

MEMORANDUM

March 7, 2019

TO: Mike Warner, PE – Executive Director, Lake County Stormwater Management Commission (SMC)
Kurt Woolford, PE – Chief Engineer, SMC

FROM: Darren Olson, PE, D.WRE
Jedd Anderson, PWS, CWS

SUBJECT: Upper Des Plaines River Watershed Impact Study
(CBBEL Project 180245)

This memorandum summarizes our technical evaluation of the wetland, stormwater and floodplain components of the Foxconn Development in Kenosha County, Racine County and the Village of Mount Pleasant, WI. A full list of the extensive data set reviewed for this analysis is provided in Appendix 1.

Introduction

The Foxconn Development is located within the Electronics and Information Technology Manufacturing (EITM) Zone, which was created on September 18, 2017 by the State of Wisconsin Act 58 (Act). The limits of the EITM Zone are shown as Exhibit 1. The Foxconn Development is located in Areas I, II and III of the EITM Zone.

The EITM Zone is located on a subcontinental watershed divide that separates the Lake Michigan Basin from the Mississippi River Basin. The portion of the study area within the Mississippi River Basin is located at the headwaters of the Des Plaines River Watershed within the Kilbourn Road Ditch Subwatershed. Runoff from this portion of the development drains downstream into Illinois through Lake, Cook and Will Counties prior to draining into the Illinois River. A map showing the location of the EITM Zone within the Des Plaines River Watershed is shown as Exhibit 2.

Among other actions, Act 58 also exempted development in the EITM Zone from the following:

- State wetland permitting requirements, but wetlands must be mitigated at a 2:1 ratio
- State water quality certifications associated with wetland impacts
- Environmental Impact Statement for major developments in the State
- State permitting requirements for construction of bridges or culverts over navigable waters
- State permitting requirements for fill in navigable waters
- State permitting requirements for changing the course of a navigable stream
- State permitting for enlargement of waterways or grading the banks of a navigable stream

Given the size of the EITM Zone and Foxconn Development and the environmental exemptions authorized by the State of Wisconsin, a technical review of the wetland, stormwater and floodplain aspects of the future development in the Des Plaines River Watershed was requested.

Scope of Development

Future development within and around the EITM Zone can be divided into the Foxconn Development, Roadway Development and Potential Related Development. The Foxconn Development and currently

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planned roadway improvements (I-94 and local roadways) total approximately 3,560 acres, 2,094 acres of this is within the Des Plaines River Watershed, as shown on Exhibit 3.

Foxconn Development

The Village of Mount Pleasant is in the process of acquiring the land for the Foxconn Development, which will be conveyed to Foxconn through various means. The development is divided into three areas as shown on Exhibit 1 and described below:

Area I: This consist of 1,116 acres located east of I-94 and south of Braun Road and is also referred to as the Main Plant Area. Approximately 777 acres are located within the Des Plaines River Watershed. Area I contains Phase 1 of the Foxconn development, which is the first 816 acres of development currently under construction. Approximately 400 acres of Phase 1 are located within the Des Plaines River Watershed.

Area II: Area II consists of 999 acres located east of I-94 and north of Braun Road, and is also referred to as Support Industrial Development. Approximately 745 acres of Area II are located within the Des Plaines River Watershed.

Area III: Areas III consists of 590 acres located east of County Highway H and south of Braun Road, and is also referred to as Support Industrial Development. Area III is not located in the Des Plaines River Watershed.

The overall footprint for the Foxconn Development is approximately 2,705 acres, 1,526 acres of which is located within the Des Plaines River Watershed. This does not include the adjacent roadway improvements described below.

Roadway Development

The adjacent roadway development consists improvements to Interstate 94 (I-94) and local roads. Local roads have been placed under the temporary jurisdiction of the Wisconsin Department of Transportation (WisDOT) during construction. After reconstruction is completed (projected to be in 2021), local jurisdiction will resume.

I-94 South Segment: The interstate will be widened from 6 lanes to 8 lanes between 142nd Street and WIS 20. Various frontage road improvements and three interchange expansions are also proposed. This distance is approximately 6.7 linear miles.

County Highway 11: This road will be widened from 2 lanes to 4 lanes between County Highway H and South-East Service Road and from 1 to 2 lanes between South Sylvania Avenue and 56th Road. The total distance of improvements is approximately 2.6 linear miles. The interchange at I-94 will also be improved, the bridge raised, and new frontage roads added on the north side of the interchange.

County Highway H: This road will be widened from 2 lanes to 4 lanes between County Highway KR and Venice Avenue. Various frontage road improvements are also proposed. This distance is approximately 2.5 linear miles.

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County Highway KR: This road will be widened from a 2 lane rural roadway to a 4 lane urban roadway between I-94 and 90th Street. This distance is approximately 2.8 linear miles. The interchange at I-94 will also be improved, the bridge raised, and new frontage roads added.

Braun Road: This road will be widened from a 2 lane rural roadway to a 6 lane urban roadway between I-94 and County H. The distance is approximately 3.0 linear miles.

Wisconsin Valley Way: This is a new north-south urban roadway between County KR and County Highway 11. The proposed roadway will consist of 4 traffic lanes and 2 shared path lanes for an approximate distance of 2.0 linear miles.

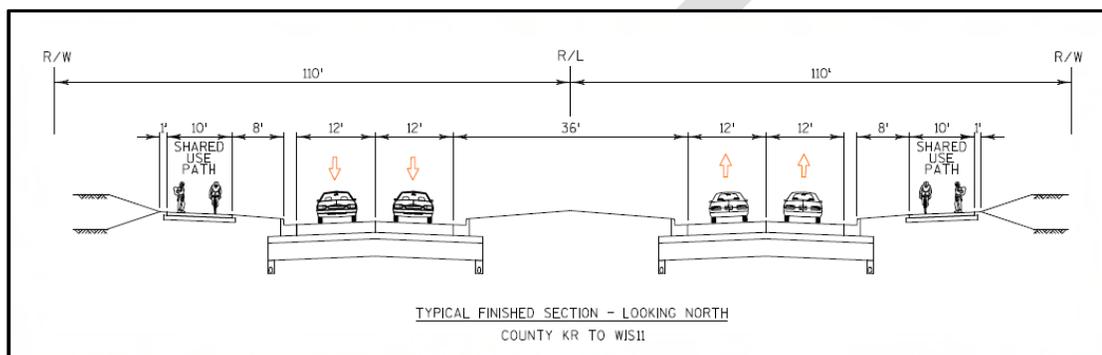


Figure 1. Wisconsin Valley Way Typical Section (Source WisDOT Public Exhibit – 3/15/18)

International Drive: This road will be extended north to WIS20. The proposed roadway will have 4 lanes between County Highway 11 and WIS 20. This distance is approximately 1.2 linear miles.

Additional information regarding the roadway development is included in **Appendix 2**. The local road Right of Way (ROW) will range from approximately 200-225 feet in width upon completion of property acquisition and construction. These ROW corridors were transferred into a GIS mapping program to determine the scope of roadway development and Foxconn development within the corridor. Based on the GIS mapping, the overall ROW footprint for the roadway development is approximately 855 acres, of which 568 acres is located within the Des Plaines River Watershed. Of the 568 acres within the Des Plaines River Watershed, 420 acres is within the I-94 ROW and 148 acres are within local roadway ROW.

Potential Related Development Areas Outside of the EITM Zone

In addition to the EITM Zone and adjacent roadway improvements, the expectation is that the I-94 corridor will continue to develop in future years, similar to how other transportation corridors have developed around manufacturing developments. The Des Plaines River Watershed in Wisconsin is approximately 125 square miles in size, and 57% of this is currently agricultural. Similarly, the Kilbourn Road Ditch Subwatershed is 24 square miles in size, and 63% of this is currently agricultural.

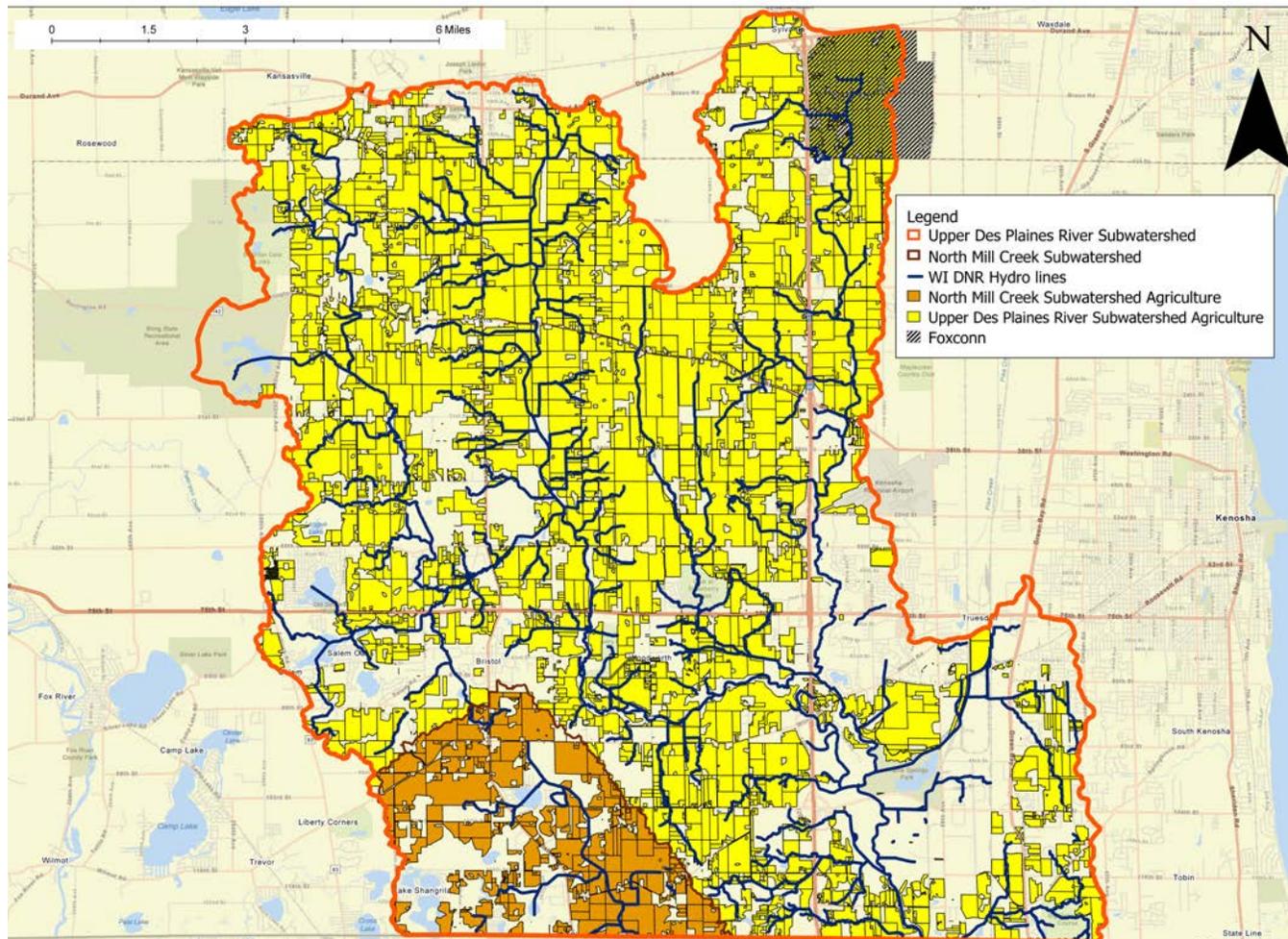


Figure2. Agricultural Lands in Des Plaines River Watershed in Wisconsin

The corridor immediately adjacent to I-94 within the Kilbourn Road Ditch Subwatershed is zoned commercial and mixed use per the Kenosha County 2035 Land Use Plan. There is approximately 5.5 mi² of current agricultural area within ½ mile of I-94 that could potentially be developed in the future.

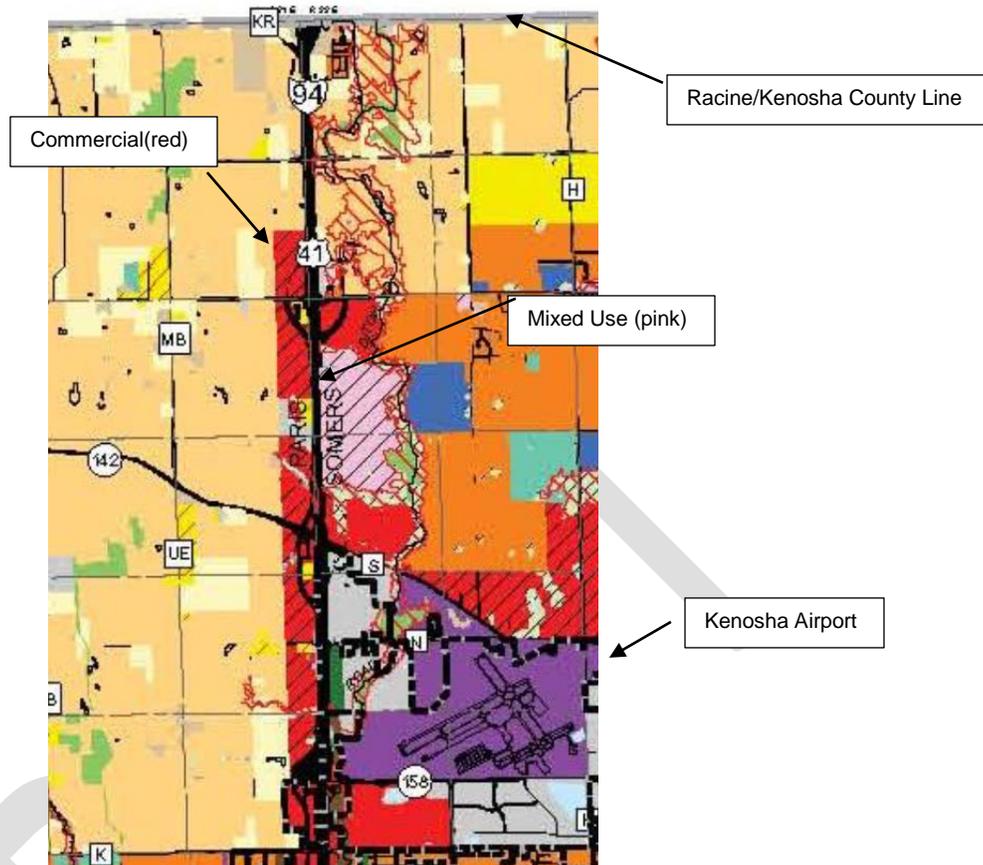


Figure 3. Excerpt from Map 9-5A of Kenosha County 2035 Land Use Plan Map

Future land development upstream of Illinois within the Des Plaines River Watershed will alter the riverine hydrology downstream, as the runoff flows downstream and eventually into the Illinois River.

Existing Site Conditions and Depressional Storage

The pre-development land use for the Foxconn Development is primarily agricultural with a small residential land use component. The roadway development projects are located along the existing roadway alignments except for Wisconsin Valley Way, which is located within Area II of the Development. Phase 1 of Area I and the roadway projects are currently under development. An aerial photograph from 2017 showing pre-development site conditions is provided below.

