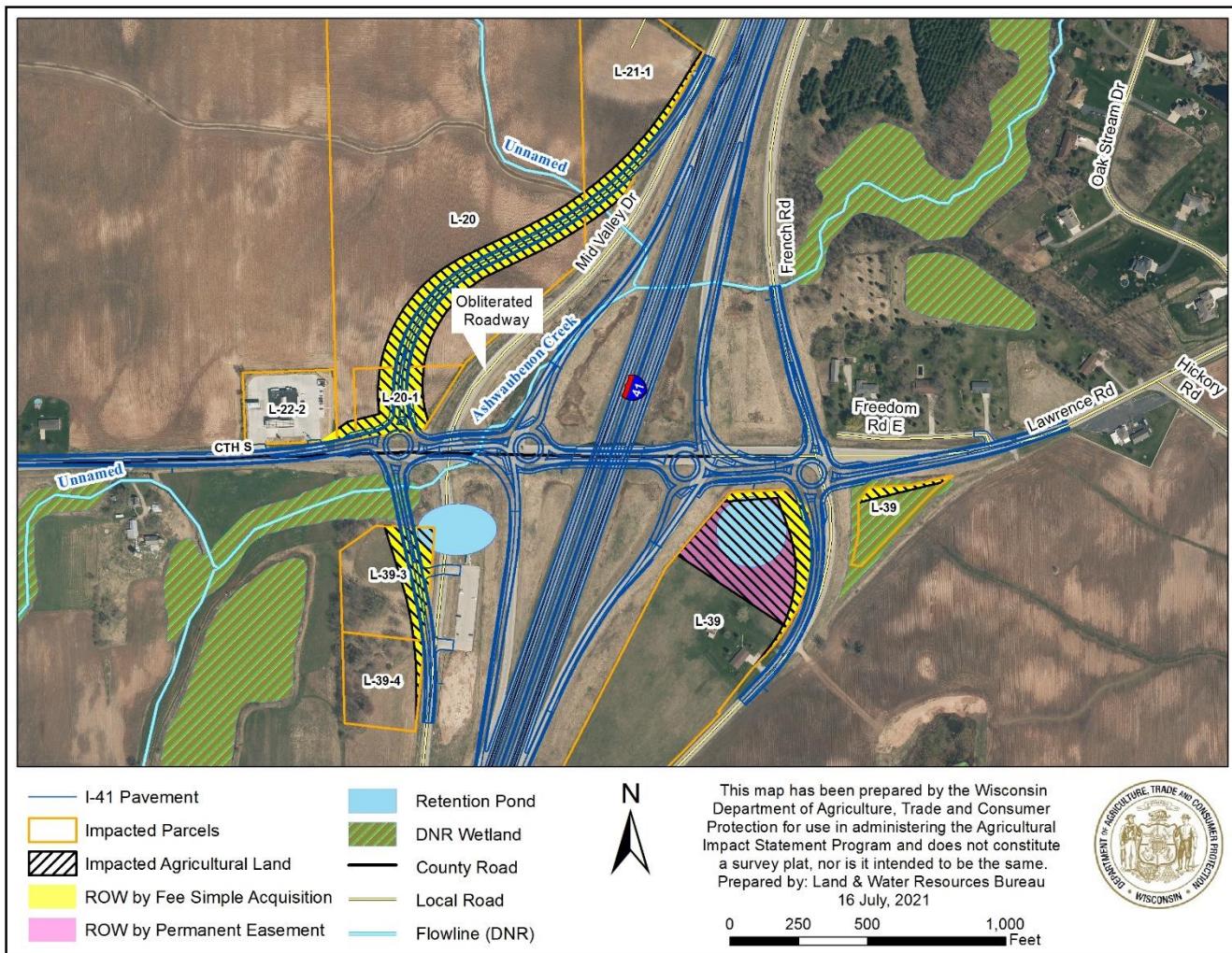


Figure 4: WisDOT preferred design (*diamond interchanges with roundabouts*) and retention ponds, for the I-41 and CTH interchange located in the Town of Lawrence in Brown County, WI. Newly proposed Right-of-Ways from agricultural and non-agricultural lands, as well as DNR flowlines are also shown.

#### Retention Ponds

WisDOT has initially proposed to construct nineteen new retention ponds along the I-41 project corridor. As design and location of the retention ponds are still within the design phase, WisDOT may change the number, size and location of any of the proposed retention ponds discussed within

this AIS. WisDOT has also proposed two additional retention ponds for the South Bridge Connector project. However, the proposed ponds are within the existing Southbridge Rd interchange study area and are therefore beyond the scope of this AIS. Please refer to AIS #3839 and the [South Bridge Connector](#) website for information on the I-41 and Southbridge Rd interchange.

Of the nineteen I-41 retention ponds proposed by WisDOT, only ten will acquire new ROW's from agricultural lands. As such, the AIS will focus on these ten ponds with agricultural impacts. WisDOT maps of all nineteen proposed I-41 retention ponds can be found in Appendix A (Appendix A – Figure 5a-e and Appendix A - Figure 6a-h). Of the ten proposed retention ponds impacting agricultural lands, five would be located within Brown County (Figure 5) and the other five in Outagamie County (Figure 6).

As WisDOT is in the initial planning phase for the number, size and location of the retention ponds, WisDOT is actively seeking governmental and public input and feedback. WisDOT, in conjunction with communications from the Department, is working with the Town of Lawrence to refine retention pond designs along the I-41 project corridor in the Town of Lawrence. The Department believes the potential collaboration may result in shared retention ponds that would reduce the number of retention ponds along the I-41 project corridor.

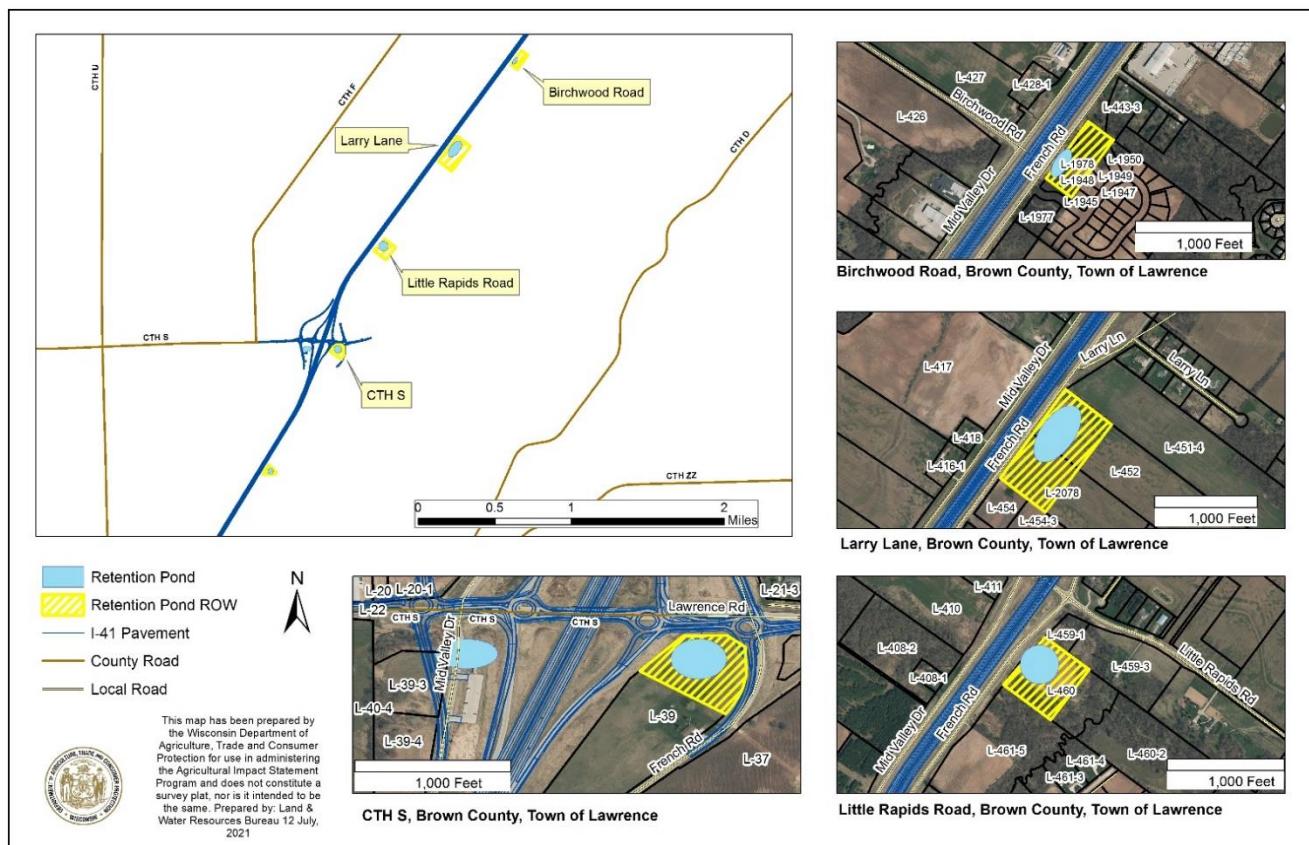


Figure 5: WisDOT proposed new Right-of-way to construct I-41 retention ponds in Brown County, WI.

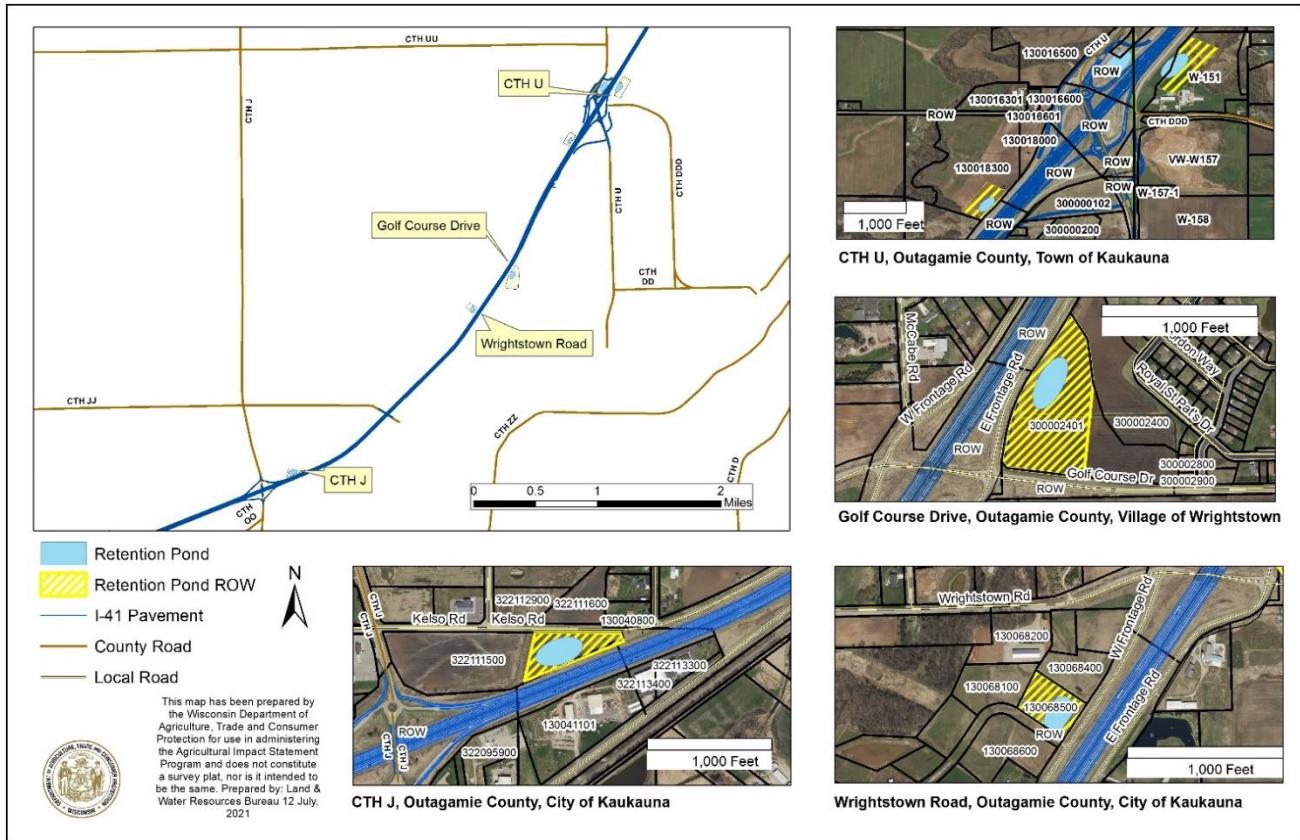


Figure 6: WisDOT proposed new Right-of-way to construct I-41 retention ponds in Outagamie County, WI.

