

**Design Refinement/Environmental  
Impact Update Memo**

**For**

**Wis 29  
County VV Interchange  
Brown County, WI**

**Project I.D. 9200-10-00/71  
January 21, 2020**



WisDOT Northeast Region  
Matt Ternes, P.E., Project Manager



Date



Federal Highway Administration  
Daniel Holt, P.E., Program Delivery Engineer

1/27/2020

Date

CC:  
WisDOT Bureau of Technical Services

## **Introduction:**

This report documents proposed design refinements on the WIS 29/County VV interchange project 9200-10-00/71 and associated changes in environmental impacts consistent with WisDOT Facilities Development Manual chapter 20-40 and 23 Code of Federal Regulations 771.129. The original Environmental Report (ER) for this project was approved by the Federal Highway Administration on 08/09/2019. The ER is available in the Wisconsin Department of Transportation (WisDOT) Northeast Region Files.

## **Adjacent Projects:**

Brown County is proposing to reconstruct Marley Street on the north end of the WisDOT project in 2022 from Millwood Court to County C. While this project is on a similar schedule as the interchange project, the County project will have a separate environmental document and will be a separate bidding/letting from the interchange project.

## **Design Refinements: (All items below are identified on Exhibit 1)**

1. Brown County is proposing to reconstruct Marley Street on the north end of the WisDOT project in 2022 from Millwood Court to County C. This would shorten the north project limits of the WisDOT project by approximately 300 feet. The county also proposes to add sidewalk on both sides of the roadway north of Millwood Court. Therefore, sidewalk is proposed to be added by the WisDOT project to fill the gap between where the sidewalk would end north of the Evergreen up to Millwood Court. There is also a minor change to the proposed right of way acquisition. The amount of fee acquisition is proposed to be reduced by 0.08 Acres, while the amount of Temporary Limited Easement (TLE) is proposed to increase by 0.04 Acres. No other changes to the overall impacts listed in the ER are anticipated. A temporary roadway connection will be installed just north of Millwood Court as this portion of the interchange project will be constructed in 2021, but the Brown County project will not be constructed until 2022. See Exhibit 2.
2. The location of the cul-de-sac on North Overland Road is proposed to be shifted slightly north. This would utilize WisDOT owned property and reduce the required fee title right of way acquisition for the project by approximately 0.2 acres.
3. Coordination with the Wisconsin Department of Natural Resources (DNR) on requirements for the storm water management allowed for a reduction of the footprint needed for the storm water pond adjacent to Evergreen Avenue. Through analysis of TSS reduction percentages for new roadway construction areas versus re-construction areas, the overall TSS reduction requirement for the project was reduced, and therefore the storm water pond size could also be reduced. This reduces the proposed need for approximately 1.54 acres of fee title right of way. There is also a proposed increase of 0.04 acres of TLE.
4. The location of the cul-de-sac for the connection roadway from Evergreen Ave. to existing Milltown Road is proposed to be shifted approximately 25 feet to the west to avoid the proposed need for 0.3 acres of fee title right of way from the Maplewood Meats property.
5. Due to a change in ownership of a property in the SW corner of the Overland Road and County VV intersection, proposed right of way acquisition of approximately 10 acres from the parcel is proposed to change from fee to Limited Highway Easement (LHE). While the manner of acquisition has changed, the acreage remains relatively consistent as stated in the ER. LHE acreage (previously fee) was reduced on this parcel by 0.20 acres due to item 2 above. Approximately an additional 0.2 acres of LHE was reduced on this parcel due to final design refinement of the roundabout on the

north end of Overland Road where it meets the existing County VV roadway. Additionally, approximately 0.2 acres of LHE was changed to TLE due to no longer needing a ditch and being able to maintain drainage via the storm sewer through sloping.

#### **Updated Agency Coordination:**

The DNR provided updated comments on September 16<sup>th</sup>, 2019. The main reason for the update was to include language related to storm water management and coverage under the Wisconsin Pollutant Discharge Elimination System Transportation Construction General Permit. The other additional information was related to potential impacts to an unnamed tributary to trout creek, an updated review for threatened and endangered species, and an update to potential invasive species encountered on the project.

- WisDOT will continue to work with the DNR to minimize impacts to the unnamed tributary.
- The update to the threatened and endangered species confirmed that there are no concerns related to the Northern Long Eared Bat or the Rusty Patched Bumble Bee.
- WisDOT will continue to work with DNR on measures to minimize the spread of any identified invasive species.