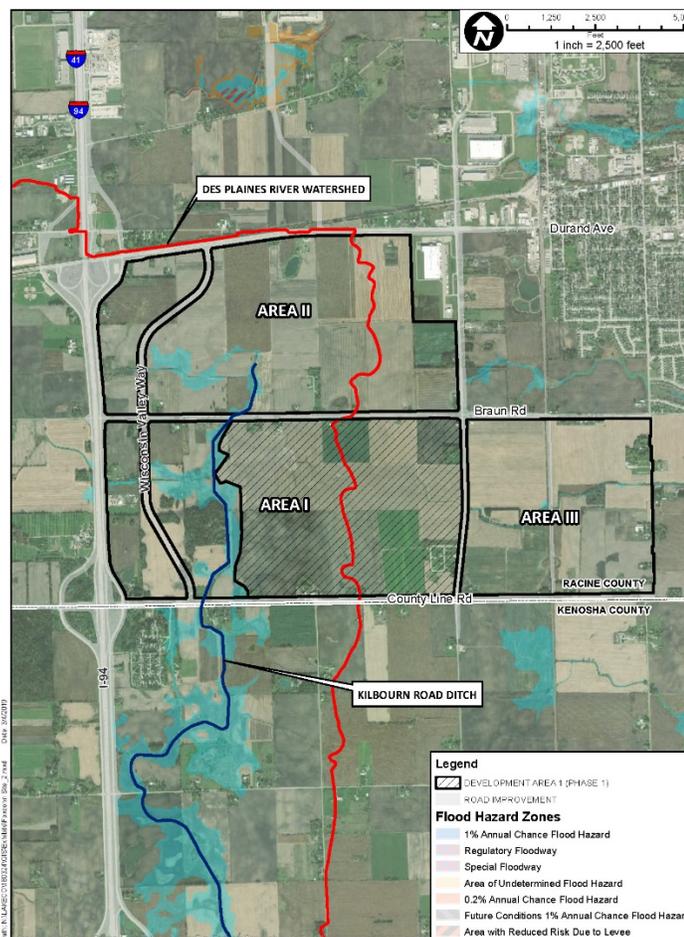


Figure 4. 2017 Aerial Photograph of Foxconn Development Site

While the Phase 1 development is located outside of the Federal Emergency Management Agency (FEMA) regulatory floodplain, there are a significant number of depressional storage areas within the Des Plaines River Watershed portion of the EITM Zone. Many of these are drained through an extensive agricultural tile network. A map showing the agricultural drain tiles in Phase 1 is included in [Appendix 3](#).

Existing depressional storage areas collect runoff and allow for natural storage to reduce peak flowrates to downstream receiving systems. Typical stormwater detention is designed to mitigate for conversion of land from pervious to impervious coverage, and it does not along compensate for filling of depressional

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storage areas. The Lake County Watershed Development Ordinance (WDO) requires that the depressional storage volume displaced by a development must be added to the stormwater detention volume required for a site so that the flow attenuation benefits of the existing depressional storage is not lost in the post-development conditions. There is not a requirement for this under the Village of Mount Pleasant or Wisconsin Department of Natural Resources (WDNR) regulations.

Using the Racine County aerial topographic mapping, a GIS analysis was completed to quantify the existing depressional areas (outside of the floodplain) within the EITM zone in the Des Plaines River Watershed. For the purpose of this analysis, depressional storage areas within the I-94 corridor were not included, as they were determined to be primarily man-made depressional areas for the purpose of draining the roadway. A summary of the existing depressional storage is provided in Table 1 and mapping is included in Appendix 4.

TABLE 1. EITM Zone Existing Depressional Storage within Des Plaines River Watershed

Development Location	Existing Depressional Storage (acre-ft)
Phase 1 within Area I*	43.0
Area I outside of Phase 1	40.0
Area II	56.2
Local Roadway Corridors	16.9
TOTAL	156.1

*Drain tile mapping used to estimate effective depressional storage with HEC-HMS hydrologic model and assumed 18-inch field tile.

Stormwater Detention Analysis

The development, currently under design and construction, consists of the Foxconn Phase 1 development, local roads, and Interstate 94. The stormwater detention analyses for these components of the development were reviewed and compared to applicable regulations and the requirements of the Lake County Watershed Development Ordinance (WDO).

Design Standards

The stormwater detention design standards include both rainfall design standards and detention basin release rate standards.

Rainfall Standards

The stormwater management systems for the development components was completed using the National Oceanic Atmospheric Administration (NOAA) "*Atlas 14, Precipitation-Frequency Atlas of the United States, Volume 8, Version 2.0: Midwestern States*" as established by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) guidelines and the Village of Mount Pleasant Code of Ordinances. The design rainfall depths from Atlas 14 are lower than the design rainfall depths contained in the Illinois State Water Survey (ISWS) "*Rainfall Frequency Atlas for the Midwest*" (Bulletin 71) for Northeastern Illinois and Wisconsin. Table 1 summarizes the 100-year 24-hour rainfall depths from these various sources.

TABLE 2. 100-Year 24-Hour Design Rainfall Depths

Rainfall Source	Location	100-year 24-hour Rainfall Depth (in)
NOAA Atlas 14	Racine County, WI	5.88
Bulletin 70	Southeast WI	6.24
Bulletin 70	Northeast IL*	7.58

*Lake County utilizes the Bulletin 71 isohyetal rainfall depth of 6.50 inches for regulatory purposes.

The 24-hour rainfall distribution over which the depth is to be applied in Wisconsin is the National Resource Conservation Service (NRCS) MSE 3 Distribution. This distribution is similar, although more intense, than the Soil Conservation Service (SCS) Type II Distribution. This leads to a greater detention volume required that would be required for the Huff 3rd Quartile storm, which is used in Northeast Illinois and Lake County for the 24-hour duration design storm.

Detention Basin Release Rate Standards

The WDNR NR151 requires stormwater detention so that the post-development release rate does not exceed the existing conditions release rate for the 2-year 24-hour event. This requirement is also contained within the WisDOT Facilities Design Manual. The Village of Mount Pleasant has more stringent stormwater detention requirements. Within the Des Plaines River Watershed, the Village has adopted the SEWRPC stormwater detention release rate guidelines. Per Section 74-233 of the Village Code, the 100-year and 2-year release rate from a development site must not exceed 0.30 cfs/acre and 0.04 cfs/acre, respectively. For comparison purposes, the Lake County Watershed Development Ordinance (WDO) 100-year and 2-year release rates are 0.15 cfs/acre and 0.04 cfs/acre, respectively.

The Foxconn site is being designed to meet the Village of Mount Pleasant release rate requirement. Where the local roadway is adjacent to the Foxconn development, it is being incorporated into the Foxconn stormwater management system and follows these requirements. Stormwater detention for the

other sections of the local roads and I-94 are being designed in accordance with the applicable sections of the WisDOT FDM and Trans 401 guidance.

Foxconn Phase 1 Development

Phase 1 of the Foxconn Development is located within Development Area I of the EITM Zone. It consists of approximately 736 acres of site development and 80 acres of adjacent roadway development. The stormwater detention for the development was designed in accordance with Wisconsin Department of Natural Resources (WDNR), SEWRPC and Village of Mount Pleasant guidelines and requirements as outlined in the following report:

- Wisconn Valley Science & Technology Park – Phase 1 Stormwater Management Report by The Sigma Group, dated April 2, 2017 and revised April 13, 2018.

WDNR reviewed the documentation for compliance with regulations applicable to potential impacts to endangered/threatened species, historical/archaeological sites and wetlands. Foxconn developed construction site erosion control and post-construction storm water management plans describing the best management practices it would employ for on-site storm water control. On April 23, 2018 WDNR granted coverage under Wisconsin Pollutant Discharge Elimination System (WPDES) Permit WI-S067831-5.

A technical review was completed of the approximately 400 acres of the Foxconn Phase 1 Development within the Des Plaines River Watershed. Based on this review, the following comments are provided:

- The Foxconn Phase 1 Development area does not encroach on the Federal Emergency Management Agency (FEMA) regulatory floodplain.
- The stormwater management plan follows the Village’s storm water quantity and quality performance standards that are consistent with the WDNR NR151 regulations as well as the SEWRPC Comprehensive Plan for the Des Plaines River Watershed recommended detention storage release rates of 0.04 cfs/acre for the 2-year storm and 0.3 cfs/acre for the 100-year return interval storm event.
- The development area within the Des Plaines River Watershed consists of the following:

TABLE 3. Foxconn Phase 1 Development Summary

Detention Pond	Subbasin Name	Area (acres)*			
		Stormwater Report Tables	Stormwater Report Text	Exhibit SW2.0	HydroCAD Models
Detention Basin A	P1		189	199.47	199.47
	P6 (Braun Road)**		15	15.30	14.28
	TOTAL	215	204	214.77	213.75
Detention Basin E	P5		169	180.43	171.30
	P10 (County Highway KR)**		17	16.92	10.11
	TOTAL	188	186	197.35	181.41
Phase 1 Des Plaines River Watershed Total		403	390	412.12	395.16

*The proposed development results in a transfer of approximately 24 acres from the Lake Michigan Basin into the Des Plaines River Basin.
 **The stormwater report states that stormwater detention for adjacent roadway development will be provided in the Foxconn Detention Basins.



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There are additional inconsistencies between the Exhibit SW2.0 and the HydroCAD model in the runoff curve number (CN) for the roadway subbasins (P6 and P10).

- The impervious and pervious percentages for the developed site areas were assumed at 80% and 20%, respectively in the runoff calculations. The open water in the detention basins should be considered as impervious area and these ratios should be verified during the final permitting for the development. These assumptions should be verified during the final design of each segment of the development.
- Based on the Stormwater Management Report and HydroCAD model results, Detention Basin A and Detention Basin E provide sufficient storage to meet the Village of Mount Pleasant 2-year and 100-year release rate requirements.

TABLE 4. Foxconn Phase 1 Release Rate Summary

Detention Basin	Rainfall Event	Release Rate	Drainage Area*	Allowable Discharge*	Actual Discharge
Detention Basin A	2-year	0.04 cfs/acre	215 acres	8.60 cfs	7.19 cfs
	100-year	0.30 cfs/acre		64.50 cfs	52.68 cfs
Detention Basin E	2-year	0.04 cfs/acre	188 acres	7.52 cfs	7.51 cfs
	100-year	0.30 cfs/acre		56.40 cfs	42.70 cfs

*Drainage area taken from tables in Report, which deviate slightly from the report text, exhibits and models.

- An analysis was completed to determine the difference in stormwater detention volumes for the 100-year return interval storm event between the following scenarios:
 - The minimum stormwater detention storage volume required to meet the release rate requirement in accordance with Mount Pleasant standards.
 - The actual volume of stormwater detention storage being provided per the plans.
 - The amount of stormwater detention storage that would be required to meet Lake County WDO requirements:
 - 100-year 24-hour rainfall depth of 6.50 inches with Huff 3rd Quartile Distribution
 - 100-year release rate of 0.15 cfs/acre
 - Hydrologic Soil Group (HSG) D soils for developed areas



TABLE 5. 100-Year Detention Storage Summary

Detention Basin	Tributary Area*	Stormwater Detention Storage			
		Required Volume per Mount Pleasant Village Code	Provided Volume	Required Volume per WDO	Difference Between Mount Pleasant and WDO Required Volume
Detention Basin A	213.75 acres	66 ac-ft	68 ac-ft	75 ac-ft	9 ac-ft
		0.31 ac-ft/acre	0.32 ac-ft/acre	0.35	
Detention Basin E	181.41 acres	56 ac-ft	57 acre-ft	64 ac-ft	8 ac-ft
		0.31 ac-ft/acre	0.31 ac-ft/acre	0.35	
TOTAL	395.16 acres	122 acre-ft	125 ac-ft	139 ac-ft	17 ac-ft

*To accurately compare between the CBBEL HEC-HMS hydrologic model and Foxconn Hydrocad, model the tributary areas from the HydroCAD models were used for this analysis.

The total stormwater storage deficit for the Foxconn Phase 1 development between the WDO requirements and the Village of Mount Pleasant requirements is summation of the stormwater detention storage and the depressional storage deficits.

TABLE 6. Summary of Mount Pleasant Stormwater Storage Requirements vs. Lake County WDO Requirements

Development Scenario	Stormwater Storage Volume (ac-ft)
Foxconn Phase 1 Required Stormwater Detention	122
Foxconn Phase 1 Provided Stormwater Detention	125
Phase 1 Depressional Storage	43
WDO Required Stormwater Detention	139
Total Required WDO Stormwater Storage	182
Difference between WDO and Mount Pleasant Requirements	60

Roadway Projects

Stormwater detention is proposed to be handled differently between the local roadway projects and the I-94 widening project.

Local Roadways

Stormwater detention for the local road projects is being provided in proposed detention basins adjacent to the roadway or within the Foxconn Development for those sections of the roadway that are contiguous with the development as outlined in the following report:



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- DRAFT Foxconn Development Local Roads Storm Water Drainage Report by Kapur & Associates, Inc. dated May 25, 2018.

The report is marked draft and several numbers within the Best Management Practices section regarding stormwater detention are left out of the report. The report indicates that the sizing criterion for the wet detention basins is to contain the runoff generated by the 100-year storm event in accordance with the WDNR Technical Standard 1001 with basins designed to minimize the release rates to the practical extent possible within the footprint of the proposed improvements. This technical standard and Chapter 10 Section 35 of the WisDOT Facilities Design Manual (FDM) indicate stormwater detention should be sized so the proposed conditions peak flowrates do not exceed the pre-development conditions for the 2-year 24-hour design storm event. The report states that typically 0.3 acre-ft/acre of detention storage is required for each acre of new impervious and the area and depth of each pond was sized to control:

1. The high-water elevation during the 1% probability (100-year) storm event,
2. Provide 1 foot of freeboard, and
3. Where possible, provide an overflow structure for storm events exceeding the 100-year event.

The existing and proposed roadway corridors were modeled using HydroCAD that is based on the National Resource Conservation Service (NRCS) TR-20 methodologies. Table 7 provides a summary of the proposed stormwater detention volumes taken from the report.

TABLE 7. Local Roads Stormwater Detention Summary within Des Plaines River Watershed

Roadway		Pervious Area (ac)	Impervious Area (ac)	Total Area (ac)	Stormwater Detention Provided* (ac-ft)
County KR	Existing	4.8	4.4	9.2	2.9
	Proposed	4.96	17.79	22.75	
Braun Road	Existing	6.1	4.2***	10.3	1.3
	Proposed	1.83	3.92	5.75	
			3.07	11.21	14.28
Wisconsin Valley Way	Existing				15.3
	Proposed	15.44	25.78	41.22	
County Highway 11**	Existing	13.7	14.0	27.7	
	Proposed	8.8	16.39	25.19	

*Volume below overflow weir

** Stormwater detention is provided in Wisconsin Valley Way detention basin

*** The existing impervious area corresponding to the Foxconn Basin A area is 2.3 acres

The following comments pertain to the review of the local roads stormwater detention volume calculations:

1. The drainage areas in the stormwater report appear to only reflect a portion of the total Right of Way (ROW) or area of disturbance. Examples include:

- a. Wisconsin Valley Way:
 - i. Proposed Typical ROW width = 220 ft.
 - ii. Typical width of disturbance on plans = 170 ft.
 - iii. Approximate width included in Stormwater Report Exhibit = 130 ft.
- b. County Road KR:
 - i. Proposed Typical ROW width = 224 ft.
 - ii. Typical width of disturbance on plans = 200 ft.
 - iii. Approximate width included in Stormwater Report Exhibit = 180 ft.

Review of the construction plan cross-sections indicated that proposed drainage areas in the report may be less than the total developed areas within the ROW. Given the scale of the drainage report exhibits and draft nature of the stormwater report, this is an area that may require further investigation/clarification.