## Project Right-of-Way (ROW)

Throughout the entire length of the proposed project corridor, WisDOT has stated it will utilize the existing I-41 highway ROW to construct the additional lanes required to convert this section of I-41 into a six-lane freeway (WisDOT, 2021a). WisDOT is also proposing to acquire new ROW's along the I-41 corridor (Figure 1) to accommodate the realignment and/or reconstruction several of existing interchanges and frontage roads.

### **CTH E Interchange**

In order to accommodate the realignment, reconstruction and widening of the I-41 and CTH E interchange, WisDOT will acquire a total of 6.12 acres of new ROW's from fee-simple acquisitions (i.e. property purchase) (Appendix A – Figure 2). Of the total new ROW, 1.58 acres will be acquired from agricultural lands. The additional ROW's will run parallel to the existing highway ROW and range from 20 to 90 ft in width (measured from the existing ROW).

### **CTH U Interchange**

While the redesign of the I-41 and CTH U Diamond interchange with roundabouts will occur within the existing WisDOT highway ROW, the realignment and reconstruction of the east and west I-41 frontage roads will acquire a total of 8.57 acres of new ROWs (Appendix A – Figure 3).

Of the proposed new ROWs, 5.73 acres will be acquired from agricultural lands.

The realignment and reconstruction of the east I-41 frontage road (French Rd) will primarily be constructed outside of existing WisDOT ROWs. Additional ROWs ranging from 70 to 85 ft (measured from the roadway centerline) will acquire the majority (5.44 acres) of the proposed new ROW, of which 4.02 acres are agricultural lands (Figure 3). The realignment and reconstruction of the west I-41 frontage road (Mid Valley Dr) will mainly occur within the existing WisDOT highway ROW. However, a total of 3.13 acres of new ROW will be acquired using fee-simple acquisitions, of which 1.71 acres are agricultural lands. The new Mid Valley ROWs will run parallel to the existing highway ROW and range from 40 to 145 ft in width (measured from the existing ROW).

### ***CTH S Interchange***

While the redesign of the I-41 and CTH S Diamond interchange with roundabouts will occur within the existing WisDOT highway ROW, the realignment and reconstruction of the east and west I-41 frontage roads will acquire a total of 6.60 acres of new ROWs (Appendix A – Figure 4). Of the proposed new ROWs, 6.55 acres will be acquired from agricultural lands.

The realignment and reconstruction of the west I-41 frontage road (Mid Valley Dr) will primarily be constructed outside of existing WisDOT ROW's. Additional ROWs ranging from 50 to 150 ft (measured from the roadway centerline) will acquire the majority (5.58 acres) of the proposed new ROW, of which 5.53 acres are agricultural lands (Figure 4). The realignment and reconstruction of the east I-41 frontage road (French Rd) will mainly occur within the existing WisDOT highway ROW. However, a total of 1.02 acres of new ROW will be acquired using fee-simple acquisitions, all of which are agricultural lands. The new French Rd ROWs will run parallel to the existing highway ROW and range from 44 to 96 ft in width (measured from the existing ROW).

### ***Retention Ponds***

While WisDOT is still in the initial design phase for the I-41 corridor retention ponds, WisDOT is proposing to purchase new ROWs, via permanent easements, to construct thirteen of the nineteen retention ponds in the project area. The remaining six retention ponds (all in Outagamie County) would be constructed within the existing WisDOT Highway ROW (Appendix A - Figure 6a-h).

### ***Existing Roadway***

WisDOT has designated I-41 as a backbone route for Wisconsin's Connections 2030 State Highway Plan and I-41 is part of the U.S. National Interstate Highway System (WisDOT, 2009). Backbone routes are the highest value multilane divided highways, interconnecting all regions and major economic centers statewide and tying them to the national transportation network to support the

state and national economy (WisDOT, 2009). According to WisDOT, I-41 is utilized as a major passenger and freight route connecting the Fox Cities to Fond du Lac and Milwaukee to the south and Green Bay to the north (WisDOT, 2021c).

The 23 mile segment of I-41 within the proposed project area, between STH 96 (Wisconsin Ave) in Outagamie County and CTH F (Scheuring Rd) in Brown County, currently consists of a four-lane divided freeway (two lanes in each direction). Within the proposed project area, I-41 has a posted speed limit of 70 mph and existing ROW widths for traffic lanes, measured from the center of median, ranging from 100 to 260 ft (ROW widths wider for I-41 interchanges).

### ***CTH E Interchange***

CTH E is a four-lane (two lanes in each direction) urban minor arterial (i.e providing intra-regional and inter-area traffic mobility) with a posted speed limit of 35 mph that provides an important north-south route for the area (WisDOT, 2013; WisDOT, 2021b). The existing I-41 and CTH E interchange consists of a diamond interchange with traffic signals to control the I-41 on/off ramp intersections with CTH E (Figure 2). The existing right of way along CTH E at the I-41 and CTH E interchange is approximately 113 ft, as measured from the centerline of the roadway.

### ***CTH U Interchange***

CTH U is a two-lane rural major collector (i.e servicing small-to-moderate sized places and providing a connection to nearby larger population centers) with a posted speed limit of 55 mph that provides the Village of Wrightstown with one of three access points to the I-41 corridor (WisDOT, 2013; WisDOT, 2021b). The existing I-41 and CTH U interchange consists of a diamond interchange with stop signs to control the I-41 on/off ramp intersections with CTH U (Figure 3). The existing right of way along CTH U is typically 45 ft, as measured from the centerline of the roadway, however the ROW widens to as much as 500 ft through the I-41 and CTH U interchange.

### ***CTH S Interchange***

CTH S is a two-lane rural major collector (i.e servicing small-to-moderate sized places and providing a connection to nearby larger population centers) with a posted speed limit of 55 mph that provides the Town of Freedom a point of access to the I-41 corridor and the City of De Pere (WisDOT, 2013; WisDOT, 2021b). The existing I-41 and CTH S interchange consists of a diamond interchange with stop signs to control the I-41 on/off ramp intersections with CTH S (Figure 4). The existing right of way along CTH S is typically 48 ft, as measured from the centerline of the roadway, however the ROW widens to as much as 130 ft through the I-41 and CTH S interchange.

## **Project Need**

WisDOT has indicated three primary reasons for the expansion of I-41 into a six-lane freeway from STH 96 in Outagamie County to CTH F in Brown County: 1) improve safety, 2) reduce congestion and 3) correct roadway design deficiencies (WisDOT, 2021a). In addition, WisDOT has also

indicated the I-41 expansion project will also address deteriorating pavement and bridges, maintain a key backbone route for the local, state and national transportation network, and replace the functionally obsolete Wrightstown Safety and Weight Enforcement Facility.

Regarding the concern for safety, WisDOT stated its awareness that this 23 mile corridor of I-41 has a higher than average crash rate as compared to similar roadways (WisDOT, 2021a). The various I-41 interchanges along this corridor have also seen numerous vehicle crashes and some of these interchanges have been denoted as the most dangerous in Outagamie County (BOTSTS, 2020). For example the I-41 and STH 96 (Wisconsin Ave) interchange ranks 1<sup>st</sup> for locations of fatal motorcycle crashes, injury or fatal crashes involving a teen driver, injury or fatal crashes involving an older driver (65+ years of age) between 2014 – 2018 (BOTSTS, 2020). Vehicle crash data from WisDOT and the Traffic Operations and Safety (TOPS) laboratory provides further support for WisDOT's concern that these intersections are in fact a safety concern. From 2018 – 2020 the I-41 and CTH E interchange in the City of Appleton has seen a total of 86 crashes with 19 crashes causing injury (TOPS, 2021).

WisDOT's second primary reason for the project is to reduce traffic congestion. WisDOT (2021c) has stated that this 23 mile segment of I-41 experiences heavy congestion, especially during peak weekday travel times. Furthermore, the volume of traffic on this segment of I-41 has increased by approximately 20 percent since 2012. Comparatively, nationwide traffic has only increased by approximately 10 percent on all roads. By 2045, WisDOT expects the average annual daily traffic on I-41 to increase between 20 and 56 percent, depending on location (WisDOT, 2021c).

WisDOT's last primary reason for the project is to correct roadway design and infrastructure deficiencies. Within the notification to the Department, WisDOT stated that much of the original pavement for this 23 mile corridor of I-41 was built in the 1960s, requires constant maintenance, has reached the end of its useful lifespan and further rehabilitation efforts are no longer cost effective (WisDOT, 2021a). Furthermore, numerous geometric and bridge deficiencies exist within this corridor, which include substandard bridge clearance, substandard vertical and horizontal curves and substandard ramp design as well as substandard interchange spacing and substandard shoulder widths (WisDOT, 2021c). WisDOT has also stated that these deficiencies detract from safety and contribute to operational problems throughout this corridor (WisDOT, 2021c). WisDOT is also studying whether to replace the Wrightstown Safety and Weight Enforcement Facility (SWEF) in Outagamie County located about 0.75 mile south of CTH U as part of the I-41 expansion project. WisDOT considers the existing SWEF to be functionally obsolete and does not offer modern technologies to weigh and inspect commercial motor vehicle truck traffic (WisDOT, 2021c). The potential new SWEF may also be a co-facility to house the WI State Patrol Northeast Region Headquarters, which is currently located in Fond du Lac (WisDOT, 2021c).

## **Alternatives**

As part of the AIN submitted to the Department, WisDOT indicated and described all alternatives that were evaluated during the design process for the I-41 interchanges that affected agricultural lands as part of the proposed I-41 expansion project. As mentioned within the Project Design Section above, alternatives for the actual expansion of I-41 driving lanes, I-41 interchanges that do not affect agricultural lands and the South Bridge Road interchange are beyond the scope of this AIS and are therefore not included within this alternatives analysis. The I-41 interchanges that are part of this analysis include the CTH E interchange, the CTH U interchange and the CTH S interchange.

### ***CTH E Interchange***

During the design process for the I-41 and CTH E interchange, WisDOT evaluated a total of three alternatives (denoted here as A, B and C), as described below, to address the three primary concerns for the I-41 expansion project. A no build alternative was not included. Through their analysis, the WisDOT selected alternative A "Diverging Diamond Interchange" for the I-41 and CTH E interchange as their preferred alternative as it best addressed the primary project goals.

- *Alternative A: Diverging Diamond Interchange Alternative (Preferred Alternative, see Figure 2, Appendix A - Figure 2)*

Under this alternative, WisDOT would realign and construct a diverging diamond interchange with traffic signals, realign the I-41 on/off ramps to accommodate the additional lanes on I-41 and widen the CTH E overpass. In order to implement the proposed CTH E diverging diamond interchange, WisDOT proposes to acquire a total of 6.12 acres (1.58 acres being agricultural lands) of new ROW's using fee-simple acquisitions (i.e. property purchase).

From their analysis, WisDOT determined the diverging diamond interchange with traffic signals would provide the safest interchange option, had the best traffic operations, and has the support of Outagamie County and the municipalities (WisDOT, 2021a). For the aforementioned reasons, WisDOT selected the diverging diamond interchange with traffic signals as the preferred alternative for the I-41 and CTH E interchange.

- *Alternative B: Diamond Interchange with Traffic Signals Alternative (Dismissed)*

Under this alternative, WisDOT would realign and construct a diamond interchange with traffic signals, realign the I-41 on/off ramps to accommodate the additional lanes on I-41 and widen the CTH E overpass. If implemented, the CTH E diamond interchange with traffic signals alternative (dismissed) would acquire a total of 2.26 acres (0.07 acres being agricultural lands) of new ROW's using fee-simple acquisitions.

From their analysis, WisDOT determined the diamond interchange with traffic signals would be the least safe available interchange option and would not improve traffic operations (WisDOT, 2021a). For the above-mentioned reasons, WisDOT dismissed the diamond interchange with traffic signals alternative.

- *Alternative C: Diamond Interchange with Three-lane Roundabouts Alternative (Dismissed)*

Under alternative C, WisDOT would realign and construct a diamond interchange with three-lane roundabouts, realign the I-41 on/off ramps to accommodate the additional lanes on I-41 and widen the CTH E overpass. If implemented, the CTH E diamond interchange with roundabouts alternative (dismissed) would acquire a total of 1.49 acres (0.8 acres being agricultural lands) of new ROW's from fee-simple acquisitions.