All other items in the review letter remain valid. See Exhibit 3.

#### **Updated Wetland Impact Information**

Wetlands were originally reviewed within the project corridor in 2011. An update to the wetland review was completed in 2019. Estimated wetland impacts went from 3.417 acres listed in the ER, to 5.497 acres for final design and permitting. The change is primarily due to the wet conditions in recent years, where several areas of cropland have converted to wetland. Wetland mitigation is still proposed at a WisDOT Statewide Wetland Mitigation Bank Site. See Exhibit 4 for updated wetland mitigation information.

#### **Updated Public Outreach**

Numerous meetings have been held and will continue to be held with property owners, Brown County, Villages of Hobart and Howard, and the Oneida Nation. Refinements presented in this document have been discussed at those meetings. Additionally, a public meeting was held on 10/22/2019 to discuss the upcoming real estate process and traffic impacts. Refinements presented in this document were displayed at that meeting. Adjacent property owners, businesses, Brown County, Village of Hobart, Village of Howard, and the Oneida Nation were all invited to the meeting on 10/22/2019

#### **Summary:**

No other substantial changes to the project or environmental impacts have occurred since the ER approval. The proposed project still meets the purpose and need stated in the ER and also covers all of the items stated in the U.S. Department of Transportation's Better Utilizing Investments to Leverage Development grant. With the above/attached considered, the Region has determined that none of the project changes described above will result in a new significant impact, no further coordination or documentation of impacts is necessary for the WIS 29 (9200-10-00/71) project at this time and the

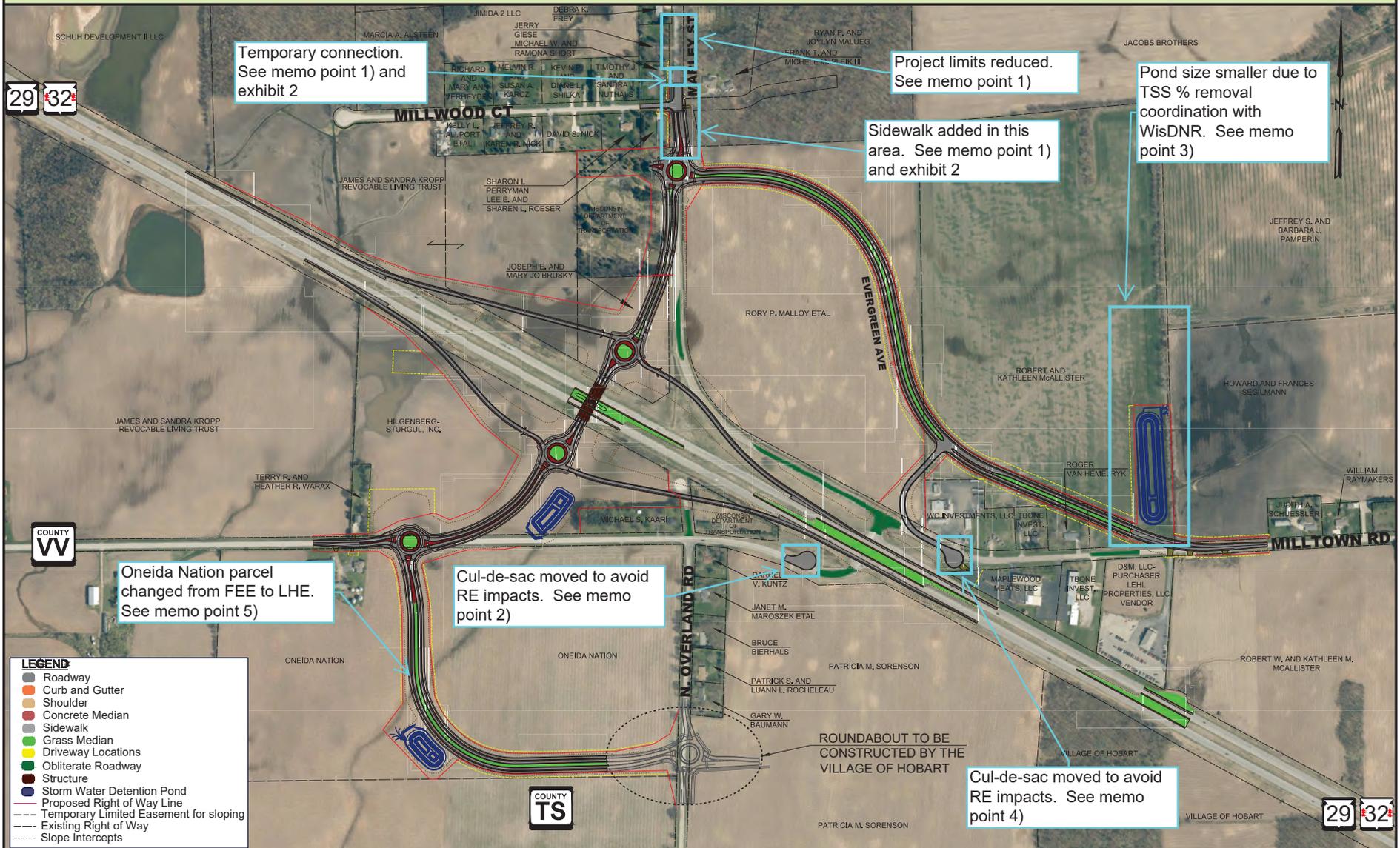
previously approved ER remains valid. Furthermore, WisDOT remains committed to fulfilling the avoidance, minimization, and mitigation measures described in the ER.