2. Portions of County Road KR are proposed to drain to the Foxconn Development Detention Basin E, but these areas are included in the report as draining to a separate Basin E within the Foxconn Development.
3. Excluding the portions of Braun Road that are tributary to Foxconn Detention Basin A, the total detention is provided at a 0.45 acre-ft/acre ratio. This is less than the 0.525 ac-ft/acre that is typically required in Lake County. If stormwater detention were provided per the Lake County WDO, approximately 22.9 acre-ft of detention storage would be required, an increase of 3.4 acre-ft.
4. In addition to the shortfall in stormwater detention, there is also approximately 16.9 acre-ft of depressional storage within the roadway ROW areas that may be filled as part of the project. The total stormwater storage volume deficit would be 20.3 acre-ft for the local roadway projects.

I-94 Corridor

According to the following stormwater reports received for the I-94 corridor improvements, stormwater management is proposed to be provided in accordance with WisDOT Trans 401 requirements.

- I-94 N-S Freeway Reconstruction CTH KR Interchange Drainage Report by Daar Engineering, Inc., dated March 19, 2018.
- Stormwater Report IH 94 N-S Racine County by Stormwater Solutions Engineering, LLC, dated April 2018.

Trans 401 establishes minimum performance standards for erosion control, TSS removal, infiltration and stormwater management. Per this requirement, the post-development 2-year release rate shall not exceed the pre-development 2-year release rate to the maximum extent practicable. Stormwater reports were only provided for the two sections of roadway listed above. Roadway reconstruction plans were provided for several project locations. Based on review of the plans, stormwater detention will be provided at the interchanges to meet the stormwater detention requirements to the maximum extent practicable.

Water Quality Measures

The Foxconn Phase 1 development, local road development and I-94 development are required to meet water quality requirements to reduce sediment discharge during and upon completion of construction. The Village of Mount Pleasant requirements closely follow the WDNR requirements. The Des Plaines River within Wisconsin is impaired for phosphorus. On the Illinois side of the border, it is impaired for several more pollutants including Total Suspended Solids, Mercury, Fecal Coliform, and Dissolved Oxygen.

Construction Site Soil Erosion and Sediment Control

In accordance with WDNR Chapter 151, sediment discharge during construction must be no more than 5 tons/acre per year for development sites. Transportation projects are exempt from this requirement, and WisDOT FDM Chapter 10 includes requirements for soil erosion and sediment control during construction.

A joint inspection was held on December 10, 2018 with Lake County personnel and the stakeholders of the Foxconn development, including the project owner, consultants, contractors, the Village of Mount Pleasant and WDNR. According to discussions at this meeting, weekly site inspections are completed by the Foxconn site development team in accordance with their WPDES permit. A meeting and inspection were also held with WisDOT on the same date with their team responsible for soil erosion and sediment control measures associated with the local roadway project. It was reported that similar inspections were occurring on the roadway portions of the development.

Additional inspections have been completed by SMC staff within and around the development areas that are not restricted (i.e. public road ROW, etc.). The first inspection was completed via private airplane on September 6, 2018. At this inspection, it was visually noted that the Foxconn Phase 1 Development and roadway developments were under construction with large areas of bare, un-stabilized earth. The reach of Kilbourn Road Ditch, downstream of the project site, contained very turbid water at the time of our reconnaissance. This turbidity extended downstream to the confluence with the mainstem of the Des Plaines River and was continuing downstream in the mainstem as illustrated in the photographs below.



Photo 1. Confluence of Kilbourn Road Ditch and Des Plaines River on September 6, 2018

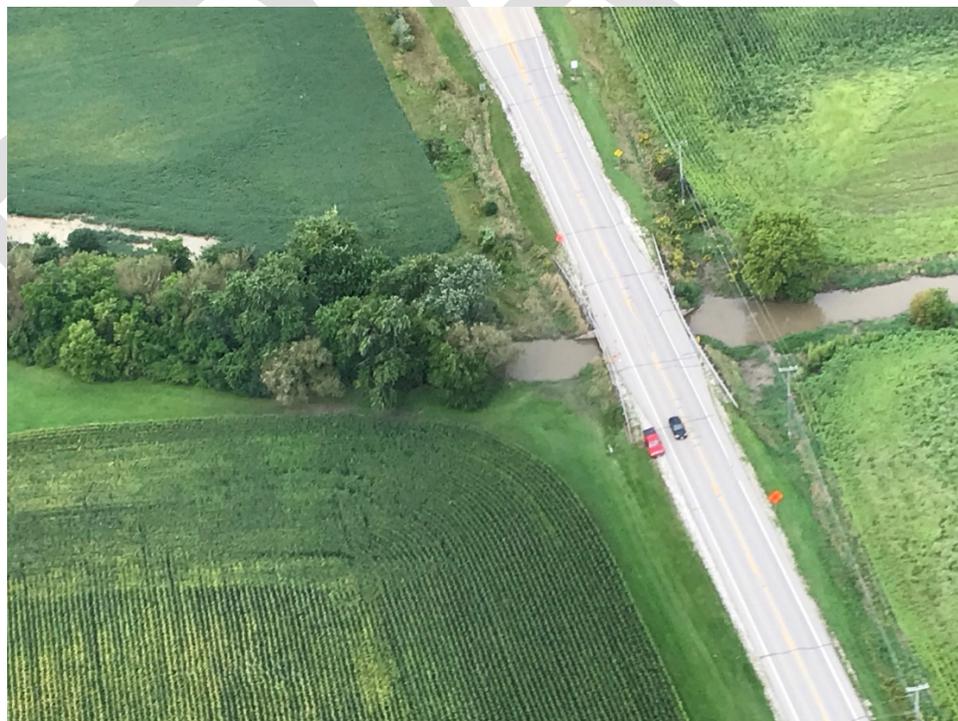


Photo 2. Kilbourn Road Ditch and County Highway E on September 6, 2018



Photo 3. Kilbourn Road Ditch South of County Highway KR on September 6, 2018



Photo 4. Foxconn Phase 1 Construction Site on September 6, 2018

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On September 14, 2018, WDNR issued a citation for failure to implement or maintain erosion control on the site. The citation, inspection and October 12, 2018 Notice of Noncompliance letter are included in Appendix 5.

SMC also completed a site inspection of County Highway KR on January 8, 2019 after 0.57 inches of rain on the previous day as measured at Kenosha Airport. A photograph of the culvert crossing during the visit is shown as Photo 5. Based correspondence received from WisDOT after this event, the area around the culverts was stabilized by January 11, 2019.



Photo 5. Kilbourn Road Ditch Downstream of County Highway KR on January 8, 2019

Based on the inspections, the following general items are noted with respect to soil erosion and sediment control measures. These are largely consistent with the WDNR citation.

- Given the hundreds of acres of disturbed land for the roadway and land developments, ongoing timely temporary stabilization is critical to reducing erosion. At the December 10th site meeting, a map was handed out showing recent stabilization measures at the Foxconn Phase 1 development. This map had to be returned at the end of the meeting, consequently follow up of installation of recommended stabilization measures could not be verified.
- Construction sequencing (mass grading) should be phased with smaller areas disturbed to minimize the surface area exposed bare soil needed. Soil erosion and sediment control measures should be in place and functional prior to grading activities.
- For the reasons noted above, surface applied polymers should be used as a proactive starting point for erosion control and stabilization rather than as a reactive measure. Polymers can be applied hydraulically or dry powder to the ground to hold the soil in place to minimize erosion and can be used in sediment basins to coagulate sediments to

improve capture. This treatment train approach will minimize off site discharge of sediment, minimizing the risk of NPDES violation.

- Within the Foxconn development, Detention Basins A and E are being used as temporary sediment basins during construction. In addition to polymer treatment systems prior to inflow into the basins, a tight monofilament filter wrapped perforated riser pipe on the outlet pipe should be installed to help retain fine particles in the basin.

Post Construction Water Quality Measures

In accordance with WDNR Chapter NR 151, projects are required to implement a stormwater management plan to reduce the Total Suspended Solids (TSS) load 80% (40% for re-development) based on an average annual rainfall as compared to no runoff management controls. The Foxconn Development would be held to the 80% removal while the roadway projects are held to 40% per Chapter 10 of the FDM as they are reconstruction projects.

Infiltration is also required for site development per WDNR Chapter NR 151, however exemptions are granted for sites with low existing permeability. The Foxconn Phase 1 development was found to qualify for this exemption based on the geotechnical report submitted for the site and evaluation by the site Civil Engineer. The stormwater detention basins on the Foxconn site have been designed in accordance with WDNR Technical Standard 1001, which is similar to widely accepted detention basin BMP standards.

Based on a review of the post-construction water quality measures in the plans and stormwater submittals, the designs appear to meet the applicable regulations and are consistent with standards that would be required in Lake County and other Counties in Northeastern Illinois. The following items are noted:

- The planting plans for the Foxconn Phase 1 Detention Basins A and E were not provided for review. We recommend verifying that the side slopes of these detention basins and all future detention basins be planted with native vegetation that can tolerate basin water level fluctuations and provide water filtering benefits.
- The infiltration requirement of Wisconsin Chapter NR151 should be reviewed in detail for each site and only those sites with soils that meet WDNR Conservation Practice Standard 1002 should be waived from meeting this requirement.

Wetlands and Waters of the U.S.

Within the scope of the development, there are wetlands and Waters of the U.S. located on the Foxconn site, local roadways and I-94 corridor. The Act exempts the EITM Zone (Foxconn site and local roads) from WDNR permitting requirements for discharging dredged or fill material into wetlands within an EITM Zone, as long as mitigation is provided at a 2:1 ratio in accordance with Section 281.36(4m) of the Act as follows:

- Purchasing credits from a mitigation bank located in the State of Wisconsin.
- Participating in the in-lieu fee subprogram under sub. (3r), under which the department shall identify and consider mitigation that could be conducted within the same watershed and may locate mitigation outside the watershed only upon agreement of the department and the person exempt from permitting under this sub-section.
- Completing mitigation within the State of Wisconsin.

The Act also specifies that if the Wisconsin Wetland Conservation Trust (WWCT) in-lieu fee (ILF) program is chosen for providing the required wetland mitigation within the same watershed. An ILF program involves the restoration, establishment, enhancement and/or preservation of aquatic resources through funds paid to a government or non-profit natural resources management entity to satisfy compensatory mitigation requirements of permits. An ILF program sells credits to fulfill legal obligation to provide wetland compensatory mitigation. In some cases, the WWCT Program can provide wetland mitigation credits in areas where no other mitigation credits are currently available. The number of advanced credits available to the sponsor in any given time to sell in a given "Service Area" is equal to the number of Advanced Credits specified in the Instrument, minus any that have already been provided but not yet fulfilled. The Wisconsin Department of Natural Resources prepared the, "WI Wetland Conservation Trust (In-Lieu Fee Mitigation Program) Instrument" dated November 12, 2014. The Instrument establishes the principles, responsibilities and standards for the creation, operation and management of the in-lieu fee compensatory mitigation program in accordance with the listed rules and regulations.

Under the WisDOT Wetland Banking Mitigation Technical Guidelines (2002), wetland impacts within the I-94 corridor must be mitigated at a WisDOT wetland mitigation bank within the State. The bank sites of the mitigation bank are associated with the three major drainage basins; Lake Superior, Lake Michigan and the Mississippi River, which form the major geographic areas of the bank. Opportunities for bank site development are present in each of these basins so it is expected that wetland losses occurring within the three basins would be debited to bank sites within those areas. If replacement of wetland loss is by a different wetland type or into a different geographical area or both, the debit will be permitted, but the ratio of replacement may be higher and according to a specified schedule described within this section and in Appendix C (Table 3C). A higher ratio is required where replacement consists of wetland enhancement and protection or a combination of both.

Under Section 404 of the Clean Water Act, the Corps of Engineers regulates discharges of dredged or fill material into Waters of the United States and wetland. A permit from the U.S. Army Corps of Engineers is necessary to complete the activity. Under Section 401 of the Clean Water Act, Wisconsin DNR typically must issue Water Quality Certification. However, under the Act, Wisconsin DNR waived its Water Quality Certification for development with the EITM Zone. Jurisdictional wetlands and Waters of the U.S. must still receive U.S. Army Corps of Engineers approval to be impacted. The waiving of the Water Quality

Certification requirement means that the State does not have the right to review the project to determine whether it can be constructed or operated without causing water quality degradation.

Foxconn Site

CBBEL reviewed the Jurisdictional Determinations (JD's) submitted by TRC Solutions on behalf of the Wisconsin Valley Science and Technology Park summarized below:

- Jurisdictional Determination (JD) For Flying Eagle Area A, dated December 8, 2017:
 - The review area contains 28 wetlands and 1 pond all of which are isolated with no surface or shallow subsurface connection to the Kilbourn Road Ditch to the west or unnamed tributary to the North Branch Pike River to the east.
 - Wetlands total for Area A is 19.02 acres, within both the Upper Illinois (Des Plaines) River Watershed and Southwestern Lake Michigan Watershed.
 - The Corps has determined that these wetlands are not regulated by the Corps under Section 404 of the Clean Water Act.

- Jurisdictional Determination (JD) for Flying Eagle Area B, dated February 1, 2018:
 - The review area contains 10 intrastate wetlands which are isolated with no surface or shallow subsurface connection to the Kilbourn Road Ditch to the east or the unnamed tributary.
 - Wetlands total for Area B is 3.07 acres, all within the Upper Illinois (Des Plaines River) Watershed.
 - The Corps has determined that these wetlands are not regulated by the Corps under Section 404 of the Clean Water Act.

- Jurisdictional Determination (JD) for Flying Eagle Area C, dated December 8, 2017:
 - The review area contains 14 intrastate wetlands all of which are isolated with no surface or shallow subsurface connection to the Kilbourn Road Ditch to the west or the unnamed tributary to the North Branch Pike River to the east.
 - Wetlands total for Area C is 7.39 acres, within both in the Upper Illinois (Des Plaines) River Watershed and Southwestern Michigan Watershed.
 - The Corps has determined that these wetlands are not regulated by the Corps under Section 404 of the Clean Water Act.

The Corps has concurred and determined that these wetlands are not regulated by the Corps under Section 404 of the Clean Water Act. The JD information is included in Appendix 6. Area A is associated with the Phase 1 of the Foxconn Area I development. No other Foxconn development plans were available for review, nor was any proposed wetland impact information provided outside of Phase 1 within Area I.

CBBEL reviewed the Foxconn Phase 1 wetland mitigation purchase proposal from CH2M, dated April 16, 2018, on behalf of SIO International Wisconsin (SIO) which is included in Appendix 6. The proposal includes mitigation of a total of 13.17 acres of wetlands within the Upper Illinois Basin and 3.47 acres within the Southwestern Lake Michigan Basin at a 2:1 ratio. The remaining wetlands within Phase 1 of Area I will either not be impacted or be impacted by adjacent roadway development and accounted for with those projects. The Mitigation Summary Worksheet indicates that the proposed compensatory mitigation will consist of payment into WWCT ILF program sponsored and administered by the WDNR. The cost of wetland credits within the Upper Illinois River Basin in this program is \$61,000. This is less

than the wetland mitigation that would be required for impacts within the Des Plaines Watershed in Lake County, IL.