From their analysis, WisDOT determined the diamond interchange with three-lane roundabouts would be comparatively less safe than the preferred alternative, would provide the lowest level of traffic operations, and would be the most complex design alternative (WisDOT, 2021a). For the aforementioned reasons, WisDOT dismissed the diamond interchange with three-lane roundabouts alternative.

### ***CTH U Interchange***

During the design process for the I-41 and CTH U interchange, WisDOT evaluated a total of two alternatives (denoted here as A and B), as described below, to address the three primary concerns for the I-41 expansion project. A no build alternative was not included. Through their analysis, the WisDOT selected alternative A "Diamond Interchange with Roundabouts" for the I-41 and CTH U interchange as their preferred alternative as it best addressed the primary project goals.

- *Alternative A: Diamond Interchange with Roundabouts Alternative (Preferred Alternative see Figure 3, Appendix A - Figure 3)*

Under this alternative, WisDOT would construct a diamond interchange with roundabouts, realign the I-41 on/off ramps, and realign the east (French Rd) and west (Mid Valley Dr) I-41 frontage roads and at-grade intersections with CTH U. In order to implement the proposed CTH U diamond interchange with roundabouts, WisDOT proposes to acquire a total of 8.57 acres (5.73 acres being agricultural lands) of new ROW's using fee-simple acquisitions (i.e property purchase).

From their analysis, WisDOT determined the diamond interchange with roundabouts would provide the highest level traffic operations, provide the best capacity to handle future traffic volumes, and has the support of Outagamie County and the Village of Wrightstown (WisDOT, 2021a). For the above-mentioned reasons, WisDOT selected the diamond interchange with roundabouts as the preferred alternative for the I-41 and CTH U interchange.

- *Alternative B: Diamond Interchange with Traffic Signals Alternative (Dismissed)*

Under this alternative, WisDOT would construct a diamond interchange with traffic signals, realign the CTH U overpass, realign the I-41 on/off ramps, and realign the east (French Rd) and west (Mid Valley Dr) I-41 frontage roads and at-grade intersections with CTH U. If implemented, the CTH U diamond interchange with traffic signals alternative (dismissed) would acquire a total of 6.86 acres (4.02 acres being agricultural lands) of new ROW's from fee-simple acquisitions.

From their analysis, WisDOT determined the diamond interchange with traffic signals would meet the project's primary goals and needs. However, WisDOT determined the diamond interchange with traffic signals would provide comparatively less capacity to handle future traffic volumes than the diamond interchange with roundabouts (WisDOT, 2021a).

Therefore, WisDOT dismissed the diamond interchange with traffic signals alternative.

### ***CTH S Interchange***

During the design process for the I-41 and CTH S interchange, WisDOT evaluated a total of three alternatives (denoted here as A, B, and C ), as described below, to address the three primary concerns for the I-41 expansion project. A no build alternative was not included. Through their analysis, the WisDOT selected alternative A "Diamond Interchange with Roundabouts" for the I-41 and CTH S Interchange as their preferred alternative as it best addressed the primary project goals.

- *Alternative A: Diamond Interchange with Roundabouts Alternative (Preferred Alternative, see Figure 4, Appendix A - Figure 4)*

Under this alternative, WisDOT would construct a diamond interchange with roundabouts, realign the I-41 on/off ramps, and realign the east (French Rd) and west (Mid Valley Dr) I-41 frontage roads and at-grade intersections with CTH S. In order to implement the proposed CTH S diamond interchange with roundabouts, WisDOT proposes to acquire a total of 6.60 acres (6.55 acres being agricultural lands) of new ROW's using fee-simple acquisitions (i.e property purchase).

From their analysis, WisDOT determined the diamond interchange with roundabouts would provide highest level traffic operations, provide the lowest acreage of impacts caused by the relocation of the frontage road alternatives, and has the support of local municipalities (WisDOT, 2021a). For the above-mentioned reasons, WisDOT selected diamond interchange with roundabouts as the preferred alternative for the I-41 and CTH S interchange.

- *Alternative B: Diamond Interchange with Relocated Frontage Roads Alternative (Dismissed)*

Under this alternative, WisDOT would construct a diamond interchange, realign the I-41 on/off ramps, and relocate both the east (French Rd) and west (Mid Valley Dr) I-41 frontage roads and at-grade intersections along CTH S. If implemented, the CTH S diamond interchange with relocated frontage roads alternative (dismissed) would acquire a total of 11.88 acres (9.07 acres being agricultural lands) of new ROWs using fee-simple acquisitions.

From their analysis, WisDOT determined the diamond interchange with relocated frontage roads alternative, when compared to the preferred alternative, would have a lower capacity to handle future traffic volumes, increase land ROW acquisitions, and be comparatively more expensive (WisDOT, 2021a). Therefore, WisDOT dismissed the diamond interchange with relocated frontage roads alternative.

- *Alternative C: Diamond Interchange and Relocated Frontage Roads & Hickory Road Connection Alternative (Dismissed)*

Under this alternative, WisDOT would construct a diamond interchange, realign the I-41 on/off ramps, relocate the west (Mid Valley Dr) I-41 frontage road at-grade intersection along CTH S, and relocate the east (French Rd) I-41 frontage road at-grade intersection with CTH S to Hickory Rd. If implemented, the CTH S diamond interchange with relocated frontage roads & Hickory Road alternative (dismissed) would acquire a total of 14.48 acres (9.95 acres being agricultural lands) of new ROWs from fee-simple acquisitions.

From their analysis, WisDOT determined the diamond interchange with relocated frontage roads & Hickory Road alternative when compared to the preferred alternative would have a lower capacity to handle future traffic volumes, increase land ROW acquisitions, and be comparatively more expensive (WisDOT, 2021a). Therefore, WisDOT dismissed the diamond interchange with relocated frontage roads & Hickory Road alternative.

### **III. AGRICULTURAL SETTING**

The agricultural setting of a county has the potential to broadly impact agricultural land valuations. For example, counties with productive lands and/or urban counties with increased developmental pressures are generally known to result in higher sale prices for agricultural lands (Borchers *et al.*, 2014; Nantel, 2020). As the impacted agricultural lands for the proposed I-41 expansion project reside within both Brown and Outagamie Counties, the urban development pressures and agricultural policies of each County will be analyzed to provide baseline information to assess the valuation and stability of agricultural lands within the counties. Section IV, *Agricultural Impacts* will analyze and discuss the potential impacts of the project on impacted agricultural lands.

## **Urban Pressures on Agriculture**

### ***Urbanized Populations***

Brown County, with an estimated population in 2020 of 264,821 residents (WisDOA, 2020) is classified as a Central Metropolitan Statistical Area (WisDOA, 2013a). Outagamie County, with an estimated population in 2020 of 187,661 residents (WisDOA, 2020) is also classified as a Central Metropolitan Statistical Area (WisDOA, 2013a). Metropolitan Statistical Areas (MSA) are generally defined as areas that contain central urbanized population area(s) of at least 50,000 people as well as the adjacent counties that are socially and economically integrated with a large population cluster (Standards, 2010). The Brown and Outagamie County MSA's are also part of two separate Core Statistical Areas (CSA), the Green Bay-Shawano CSA and the Appleton-Oshkosh-Neenah CSA, designated by the US Census Bureau (WisDOA, 2013a).

The Green Bay-Shawano CSA is Wisconsin's third largest CSA, is home to an estimated 321,591 residents or 5.5% of the state's total population in 2018 (WisDOR, 2020) and encompasses the adjoining counties of Brown, Kewaunee, Menominee, Oconto and Shawano Counties (WisDOA, 2013a). The Appleton-Oshkosh-Neenah CSA is Wisconsin's fourth largest CSA, is home to an estimated 237,524 residents or 4.1% of the state's total population in 2018 (WisDOR, 2020), and encompasses the adjoining counties of Calumet, Outagamie and Winnebago Counties (WisDOA, 2013a). Denotation as a "Central" MSA indicates that both Brown and Outagamie Counties are associated with the largest urbanized area or urban cluster that accounts for the population within their respective CSA's (Standards, 2010).

### ***Urban Development Pressures***

Urban development pressures on agricultural lands are known to increase the rate of farmland conversion and increase agricultural land sale values (Azadi *et al.*, 2010; Borchers *et al.*, 2014, Brorsen *et al.*, 2015). The following analysis will identify if agricultural lands within Brown and Outagamie Counties are exhibiting signs of urban pressure and development.

Based on the most recent available data from the U.S. Department of Agriculture (USDA), in 2017 Brown and Outagamie Counties had 192,007 acres and 236,963 acres of land in farms or 56.6% and 58.1% of their respective counties, both of which are higher than the statewide average of 41.3% (USDA, 2017a). However, between 1997 and 2017 Brown and Outagamie Counties converted 2.0% and 6.1% of their respective agricultural lands out of agricultural use (Table 1). When compared to the statewide average rate of 3.9% for agricultural land conversion, Brown County is converting agricultural lands at approximately 1/2 the statewide rate, while Outagamie County is converting 1.5 times more than the statewide average. (USDA, 2017a). During this same time-period (1997 – 2017) both Brown and Outagamie Counties have also lost a proportionally high number of farming operations, when compared to the statewide average (Table 2). Brown County reported losing 7.9% of farming operations and Outagamie County reported losing 12.1%

of their farming operations, which is respectively almost 7 and 10 times higher than the average 1.2% loss experienced across all counties in Wisconsin (Table 2) (USDA, 2017a).

Table 1: Agricultural land in production within Brown County, Outagamie County and Wisconsin (USDA, 1997; USDA, 2017a).

<b>Location</b>	<b>Acres of Agricultural Land (acres)</b>		<b>Agricultural Land Converted (%)</b>
	<u>1997</u>	<u>2017</u>	
Brown County	195,966	192,007	2.0%
Outagamie County	252,471	236,963	6.1%
Wisconsin	14,900,205	14,318,630	3.9%

Table 2: Change in the number of farms between 1997 and 2017 within Brown County, Outagamie County and Wisconsin (USDA, 1997; USDA, 2017a).

<b>Location</b>	<b>Number of Farming Operations</b>		<b>Change in Farming Operations</b>	<b>Percent Change (%)</b>
	<u>1997</u>	<u>2017</u>		
Brown County	1,059	975	-84	-7.9%
Outagamie County	1,286	1,130	-156	-12.1%
Wisconsin	65,602	64,793	-809	-1.2%

#### Brown County

Brown County does show some signs of resiliency to the pressures of urban development. For example, from 1997 – 2017 Brown County agricultural lands have only experienced about 1/2 the rate of farmland conversion (by acre) as compared to the statewide average over the period (Table 1). On the contrary, during the same period Brown County has also lost 7.9% of its farming operations, which is almost 7 times the rate of loss as the statewide averaged loss of 1.2% (Table 2). While pressure from urban development may certainly influence the loss of farming operations, the broader push for consolidation among agricultural operations is also at work. Based on the most recent data from the USDA, 2012 – 2017 farming operations lost within Brown County generally came from small to mid-sized (1 – 499 acre) operations, while the number of large operations (500 + acres) increased (USDA, 2017a). The consolidation of agricultural operations could be one explanation for a high rate of farming operation losses and a low rate of agricultural land conversion seen in Brown County.

There are signs that the pressures of urban development stemming from urban population growth may also be influencing farmland conversion and the loss of agricultural operations across Brown County. At the county level, the Wisconsin Department of Administration (WisDOA) predicts that Brown County, as of 2020, will see a 15% population increase (41,600 persons) by 2040, which ranks third by the number of persons gained and fourth by percentage within the state (WisDOA,

2013b). The Village of Howard and the City of Green Bay may likely be two key driving forces behind the County's future growth, as the Village and City are predicted to see the state's fifth and eleventh largest population increase of 7,890 and 5,450 persons, respectively from 2020 to 2040 (WisDOA, 2013c).