**List of Exhibits:**

- Exhibit 1      Design Refinements Overview
- Exhibit 2      Design Refinement at the North Project Limits
- Exhibit 3      Updated DNR letter
- Exhibit 4      Wetland Mitigation Information

**Exhibit 1**  
**Design Refinements Overview**

# WIS 29/COUNTY VV Overview



**LEGEND**

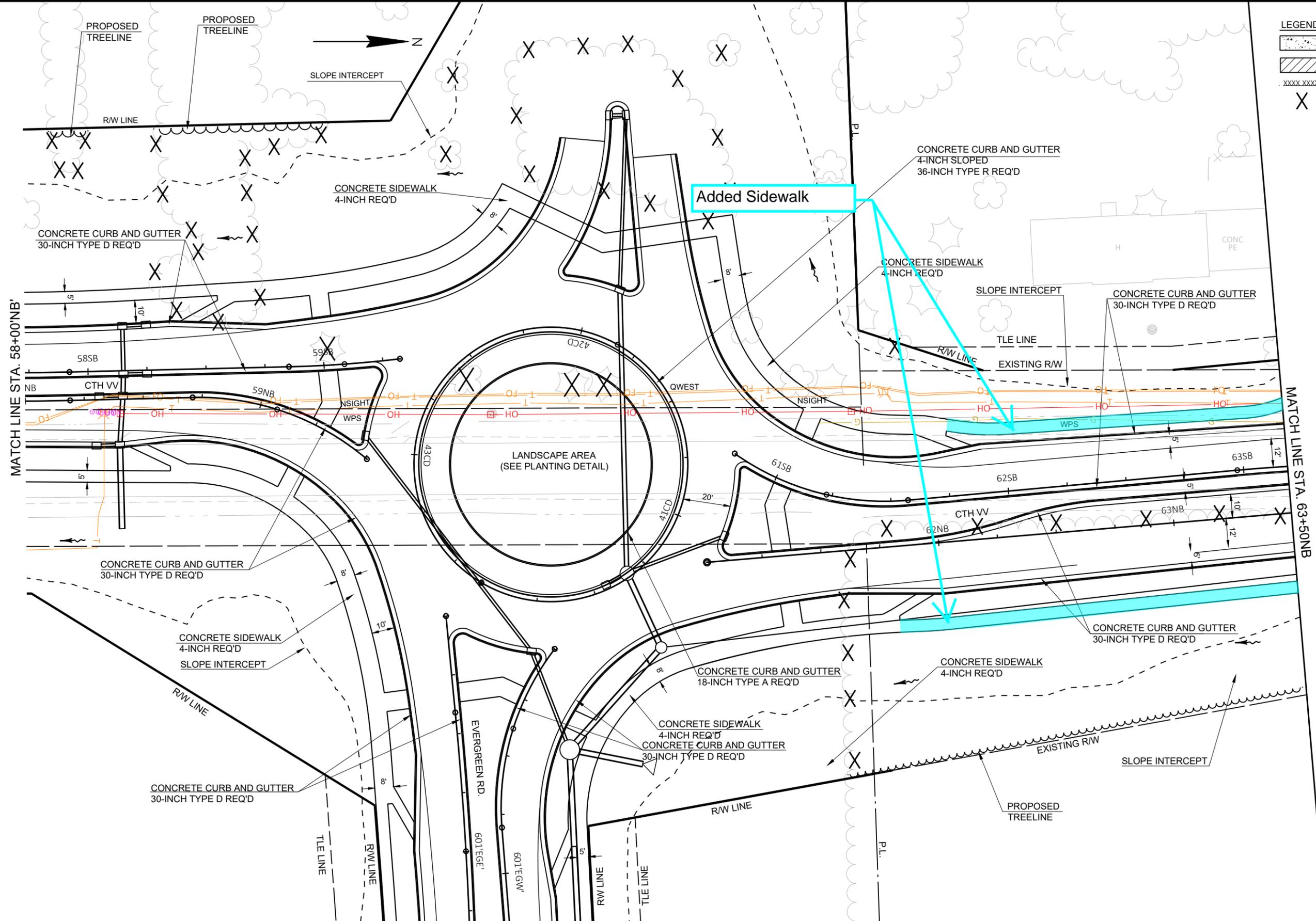
- Roadway
- Curb and Gutter
- Shoulder
- Concrete Median
- Sidewalk
- Grass Median
- Driveway Locations
- Obliterate Roadway
- Structure
- Storm Water Detention Pond
- Proposed Right of Way Line
- Temporary Limited Easement for sloping
- Existing Right of Way
- Slope Intercepts