TABLE 8. Foxconn Phase 1 Development Wetland Mitigation – Des Plaines River Watershed

Mitigation Location	Impact Acres	Price per Credit*	Ratio	Total Fee
Wisconsin - WWCT	13.17	\$61,000	2:1	\$1,606,740
Illinois – LCSMC	13.17	\$99,000	1.5:1	\$1,955,745

*Based on 2018 Fee Schedule

Due to the large number of credits needed and limitations in mitigation bank credit availability, the ILF option was chosen. The DNR requested a modification to the ILF instrument from the USACE to increase the maximum number of advance credits available for the sale to accommodate the wetland impacts within the EITM Zone. The Upper Illinois Basin is listed as one of the many service locations within the Wetland Compensatory Mitigation areas. Of the 100 credits available in the service area, up to 70 of those credits are reserved to mitigate wetland impacts within the EITM Zone. These credits are “Authorized Advanced Credits”, which are defined as those credits associated with an approved ILF program that are available for sale prior to the completion and approval of a mitigation project. This reservation of credits for future use indicates that while the wetland impacts proposed for the Foxconn Phase 1 site could occur immediately, the physical wetland mitigation project may not be in place until sometime in the future. Additionally, the mitigation for wetland impacts within the headwaters of the Des Plaines River could be placed within the Fox River Watershed, resulting in a net loss of wetlands within the Des Plaines River Watershed.

The WDNR is currently seeking proposals to create a minimum of 40 acres of credits for the WWCT ILF in the Upper Illinois Watershed to meet this demand. The proposals are due by March 1, 2019 with an available funding of \$2,000,000. The WWCT did not select projects in a previous RFP cycle in these service areas. Potential applicants are encouraged to apply and be aware that WWCT is actively searching for projects and may choose to pursue them on a first come, first served basis.

I-94 Corridor

CBBEL staff accessed the St. Paul District of the U.S. Army Corps of Engineers website and downloaded several Jurisdictional Determinations in the I-94 project area. The Corps of Engineers issued Jurisdictional Determinations (JD) for wetlands and waters located within the Interstate 94 corridor between Washington Avenue and County Road S (142). Additionally, CBBEL submitted a Freedom of Information Act (FOIA) request to the Corps of Engineers requesting copies of all Jurisdictional Determination and Permitting Documents for the I-94 corridor.

Based on our review of the provided documentation, specifically the USACE permit issued for the I-94 corridor, 4.0 acres of federally regulated wetland was permitted to be impacted by the proposed improvements. In return, 4.08 acres of wetland mitigation was to be provided via the Jacobson Mitigation Bank in Walworth County and 0.01 acre of credit provided in the Hope Marsh II Mitigation Bank in Marquette County.

Additionally, documentation provided by the USACE and WDNR indicates that 13.228 acres of WDNR regulated isolated wetland impacts were calculated for the I-94 mainline and frontage road improvements. These isolated wetland impacts are being mitigated through purchase of wetland mitigation bank credits.



Mitigation for impacts within the Des Plaines River watershed totals 12.307 acres for isolated wetland impacts associated with improvements within the I-94 corridor. Table 10 summarizes the I-94 wetland and waters of the U.S. impacts. As noted in the table, all wetland impacts are being mitigated in the Jacobson Bank within the Rock River Watershed in the Mississippi River Basin.

TABLE 10. Summary of I-94 Wetlands/Waters of the US Impacts and Mitigation - Des Plaines River Watershed

Description	Impact (ac)*	Mitigation (ac)**	Mitigation Location
I-94 Mainline Wetlands**	17.228	17.476	Jacobson – Rock River
I-94 Mainline Waters	0.426	0.426	Jacobson – Rock River
I-94 Frontage Roads Wetlands	3.682	3.682	Jacobson – Rock River
TOTAL	21.336	21.575	

*as identified in Graef Wetland tables

** Includes 4.0 acres of USACE Jurisdictional Wetland Impact and 4.09 acres of mitigation

***mitigation is being provided in the Jacobson Bank in the Rock River Watershed

Local Roads

Wetlands and Waters of the US will be impacted by the widening and reconstruction of the local roadways within the EITM zone. Delineations specific to these roadways were not available for review, only the wetland mitigation summaries. Additional wetland impacts may be required for the construction of roadway portion of Wisconsin Valley Way and County Highway 11, which were not available for review.

The wetland mitigation for the local roadway impacts will follow the EITM zone guidelines as established in the Act. Table 11 summarizes the local road wetland impacts and mitigation in the Des Plaines Watershed to be provided through the WWCT ILF.

TABLE 11. Local Roads Wetlands/Waters of the US Impacts and Mitigation-Des Plaines River Watershed

Project Section	Wetland/Waters Impact (ac)	Mitigation Ratio	Mitigation (acres)
Braun Road	0.88	2.0	1.76
County Highway KR	2.46	2.0	4.92
Wisconsin Valley Way Culvert	0.96	2.0	1.92
TOTAL	4.3	2.0	8.6

Summary of Wetland and Waters of the U.S. Impacts

Based on review of the wetland permitting information provided, we have the following comments:

1. There are 17.47 acres of known wetland impacts within the Des Plaines River Watershed of the EITM Zone development currently planned which includes Foxconn Phase 1 and local road improvements on Braun Road, County Highway KR and the Wisconsin Valley Way culvert project. Additional wetland impacts will be required for future phases of the Foxconn Development and local roadway projects within the Des Plaines River Watershed.
2. Wetland mitigation for impacts within the Des Plaines River Watershed are being provided through the WWCT ILF as required by the Act. This mitigation is being provided within the Upper



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Illinois River Watershed, which includes the Des Plaines River and Fox River Watersheds. Mitigation projects are currently being solicited by the WDNR. If the mitigation is completed outside of the Des Plaines River Watershed, there would be a current net loss of 17.336 acres of wetlands/Waters of the U.S. within the watershed as a result of the project.

3. Wetland impacts associated with the 1-94 reconstruction are being mitigated through the purchase of 21.336 acres of credit within the Rock River Watershed within the Mississippi River Basin. This results in a loss of 21.336 acres of wetlands and Waters of the U.S. within the Des Plaines River Watershed.
4. The total wetlands/Waters of the U.S. impact within the Des Plaines River Watershed is 38.81 acres. Pending the outcome of the WWCT ILF solicitation of mitigation projects, this acreage may be lost from the Des Plaines River Watershed.

DRAFT

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Floodplain Development and SEWRPC Kilbourn Road Ditch Hydrologic Analysis

The FEMA Flood Insurance Study (FIS) hydrologic and hydraulic model for the Des Plaines River Watershed, which includes the Kilbourn Road Ditch Subwatershed, was developed by SEWRPC. It consists of a USEPA Hydrologic Model Simulation Fortran (HSPF) hydrologic model and U.S. Army Corps of Engineers (USACE) HEC-2 hydraulic model. These models are the basis of the FEMA mapping for the watershed and the June 2018 hydrologic assessment of the Foxconn Development by SEWRPC.

Floodplain Mapping

Kenosha and Racine County FIS

Flowrates for the Des Plaines River watershed were computed using the HSPF continuous simulation hydrologic model. Flows were computed assuming planned land use conditions and historical rainfall from 1940 - 1994. The annual peak flowrates from the HSPF model were analyzed using the USACE HEC-FFA flood frequency program to develop the FIS flowrates. The Des Plaines River Watershed in Wisconsin was modeled using the HEC-2 step backwater program, which included Kilbourn Road Ditch. A detailed summary of the hydrologic and hydraulic modeling is contained in the 2003 "A Comprehensive Plan for the Des Plaines River Watershed" by SEWRPC.

FIS Comparison with Lake County, IL

The Des Plaines River hydrology in the Lake County FIS references a USACE HEC-1 hydrologic model that was revised as part of the September 2000 Countywide Lake County FIS update. There are significant differences between the FEMA published flowrate data for the Des Plaines River at the Illinois Wisconsin State Line between the Lake County FIS and the Kenosha County FIS. Table 12 provides a summary of the data between the two FIS sources. As shown in the table, the 100-year flowrate at the same location in Illinois FIS is 45% greater than the Wisconsin FIS flowrate.

TABLE 12. Des Plaines River FIS Information at the State Line

Description	Wisconsin (Kenosha County)	Illinois (Lake County)	% Difference
10-Year Flowrate (cfs)	1,600	1,727	8%
50-Year Flowrate (cfs)	2,310	3,086	34%
100-Year Flowrate (cfs)	2,600	3,773	45%
500-Year Flowrate (cfs)	*	5,580	

*Approximately 400 feet downstream of State Line.

**No data provided for Wisconsin FIS 500-year storm

Review of 2003 SEWRPC HSPF Regulatory Hydrologic Model

Based on our review of the 2003 SEWRPC HSPF model for the Des Plaines River and Kilbourn Road Ditch, it appears that considerable detail was included in the model for subbasin delineation and storage reach routing of the channel reaches in the model. CBBEL also performed a review of the rainfall series data and calibration of the SEWRPC HSPF model. To develop the FIS published flowrates, the annual peak flowrates from the HSPF continuation model were analyzed using the USACE HEC-FFA flood frequency program. The rainfall record from 1940 – 1994 contains only 1 storm in 1978 that approaches the 100-year return interval storm event at the Union Grove gage (the primary rain gage for Kilbourn

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Road Ditch). Based on conversations with SEWRPC staff, our understanding is that the rainfall totals for this event at this rain gage were lowered based on comparison with adjacent rain gages. It should be noted that the peak discharge on Kilbourn Road Ditch from the HSPF model was for the March 1943 flood event, which included approximately 2 inches of rainfall at the Union Grove rain gage on frozen ground. This is well below the rainfall or runoff for a 1% exceedance storm event. A summary of the rainfall data from the National Climatic Data Center (NCDC) for the Union Grove is provided in Table 13.

TABLE 13. Summary of Union Grove Rainfall Gage
Highest 5 Rainfall Totals for 24-Hour and 48-Hour Durations

Duration (Hours)	Depth (in)	Date	NOAA Atlas 14 100-Year Recurrence Interval
24	5.4*	8/18/1978	5.8
	4.33	9/1/1989	
	4.0	8/30/1957	
	4.0	7/18/1964	
	3.96	8/18/2007	
48	7.04*	8/19/1978	6.7
	6.22	8/19/2007	
	5.37*	8/18/1978	
	5.11	7/13/2017	
	5.02	5/22/2004	

*Rainfall value lowered for input into HSPF model. Value shown in table is before adjustment.
Bold values are outside of the period of record analyzed in HSPF

This summary shows that for the 24-hour duration, the rainfall events analyzed are significantly lower than the NOAA Atlas 14 100-year rainfall depth. The highest rainfall total was reduced prior to input into the model and one of the top 5 storms was after the period of record. For the 48-hour duration, two of the 3 highest rainfall totals occurred after the period of record used by SEWRPC. The two within the period of record are related to the August 1978 event, which was adjusted downward.

The HSPF model was calibrated to the period of record from October 1968 – September 1994 for historical storm events at the Des Plaines River streamgage at Russell Road as documented in the report. A summary of the largest 10 recorded yearly peak streamflow measurements are provided in Table 14.

TABLE 14. Yearly Peak Streamflow at USGS Russell Road Streamgauge

Water Year	Date	Peak Streamflow (cfs)
2004*	May 23, 2004	3,500
2017*	Jul. 14, 2017	2,830
2009*	Jun. 21, 2009	2,470
2013*	Apr. 19, 2013	2,300
2000*	Jun. 14, 2000	2,130
1979	Mar. 21, 1979	2,120
1976	Mar. 06, 1976	1,990
2008*	Jun. 11, 2008	1,910
1993	Apr. 21, 1993	1,750
1974	Mar. 05, 1974	1,690

*After the calibration period and historical data set used for HSPF model development

This summary shows that the five largest yearly peaks and six of the 10 largest peaks have occurred since 1994, which would excluded them from the model calibration and the historical series used for the HSPF hydrologic model and subsequent statistical analysis of the model results to calculate the FIS flowrates.

Statistical Evaluation of the Des Plaines River Russell Road Streamgauge

A statistical analysis was completed by the USGS for the Des Plaines River streamgauge station at Russell Road in Lake County as part of their study “Estimation of Peak Discharge Quantiles for Selected Annual Exceedance Probabilities in Northeastern Illinois”, dated November 2017. This report and companion data provide regression equations for estimating peak discharge quantiles at annual exceedance probabilities for watersheds in Illinois based on annual maximum peak discharge data from 117 watersheds in and near northeastern Illinois. The Russell Road gaging station is located just downstream of the Illinois-Wisconsin state line and water data from 1960 – 2009 was used for the USGS analysis. The results from the USGS study are summarized in Table 15 and compared to the Lake County and Kenosha County FIS flowrates.

TABLE 15. Comparison of FIS Flowrates with USGS Statistical Analysis

Return Interval Storm Event	USGS Gaging Station Statistical Flowrates* (cfs)	Lake County FIS Flowrates		Kenosha County FIS Flowrates	
		cfs	% Difference	cfs	% Difference
100-Year	4,290	3,773	-12	2,600	-35
50-Year	3,590	3,086	-14	2,310	-36
10-Year	2,110	1,727	-18	1,600	-24

*Table 2 from “Estimation of Peak Discharge Quantiles for Selected Annual Exceedance Probabilities in Northeastern Illinois”, dated November 2017 by USGS

Based on the results in Table 15, both the Lake County and Kenosha County FIS flowrates are below the USGS statistical analysis flowrates. The Kenosha County FIS flowrates are significantly lower than the USSG statistical flowrates for the higher return interval events, which is consistent with the rainfall data record (1940-1994) used in the HSPF analysis that did not include several larger storm events that have occurred since 1994. This is confirmed by review of USGS recorded peak historical flood flows in



2004 and 2017 of 3,500 cfs and 2,830 cfs, respectively. Both are significantly higher than the Kenosha County FIS 100-year peak flowrate of 2,600 cfs.

A more thorough review of the May 2004 rainfall event and flood event was completed as this was the largest recorded event at the USGS Russell Road streamgauge and was close to the Lake County 100-year FIS flowrate of 3,773 cfs. Upon review of the rainfall records at the Union Grove rain gage, this event recorded 8.86 inches of rain over a 10-day period. The Des Plaines River HEC-1 regulatory hydrologic model for Illinois utilizes a 10-day critical duration with a 10-day 100-year rainfall depth of 8.82 inches, demonstrating consistency between the Illinois FIS regulatory HEC-1 hydrologic model and collected data from the May 2004 event.

The FEMA regulatory flood flows and floodplain elevations for the Des Plaines River Watershed in Wisconsin are likely underestimated based on the period of record in the regulatory HSPF hydrologic model. The flood risk for properties in Wisconsin with the Watershed is underestimated and fill within the floodplain will also be underestimated.

Floodplain Impacts

There is FEMA regulatory floodplain associated with Kilbourn Road Ditch within the EITM Zone. The regulatory requirements of Ch. NR 116 Wis. Admin. Code and the NFIP apply in those areas that have been mapped by FEMA as being at risk to flooding during the base flood and those areas which have been mapped by the DNR as required for flood storage. In both the WDNR Model Floodplain Ordinance and the Village of Mount Pleasant Municipal Ordinance (90-1779), Flood Storage Districts are defined that portion of the floodplain where storage of floodwaters has been taken into account and is relied upon to reduce the regional flood discharge as part of the regulatory hydrologic analysis. The district protects the flood storage areas and assures that any development in the storage areas will not decrease the effective flood storage capacity which would cause higher flood elevations. Compensatory storage for fill in the floodplain of a Flood Storage District, but it is not required for other floodplain areas.

Despite the HSPF hydrologic analysis completed as part of the 2003 SEWRPC study to develop the regulatory floodplain mapping for the Des Plaines River Watershed, the floodplain is not protected as part of a Flood Storage District. As such, fill in the floodplain may occur without compensatory storage.