#### Outagamie County

Urban development pressures are likely influencing agricultural land conversion and the amount of agricultural operations within Outagamie County. Between 1997 – 2017, Outagamie County has seen 6.1% of its agricultural lands converted out of farmland use, a conversion rate (by acre) which is about 1.6 times or nearly double the statewide average (Table 1). Outagamie County has also lost 12.1% of its farming operations between 1997 – 2017, a rate that is 10 times higher than the statewide average (Table 2). The loss of farming operations within Outagamie County may also be influenced by urban development pressures as well, rather than agricultural market consolidation as was seen in Brown County. Based on USDA data between 2012 – 2017, farming operations lost within Outagamie County came from mid-large sized (50 – 500+ acre) operations, while the number of small operations (1 – 49 acres), generally thought of as specialty or hobby agriculturally operations increased (USDA, 2017a). Urban development pressures and the demand for smaller specialty or hobby agricultural operations could be factors in the high rate of agricultural land conversion, loss of mid-large sized agricultural operations and increased amount of small (1 – 49 acres) agricultural operations in Outagamie County.

The pressures of urban development and urban population growth on farmland conversion are readily apparent in Table 1 and Table 2 across Outagamie County. According to WisDOA these urban development pressures are likely to persist as WisDOA predicts that Outagamie County, as of 2020, will see a 12% population increase (23,655 persons) by 2040, which ranks sixth by the number of persons gained and thirteenth by percentage within the state (WisDOA, 2013b). Several municipalities, including the Cities of Appleton, Kaukauna and the Village of Combined Locks will likely to be the driving force behind the County's future growth, as they're all predicted to see population increases ranging from 6 – 26% from 2020 to 2040 (WisDOA, 2013c).

#### Regional Pressures

Regional pressures from the Green Bay-Shawano CSA and the Appleton-Oshkosh-Neenah CSA may also influence urban development and farmland conversion in Brown and Outagamie Counties. The neighboring counties of Menominee, Oconto and Shawano are expected to all see 2020 populations increase from 5 – 13% by 2040 (WisDOA, 2013b) and this may in-turn generate additional future growth, urban development and farmland conversion in the Green Bay-Shawano CSA. The similar is true for the Appleton-Oshkosh-Neenah CSA as the Calumet and Winnebago Counties are expected to see 2020 populations increase from 9 – 18% by 2040 (WisDOA, 2013b). Given the strong potential for local, county and regional urban development pressures and urban population growth, both Brown and Outagamie Counties are vulnerable to farmland conversion. Agricultural

lands within or abutting incorporated municipal boundaries such as cities (Guiling *et al.*, 2009) or agricultural lands along transportation corridors, especially interstate highways (Mothorpe *et al.*, 2013), that link the Green Bay-Shawano CSA and the Appleton-Oshkosh-Neenah CSA would be at the highest risk of future farmland conversion.

## Agricultural Land Valuation

The valuation of agricultural lands is a key component of a county's agricultural settings. This valuation broadly serves as an indicator for the demand of agricultural land as well as its market value. Circumstances that impact the land such as agricultural productivity, urban development pressures and the intended future use of the land also factor into agricultural land valuation. Nonetheless, market conditions for agricultural land sales may vary from year to year and may not be apparent at the local scale.

The analysis of agricultural land value performed here encompassed agricultural land sales reported to the USDA for both continued agricultural use and agricultural land diverted to other land uses, at the county scale over a three year time-period (USDA, 2018; USDA, 2019a; USDA, 2020). This analysis is not a sales comparison of any parcel. Premium agricultural land sale prices for sub-acre land sales are generally not reflected in this analysis. The results of the agricultural land sale value analysis are shown in Table 3. The average (\$ /acre) sale price for agricultural land sold for continued agriculture use between 2017 – 2019 in Brown and Outagamie Counties was \$10,588 and \$7,294 respectively. In comparison to the statewide averages, agricultural land sold for agricultural uses in both Brown and Outagamie Counties respectively sold on average for 100.8% and 38.4% above the statewide average sale price. Across the state, agricultural lands sold and diverted for development to non-agricultural uses averaged sale values of \$10,005 per acre. However, over the same 2017 – 2019 time-period, the average sale price for agricultural land sales for development to non-agricultural uses in Brown and Outagamie Counties respectively was \$14,531 and \$10,966 per acre or 45.2% and 9.6% higher than the statewide average.

### *Brown County Agricultural Land Valuation*

In Brown County, the average sale price for agricultural lands sold for continued agriculture use is double the statewide average price (Table 3). Agricultural lands diverted to non-agricultural uses were also sold at prices well above the statewide average price (Table 3). The exceedingly high sale prices for agricultural land shown in Brown County indicates a strong level of demand for both agricultural land for the purpose of agricultural use as well as lands for development. The below average rate of agricultural land conversions in Brown County, as shown in Table 1, provides further evidence that Brown County agricultural landowners have a strong desire to resist demands to sell agricultural land for non-agricultural uses. Conversely, strong urban development pressures have the ability to find market based price points as shown in Table 3 to purchase and divert agricultural lands to other uses. The robust forecast for population growth in Brown County would

elude to the fact that strong urban pressure will continue within Brown County, in-turn this could continue to spur high demand and high prices to divert agricultural land.

Given WisDOT proposes to convert the acquired agricultural lands, the estimate of agricultural land valuation in Brown County for this analysis is based on the 2017-2019 average sale price for agricultural lands sold for development in Brown County. As such, the analysis has established an average valuation of \$14,531 per acre in Brown County for agricultural land sold for development. The estimated valuation proposed within this analysis is not a valuation of any particular agricultural land or property and is only intended to establish an estimated average valuation for agricultural lands sold and diverted to non-agricultural uses within Brown County, WI. As the data used within the analysis is an average over the 2017 – 2019 time period, it is likely the average sale valuation for agricultural lands sold and diverted for development to non-agricultural uses in 2021 for Brown County is different from the estimate presented here. Furthermore, the premium price theory that establishes exceedingly higher prices for small or sub-acre agricultural parcels or for agricultural parcels nearest to urban areas (Brorsen *et al.*, 2015), which may explain Wisconsin agricultural parcel sales of above \$100,000 per acre is not reflective within this analysis.

### ***Outagamie County Agricultural Land Valuation***

In Outagamie County, the average sale price for agricultural lands sold for continued agricultural use is above the statewide average, while agricultural lands diverted to non-agricultural uses were consistent the statewide average price (Table 3). This would indicate a somewhat higher level of demand to obtain farmland for agricultural uses. However, the average sale value of agricultural lands diverted land to non-agricultural uses is on par with the rest of the state and may signify a willingness to divert agricultural lands. As evident by the above average rate of agricultural land conversions in Outagamie County (Table 1), Outagamie County agricultural landowners have also historically sold agricultural lands for non-agricultural uses at a greater rate as compared to the rest of the state. Furthermore, markets have historically been able to divert agricultural lands at price points on par within the rest of the state (Table 3). Together, the high rate of agricultural land conversions and sale prices for agricultural land diversions near the statewide average would allude an openness to divert agricultural lands in Outagamie County.

Given WisDOT proposes to convert the acquired agricultural lands, the estimate of agricultural land valuation in this analysis is based on the 2017-2019 average sale price for agricultural lands sold for development in Outagamie County. As such, the analysis has established an average valuation of \$10,966 per acre in Outagamie County for agricultural land sold for development. The estimated valuation proposed within this analysis is not a valuation of any particular agricultural land or property and is only intended to establish an estimated average valuation for agricultural lands sold and diverted to non-agricultural uses within Outagamie County, WI. As the data used within the analysis is an average over the 2017 – 2019 time period, it is likely the average sale valuation for agricultural lands sold and diverted for development to non-agricultural uses in 2021 for Outagamie

County is different from the estimate presented here. Furthermore, the premium price theory that establishes exceedingly higher prices for small or sub-acre agricultural parcels or for agricultural parcels nearest to urban areas (Brorsen *et al.*, 2015), which may explain Wisconsin agricultural parcel sales of above \$100,000 per acre is not reflective within this analysis.

Table 3: Agricultural land sales from 2017 – 2019 in Brown County, Outagamie County and the Wisconsin State average (USDA, 2018; USDA, 2019a; USDA, 2020).

<b>Location</b>	<b>Agricultural Land Sale* (\$ / acre)</b>					
	<b>2017</b>		<b>2018</b>		<b>2019</b>	
	Sold for Ag <sup>†</sup>	Diverted <sup>‡</sup>	Sold for Ag <sup>†</sup>	Diverted <sup>‡</sup>	Sold for Ag <sup>†</sup>	Diverted <sup>‡</sup>
Brown County	10,326	4,800	11,441	24,261	9,996	-
Outagamie County	6,675	-	7,888	15,931	7,319	6,000
Wisconsin Average	4,960	10,794	5,587	13,280	5,269	5,942

\*Sales based on "arms length" transactions, not including sales outside of market conditions (e.g. family sales or foreclosures)

† Agricultural land sold for continued agricultural use

‡ Agricultural land sold and diverted to other use outside of agriculture

## Farmland Preservation

Wisconsin's farmland preservation (FP) program provides local governments and landowners with tools to aid in protecting agricultural land for continued agricultural use and to promote activities that support the larger agricultural economy. Lands that are planned for farmland preservation by the county and included in a certified zoning district or located within an Agricultural Enterprise Area (AEA) are afforded land use protections intended to support agriculture, and are eligible for the farmland preservation tax credit.

Through this program, counties adopt a state-certified farmland preservation plan that maps areas identified as important for farmland preservation and agricultural development based upon reasonable and objective criteria. Based on the plan, local governments may choose to adopt a FP zoning ordinance or designate Agricultural Enterprise Areas (AEA) to achieve further land protections and ensure that farmland covered by the plan is eligible for farmland preservation tax credits. Such ordinances and AEA's must also be certified by the Department of Agriculture, Trade and Consumer Protection (the Department). Landowners who are eligible in either or both AEA and FP zoning areas and claim the tax credit are required to follow the state soil and water conservation standards to protect water quality and soil health.

### *Farmland Preservation Planning*

Brown County's current FP plan was certified by the Department in 2017 and is set to expire in 2027 (Brown County, 2017). Outagamie County has maintained a Department certified FP plan since 1982, the current plan was certified in 2012 and expires in 2022 (Outagamie County, 2020).

### ***Farmland Preservation Zoning***

WisDOT funded projects possess a broad exemption to Wisconsin's Farmland Preservation statute, Wis. Stat. Chp. 91, regardless of whether or not FP zoned agricultural lands were impacted by the proposed project, under [Wis. Stats. § 84.01\(34\)](#). Unless the intended purpose of the WisDOT project is to construct a building or facility for the motor vehicle emission inspection and maintenance program under Wis. Stats. § 110.20, WisDOT is generally exempt from Wisconsin's Farmland Preservation statute. As WisDOT's proposed I-41 expansion is unrelated to the Wis. Stats. § 110.20, the proposed project would be exempt from the conditional use zoning criteria under [Wis. Stats. § 91.46\(4\)](#) if the project area were to be covered by a certified FP zoning district.

#### Brown County

A review of the Departments FP program participation map shows that sixteen jurisdictions within Brown County have adopted certified FP zoning districts administered under town or village authorities (DATCP, 2020). The Town of Lawrence is the only town to be impacted by the proposed project within Brown County. However, the Town of Lawrence does not have authority within incorporated areas (villages and cities), leaving the authority to zone for agriculture with the incorporated areas (i.e the City of De Pere). Excluding the South Bridge Connector project (DOT ID 4556-02-00) documented by the Department under AIS #3839, the proposed I-41 expansion project does not impact any cities within Brown County. Therefore, the FP zoning analysis for Brown County will focus on the impacted agricultural lands within the Town of Lawrence.

Administered by the Town of Lawrence, FP zoning throughout the Town is defined as the AG-FP *Agricultural Farmland Preservation* zoning district (Lawrence, 2021). A review of the Town of Lawrence zoning map indicates that one agricultural parcel (parcel ID L-20) that is zoned AG-FP is impacted by the preferred alternative to reconstruct the I-41 and CTH S interchange (Lawrence, 2020).

#### Outagamie County

A review of the Departments FP program participation map shows that seven Towns within Outagamie County have FP zoning, which is administered by either the County or Town. The Town of Kaukauna is the only Town impacted by the proposed I-41 expansion project to have a certified FP zoning district, which the Town administers (DATCP, 2020). However, Outagamie County and the Towns within the County do not have authority within incorporated areas (villages and cities), leaving the authority to zone for agriculture with the incorporated areas (e.g. the City of Appleton). The proposed I-41 expansion project impacts agricultural lands located within the City of Appleton, the Village of Wrightstown and the Town of Kaukauna, therefore, the FP zoning analysis for Outagamie County will focus on the impacted agricultural lands within the aforementioned municipalities.