## **Exhibit 2**

### **Design Refinements at the North Project Limits**

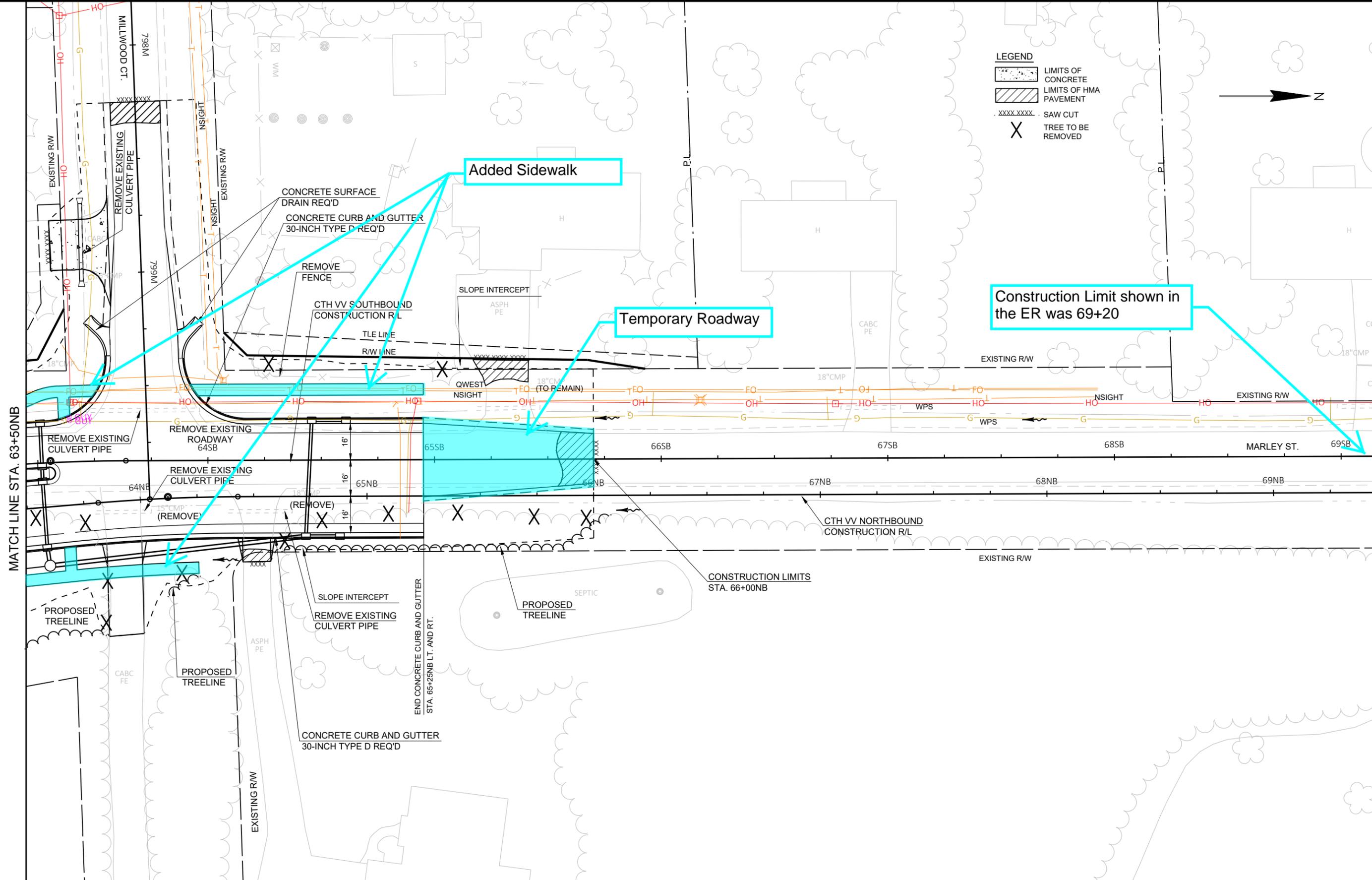
**LEGEND**

	LIMITS OF CONCRETE
	LIMITS OF HMA PAVEMENT
	SAW CUT
	TREE TO BE REMOVED



**LEGEND**

-  LIMITS OF CONCRETE
-  LIMITS OF HMA PAVEMENT
-  .XXXX XXXX. SAW CUT
-  TREE TO BE REMOVED



Added Sidewalk

Temporary Roadway

Construction Limit shown in the ER was 69+20

MATCH LINE STA. 63+50NB

**Exhibit 3**  
**Updated DNR Letter**



September 16, 2019

DOT: Brown

Matt Ternes  
WI Department of Transportation  
944 Vanderperren Way  
Green Bay, WI 54304

**Subject: DNR Initial Project Review (UPDATED)**

Project I.D. 9200-10-00/71 (Formerly 9200-06-00)  
STH 29/CTH VV Interchange  
CTH U to Woodland Road  
Villages of Hobart and Howard  
Brown County

Dear Mr. Ternes:

The Wisconsin Department of Natural Resources (DNR) has received the information you provided for the above-referenced project. According to your proposal, the purpose of this project is to reconstruct the existing intersection to a grade separated diamond interchange. Proposed improvements include reconstruction and relocation of the existing intersection and associated local roads.

Preliminary information has been reviewed by DNR staff for the project under the DNR/DOT (Wisconsin Department of Transportation) Cooperative Agreement. Initial comments on the project as proposed are included below, and we assume that additional information will be provided that addresses all resource concerns identified. To ensure compliance with resource protections, we are recommending that Special Provisions be developed for specific resource protections described below. DNR expects that the full range of DOT roadway standards will be applied throughout the design and construction process.

**Wetlands**

DNR and DOT conducted a joint wetland determination during the original review period and then updated that review in the summer of 2019. DOT has the GPS coordinates of our approximate boundaries. Based on the wetland determination there is potential for wetland impacts to occur as a result of this project. Wetland impacts must be avoided and/or minimized to the greatest extent practicable. Unavoidable wetland losses must be compensated for in accordance with the DNR/DOT Cooperative Agreement and the DOT Wetland Mitigation Banking Technical Guideline. DNR requests information regarding the amount and type of unavoidable wetland impacts.

**Fisheries/Stream Work**

There is an unnamed tributary to Trout Creek on the western side of the proposed project. This waterway is mapped to start around the western edge of Millwood Court and go south under STH 29 and CTH VV. During the joint wetland determination we did not review the waterway other than looking

at the wetlands adjacent to STH 29. Based on the current proposed alignment there doesn't appear to be a lot of impacts to this waterway other than a potential structure replacement and possible extension on STH 29. Impacts to this waterway should be minimized and any new structure should be placed in a manner that will not affect fish passage. It is recommended that any new structure be placed low enough to encourage a natural stream bed.