The Foxconn Phase 1 plans show that the proposed development is located outside of the floodplain boundary and the Normal Water Level (NWL) of proposed Detention Basins A and E are located above the floodplain elevation to not be affected by tailwater from Kilbourn Road Ditch. Three of the proposed local roadway projects are located within mapped Zone AE floodplain of Kilbourn Road Ditch. Based on the roadway plans, the floodplain fill for each roadway was calculated as shown in Table 16. Compensatory storage is not being provided for the floodplain fill associated with these projects.

TABLE 16. Floodplain Fill Summary for Local Road Projects

Location	0-10 Floodplain Fill (acre-ft)	10-100 Floodplain Fill (acre-ft)	Total Floodplain Fill (acre-ft)
Wisconsin Valley Way*	2.5	1.5	4.0
Braun Road	0.6	1.3	1.9
County Highway KR	2.3	2.5	4.8
TOTAL	5.4	5.3	10.7

Based on the discussion above regarding the FIS flowrates for Kilbourn Road Ditch, if the regulatory flowrates are low in comparison to the statistical analysis of the historical streamflow, the mapped floodplain elevations are also likely lower than the actual 100-year return interval flood flows. This would result in potential fill within the limits of the 100-year flood as well as an underestimation of floodplain fill associated with the project.

SEWRPC Foxconn Hydrologic Analysis

SEWRPC completed an evaluation of the Foxconn proposed stormwater management for the Des Plaines River Watershed in June 2018. The analysis was requested by WDNR and WisDOT to assess the impact of the development on the regulatory flood flows and flood profiles on the receiving system. The SEWRPC scope included modifying the regulatory HSPF hydrologic model to include reflect the proposed Foxconn Development (Area I and Area II) with 10 stormwater basins that meet the Village of Mount Pleasant Ordinance release rates of 0.3 cfs/acre and 0.04 cfs/acre for the 100-year and 2-year return interval storm event, respectively. The local roadway improvements and I-94 improvements were also included in the with-project conditions with applicable stormwater controls as outlined in the SEWRPC memorandum.

The resultant annual peak discharges from the with-project HSPF hydrologic model were statistically analyzed to generate flowrates for the 50 through 1-percent annual probability flood event. These flowrates were then compared to the FIS flowrates within Kilbourn Road Ditch to determine the hydrologic impact of the proposed development. The proposed development included the Foxconn Development, local road improvements and I-94 improvements.

As shown in Table 17, the results of the SEWRPC analysis show that the return interval flowrate from the HSPF model and statistical analysis decreases within the Kilbourn Road Ditch Watershed in the with-project conditions.

TABLE 17. Kilbourn Road Ditch Return Interval Flowrates from SEWRPC Summary Memorandum

Location	2-year Peak Flowrate		100-Year Peak Flowrate	
	Existing Conditions	Proposed Conditions	Existing Conditions	Proposed Conditions
Reach 250 (County E /Somers Road)	211	197	772	630
Reach 270 (38th Street)	297	292	1370	1300

An additional analysis was completed to review the annual maximum peak flowrates from the HSPF output at several locations within the downstream portions of the Kilbourn Ditch Subwatershed. Reach 250 (at Somers Road) and Reach 270 (at 38th Street) and Reach 294 (810' upstream of the confluence with the Des Plaines River Mainstem) were selected because they are all located downstream of the proposed improvements associated with the Foxconn development and Reach 294 is the furthest point downstream that is included in the SEWRPC HSPF models and encompasses all of the Kilbourn Road Ditch Subwatershed. Table 18 provides a summary of the yearly maximum flowrate and number of years in which the annual maximum peak flowrate increased or decreased as a result of the project.

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TABLE 18. Kilbourn Road Ditch HSPF Model Results for Annual Maximum Peak Flowrates

Location	# Years with Increased Annual Peak Discharge	Maximum Increase	# years with Decreased Annual Peak Discharge	Maximum Decrease
Reach 250 (County E /Somers Road)	6	55 cfs (28%)	49	-238 cfs (-23%)
Reach 270 (38 th Street)	10	60 cfs (24%)	45	-142 cfs (-9%)
Reach 294 (Upstream of Confluence with Des Plaines Mainstem)	28	73 cfs (20%)	27	-169 cfs (-9%)

Table 18 indicates that while the statistical peak flowrates for the return intervals decreased in the with-project conditions, there were years with annual maximum peak flowrates that increased as a result of the project. The number of years with annual maximum peak flowrates increases further downstream in the Kilbourn Road Ditch Subwatershed. The SEWRPC analysis terminated at the confluence with the Des Plaines River.

A comparison of the existing and with-project volume of runoff was completed at the same three locations in the Kilbourn Ditch Subwatershed. Table 19 summarizes the results of the volume comparison.

TABLE 19. Volume Comparison between Existing and With-Project Conditions
Period of Record 1940 - 1994

Location	Existing Volume (Acre-ft)	With Project Volume (Acre-ft)	Difference (Acre-ft)	Increase (%)
Kilbourn Road Ditch at Somers Road (HSPF Reach 250)	309,480	389,880	80,400	26.0
Kilbourn Road Ditch at 38 th Street (County Highway N) (HSPF Reach 270)	508,049	588,448	80,400	15.8
Kilbourn Road Ditch 810' Upstream of confluence with Des Plaines (HSPF Reach 294)	784,889	865,287	80,400	10.2

As shown in Table 19, there is an increase in volume associated with the proposed development. This is due to the increased impervious area within the Foxconn development, local roadways and I-94.

The final item reviewed was an examination of the performance of the proposed detention basins included in the HSPF simulation for the proposed Foxconn development. The SEWRPC models used the Sigma Group detention basins for the Phase 1 portion of the development (Sigma Group Pond A for Reach 727 and Pond E for Reach 733). SEWRPC used a design storm in HSPF to determine detention pond volumes for the remaining Foxconn development. The SEWRPC detention pond design summary and output from the HSPF continuous simulation was extracted at each of the proposed detention ponds (HSPF Reaches 718-736) and the results are summarized in Table 20.

TABLE 20. HSPF Detention Pond Volume Analysis

Detention Basin ID	2-Year Design Discharge (cfs)	2-Year Simulated Discharge (cfs)	Difference	100-year Design Discharge (cfs)	Maximum HSPF Discharge for 1943 Event (cfs)	Difference
718	15.7	12.3	-21.7%	118.1	64.5	-45%
720	4.2	3.3	-21.4%	31.2	17.0	-45%
722	5.8	4.5	-22.4%	43.3	23.6	-45%
726	5.2	4.1	-21.2%	39.0	21.3	-45%
727*	8.6	7.9	-8.1%	64.1	31.0	-52%
730	5.9	4.6	-22.0%	44.5	23.6	-47%
732	1.8	1.4	-22.2%	13.7	7.5	-45%
733*	7.3	8.3	13.7%	54.4	25.7	-53%
734	3.5	2.8	-20.0%	26.1	13.4	-49%
736	1.2	0.9	-25.0%	9.0	4.9	-46%

*Foxconn Detention Basins A and E

Based on the information in Table 20, the following comments are offered:

- The 2-year actual release rate from the proposed detention ponds is 20% less than the design release rate. This would indicate that the proposed detention basins were oversized with respect to the 2-year event. Given that approximately 75 % of the annual maximum storms fall below the 2-year release rate, if the ponds are oversized this may lead to an overestimation in the model of their effectiveness in reducing release rates.
- The HSPF model maximum detention pond outflow (1943 historical event) from the detention ponds is approximately 50% of the 100-year design outflow. This is consistent with the historical rainfall series used for the HSPF model having rainfall depths significantly lower than the NOAA Atlas 14 rainfall depths. It is difficult to draw conclusions on how the detention basins would function and the watershed would respond for storm events up through the 100-year event with the current historical rainfall series in HSPF, which does not contain statistically significant storm events when compared to rainfall events after 1994.

Summary of Floodplain Impact and SEWRPC Foxconn Hydrologic Analysis

The following summary items pertain to the floodplain review:

- A loss of 10.7 acre-ft of floodplain storage will result from the local road projects. If the Des Plaines River were included as a Flood Storage District, compensatory storage would be required to mitigate for this floodplain fill.
- The Des Plaines River hydrologic and hydraulic models should be updated, merged across the state lines and calibrated to the larger storm events such as May 2004 and July 2017. The FIS peak flowrates for the Des Plaines River in Wisconsin are currently much lower than those on the Illinois side of the border as well as USGS published statistical flowrates for the watershed.
- The following items were noted in the review of the SEWPC HSPF model analysis for the Foxconn Development.

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- While the statistically generated 2-year and 100-year return interval flowrates decreased for the area immediately adjacent to the Foxconn Development, review of the annual maximum peak flowrates from the HSPF model for the downstream-most reach of the development indicate that a majority of the annual maximum peak flowrates increase as a result of the development.
- The volume of runoff discharging downstream from Kilbourn Road Ditch will increase by 10% as a result of the Foxconn Development.
- The detention basins in the HSPF model are oversized for the 2-year event. During the full historical series from 1940-1994, the peak release rate out of the ponds is only 50% of the maximum release rate. It is difficult to predict the downstream impacts from the development in larger storm events with the HSPF hydrologic model because there are no large storm events within the series to verify how the downstream receiving system would function when the ponds are at capacity.

DRAFT



Conclusions

Based on the analysis above, we have the following conclusions:

- C1. The Foxconn and associated roadway development within the Des Plaines River Watershed totals 2,094 acres (3.3 mi²). This is roughly 14% of the Kilbourn Ditch Subwatershed and 3% of the total Des Plaines River Watershed within Wisconsin.
- C2. The Kilbourn Ditch Subwatershed is currently 63% agricultural, with significant portions of the I-94 corridor still in agricultural use. There is approximately 5.5 square miles of agricultural land within ½ mile of I-94 located between the proposed Foxconn Development and the Kenosha Airport, much of which is zoned Commercial and Mixed Use in the 2035 Kenosha County 2035 Land Use Plan.
- C3. Due to the undulating glacial topography, there is a significant amount of natural depressional storage in the existing landscape that is not being preserved with the development of Foxconn Phase 1 or the local roadway projects. It is estimated that the depressional storage displaced for Foxconn Phase 1 Development is 43 acre-ft and for the local roads an additional 16.9 acre-ft. The total depressional storage deficit is 59.9 acre-ft for the Phase 1 development and local road improvements. These projects are currently under construction and this depressional storage has already been filled.
- C4. The 100-year stormwater detention release rate for developments in the Des Plaines River Watershed in Wisconsin is greater than the Lake County release rate and the design rainfall depths are less. This results in approximately 17 acre-ft less stormwater detention required for the Foxconn Phase 1 improvements and 3.4 acre-ft less stormwater detention for the local road improvements. The total stormwater detention deficit is 20.4 acre-ft for what is required for the Foxconn Phase 1 development and local road improvements as compared to what would be required in Lake County, IL.
- C5. The Des Plaines River FEMA floodplain mapping in Kenosha and Racine County is based HSPF hydrologic modeling as outlined in the 2003 Comprehensive Plan for the Des Plaines River Watershed by SEWRPC. The flood flows and flood elevations for the Des Plaines River are underestimated in this study based on review and comparison of information from NCDC, USGS, and FEMA.
 - C5.i The HSPF model for the floodplain mapping used rainfall data from 1940-1994, which does not contain rainfall events that were comparable to the 100-year return interval rainfall depths from NOAA Atlas 14.
 - C5.ii The largest rainfall event in the historical series from 1940-1994 was the August 1978 storm event, and this rainfall depth at the Union Grove rain gage was scaled down in the HSPF analysis for the floodplain mapping.
 - C5.iii The historical rainfall events and corresponding USGS streamgage data for the Des Plaines River after 1994 contains the four largest storm events and 6 of the largest 10 storm events recorded in the watershed. These were not included in the HSPF model that is the basis of the FEMA floodplain mapping for the Des Plaines River in Wisconsin.
- C6. Phase 1 of the Foxconn Development is currently under construction along the edge of the FEMA mapped floodplain. While it was designed to be outside of the FEMA regulatory floodplain, the under-estimation of the FEMA regulatory flood flows and flood elevations may result in an

MEMORANDUM

encroachment on the floodplain during the 100-year flood event. Similarly, other developments that have been completed adjacent to the Des Plaines River may be at risk of flooding given the underestimation of the flood flows and flood elevations in Wisconsin.

- C7. There are approximately 10.7 acre-ft of floodplain fill associated with the local road improvements, which is not being compensated because the Des Plaines River is not a Flood Storage District, despite meeting the technical requirements to qualify as one. The actual floodplain fill may be greater than this volume due to the under-representation of FEMA regulatory flood flows and flood elevations in the Watershed.
- C8. The total storage deficit (stormwater, depressional storage and floodplain) for Foxconn Phase 1 and the local road improvements in the Des Plaines River Watershed is 91 acre-ft when compared to what would be required in Lake County and other adjacent Counties in Northeast Illinois. This correlates to a 0.17 acre-ft/acre deficit or 54,600 gallons of stormwater storage that is missing for every acre of development that is occurring the watershed in Wisconsin.
- C9. The SEWRPC HSPF hydrologic analysis of the Foxconn Development used the same modeling as the FEMA floodplain mapping for Kenosha and Racine Counties. There are similar concerns with the HSPF analysis of the Foxconn Development as there are with the floodplain mapping as the historical rainfall series used from 1940-1994 does not include the largest storm events in the watershed that occurred after 1994. Additionally, the HSPF model output provided by SEWRPC for the downstream reach of Kilbourn Road Ditch (Reach 294) indicates that over half of the annual maximum peak flowrates would increase as a result of the project. This indicates an increase in yearly peak flood elevations along Kilbourn Road Ditch and increased flood flows and volumes moving downstream in the Watershed.
- C10. Based on the information provided, Foxconn Phase 1, local roads and I-94 have impacted 38.81 acres of wetlands and Waters of the US. There are many wetland areas of wetland in the undeveloped portions of the EITM. Additional jurisdictional and isolated wetland, and waters of the United States are anticipated for future phases of the project.
 - C10.i The mitigation for 21.34 acres of impacts within the I-94 improvements are being provided in the Rock River Watershed within the Mississippi River Basin in accordance with WisDOT procedures. Use of this Rock River watershed location results in a net loss of wetlands within the Des Plaines River Watershed.
 - C10.ii The 17.47 acres of wetland impacted for Foxconn Phase 1 and the local roads within the EITM Zone is occurring through the Wisconsin Wetland Conservation Trust (WWCT) in-lieu fee (ILF) program. The mitigation is proposed to be located within the Upper Illinois River Basin, which includes the Des Plaines River and Fox River Watersheds. Mitigation for wetland impacts are to occur at a 2:1 replacement ratio at a cost of \$61,000 per credit. Multiplying 17.47 acres times 2 equals 34.94 acres (required credits), times \$61,000 per credit, equates to a mitigation cost of \$2,131,340.
 - C10.iii If land values in the watershed continue to escalate due to the increased development in the watershed, \$61,000 per credit to obtain credit within the watershed may be too low, resulting in more credits being provided out of watershed.

MEMORANDUM

C10.iv A Request for Proposals on creation of wetland credits is currently underway through WDNR.

C10.v If the credits are created in the Fox River Watershed, this would result in additional net loss of wetlands within the Des Plaines River Watershed.

C11. The large area of construction activities and insufficient soil erosion and sediment control measures have resulted in sediment being transported from the site downstream through the Watershed. A citation was issued to Foxconn by WDNR for violations in September 14, 2018 for failure to implement or maintain Soil Erosion and Sediment Control Best Management Practices (BMPs). The Des Plaines River just downstream of the state line is listed as impaired for Total Suspended Solids (TSS), sedimentation and siltation as a result of land development activities. Sediment transport from construction sites in the headwaters of the Des Plaines River Watershed will exacerbate the impairments in downstream stream segments in Illinois.