Administered by the Town of Kaukauna, FP zoning throughout the Town is defined as the *Exclusive Agricultural District* (DATCP, 2013a). The City of Appleton and the Village of Wrightstown do not

have FP zoning certified by the Department. A review of the Town of Kaukauna's 2013 certified zoning map on file with the Department indicated that none of the agricultural parcels impacted by the preferred alternative to reconstruct the I-41 and CTH U interchange are zoned under the Exclusive Agricultural District (DATCP, 2013b).

### ***Agricultural Enterprise Areas***

AEA are community-led efforts to establish designated areas important to Wisconsin's agricultural future. This designation highlights the importance of the area for local agriculture and further supports local farmland preservation and agricultural development goals. Designation as an AEA also enables eligible landowners to enter into FP agreements. Through an FP agreement, a landowner agrees to voluntarily restrict the use of his/her land to agriculture for fifteen years in exchange for eligibility for the farmland preservation tax credit.

A review of the Department's AEA program shows that Outagamie County contains three designated AEAs (DATCP, 2021): the Cicero Blackmour, the Greenville Greenbelt and the Three Rivers AEA's. Brown County does not contain a designated AEA. The Cicero Blackmour AEA is located in northeastern Outagamie County, while the Greenville Greenbelt AEA is located in southwestern Outagamie County. The Three Rivers AEA is located across both northwestern Outagamie and central/northeastern Waupaca Counties. As the proposed I-41 expansion project is located across southeastern Outagamie County, none of Outagamie County's three AEAs are impacted by the WisDOT project.

### **Drainage Districts**

Drainage districts are local governmental entities governed under Wis. Stat. Ch. 88 and organized under a county drainage board and for the primary purpose of draining of lands for agricultural use (DATCP, 2019a). Landowners who benefit from drainage pay assessments to cover the cost to construct, maintain, and repairing the district's drains. According to the Department, approximately 190 active districts exist within 27 of Wisconsin's 72 counties.

A review of the Department's Drainage Program database indicates that Brown County has two active drainage districts that are managed under the Brown County Farm Drainage Board Commission. The proportion of the I-41 expansion project area that was analyzed as part of the South Bridge Connector project (DOT ID 4556-02-00) under AIS #3839 (DATCP, 2012) will impact Drainage District #5 in the City of De Pere. As mentioned within the introduction, the agricultural impacts of the proposed project area that is part of the South Bridge Connector project were already analyzed and published in AIS #3839 (DATCP, 2012). Therefore, the analysis of the South Bridge Connector project area is beyond the scope of this analysis. In accordance with the scope of this analysis, the proposed I-41 expansion project does not impact any active drainage districts within Brown County.

Outagamie County has eight active drainage districts that are managed under the Outagamie County Drainage Board. Of the active drainage districts, the proposed I-41 expansion project will impact the Vandenbroek (#4509) drainage district (Figure 7). Under [Wis. Stat. § 86.075](#) and [ATCP 48.40](#) WisDOT is required to notify a county drainage board whenever a highway project impacts a drainage district and furthermore consult with the drainage board on the design implications to existing drainage infrastructure. The AIN WisDOT (2021) submitted to the Department did not indicate whether the WisDOT has already informed the Outagamie County Drainage Board of this project. To that end, the Department reiterates that WisDOT shall inform the Outagamie County Drainage Board of the proposed project and work with the Board to mitigate potential impacts to existing drainage infrastructure.

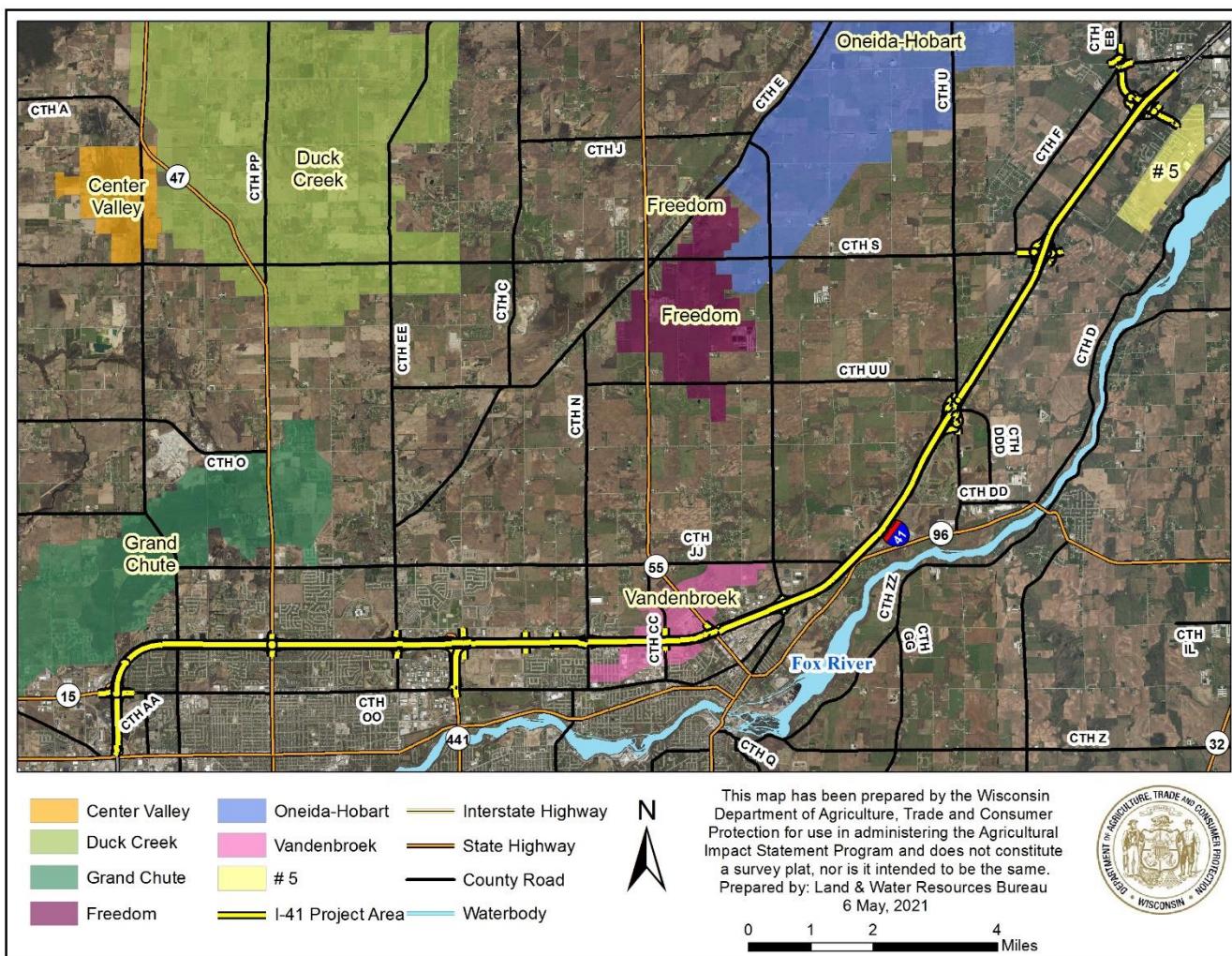


Figure 7: Active drainage districts relative to the location of the proposed Interstate 41 expansion in Brown and Outagamie Counties, WI.

## **Conservation Programs**

Voluntary conservation programs such as the USDA Conservation Reserve Enhancement Program (CREP) and the USDA Conservation Reserve Program (CRP) are financial incentive programs to help agricultural landowners meet their conservation goals. The USDA and the Department jointly administer the CREP program in Wisconsin.

### ***Conservation Reserve Enhancement Program (CREP)***

The CREP program pays eligible agricultural landowners enrolled within the program to install filter strips along waterways or to return continually flooded fields to wetlands while leaving the remainder of the adjacent land in agricultural production. To be eligible for CREP payments, a recipient must have agricultural lands in crop production that are within 150 ft of a stream or water body or 1,000 ft from a grassland project area (DATCP, 2019b). A review of the Departments CREP records indicated that the proposed I-41 expansion project would not directly impact any current CREP fields or easements.

### ***Conservation Reserve Program (CRP)***

The CRP program is a land conservation program administered by the Farm Service Agency of the USDA. In exchange for a yearly rental payment, eligible agricultural landowners enrolled in the program agree to remove highly erodible land from agricultural production and plant resource-conserving plant species such as grasses or trees that will improve environmental health and quality (USDA, 2019b). Eligible agricultural landowners must possess lands with the potential for long-term improvements to water quality, prevent soil erosion or establish beneficial wildlife habitats according to the USDA Environmental Benefits Index (USDA, 2019b). CRP enrollment information is privileged to the USDA and CRP program participants. The Department is therefore unable to determine if any of the impacted agricultural parcels are enrolled within the CRP program.

## **IV. AGRICULTURAL IMPACTS**

In addition to being a key component of [Wis. Stat. §32.035](#), documenting the agricultural impacts of a project provides the project initiator and the agricultural landowner the opportunity to better understand the project in its own right as well as learn how the project will impact agriculture. Furthermore, the documentation of agricultural impacts by agricultural landowners and operators creates the opportunity for them to advocate for alternatives that may reduce impacts to agricultural lands. In order to promote the opportunity for alternatives, the Department has used information provided by WisDOT for this AIS and information gathered by the Department from agricultural landowner(s) to analyze the potential agricultural impacts of the proposed I-41 expansion project from STH 96 (Wisconsin Ave) in Outagamie County, to CTH F (Scheuring Rd) in Brown County, WI. The analysis of the agricultural impacts and conclusions drawn from the

analysis form the basis of the Department's recommendations within the Agricultural Impact Statement Recommendation Section above.

As mentioned within the Project Design Section, only the I-41 interchanges and retention ponds that affect agricultural lands are included within this analysis. Components of the proposed I-41 expansion project that are beyond the scope of this analysis include:

- Expansion of I-41 driving lanes that occur within the existing WisDOT highway ROW
- Expansion of I-41 driving lanes that require acquisitions of non-agricultural lands
- Modifications to I-41 interchanges that will not affect agricultural lands
- The South Bridge Road interchange, refer to AIS #3839

## **Farmland Acquisitions and Landowner Concerns**

The proposed improvements to the I-41 interchanges of CTH E, CTH U and CTH S and retention ponds will require WisDOT to purchase 65.68 acres of agricultural lands via a combination of permanent easements and fee-simple acquisitions from ten agricultural operations (Table 4). The Department attempted to contact agricultural landowners and agricultural tenant operations whom had agricultural impacts of one or more acres as shown in Table 4. WisDOT has also engaged in a public outreach campaign to gather public and stakeholder feedback and has provided the Department a summary of those interactions within the AIN submitted to the Department (WisDOT, 2021a). The following section relays the feedback and comments received from stakeholders and agricultural landowner through the Department's efforts as well as WisDOT. The information obtained will help form the basis of the Department's analysis of agricultural impacts to specific agricultural landowners and agricultural landowners in general.

Agricultural tenant operators impacted by the I-41 expansion project may be eligible for a farm replacement payment from WisDOT in accordance with [Wis. Stat. §32.19\(4m\)\(b\)](#) if WisDOT exercises the powers of eminent domain through a jurisdictional offer to the agricultural property owner. A voluntary sale between the WisDOT and agricultural property owner, after a jurisdictional offer has been made, would not negate the potential for a farm replacement payment.

### ***WisDOT***

Within the AIN submitted to the Department, WisDOT (2021a) stated they have engaged in various public outreach efforts including two public information meetings, two local officials' meetings, and numerous individual meetings with project stakeholders. WisDOT stated they had not received specific comments regarding farm operations or agricultural land impacts at the time of the AIN submission. WisDOT stated various units of government and municipalities, including Outagamie and Brown County, municipalities within Outagamie County, and the Town of Lawrence have

provided their support for the preferred alternatives for the I-41 interchanges of CTH E, CTH U and CTH S (WisDOT, 2021a).