If erosion control matting is to be used along stream banks, DNR recommends biodegradable non-netted matting (e.g. Class I Type A Urban, Class I Type B Urban, or Class II Type C). Long-term netted mats may cause animal entrapment. Avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings in the mesh are fixed in size.

### **Endangered Resources**

Based upon an updated review of the Natural Heritage Inventory (NHI) dated March 13, 2019, the project area is near a known occurrence for the threatened and/or endangered species. I am including the conditions from my original initial review letter dated January 7, 2011 as these conditions would still apply:

There are recent records for a Migratory Bird Concentration Site close to this location as well as records for both State Threatened Blanding's turtle (*Emydoidea blandingii*) and State Threatened wood turtle (*Glyptemys insculpta*). The Department recommends that clearing of any wooded area be kept to a minimum to minimize impacts to the Migratory Bird Concentration Site as migratory birds will use the trees to rest and perch.

For the two State Threatened turtle species both species are known to inhabit the waterways and their riparian corridors. It is reasonable to assume that these turtles may be present at or near the project site if the project limits extend to the waterway discussed above.

If project construction will start in the spring, the perimeter of the areas to be disturbed that are along the riparian corridors should be protected with properly trenched-in silt fence prior to March 15 to discourage turtles from entering the work area. If the construction area cannot be silt-fenced by March 15, the silt fence must be installed prior to construction activities and the area behind the silt fence must be surveyed and any turtles confined within the project area removed prior to any site disturbance, and throughout the construction period. There is a [Wood Turtle Broad Incidental Take Permit/Authorization](#) that provided additional information.

With this review the following has also been determined:

- There are no known Northern Long-eared Bat (NLEB) maternity roost trees within 150 feet of the project, or known hibernacula within 0.25 miles of the proposed project area.
- This project is located outside of any High Potential Zones (HPZ) for the Rusty Patched Bumblebee (RPBB), and therefore should have no impact on this federally endangered species.
- ❖ *NHI Disclaimer: This review letter may contain NHI data, including specific locations of endangered resources, which are considered sensitive and are not subject to Wisconsin's Open Records Law. As a result, information contained in this review letter may be shared only with individuals or agencies that require this information in order to carry out specific roles in the permitting, planning and implementation of the proposed project. Specific locations of endangered resources may not be released or reproduced in any publicly disseminated documents.*

### **Invasive Species**

All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. For more information, refer to <http://dnr.wi.gov/topic/Invasives/bmp.html>.

### **Floodplains**

A determination must be made as to whether the project lies within a mapped/zoned floodplain. Any proposed temporary or permanent changes to the road or waterway geometry in mapped floodplain areas requires that DOT coordinate with the Brown Zoning Administrator to ensure compliance with the local zoning ordinance and NR116. Examples of floodplain development activity includes, but not limited to, the following: changes to waterway crossings; culvert extensions; changes to road surface elevations and/or side-slopes; temporary causeways; temporary structures; general fill.

### **Storm Water Management & Erosion Control**

- For projects disturbing an acre or more of land, erosion control and storm water measures must adhere to the Wisconsin Pollutant Discharge Elimination System Transportation Construction General Permit (TCGP) for Storm Water Discharges. Coverage under TCGP is required prior to construction. DOT should apply for permit coverage just before the project goes to final PS&E. Permit coverage will be issued by the DNR after design is complete and documentation shows that the project will meet construction and post-construction performance standards. For more information regarding the TCGP you can go to the following link, and click on the “Transportation” tab: <https://dnr.wi.gov/topic/Sectors/Transportation.html>.
  - DOT and DNR met to discuss the post construction standards required for this project. DOT is currently designing the project so that it will meet the conditions of the TCGP
- All projects require an Erosion Control Plan (ECP) that describes best management practices that will be implemented before, during and after construction to minimize pollution from storm water discharges. Additionally, the plan should address how post-construction storm water performance standards will be met for the specific site. The project design and Erosion Control Implementation Plan (ECIP) must comply with the TCGP in order to receive “permit-coverage” from the DNR.
- Once the project contract has been awarded, the contractor will be required to outline their construction methods in the ECIP. An adequate ECIP for the project must be developed by the contractor and submitted to this office for review at least 14 days prior to the preconstruction conference. For projects regulated under the TCGP, submit the ECIP as an amendment to the ECP.