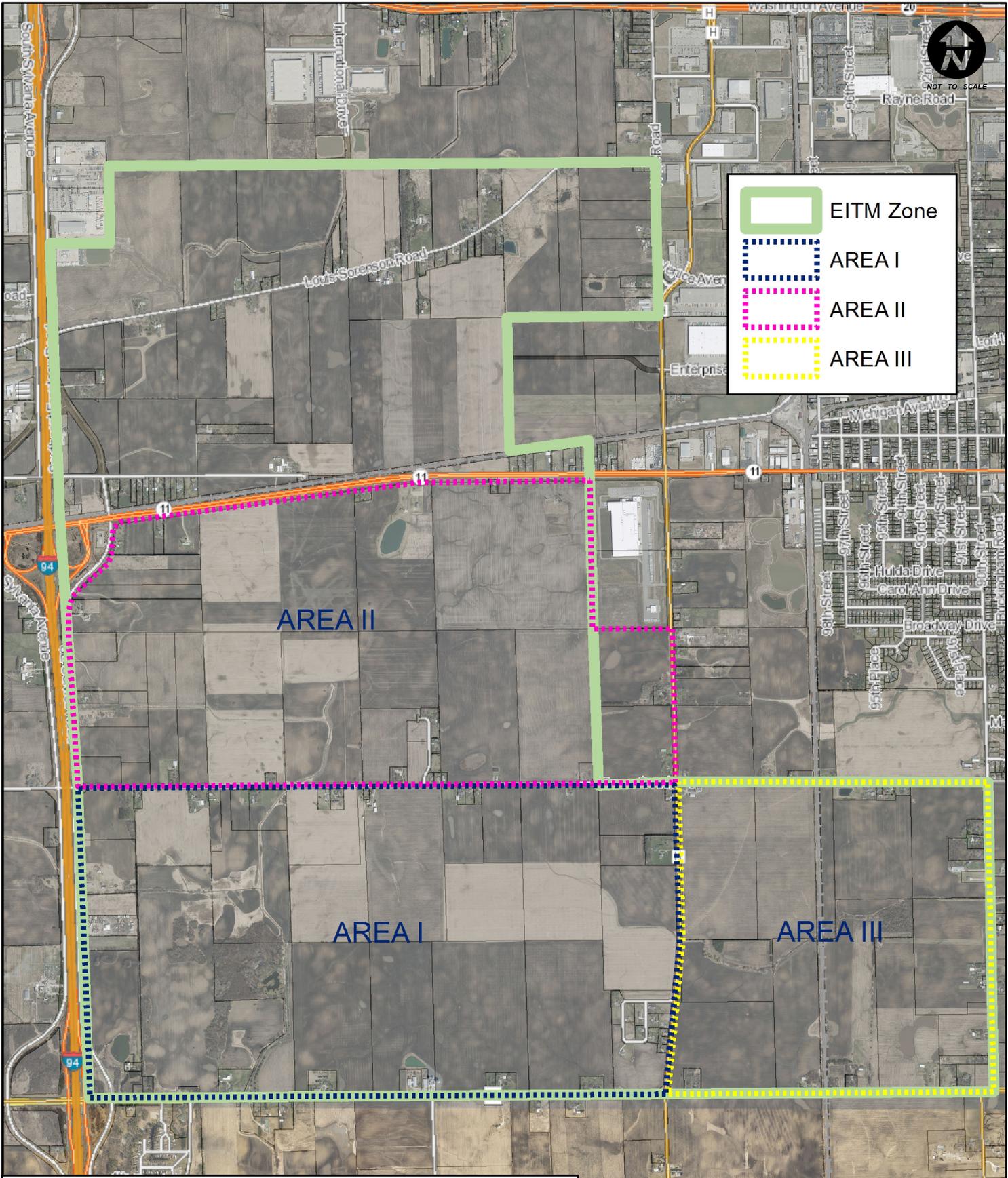
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Recommendations

To address the potential impacts to the residents, businesses and environment in Wisconsin and Illinois from the EITM Zone Development, we have developed the following technical recommendations:

1. A comprehensive hydrologic and hydraulic re-study of Des Plaines River Watershed should be completed which spans the Illinois-Wisconsin border. The study should be completed with the most current data and state of the art modeling software and calibrated to recent large storm events. This process should be led by each State's FEMA Cooperating Technical Partner (CTP) with extensive stakeholder involvement.
2. The Des Plaines River should immediately be made a Flood Storage District so that hydraulically equivalent compensatory storage is required for fill in the floodplain. The compensatory storage requirement should apply to all projects where floodplain fill occurs, including roadway projects.
3. Mitigation for fill of wetlands and waters of the U.S. in the Des Plaines River Watershed should be provided within the watershed so that there is no net loss of wetland/waters in the watershed. This recommendation includes WisDOT projects and the WWCT ILF mitigation for impacts in the EITM Zone. The cost per credit for ILF mitigation should be re-evaluated to ensure that the fee is appropriate to fund land cost, maintenance, monitoring and long-term stewardship.
4. Development in the Watershed should be required to quantify the existing depressional storage within the development site and compensate for lost depressional storage as part of the site development stormwater management plan.
5. Future development within the Des Plaines River Watershed should be required to provide stormwater detention to meet a 0.15 cfs/acre release rate to be consistent with Lake County regulations.
6. The Foxconn site should consider cloud-based technology, sensors, flow controls, weather forecasting and pumping systems for their stormwater detention basins to provide additional storage below the Normal Water Levels (NWL) of the detention basins prior to storm events. Implementation of such a system would compensate for the storage deficit that exists due to differences between the Illinois and Wisconsin regulations for stormwater detention, depressional storage and floodplain fill.
7. Soil erosion and sediment controls should be deployed and diligently maintained to reduce the likelihood of sediment transport from the work sites downstream through the Des Plaines River, which is impaired for Total Suspended Solids (TSS) immediately downstream of the state line in Illinois. Special attention should be paid to proper construction phasing and temporary stabilization, which are currently required under State and local regulations. Additional measures such as water sampling, turbidity barriers and the use of polymers, filter wrapped perforated riser pipes and flocculation systems in a treatment train approach should be adopted to further control sediment prior to discharge of water from the sites during construction. In addition to comprehensive soil erosion and sediment controls on all construction sites, implementing rigorous enforcement inspections to verify compliance, issuing violations and utilizing available legal and financial tools as necessary should be used to achieve compliance. This should apply to all public and private developments as well as linear projects such as roadways.



	EITM Zone
	AREA I
	AREA II
	AREA III

AREA II

AREA I

AREA III

NOTE: SOURCE IS WISCONSIN DEPARTMENT OF NATURE RESOURCES

CLIENT:

TITLE: **EITM ZONE MAP**

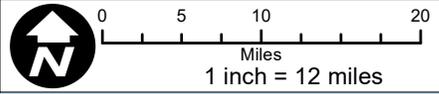
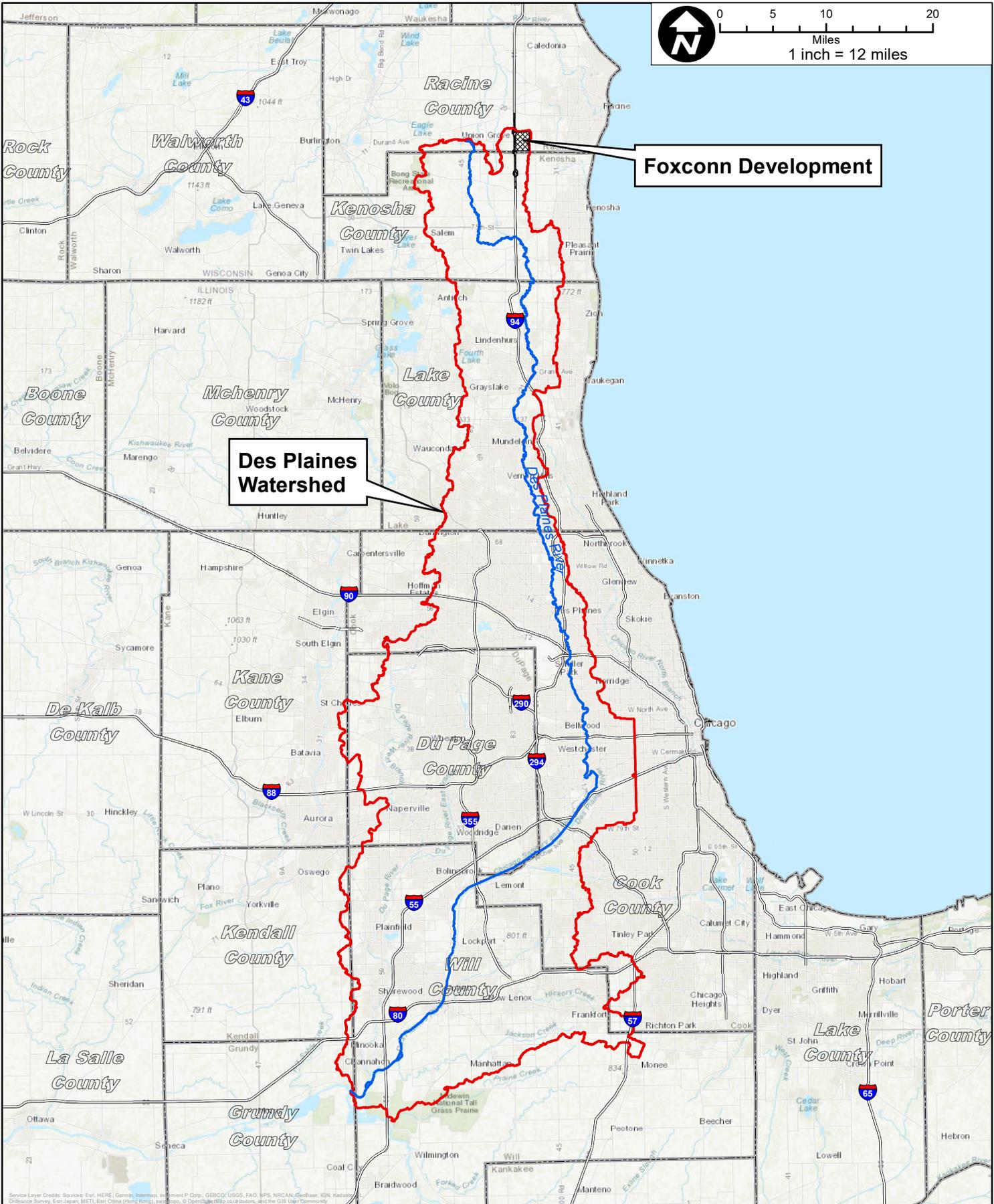
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 DATE: 2/12/2019
 SHEET 1 OF 1
 DRAWING NO.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600 · Rosemont, Illinois 60018 · (847) 823-0500

DSGN.		SCALE:	1:0
DWN.		AUTHOR:	MHAYES
CHKD.		PLOT DATE:	2/12/2019
FILE:	EXH_03_EITM Zone Map		

EXH 1

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Des Plaines Watershed

Foxconn Development

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TITLE:

**FOXCONN
DES PLAINES RIVER WATERSHED
LOCATION MAP**

PROJ. NO. 180324

DATE: 2/14/2019

SHEET 1 OF 1

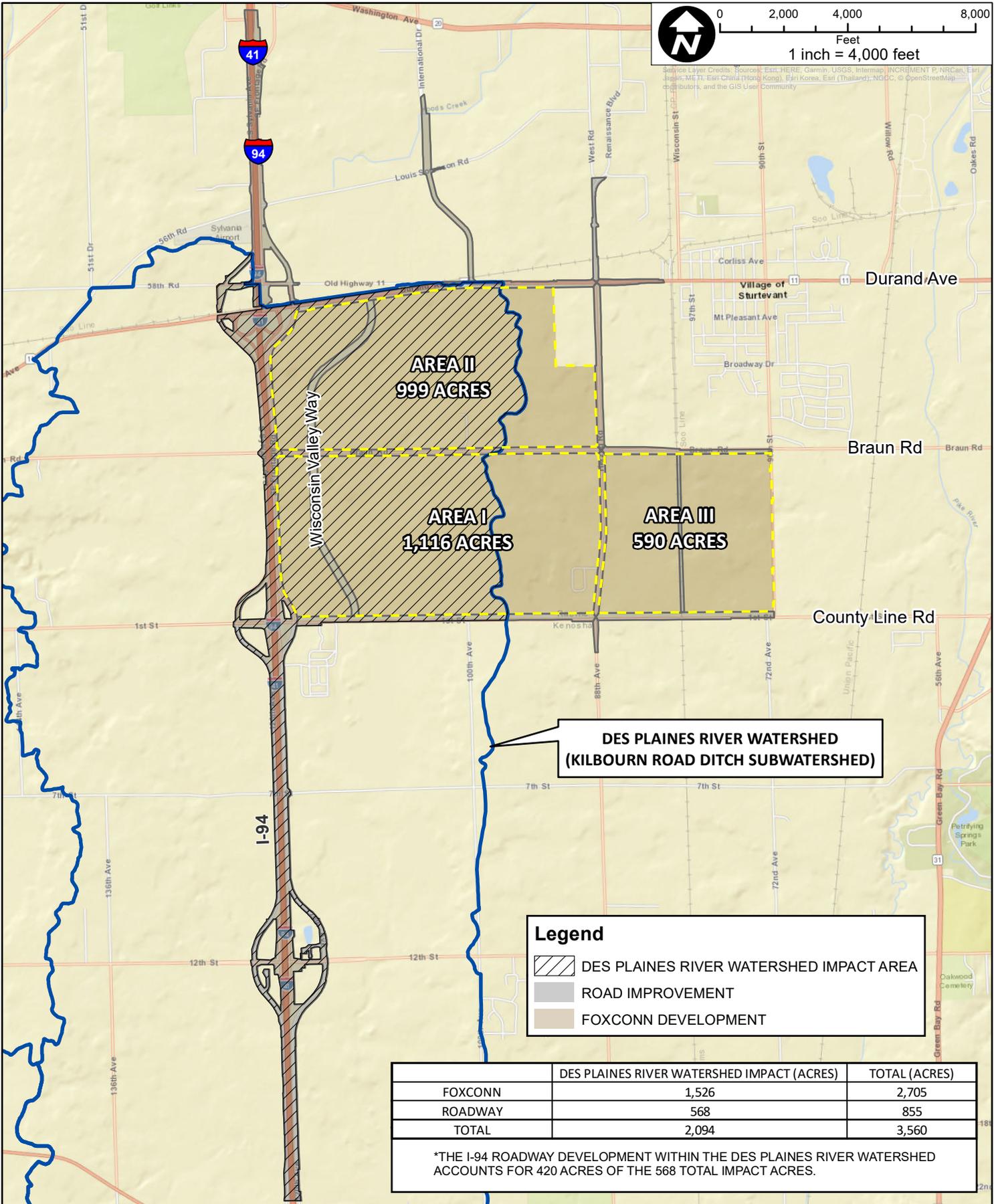
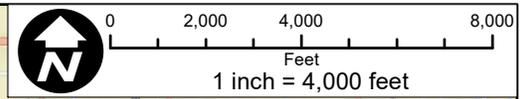
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CHKD.		PLOT DATE:	2/14/2019
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EXH 2



Legend

- DES PLAINES RIVER WATERSHED IMPACT AREA
- ROAD IMPROVEMENT
- FOXCONN DEVELOPMENT

	DES PLAINES RIVER WATERSHED IMPACT (ACRES)	TOTAL (ACRES)
FOXCONN	1,526	2,705
ROADWAY	568	855
TOTAL	2,094	3,560

*THE I-94 ROADWAY DEVELOPMENT WITHIN THE DES PLAINES RIVER WATERSHED ACCOUNTS FOR 420 ACRES OF THE 568 TOTAL IMPACT ACRES.