### **MS Real Estate Holding LLC**

MS Real Estate Holding LLC owns approximately 5,895 acres of agricultural land, some of which they rent to an affiliated agricultural producer. Their agricultural operation primarily consists of a large dairy operation and related cropland to support the dairy. Of the agricultural parcels owned by MS Real Estate Holding LLC in Brown County, the I-41 and CTH S interchange impacts parcel numbers L-20, L-20-1 and L-21-1 (Figure 4). Parcels L-20, L-20-1 and L-21-1 are located within the Town of Lawrence and are zoned as Agricultural - Farmland Preservation (AG – FP), Estate Residential (ER) and ER respectively, by the Town of Lawrence (Lawrence, 2020). In Outagamie County, the CTH U interchange impacts parcel numbers 300000102 and 300000101 (Figure 3) and the Golf Course Drive retention pond impacts parcel number 300002401 (Figure 6). These parcels are located within the Village of Wrightstown and are zoned as General Business (B-1), with Planned Development District (PDD) and B-1, respectively by the Village of Wrightstown (Wrightstown, 2007). In order to implement the two I-41 interchanges with CTH U and CTH S, WisDOT is proposing to acquire a total of 17.64 acres of agricultural cropland from the aforementioned parcels owned by MS Real Estate Holding LLC (Table 4).

MS Real Estate Holding LLC reported two concerns to the Department, those being lost development potential and maintaining access to the parcels impacted by WisDOT's proposed acquisitions. MS Real Estate Holding LLC has stated the proposed acquisitions remove agricultural lands they are currently planning to sell for development. MS Real Estate Holding LLC indicated the asking price for the impacted lands ranges from \$100,000 - \$250,000 per acre. MS Real Estate Holding LLC is also concerned the remnant parcels will have few opportunities for commercial entrances and access points.

### **Phyllis & Thomas Van Asten**

Phyllis & Thomas Van Asten own approximately 250 acres of agricultural land, the majority of which they rent to two other agricultural producers. The Van Asten's agricultural operation primarily consists of agricultural land rentals. Of the agricultural parcels owned by Phyllis & Thomas Van Asten, the CTH U interchange and retention ponds impact parcel numbers 130016500, 130016600, 130018000, 130018300 and W-151 (Figure 3). These parcels are located within the Town of Kaukauna in Outagamie County and are zoned as either Rural Development (RD) or Light Industrial by the Town of Kaukauna (DATCP, 2013b). In order to realign the west (Mid Valley Dr) I-41 frontage roads, as part of the I-41 and CTH U interchange, WisDOT is proposing to acquire a total of 11.92 acres of agricultural cropland from the aforementioned parcels owned by the Van Asten's. Phyllis Van Asten reported to the Department her concerns for lost agricultural land rental income and not receiving fair compensation for agricultural lands lost to the proposed I-41 expansion project.

## **R & B Real Estate**

R & B Real Estate LLC (R & B) owns 24.69 acres of agricultural land, some of which they rent to another agricultural producer. R & B's agricultural operation primarily consists of pasture and cropland for a hay/forage crop. Of the agricultural parcels owned by R & B, the CTH S interchange impacts parcel numbers L-39-3 and L-39-4 (Figure 4). These parcels are located within the Town of Lawrence in Brown County and are zoned as Residential (R-2) by the Town of Lawrence (Lawrence, 2020). In order to realign the west (Mid Valley Dr) I-41 frontage road, as part of the I-41 and CTH S interchange, WisDOT is proposing to acquire a total of 1.10 acres of agricultural cropland from the aforementioned parcels owned by R & B. R & B reported two concerns to the Department, 1) loss of access and 2) the creation of an uneconomic remnant parcel via parcel severance.

## **Lloyd and Faye Patoka**

Lloyd and Faye Patoka own approximately 14.73 acres of agricultural land. The Patoka agricultural operation primarily consists of agricultural pastureland. Of the agricultural parcels owned by Lloyd and Faye Patoka, the CTH S interchange impacts parcel number L-39 (Figure 4). This parcel is located within the Town of Lawrence in Brown County and is zoned as Agricultural (A-1) by the Town of Lawrence (Lawrence, 2020). In order to realign the east (French Rd) I-41 frontage road and create a retention pond, as part of the I-41 and CTH S interchange, WisDOT is proposing to acquire a total of 3.86 acres of agricultural cropland from the aforementioned parcel owned by the Patoka's. Lloyd and Faye Patoka reported to the Department their concern for drainage impacts resulting from the relocation of the culvert that runs underneath French Road.

## **Huss Living Trust**

WisDOT is proposing to acquire, via permanent easement, 2.33 acres of agricultural land from parcel number 130068500 owned by the Huss Living Trust (Figure 6) to construct the proposed Wrightstown Road retention pond. This parcel is located within the Town of Kaukauna in Outagamie County and is zoned as Light Industrial by the Town (DATCP, 2013b). The Huss Living Trust reported to the Department their concern for drainage impacts to their cropland, loss or impacts to a current field access point, and general concerns for the impacts the project will have to their agricultural operation.

## **R & R Countryside LLC**

WisDOT is proposing to acquire, via permanent easement, 6.00 acres of agricultural land from parcel number L-460 owned by R & R Countryside LLC (Figure 5) to construct the proposed Little Rapids Road retention pond. This parcel is located within the Town of Lawrence and is zoned as Agricultural (A-1) by the Town of Lawrence (Lawrence, 2020). Marcel Turriff, speaking on the behalf of R & R Countryside LLC, reported several concerns regarding the proposed retention pond to the Department. Mr. Turriff indicated his main concern was for the loss of access to the remnant of parcel L-460, as WisDOT's proposed new ROW will acquire the current access point and place a retention pond between the road and the remnant parcel. Mr. Turriff also reported concerns that

the remnant parcel is not productive agricultural land, is located within a floodplain and is frequently flooded. Furthermore, the combination of lost access and limited land use for the remnant has led Mr. Turriff to believe it would be difficult to sell the remnant parcel.

### **Vanepern Family Trust**

WisDOT is proposing to acquire, via permanent easement, 3.80 acres of agricultural land from parcel number 322111500 owned by the Vanepern Family Trust (Figure 6) to construct the proposed CTH J retention pond. This parcel is located within the City of Kaukauna and is zoned as Industrial (IND) (City of Kaukauna, 2019) by the City of Kaukauna. The Vanepern Family Trust is opposed to the location of the CTH J retention pond on the eastern highland side of parcel number 322111500. The Vanepern Family Trust stated the eastern side is drier productive agricultural lands, while the western side is less productive agricultural land that is prone to ponded water. The Vanepern Family Trust suggested that WisDOT relocate the CTH J retention pond to the western side of parcel number 322111500 in order to preserve the most productive farmland. The Vanepern Family Trust stated they would also like to crop around the remnants of agricultural land regardless if the pond is located on the western or eastern side of the parcel.

### **Integrated Public Resources LLC**

WisDOT is proposing to acquire, via permanent easement, 6.87 acres of agricultural land from parcel number L-452 owned by Integrated Public Resources LLC (Figure 5) to construct the proposed Larry Lane retention pond. This parcel is located within the Town of Lawrence and is zoned as Agricultural (A-1) by the Town of Lawrence (Lawrence, 2020). TJ Lamers, speaking on the behalf of Integrated Public Resources LLC reported the Town of Lawrence is currently designing a new retention pond approximately 100 yards to the east of this pond. Mr. Lamers suggested WisDOT contact the Town of Lawrence to determine if the Town's retention pond may be redesigned to incorporate the needs of WisDOT. Given the Town's proposed retention pond is in close proximity to the WisDOT proposed pond, Mr. Lamers is opposed to the placement of the Larry Lane retention pond on parcel number L-452.

### **Town of Lawrence**

WisDOT is proposing to acquire, via permanent easement, 6.87 acres of agricultural land from parcel number L-453 owned by the Town of Lawrence (Figure 5) to construct the proposed Larry Lane retention pond. This parcel is located within the Town of Lawrence and is zoned as Agricultural (A-1) by the Town of Lawrence (Lawrence, 2020). Patrick Wetzel, Town Administrator reported that the Town of Lawrence is currently working with WisDOT on an alternative design to remove the Larry Lane retention pond and redirect the incoming stormwater to new regional retention ponds owned by the Town.

Table 4: Acres of agricultural lands, listed by agricultural landowner (separated by I-41 interchange & retention pond), impacted by the proposed I-41 expansion project Outagamie and Brown Counties, WI.

<b>Agricultural Landowner</b>	<b>Acres of Impacted Agricultural Land (acres)</b>			
	<u>Fee-simple*</u>	<u>Permanent Easement</u>	<u>Temporary Easement</u>	<u>Total</u>
<i>I-41 and CTH E Interchange</i>				
Thrivent Financial	1.58	0.00	0.00	1.58
<i>I-41 and CTH U Interchange (with Retention Ponds)</i>				
MS Real Estate Holding LLC	4.02	0.00	0.00	4.02
Phyllis & Thomas Van Asten	1.71	10.21	0.00	11.92
<i>I-41 and CTH S Interchange (with Retention Ponds)</i>				
Lloyd and Faye Patoka	1.02	2.84	0.00	3.86
MS Real Estate Holding LLC	4.42	0.00	0.00	4.42
R & B Real Estate LLC	1.10	0.00	0.00	1.10
Retention Ponds (Excluding CTH U & S Interchanges)				
Vanepern Family Trust	0.00	3.80	0.00	3.80
MS Real Estate Holding LLC	0.00	9.20	0.00	9.20
Huss Living Trust	0.00	2.33	0.00	2.33
R & R Countryside LLC	0.00	6.00	0.00	6.00
Integrated Public Solutions LLC	0.00	6.87	0.00	6.87
Town of Lawrence	0.00	6.87	0.00	6.87
Nazcr Trac LLC	0.00	3.71	0.00	3.71
<b>Project Totals</b>				<b>65.68</b>

\* **Fee-simple purchase:** to transfer full ownership of property, including the underlying title, to another party

## Severance, Access and Wasteland

The acquisitions of agricultural property to implement the selected alternatives for proposed improvements to the I-41 interchanges of CTH E, CTH U and CTH S and retention ponds would result in agricultural parcel severance, removal of existing field access points and potentially the creation of wastelands and uneconomic remnant parcels. The circumstances (i.e loss of access, severance, wasteland etc.) surrounding the impacts to each impacted remnant agricultural parcel are unique, thus some agricultural parcels may remain economically viable, while others may not. The following analysis will document the potential for severance, loss of access and potential creation of wastelands and uneconomic remnant parcels for the agricultural parcels impacted by the preferred selected alternatives for the proposed I-41 interchanges of CTH E, CTH U and CTH S and retention ponds.

## *Severance*

While WisDOT does take efforts to eliminate, reduce or mitigate severance, agricultural parcels at times are severed to accommodate a roadway project. Severing an agricultural parcel to accommodate a new roadway effectively splits the existing parcel into two or more smaller parcels, which are separated by the roadway. Severing an agricultural parcel may remove existing access points, create agricultural wastelands or uneconomic remnant parcels, and even divide the operation of a farm. The impacts of severance are referred to as “severance damage”, which WisDOT defines as the, “loss in market value to remaining property resulting from a partial acquisition.” (WisDOT, 2016). Under Wisconsin’s Eminent Domain Statute, compensation for damages resulting from severance is described in [Wis. Stat. § 32.09\(6\)](#).

As shown in Figure 3 and Figure 4, under the proposed preferred selected alternatives, the I-41 expansion project would sever the following agricultural parcels:

- **I-41 and CTH U Interchange:**

- The realignment of the east I-41 frontage road (French Rd) for the CTH U interchange (Outagamie County) will sever parcel ID 300000102. This severance will create two different fields, each with irregularly shaped corners.

- **I-41 and CTH S Interchange:**

- The realignment of the west I-41 frontage road (Mid Valley Dr.) for the CTH S interchange (Brown County) will sever parcel IDs L-20 and L-20-1. This severance will divide the parcels into smaller remnant fields and potentially create uneconomic remnant parcels.

## *Access*

Partial acquisitions of farmland, such as for new ROWs for highways, may remove existing points of access and entrances utilized by agricultural operations to access their farmland. According to [Wis. Stat. § 86.05](#), WisDOT is required to provide a suitable new entrance to the parcel if one is removed and if the parcel is divided (severed) then an entrance shall be constructed on each side of the highway to restore access to the severed parcels.

As proposed under the preferred selected alternatives (Figure 3, Figure 4, Figure 5 and Figure 6), the I-41 expansion project has the potential to remove agricultural field access points from the following parcels or remnant severed parcels:

Brown County

- **I-41 and CTH S Interchange:** parcel ID's: L-20, L-20-1, L-21-1, L-39, L-39-3.
- **Birchwood Road Retention Pond:** parcel ID: L-1978
- **Larry Lane Retention Pond:** parcel ID's: L-452, L-453

- **Little Rapids Road Retention Pond:** parcel ID: L-460

Outagamie County

- **I-41 and CTH U Interchange:** parcel ID's: 130016500, 130016600, 130018000, 300000101 and 300000102.
- **Wrightstown Road/Golf Course Drive Retention Pond:** parcel ID's: 130068500, 300002401
- **CTH J Retention Pond:** In Outagamie County, parcel ID: 322111500

At this time, it is unclear where WisDOT would provide new access points to these remnant fields. In order to accommodate field access to the remnant fields, the Department recommends that WisDOT work with agricultural landowners and any agricultural tenant operators to determine safe new access points to the remnant fields.