### **Selected Site & Commercial Non-Metallic Mines**

- The DOT Select Site process must be adhered to for clean fill or any other material that leaves the work site. The DNR liaison will review all proposed select sites and a site visit may be required. Filling of wetlands, waterways or floodplain is not allowed under the select site process, unless the site owner obtains required permits. No new impermeable surfaces can be left at a select site (including gravel roads or pads), unless the site owner obtains required permits. Contaminated materials leaving the site need to adhere to the Hazardous Material Management Plan.
- Use of Commercial Non-Metallic Mines must accompany documentation that such mines have received all applicable local, state and federal permits before being used on the project,

including local non-metallic mining reclamation permits and applicable WPDES permits as issued by the DNR.

**Other Issues**

- This project may require a permit from the U.S. Army Corps of Engineers (USACE). For further permit details, you may contact Jessica Kempke of the USACE located in the Green Bay office, at (920) 448-2824. All local, state, and federal permits and/or approvals must be obtained prior to commencing construction activities.
- Because part of this project is located within the Oneida Nation Reservation you should contact Jim Snitgen from the Oneida Nation at (920) 869-4589.

The above comments represent the DNR's updated initial concerns for the proposed project and do not constitute final concurrence. Final concurrence will be granted after further review of refined project plans, and additional consultation if necessary. If any of the concerns or information provided in this letter requires further clarification, please contact this office at (920) 412-0165, or email at [james.doperalski@wisconsin.gov](mailto:james.doperalski@wisconsin.gov).

Sincerely,



James P. Doperalski Jr.  
Environmental Analysis & Review Specialist

c: Mike Helmrick - DOT  
Jim Snitgen – Oneida Nation  
File

## **Exhibit 3**

### **Wetland Mitigation Information**



# WETLAND IMPACT TRACKING FORM

**\*\*This form must be filled out for all projects.\*\***

**Return This Completed Form to:**

Jennifer Gibson  
 Environmental Coordinator  
 WisDOT-NE Region  
 944 Vanderperren Way  
 Green Bay, WI, 54304  
 Phone: (920) 492-4160  
 Jennifer.Gibson@dot.wi.gov

**Please Complete All  
 Information Highlighted In  
 Yellow**

**WisDOT Regional  
 Environmental Coordinator  
 (REC) Will Complete Sections  
 Highlighted In Green**

**Project Design I.D. #:** 9200-10-00  
**Project Construction I.D. #:** 9200-10-71/72  
**Hwy/Project Title :** STH 29: Shawano - Green Bay  
 CTH VV Interchange  
**County :** Brown/Outagamie  
**Construction Year :** 2021/2022  
**Let Date:** September 8, 2020  
**Date this form is completed:** 10/23/19  
**Date this form is approved:** 10/23/2019

**This Form Prepared by:** Phil Verville III, Ayres 920-327-7822 [vervillep@ayresassociates.com](mailto:vervillep@ayresassociates.com)  
NAME PHONE EMAIL

**This Form Approved by:** Jennifer Gibson 920-492-4160 [Jennifer.Gibson@dot.wi.gov](mailto:Jennifer.Gibson@dot.wi.gov)  
NAME PHONE EMAIL

**Is a discharge of dredged or fill material into wetlands anticipated?**

**NO**  **⇒ Form complete; no further information is required (RETURN FORM TO REC).**

**YES**  **⇒ 1. Complete remainder of form:**

After final wetland impacts are determined, complete yellow portions on both pages of this form and submit to REC for finalization and approval. Also provide a copy of wetland impact displays.

- 2. Include this final APPROVED form with DNR 401 request and USACE 404 permit application.**
- 3. Provide a PDF copy of the USACE 404 permit and DNR 401/final concurrence letter to REC.**

**Wetland Delineation/  
 Determination completed by:** James Doperalski Jr. 920-412-0165 [james.Doperalski@wisconsin.gov](mailto:james.Doperalski@wisconsin.gov)  
NAME PHONE EMAIL

WDNR - Environmental Analysis and Review Specialist – Advanced  
 QUALIFICATIONS

**Describe methods used to avoid and minimize impacts to wetlands:**

Slopes were steepened where possible. Alternative selected minimized wetland impacts.