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CLIENT: **Lake County**

TITLE: **FOXCONN RELATED DEVELOPMENT IN DES PLAINES RIVER WATERSHED**

PROJ. NO. 180324
 DATE: 3/4/2019
 SHEET 1 OF 1
 DRAWING NO.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600 · Rosemont, Illinois 60018 · (847) 823-0500

DSGN.		SCALE:	1:0
DWN.		AUTHOR:	MHAYES
CHKD.		PLOT DATE:	3/4/2019
FILE:	EXH_03_DevelopmentAreas and Impacts		

EXH 3

Appendix 1

List of Data Reviewed as part of Technical Evaluation

Lake County SMC:

- Des Plaines River Watershed Agricultural Land in Subwatershed ArcGIS Layer Package
- Request for Access to Public Record, dated 08/14/2018
- Racine County letter to LCSMC, dated 08/20/2018
- Site Photos, dated 01/08/2019
- Site Monitoring Results, dated 01/16/2019

Southeast Wisconsin Regional Planning Commission (SEWRPC):

- A Comprehensive Plan for the Des Plaines River Watershed – Parts 1-3, date 06/2003
- Existing and Anticipated Development in the Des Plaines River Watershed
- Presentation to the MMSD – New NOAA Precipitation-Frequency Atlas for Wisconsin, dated 01/16/2014
- Recommended Land Use Plan for the Town of Yorkville: 2035
- Record of Public Comments – A Comprehensive Plan for the Des Plaines River, dated 03/18/2003
- SEWRPC and RCPD A Multi-Jurisdictional Comprehensive Plan for Racine County: 2035, dated 11/2009
- SEWRPC and WDNR 2010 Wetland Summary and Environmental Corridors Map, dated 06/22/2018
- Staff Memorandum – Evaluation of Proposed Stormwater Quantity Management for the Des Plaines River Watershed Portion of the Proposed Foxconn Development in the Village of Mount Pleasant, dated 06/11/2018

U.S. Army Corps of Engineers:

- 2018 Des Plaines River H&H Model, dated 12/2018
- 2018 Des Plaines River H&H Model Improvements, dated 12/2018
- Approved Jurisdiction Determination Forms, dated 2016-2018
- Discharge Authorization Letter, dated 05/24/2018
- FOIA Tracking No. FP-18-031236 Letter, dated 10/11/2018
- Summary of Des Plaines HEC-HMS Model Changes and Improvements, dated 12/2018

Village of Mount Pleasant:

- Chapter 1, Submittal Overview Development Engineering Submittal Guide
- Comprehensive Plan of Redevelopment along the Braun Road corridor, dated 02/2018
- Municipal Code – Update No. 14-2017, dated 12/2017
- Mount Pleasant Year 2035 Master Plan Map, dated 12/14/2015
- Notification of Foxconn Construction Site Runoff Flowing to Pike River, dated 09/04/2018

Wisconsin Department of Natural Resources (WDNR):

- Chapter NR 116.03 – Wisconsin's Floodplain Management Program
- Chapter NR 151.002 – Runoff Management
- Chapter NR 320.03 – Bridges and Culverts in or over Navigable Waterways

- Chapter Trans 401.03 – Construction Site Erosion Control and Stormwater Management Procedures for Department Actions
- Coverage Under WPDES General Permit No. WI-S067831-05: Construction Site Stormwater Runoff FIN 62612, dated 04/23/2018
- Development Road Plans Correspondence
- Development Road Plans Permit Documents
- Development Roads Plans Wetland Reports
- EITM Zone – Stormwater Permit Enforcement Procedures
- EITM Zone Map, dated 02/15/2018
- Final Concurrence Project ID 1030-20-16, dated 12/20/2017
- Guidelines for Wetlands for Wetland Compensatory Mitigation in Wisconsin, Version 1, dated 08/2013
- Incidental Take Permit/Authorization Application
- Initial Project Review Project ID 2265-10-02, dated 11/06/2017
- Memorandum to File Wetland Mitigation and DNR 401 Water Quality Certification for I-94 N/S Projects, dated 06/18/2018
- Memorandum – DNR Site #62612 Construction Site Erosion Control Inspection, dated 09/20/2018
- Wetland Mitigation Summary Forms
- Natural Resources Citation No. D650C713PN, dated 09/14/2018
- Notice of Non-Compliance – DNR Construction Site Storm Water General Permit – DNR Site #62612, dated 10/12/2018
- Wetland Impact Summary Tables
- WISDOT/WDNR Correspondence
- WWCT Upper Illinois Service Area Additional Advanced Credit Request

Wisconsin Department of Transportation:

- Available DOT Wetland Credits Map, 2015
- Wetland Bank System Map, 12/31/2016
- Braun Road Disturbed Wetland Areas
- Braun Road Improvements, dated 03/15/2018
- Braun Road Kilbourn Ditch Cross Sections
- Bridge Manual – Chapter 8, Hydraulics
- Cooperative Agreement between WDNR and WISDOT, dated 11/2002
- County KR Improvements, dated 03/15/2018
- County Highway H Improvements, dated 03/15/2018
- Facilities Development Manual – Chapter 13 Drainage, Section 1 Drainage Practice
- Facilities Development Manual – Chapter 13 Drainage, Section 35 Erosion and Water Pollution Control
- Foxconn Access Construction Overview Map, dated 05/2018
- Foxconn Development Proposed Drainage Areas Contributing to Storm Sewer System Map
- I-94 South Segment (WIS 142 to WIS 20) Preliminary Design Plans, dated 12/2017
- I-94 South Segment (WIS 142 to WIS 20) Project Summary, dated 05/2018

- Implementation of DOT/DNR Cooperative Agreement, Section VII: Waterway Crossings and Other Floodplain Encroachments Memo, dated 02/11/1988
- International Drive Improvements, dated 03/15/2018
- Plan of Proposed Improvement, Braun Road, dated 03/30/2018
- Plan of Proposed Improvement, N-S Freeway – Cth E Interchange, dated 02/01/2018
- Plan of Proposed Improvement, N-S Freeway – Cth E to Cth KR, dated 11/30/2018
- Plan of Proposed Improvement, N-S Freeway – Cth KR Interchange, dated 02/01/2018
- Plan of Proposed Improvement, N-S Freeway – Cth KR to Sth 11, dated 02/01/2018
- Plan of Proposed Improvement, N-S Freeway – Sth 11 Interchange, dated 08/01/2017
- Plan of Proposed Improvement, N-S Freeway – Sth 11 Interchange, dated 02/01/2018
- Plan of Proposed Improvement, Sth 11, dated 08/01/2018
- Plan of Proposed Improvement, Sth 142 to Cth E, dated 01/30/2018
- Plan of Proposed Improvement, Wisconn Valley Way, Cth KR, dated 08/01/2018
- Plan of Proposed Improvement, Wisconn Valley Way, Cth KR, dated 06/01/2018
- Racine County Highway Map, dated 01/2018
- Racine County Road Improvements Handout, dated 03/15/2018
- Wetland Mitigation Banking Technical Guideline, second revision, dated 03/2002
- WIS 11 Improvements, dated 03/15/2018
- Wisconn Valley Development Roads Improvements Handout, dated 10/17/2018
- Wiscon Valley Way Improvements, dated 03/15/2018
- Daar Engineering, Inc IH-94 N-S Freeway Reconstruction Cth KR Interchange Drainage Report, dated 03/19/2018
- Kapur Inc. Correspondence, dated 10/30/2018
- Kapur & Associates, LLC Draft Foxconn Development Local Roads Stormwater Drainage Report, dated 05/25/2018
- Stormwater Solutions Engineering, LLC Stormwater Report – IH 94 N-S, dated 04/2018
- Stormwater Solutions Engineering, LLC Total Suspended Solids Removal Analysis I-94 N-S Corridor, dated 02/16/2011

Foxconn Phase 1 Stormwater Report and Plans

- SIGMA Proposed HydroCAD Report, dated 03/27/2018
- SIGMA Proposed Improvements and Construction Schedule, dated 10/16/2017
- SIGMA Stormwater Management Plan Post-Development Conditions, dated 04/02/2018
- SIGMA Wisconn Valley Science & Technology Park – Phase I Site Prep Plan, dated 04/02/2018
- SIGMA Wisconn Valley Science & Technology Park – Phase 1 Stormwater Management Report and Appendices, dated 04/13/2018
- TRC Wetland and Waterway Delineation Report, dated 12/21/2017

Miscellaneous:

- FEMA Floodplain Maps
- I-94 Exhibit 4-7 Floodplain Locations Map
- I-94 Exhibit 4-8 Wetland Impacts Table

- Illinois State Water Survey Bulletin 71 – Rainfall Frequency Atlas of the Midwest, dated 1992
- Kenosha County Adopted Land Use Plan Map: 2035, dated 01/2015
- National Weather Service Weather Observations – Kenosha Regional Airport, dated 01/08/2019
- Racine County Chapter 6 – Inventory of Existing Plans and Ordinances
- Racine County Development Road Let Packages Map, dated 07/10/2018
- Stack Foxconn Development Opportunity Presentation, dated 05/16/2018
- State of Wisconsin, 2017 Wisconsin Act 58 Assembly Bill 1, dated 09/19/2017
- USGS Blackberry Creek Study Correspondence, dated 11/20/2018
- USGS New Muenster July 2017 Rainfall Data
- USGS Streamstats, I-94 Corridor
- Village of Pleasant Prairie, Wisconsin 2035 Comprehensive Plan – Appendix 9-5: Kenosha County 2035 Land Use Plan Map
- WisContext Article: “Could Foxconn Increase Downstream Flooding?”, dated 08/08/2018
- WisContext Article: “Downstream From Foxconn, Anxiety Mounts Over Floods”, dated 08/07/2018

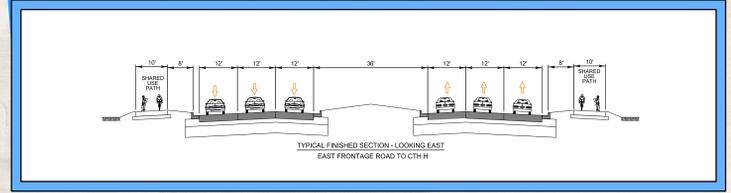
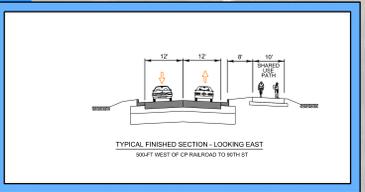
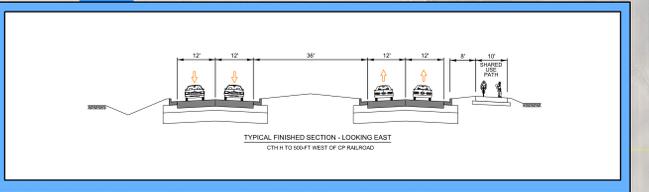
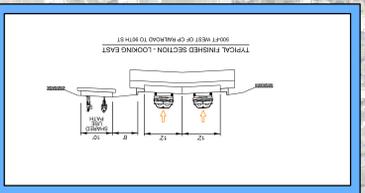
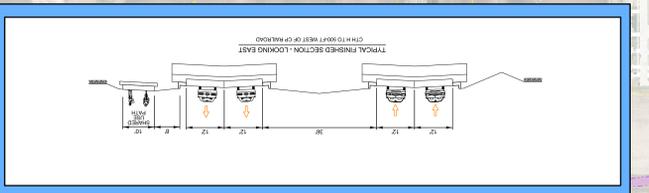
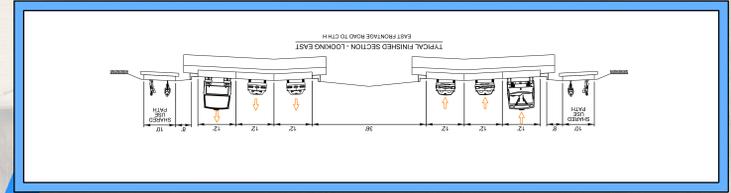
Appendix 2

Roadway Development Public Meeting Exhibits

PRELIMINARY DRAFT 3/15/2018

SCALE IN FEET: 0, 100, 200, 400

- 100-YEAR FLOODPLAIN
- HISTORIC PROPERTY
- POTENTIAL RELOCATION
- ACCESS CONTROL
- FEASIBLE AND REASONABLE NOISE BARRIER
- ENVIRONMENTAL CORRIDOR
- PARCEL LINE
- WETLANDS
- PUBLIC RECREATION (4(f) RESOURCE)
- PROPOSED BRIDGE / EXISTING BRIDGE
- HISTORIC BOUNDARY (SECTION 106 & 4(f) RESOURCE)
- 100-YEAR FLOODPLAIN
- SCHOOL
- CEMETERY
- POTENTIAL RELOCATION
- ACCESS CONTROL
- FEASIBLE AND REASONABLE NOISE BARRIER
- ENVIRONMENTAL CORRIDOR
- PARCEL LINE
- WETLANDS



SCALE IN FEET: 0, 100, 200, 400

- WETLANDS
- PUBLIC RECREATION (4(f) RESOURCE)
- PROPOSED BRIDGE / EXISTING BRIDGE
- HISTORIC BOUNDARY (SECTION 106 & 4(f) RESOURCE)
- 100-YEAR FLOODPLAIN
- ENVIRONMENTAL CORRIDOR
- PROPOSED RIGHT-OF-WAY
- FEASIBLE AND REASONABLE NOISE BARRIER
- ACCESS CONTROL
- PARCEL LINE
- ENVIRONMENTAL CORRIDOR
- PROPOSED RIGHT-OF-WAY
- FEASIBLE AND REASONABLE NOISE BARRIER
- ACCESS CONTROL
- SCHOOL
- CEMETERY
- POTENTIAL RELOCATION
- HISTORIC PROPERTY
- TRAFFIC SIGNAL

PRELIMINARY DRAFT 3/15/2018

PROPERTY ACCESS WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION
ROADWAY OPEN TO TRAFFIC DURING CONSTRUCTION

PRELIMINARY DRAFT 3/15/18

SCALE IN FEET
0 100 200 400

N

100-YEAR FLOODPLAIN	WETLANDS	PARCEL LINE	POTENTIAL RELOCATION
HISTORIC BOUNDARY (SECTION 106 & 41) RESOURCE	PUBLIC RECREATION (41) RESOURCE	POTENTIAL RIGHT-OF-WAY	POTENTIAL RELOCATION
PROPOSED BRIDGE / EXISTING BRIDGE	PROPOSED BRIDGE / EXISTING BRIDGE	FEASIBLE AND REASONABLE NOISE BARRIER	FEASIBLE AND REASONABLE NOISE BARRIER
SCHOOL	CEMETERY	ACCESS CONTROL	ACCESS CONTROL
HISTORIC PROPERTY	HISTORIC PROPERTY	TRAFFIC SIGNAL	TRAFFIC SIGNAL



SEE I 94 PLAN EXHIBITS

PROPERTY ACCESS WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION
ROADWAY OPEN TO TRAFFIC DURING CONSTRUCTION

WETLANDS	PARCEL LINE	POTENTIAL RELOCATION
PUBLIC RECREATION (41) RESOURCE	POTENTIAL RIGHT-OF-WAY	POTENTIAL RELOCATION
PROPOSED BRIDGE / EXISTING BRIDGE	FEASIBLE AND REASONABLE NOISE BARRIER	FEASIBLE AND REASONABLE NOISE BARRIER
HISTORIC BOUNDARY (SECTION 106 & 41) RESOURCE	ACCESS CONTROL	ACCESS CONTROL
100-YEAR FLOODPLAIN	SCHOOL	CEMETERY
	HISTORIC PROPERTY	HISTORIC PROPERTY
	TRAFFIC SIGNAL	TRAFFIC SIGNAL