### *Wasteland*

Acquisitions that sever farmland frequently create small remnant fields that may be difficult to access or are irregularly shaped. Small remnant fields that are irregularly shaped can make it difficult for agricultural equipment to navigate and reduce the amount of tillable acres, thus creating undeveloped land ([Wis. Stat. § 70.32\(2\)\(a\)\(5\)](#)) or what is commonly referred to as wasteland as shown in Figure 8B. This in turn reduces agricultural productivity and decreases the economic viability of the land. Furthermore, as remnant fields decrease in size the proportion of wasteland (a result of narrow fields and sharp corners) increases, which further influences the fields overall productivity and economic viability. Compensation for the reduction in the value of parcels that are small and/or irregularly shaped and the potential creation of uneconomic remnant parcels according to [Wis. Stat. 32.05\(3m\)](#) should be addressed in the appraisal of each affected parcel. If an uneconomic remnant parcel is created, the Department recommends that WisDOT consider offering to purchase the uneconomic remnant field.

As proposed by WisDOT (Figure 3, Figure 4, Figure 5 and Figure 6), the I-41 expansion project has the potential to create agricultural wastelands and potentially uneconomic remnant parcels across several parcels including:

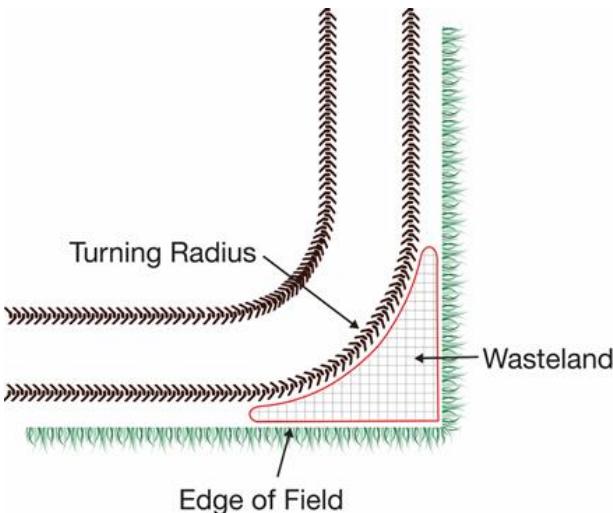
#### *Wasteland*

- The realignment of the west I-41 frontage road (Mid Valley Dr.) for the CTH U interchange will dramatically narrow the width of tillable cropland on parcel ID 130016600 from 167 ft down to 80 ft. This has the potential to increase the level difficulty to maneuver agricultural equipment and create a higher proportion of wasteland on parcel ID 130016600.
- The severance of parcel ID 300000102 to realign the east I-41 frontage road (French Rd) for the CTH U interchange will create two different fields, each with several irregularly shaped corners that may create additional wastelands.

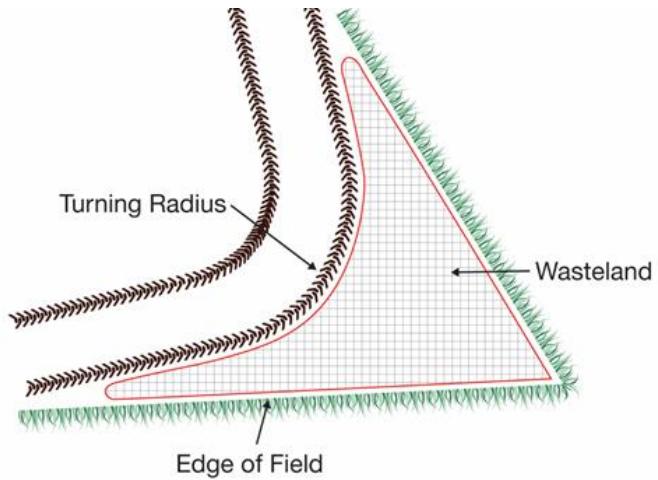
- The proposed realignment of the west I-41 frontage road (Mid Valley Dr) for the CTH S interchange will sever parcel ID L-20. The smaller (2.5 acres) of the remnant L-20 parcels will contain several irregularly shaped corners that may create additional wastelands.

#### Uneconomic Remnant Fields

- The proposed acquisition of approximately 0.75 acres of tillable cropland from parcel ID L-39-3 to realign the west I-41 frontage road (Mid Valley Dr) for the CTH S interchange will acquire the majority (55%) of the total tillable land (1.36 acres) from parcel ID L-39-3. As a result, the remnant of parcel L-39-3 will only have approximately 0.6 acres of tillable cropland, which may no longer be economically viable agricultural land given its' future size, access limitations, and the potential for increased stormwater runoff from the realigned frontage road.
- The proposed realignment of the west I-41 frontage road (Mid Valley Dr) for the CTH S interchange will sever parcel ID L-20-1, leaving two small remnant parcels each less than 0.4 acres. The remnant parcels of L-20-1 may no longer be economically viable agricultural land given its future size, access limitations, and the potential for increased stormwater runoff from the realigned frontage road.
- The proposed realignment of the west I-41 frontage road (Mid Valley Dr) for the CTH S interchange will sever parcel ID L-21-1, creating 4.6 acre and 0.2 acre remnant parcels. The 0.2 acre remnant parcel of L-21-1 may no longer be economically viable agricultural land given its' future size, access limitations, and the potential for increased stormwater runoff from the realigned frontage road.
- The proposed new ROWs for the 1) Birchwood Road and 2) Little Rapids Road retention ponds within Brown County will acquire the majorities of parcel IDs L-1978 and L-460, respectively. The 0.34 acre remnant parcel of L-1978 may no longer be economically viable agricultural land given its future size. The 3.82 acre remnant of parcel L-460 may also no longer be economically viable agricultural land given access limitations, the presence of subprime flood prone soils and the potential for increased soil moisture from the Little Rapids Road retention pond & spillway.



**Figure A: Regular Shape**



**Figure B: Irregular Shape**

Figure 8: Examples of agricultural wastelands created from regular shaped fields with square corners (Figure A) and irregular shaped fields with sharp or acute angles (Figure B) that may result from parcel severance.

### Prime Farmland and Soils

As proposed by WisDOT, the realignment, redesign and reconstruction of the I-41 interchanges of CTH E, CTH U and CTH S and retention ponds will impact a total of 65.68 acres of agricultural lands and agricultural soils. WisDOT proposes to purchase these agricultural lands using a combination of permanent easements and fee-simple acquisitions. The soils impacted by the proposed project were cataloged by soil map unit and soil texture (Table 5) using the Department's prime farmland soils GIS layer. These soils were analyzed for impacts to soils designated as prime farmland, prime farmland if drained or farmland of statewide importance (Table 5). Prime farmland is designated by the USDA according to section 622.3 of the National Soil Survey Handbook (USDA, 2017b) and is based on the ability of the land and soil to produce crops. Definitions of prime farmland, prime farmland if drained and farmlands of statewide importance are provided under Table 5.

The vast majority of the agricultural lands (85% or approximately 56.08 acres) impacted by the I-41 interchanges of CTH E, CTH U and CTH S and retention ponds hold some level of Federal or State priority designation. Specifically, the USDA has designated approximately 23.10 acres as prime farmland or 12.24 acres as prime farmland if drained, while the State of Wisconsin has designated approximately another 20.74 acres as farmland of statewide importance (Table 5). Across the impacted agricultural parcels, there are three primary soil textures including silt loam, sandy loam soils and silty clay loam of various soil series. The majority of impacted soils are silt loam soils, which are medium-textured soils (Cornell, 2017) with good soil structure, possess an ideal ability to hold onto water without becoming excessively wet and are usually best suited for crop production (UW-Extension, 2005). Sandy loam soils are course-textured porous soils (Cornell, 2017) that aren't able to hold onto water as well as medium or fine textured soils and may require irrigation to best suit crop production (UW-Extension, 2005). Silty clay loam soils are fine-textured

soils (Cornell, 2017) that lack soil structure, have very small pores, accumulate moisture which can lead to excessively wet conditions and are generally considered less than ideal soils for plant growth (UW-Extension, 2005). Draining fine-textured soils, such as with underground drain tiling, can remove excess moisture and improve the quality of the soil.

This soils analysis shows that WisDOT's proposed improvements to the I-41 corridor has the potential to remove both high quality soils and prime farmland from production. Furthermore, the proposed realignment of the west frontage road (Mid Valley Dr) for the I-41 and CTH S interchange will remove agricultural lands (parcel ID L-20, L-20-1) currently participating within Wisconsin's Farmland Preservation (FP) program through a certified FP zoning district. Cumulatively, the proposed I-41 expansion project will remove 56.09 acres of high quality soils and productive farmland as well as remove 3.61 acres of agricultural lands out of the states certified farmland preservation program.

Table 5: Agricultural soils impacted by the proposed I-41 expansion project in Brown and Outagamie Counties, WI.

<b>Soil Texture</b>	<b>Prime Farmland*</b> (acre)	<b>Prime Farmland if Drained<sup>◊</sup></b> (acre)	<b>Farmland of Statewide Importance<sup>†</sup></b> (acre)	<b>Not Prime Farmland<sup>‡</sup></b> (acre)	<b>Total (acre)</b>
Alluvium	0.00	2.03	0.00	0.00	2.03
Sandy Loam	0.39	0.02	17.22	5.69	23.33
Silty Clay Loam	6.75	3.90	2.34	0.00	12.99
Silt Loam	15.96	6.29	1.18	3.90	27.33
<i>Project Total</i>					65.68

\***Prime farmland** is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and may be utilized for cropland, pastureland, rangeland, forest land, or other lands excluding urban built-up land or water. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management.

<sup>◊</sup>**Prime farmland if drained**, indicates that if farmland is drained it would meet prime farmland criteria.

<sup>†</sup>**Farmlands of statewide importance** are set by state agency(s). Generally, these farmlands are nearly prime farmland and economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce yields high as prime farmlands under proper conditions.

<sup>‡</sup>**Not Prime farmland**, indicates farmland is neither prime farmland nor of designated importance.

## Drainage and Soil Health

Maintaining proper field drainage and preserving soil health is vital to the success of an agricultural operation. If drainage is impaired, water can settle in fields and cause substantial damage, such as reducing soil health, harming or killing crops and other vegetation, concentrating mineral salts, flooding farm buildings, or causing hoof rot and other diseases that affect livestock. Soil structure, texture, organic matter and microorganisms are all important factors that influence soil health

(Wolkowski and Lowery, 2008). The winter application of sodium chloride (salt) to roadways and the salt rich runoff that leaves the roadway can have potentially detrimental impacts to the health of nearby soils, ecosystems and surface waters (Richburg, 2001; Kelly *et al.*, 2008; Corsi *et al.*, 2010).

WisDOT holds a general permit to discharge under the Wisconsin Pollutant Discharge Elimination System (WPDES), which supersedes local ordinances. WisDOT's current WPDES permit [No. WI-S066796-1](#), ensures that WisDOT is compliant with provisions of Wis. Stat. ch. 283, ch NR 151, Wis. Adm. Code, ch NR 216, Wis. Adm. Code, and Wis. Stat. 30.2022(2) when WisDOT engages in land disturbance construction activities including clearing, grading and/or excavating that affects one acre or more of land (WisDNR, 2018). The permit only authorizes WisDOT to discharge stormwater from land disturbing construction activities that may become mixed with other stormwater discharges and the WisDNR may require individual permits for construction sites under section 1.1.4 of WPDES permit [No. WI-S066796-1](#) (WisDNR, 2018).

### ***Drainage and Soil Health Impacts***

While the expansion of I-41 extends along a 23 mile corridor, the agricultural impacts will be specific to only three I-41 interchanges and new retention ponds (Figure 2, Figure 3 and Figure 4). Therefore, the drainage and soil health analysis will focus on the agriculture parcels that are impacted by the preferred alternatives for the CTH E, CTH U and CTH S interchanges and various retention ponds.