WETLAND IMPACT / REPLACEMENT SUMMARY			
Type Impacted	Area Impacted	Type Mitigated	Area Mitigated
AB	-	AB	-
BOG	-	BOG	-
DM	-	DM	-
M	0.20	M	-
RPE	-	RPE	-
RPF	-	RPF	-
SM	0.20	SM	-
SS	-	SS	5.47
WS	0.11	WS	0.11
AB(D)	-	<b>TOTAL</b>	<b>5.58</b>
DM(D)	-		
M(D)	4.99		
RPE(D)	-		
RPF(D)	-		
SM(D)	-		
SS(D)	-		
WS(D)	-		
<b>TOTAL</b>	<b>5.50</b>		

**Was professional discretion used to determine debit ratio?** No  Yes  **⇒ Describe discretionary rationale below:**



**WETLAND IMPACT TRACKING FORM - PAGE 2**  
**DETAILED TABLE OF WETLAND IMPACTS**

**Notes for Page 2 completion:**

1. A wetland area (ID) may be made up of multiple wetland types. Separate the impact area by type and report in separate rows.
2. To add additional rows, right click on row number within the table and select "insert". Repeat as needed.
3. Use Department of Transportation Wetland Classification System. See abbreviations tab.
4. Individual wetland impacts should be reported to the nearest 0.001-acre.
5. The Environmental Coordinator will enter the appropriate debit ratio, mitigation type, area, and bank information.
6. Impacts and mitigation are automatically summed by type and rounded to the nearest 0.01-acre. See page 1.

Point #	Wetland ID	Impact Location (project station)	Decimal Degrees		Type Impacted	Area Impacted	DOT REC will provide this information.		
			Latitude	Longitude			Debit Ratio	Type Mitigated	Area Mitigated
	1		44.584716	88.192692	WS	0.033	1.000	WS	0.033
	2		44.584471	88.191822	M(D)	0.224	1.000	SS	0.224
	3		44.583485	88.190502	WS	0.054	1.000	WS	0.054
	4		44.583272	88.190567	M(D)	0.136	1.000	SS	0.136
	5		44.582982	88.190439	M(D)	0.006	1.000	SS	0.006
	6		44.582621	88.190114	SM	0.033	1.200	SS	0.040
	7		44.580142	88.180153	M	0.015	1.200	SS	0.018
	8		44.579108	88.177445	M	0.137	1.200	SS	0.164
	9		44.578518	88.177464	SM	0.070	1.200	SS	0.084
	10		44.577415	88.17512	M(D)	0.153	1.000	SS	0.153
	11		44.577161	88.175579	M(D)	0.148	1.000	SS	0.148
	12		44.578261	88.174635	M(D)	0.086	1.000	SS	0.086
	13		44.578143	88.173039	M(D)	2.223	1.000	SS	2.223
	14		44.576089	88.173703	M(D)	0.303	1.000	SS	0.303
	15		44.574715	88.175375	M(D)	0.119	1.000	SS	0.119
	16		44.575447	88.171766	M(D)	1.038	1.000	SS	1.038
	17		44.57627	88.171442	SM	0.009	1.200	SS	0.011
	18		44.575252	88.168943	SM	0.087	1.200	SS	0.104
	19		44.574725	88.167374	M	0.051	1.200	SS	0.061
	20		44.573726	88.1649	M(D)	0.058	1.000	SS	0.058
	21		44.574241	88.164257	M(D)	0.046	1.000	SS	0.046
	22		44.57495	88.159583	WS	0.019	1.000	WS	0.019
	23		44.574505	88.164066	M(D)	0.003	1.000	SS	0.003
	24		44.574968	88.16538	M(D)	0.032	1.000	SS	0.032
	25		44.575086	88.165751	M(D)	0.014	1.000	SS	0.014
	26		44.576745	88.169472	M(D)	0.151	1.000	SS	0.151
	27		44.579036	88.170033	M(D)	0.145	1.000	SS	0.145
	28		44.580163	88.169293	M(D)	0.053	1.000	SS	0.053
	29		44.582444	88.170293	M(D)	0.016	1.000	SS	0.016
	30		44.582435	88.170124	M(D)	0.035	1.000	SS	0.035

**Is there potential for onsite mitigation? If unknown, check with the REC.**

YES  Where is it located? (T/R, station, map) \_\_\_\_\_

NO  List bank site to be used. (Determined by REC)  Peshtigo Brook Phase 2

Please attach another sheet if the space provided is not adequate for all impacts or to add any additional comments.