#### **CTH S Interchange**

Of primary concern is the realignment of the I-41 west frontage road (Mid Valley Dr) at the CTH S interchange further into parcel L-21-1. As a result, the realigned Mid Valley Drive will cross a known DNR flowline that drains parcel L-21-1, the adjoining contiguous field parcels and the upland parcels to the west of CTH S. This flowline has visible pathways of concentrated flow over grassed waterways that cross underneath Mid Valley Dr before draining into the Ashwaubenon Creek (Figure 4). The realignment of Mid Valley Dr has the potential affect the existing drainage of parcel L-21-1 and the upland fields if drainage is impaired or if backwaters are created upstream of the DNR flowline along the realigned roadway.

The realignment of Mid Valley Dr and the creation of the southwestern retention pond at the CTH S interchange will also require the filling of a known wetland and the alteration of Ashwaubenon Creek's existing flow path between parcels L-39-3 and L-20-1 (Figure 4). The culmination of impacts agricultural parcel L-39-3 (i.e impacts to an adjacent wetland, the additional new impermeable roadway surfaces for Mid Valley Dr, and roadway salt application) creates the potential for increased overland salty runoff that will funnel onto the field and potential degrade the health of the soil, nearby wetland and surface water.

#### CTH U Interchange

The realignment of the east I-41 frontage road (French Rd) for the CTH U interchange in Outagamie County will sever parcel ID 300000102 (Figure 3). This severance may impede current overland drainage pathways within parcel ID 300000102, which degrade the ability of the remnant parcels to drain properly. The additional new impermeable roadway surfaces for French Rd and the application of salt in winter, also creates the potential for increased volumes of overland salty runoff that will funnel onto the remnant fields and potentially degrade soil health.

#### CTH E Interchange

As shown in Figure 2, the agricultural impacts from the proposed selected alternative are in close proximity (less than 10 ft) to a known DNR flowline that drains agricultural parcel ID 311645110. This flowline also drains a substantial urban area eastward approximately 1.8 miles to State Highway 47 and crosses I-41 at two locations prior to reaching parcel ID 311645110. Disruptions to any of these flowlines on or prior to parcel ID 311645110 may disrupt the proper drainage of flow and degrade soil health.

#### Retention Ponds

The construction of the I-41 expansion project retention ponds may affect the existing surface and subsurface (i.e drain tile) drainage patterns of agricultural fields. Construction activities also have the potential to disrupt and/or mix soil profiles surrounding the physical pond & spillway, damage or break active drainage tile lines and the movement of heavily equipment may compact soil. UW-Extension report A3367 states that heavy equipment with axle loads that exceed 10 tons increase the risk of soil compaction into subsoil layers that cannot be removed by conventional tillage (Wolkowski and Lowery, 2008). In addition, research has also shown that construction activities can negatively impact soil properties, soil health and crop yields for up to a decade within the ROW depending on the type and severity of construction impacts (e.g equipment axle weight, use of excavation, intermixing of soil layer etc.) (Culley and DOW 1988; Shi et al., 2014).

Beyond these general concerns, revising the final locations of the four following retention ponds may mitigate drainage impacts to agricultural lands and preserve prime farmland & soils:

- **CTH J Retention Pond** (Figure 6)
- **Little Rapids Road Retention Pond** (Figure 5)
- **Golf Course Drive Retention Pond** (Figure 6)
- **Larry Lane Retention Pond** (Figure 5)

As proposed, the CTH J (parcel number 322111500) and Little Rapids Road (parcel number L-460) retention ponds are located on areas that contain prime farmland or farmland of statewide importance. The agricultural lands on the western side of parcel 322111500 and eastern side of parcel L-460 are hydric soils that are reported to be frequently ponded or flooded and less

productive agricultural soils. Hydric soils are commonly saturated, flooded or ponded for an extended period during the growing season, causing anaerobic conditions within the upper soil layer and may be associated with wetlands. Unless WisDOT determines these areas to be farmed wetland, WisDOT should consider relocating:

- The CTH J retention pond to the western side of parcel number 322111500 in order to preserve the most productive agricultural lands and address the concerns of the Vanepern Family
- The Little Rapids Road retention pond to the southeastern side of parcel number L-460 in order to preserve the most productive agricultural lands and address the concerns of R & R Countryside LLC.

The third retention pond location of concern is the Golf Course Drive retention ponds. The ROW for the Golf Course Drive pond is sited across a large grassed channel on parcel number 300002401. This grassed channel appears to drain the I-41 highway corridor to the north and carries the water south to a known DNR flowline. While the exact location of the pond within the proposed ROW is still unknown, the Department recommends avoiding the grassed waterway to the greatest extent possible to mitigate impacts to existing field drainage patterns. In addition, the soils within parcel number 300002401 are hydric soils and may contain drainage tiles that are used to remove excess water from agricultural lands in order to mitigate the negative impacts saturated hydric soils may have on crop production. While it's unknown if drainage tiles are present within parcel number 300002401, during construction WisDOT should monitor for the presence of drainage tiles and repair any lines that are broken as a result of construction activities.

Lastly, the Town of Lawrence and Integrated Public Resources have reported that the Town of Lawrence in Brown County is designing a new retention pond in close proximity to WisDOT's proposed Larry Lane retention pond on parcel numbers L-452 and L-453. WisDOT should consider contacting and consulting with the Town of Lawrence to determine if they may collaborate on retention pond designs along the I-41 project corridor in the Town of Lawrence and potentially reduce the overall number and/or size of retention ponds in the area.

#### Drainage and Soil Health Conclusion

The proposed improvements to the I-41 interchanges of CTH E, CTH U and CTH S and retention ponds have the potential to impact the drainage and soil health of the surrounding agricultural fields. The proposed retention ponds may benefit some agricultural lands by intercepting stormwater surges and retaining stormwater for an extended period, thus helping to mitigate the immediate negative impacts of large stormwater events to agricultural lands. On the other hand, alterations to existing flowlines, breaking existing drainage tile lines, increasing nearby impervious surfaces, and filling wetlands could create new flow patterns, create backwaters, and/or degrade drainage to an extend that may overwhelm the soil's ability to infiltrate and/or drain runoff.

WisDOT should consider taking steps, including relocating some of the retention ponds, to mitigate these impacts to soil health and drainage. Of specific concern is the soil health and potential for impacted drainage for parcel numbers L-21-1, L-39-3, L-460, 300000102, 300002401 and 311645110. If not properly addressed, the soils within these parcels may be wetter and less favorable for agricultural cropping because of the proposed project. The application of salt to roadways in the winter also creates the potential for additional detrimental impacts to the health of the receiving agricultural soils and downstream waterways.

The Department advises WisDOT to work within the bounds of Wis. Stat. § 88.87 to build adequate ditches, culverts, and other facilities to prevent obstruction of drainage, protect property owners from damage to lands caused by unreasonable diversion or retention of surface water, and maintain, as nearly as possible, the original drainage flow patterns to ensure stormwater and drainage impacts are mitigated on the remnant fields. Refer to Appendix C, Section III for the statutes pertaining to drainage rights. Landowners whose property is damaged by improper construction or maintenance of highway facilities and highway drainage structures may file a claim with WisDOT within three years after the damage occurs (Appendix C, Section III).

### **Obliterated Roadway**

The realignment of frontage roads to accommodate for the preferred selected alternatives for the I-41 interchanges of CTH U and CTH S will require the obliteration of portions of frontage roads as shown in Figure 3 and Figure 4. According to WisDOT's *Standard Specifications for Highway and Structure Construction*, [Sections 214](#) and [625](#), when an old roadbed is obliterated, surfacing material shall be removed and disposed of, and ditches shall be filled in. The area will then be graded to a contour that will merge with the adjoining contour. After rough grading is completed, these areas shall be covered with topsoil, harrowed, smoothed, fertilized, and seeded in accordance with WisDOT guidelines. Topsoil is usually spread to a depth of four inches.

WisDOT has indicated the planned approach is to make the land available for use, but the final course of action is still under consideration. If lands from the obliterated roadway are made available, there is approximately 4.8 acres (2.3 acres from CTH U and 2.5 acres from CTH S) of land available for use. The agricultural value of any obliterated roadway depends on the use and quality of adjoining land and on the depth and quality of the restored area's subsoils and topsoil. Soils beneath the obliterated roadway may be compacted and thus require deep tillage to de-compact subsoils in order to mitigate potential adverse effects of compaction on plant growth.

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## Federal and State Elected Officials

### Governor

Governor Tony Evers

### State Senators

Honorable Joan Ballweg (Committee on Agriculture)

Honorable André Jacque (Senate District 1)

Honorable Robert Cowles (Senate District 2)

Honorable Roger Roth (Senate District 19)

### State Assembly

Honorable Gary Tauchen (Committee on Agriculture)

Honorable Shae Sortwell (Assembly District 2)

Honorable Jim Steineke (Assembly District 5)

Honorable Rachael Cabral-Guevara (Assembly District 55)

Honorable David Murphy (Assembly District 56)

## Federal, State and Local Units of Government

### Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP)

DATCP Public Information Officer – Leeann Duwe

DATCP Legislative Liaison - Bradford Steine

DATCP Administrator, Agricultural Resource Management Division - Sara Walling

DATCP Director, Bureau of Land and Water - Lacey Cochard

### Wisconsin Department of Transportation (WisDOT)

Scott Ebel - Design Project Manager

Kathie VanPrice - Environmental Analysis & Review Specialist

Bryan Lipke - Planning Project Manager

Chad DeGrave - Project Supervisor

### Brown County Wisconsin

Brown County Conservationist – Mike Mushinski

Brown County Planning Director / MPO Director – Cole Runge

Brown County Highway Commissioner – Paul Fontecchio

### Outagamie County Wisconsin

Outagamie County Conservationist – Greg Baneck

Outagamie County PE/Project Coordinator – Jeremy Freund

Outagamie County Development and Land Services Department – Director – Kara Homan

Outagamie County Highway Commissioner – Dean Steingraber

### Towns, Cities and Villages

Town of Grand Chute Chairperson - Jason Van Eperen

Town of Grand Chute – Administrator – Jim March  
Town of Grand Chute Clerk - Angie Cain  
Town of Kaukauna Chairperson - Mike Van Asten  
Town of Kaukauna Clerk - Debbie VanderHeiden  
Town of Lawrence Chairperson - Dr. Lanny Tibaldo  
Town of Lawrence Administrator - Patrick Wetzel  
Town of Lawrence Clerk - Cindy Kocken  
Town of Vandenbroek Chairperson - Jason Wegand  
Town of Vandenbroek Clerk - Cory Swedberg  
Town of Wrightstown Chairperson - William Verbeten  
Town of Wrightstown Clerk - Donna Martzahl  
City of Appleton Mayor - Jake Woodford  
City of Appleton Clerk - Kami Lynch  
City of De Pere Mayor - James Boyd  
City of De Pere Administrator – Lawrence Delo  
City of De Pere Clerk - Carey Danen  
City of Kaukauna Mayor - Anthony Penterman  
City of Kaukauna Clerk - Sally Kenney  
Village of Little Chute President - Michael Vanden Berg  
Village of Little Chute Administrator – James Fenlon  
Village of Little Chute Clerk - Laurie Decker  
Village of Wrightstown President – Dean Erickson  
Village of Wrightstown Administrator – Travis Coenen  
Village of Wrightstown Clerk – Michelle Seidl

#### Wisconsin Drainage Boards

Brown County Drainage Board Chair – Warren Jadin  
Outagamie County Drainage Board Chair – Alvin Kramer Jr.

#### Universities

University of Wisconsin-Extension: Brown County – Judy Knudsen  
University of Wisconsin-Extension: Outagamie County – Chris Viau

## News Media, Public Libraries and Repositories

#### Public Libraries

Brown County Public Libraries  
Kress Family Branch  
Wrightstown Branch  
Appleton Public Library System  
Outagamie Waupaca Library System  
Kaukauna Public Library

Kimberly-Little Chute Public Libraries  
Kimberly-Little Chute Public Library System  
James J. Siebers Memorial Library Branch  
Gerard H. Van Hoof Memorial Library and Civic Center Branch

Newspapers

Green Bay Press Gazette  
Post Crescent  
The Press Times  
Times-Villager  
Agri-View Newspaper  
Country Today Newspaper  
Wisconsin Document Depository Program  
The Library of Congress

**Interest Groups, Entities and Individuals**

Jacobs Engineering  
Marc Morgan  
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TRADE AND CONSUMER PROTECTION**

**DIVISION OF  
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