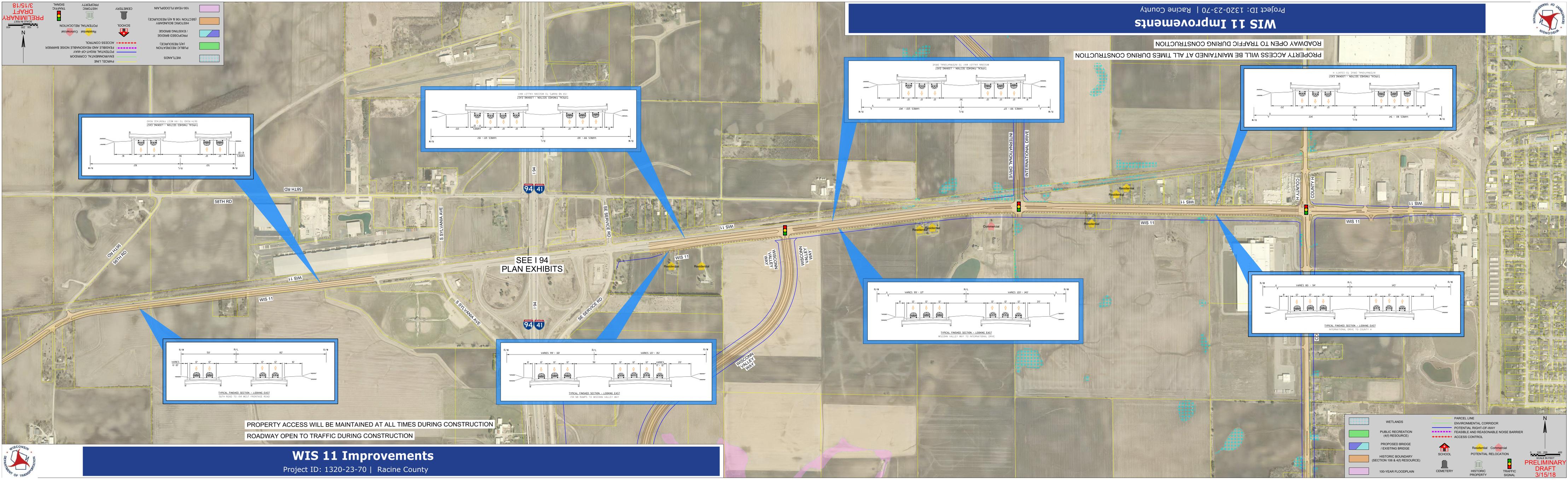
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PRELIMINARY DRAFT 3/15/18

PRELIMINARY DRAFT 3/15/18

100-YEAR FLOODPLAIN	WETLANDS
HISTORIC BOUNDARY (SECTION 106 & 41) RESOURCE	PUBLIC RECREATION (41) RESOURCE
POTENTIAL BRIDGE / EXISTING BRIDGE	PROPOSED BRIDGE / EXISTING BRIDGE
POTENTIAL RIGHT-OF-WAY (41) RESOURCE	FEASIBLE AND REASONABLE NOISE BARRIER
ENVIRONMENTAL CORRIDOR	POTENTIAL RIGHT-OF-WAY
PARCEL LINE	ACCESS CONTROL
CEMETERY	SCHOOL
HISTORIC PROPERTY	POTENTIAL RELOCATION
TRAFFIC SIGNAL	TRAFFIC SIGNAL



PROPERTY ACCESS WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION
 ROADWAY OPEN TO TRAFFIC DURING CONSTRUCTION

WIS 11 Improvements
 Project ID: 1320-23-70 | Racine County



Wisconn Valley Way Improvements

Project ID: 2704-00-76 | Racine County

3/15/18 DRAFT PRELIMINARY

SCALE IN FEET
0 100 200 400

WETLANDS
PUBLIC RECREATION (4(f) RESOURCE)
PROPOSED BRIDGE / EXISTING BRIDGE
HISTORIC BOUNDARY (SECTION 106 & 4(f) RESOURCE)
100-YEAR FLOODPLAIN

PARCEL LINE
ENVIRONMENTAL CORRIDOR
POTENTIAL RIGHT-OF-WAY
FEASIBLE AND REASONABLE NOISE BARRIER
ACCESS CONTROL

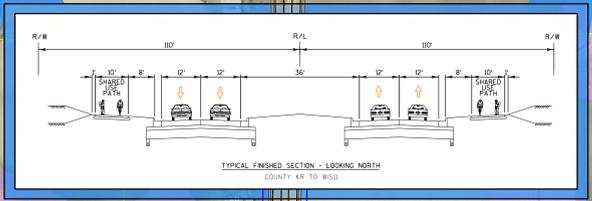
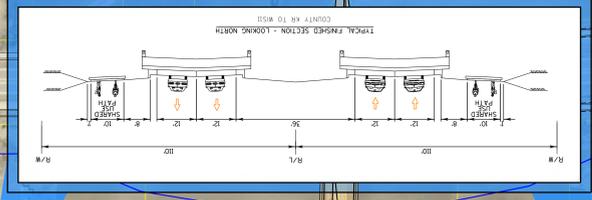
SCHOOL
CEMETERY
HISTORIC PROPERTY
TRAFFIC SIGNAL
POTENTIAL RELOCATION

Residential
Commercial

PROPERTY ACCESS WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION

SEE I 94 PLAN EXHIBITS

SEE I 94 PLAN EXHIBITS



PROPERTY ACCESS WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION

Wisconn Valley Way Improvements

Project ID: 2704-00-76 | Racine County

WETLANDS
PUBLIC RECREATION (4(f) RESOURCE)
PROPOSED BRIDGE / EXISTING BRIDGE
HISTORIC BOUNDARY (SECTION 106 & 4(f) RESOURCE)
100-YEAR FLOODPLAIN

PARCEL LINE
ENVIRONMENTAL CORRIDOR
POTENTIAL RIGHT-OF-WAY
FEASIBLE AND REASONABLE NOISE BARRIER
ACCESS CONTROL

SCHOOL
CEMETERY
HISTORIC PROPERTY
TRAFFIC SIGNAL

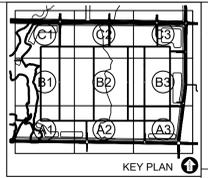
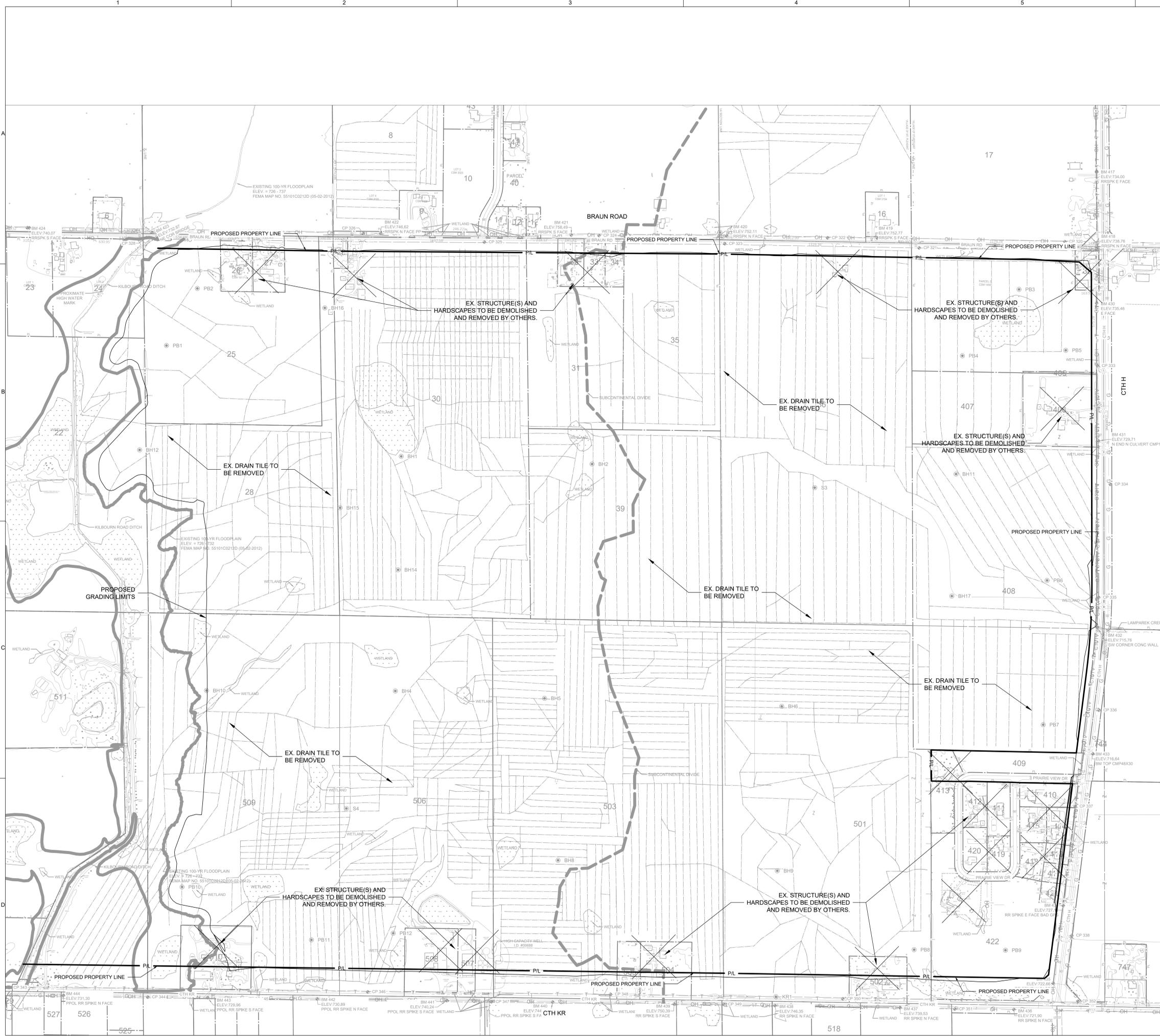
Residential
Commercial

SCALE IN FEET
0 100 200 400

PRELIMINARY DRAFT 3/15/18



Appendix 3
Drain Tile Survey



CLIENT
CONFIDENTIAL

International
Wisconsin, Inc.

SIO

- GENERAL NOTES:**
1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
 2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
 3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE LINES.
 4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.
 5. SEE SHEET ST11-C0-7600 FOR A COMPLETE LIST OF EROSION CONTROL NOTES AND DETAILS. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO START OF LAND DISTURBING ACTIVITIES.
 6. DO NOT BEGIN LAND DISTURBING ACTIVITIES UNTIL AN EROSION CONTROL PERMIT IS OBTAINED FROM LOCAL JURISDICTION.

- LEGEND:**
- EXISTING DRAIN TILE TO BE REMOVED
 - ⊗ STRUCTURE REMOVAL BY OTHERS

NO.	DATE	ISSUED FOR PERMIT	REVISION	CHK	PJ	APVD	BY	PJ
0	4-2-2018							

JACOBS THE SIGMA GROUP
Single Source. Smart Solutions.
Wisconsin Valley Science & Technology Park - Phase 1
Mount Pleasant, Wisconsin

WISCONSIN VALLEY SCIENCE & TECHNOLOGY PARK - PHASE 1
PACKAGE CS-01
SITE PREP PLAN



1" = 250'
CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
MILWAUKEE AREA 259-1181

DATE	2018-04-02
PROJ	699403
DWG	ST11-C0-100
SHEET	11 of 34

Appendix 4

Existing Conditions Depressional Storage Exhibit

Appendix 5

Wisconsin DNR Citation

Natural Resources Citation

State of Wisconsin

Form 4100-070E Rev. 11-12
Section. 23.54, Wis. Stats.

Defendant: Customer ID _____ Telephone Number _____ Birth Date _____ Sex _____ Race _____ Height _____ Weight _____ Hair _____ Eye _____ Driver License Number _____ State of Issuance _____ FEWI DEVELOPMENT CORPORATION 611 EAST WISCONSIN AVE MILWAUKEE, WI 53202		Citation No. D650C713PN Deposit Permitted: \$1,159.50 Date of Violation 09/14/2018 Day of Week 6 - FRIDAY Time of Violation 12:00 PM County of Violation RACINE - 52 Town-City-Village MOUNT PLEASANT -60, VILLAGE	
In violation of Section NR216.46(1) Ordinance			
Violation: FAIL TO IMPLEMENT OR MAINTAIN EROSION CONTROL BMPS DURING THE PERIOD OF PERMIT COVERAGE			
Offense Code E13			
On the Above Stated Time, Date and Location, the Defendant: WAS OBSERVED BY PETE WOOD, DNR STORM WATER ENGINEER, DURING AN EROSION CONTROL INSPECTION AT WISCONN VALLEY SCIENCE TECHNOLOGY PARK PHASE 1 CONSTRUCTION SITE, CTH H, MOUNT PLEASANT WI, ON 9/14/2018. DURING THIS INSPECTION IT WAS DETERMINED THAT THE CONSTRUCTION OF POND C WAS NOT COMPLETED PRIOR TO GRADING THE SURROUNDING DRAINAGE AREA AS REQUIRED BY THE EROSION CONTROL PLAN.			
Officer Name WARD B. LATZA	Officer ID Number 000800273	Officer Department NATURAL RESOURCES	Date Served 10/10/2018
You are notified to Appear Date 11/15/2018 Time 02:00 PM		Maximum Penalty for this Violation \$14,737.50	
Court Name / Address RACINE COUNTY CIRCUIT COURT 717 WISCONSIN AVE RACINE, WI 53403		The court may also revoke approvals, confiscate evidence and require restitution or restoration of any environmental damage.	
Appearance Required N (Read Instruction Sheet for Details)			
Stipulation			
I, the undersigned, am the defendant named on this citation, and do stipulate no contest to the offense and waive my rights to a trial. I understand that if the court accepts this stipulation, it may find me guilty and impose the "Deposit Permitted" amount indicated on the citation. I further understand that any equipment, wild animal or objects seized as evidence may be confiscated by the court. I have read and understand these instructions.			
_____ Signature of Defendant		_____ Date Signed	
To Mail a Deposit			
A deposit of \$1,159.50 may be made by mailing a check or money order to the Court listed above.			

NATURAL RESOURCES CITATION

INSTRUCTIONS - READ CAREFULLY

Notice: Information collected may be used for participation in surveys, eligibility for approvals, law enforcement (including child support and tax delinquency enforcement) purposes and other secondary purposes. The Department may provide this information to requestors pursuant to Wisconsin's open records law, ss. 19.31-19.39, Wis Stats.

IF YOU WISH TO DISPUTE THE CITATION, either appear in court or enter a "Not Guilty" plea by mail prior to your court date. Please include a copy of your citation and your correct mailing address OR your correct name and mailing address, citation number, court appearance date listed on the citation, offense and law enforcement agency or department who issued this citation. Mail to the court address listed on the face of the citation in the section "To Mail a Deposit."

IF YOU DO NOT WISH TO DISPUTE THE CITATION, mail in the "Deposit Permitted" amount indicated on the citation by your court date with your copy of the citation and a signed stipulation OR mail in the "Deposit Permitted" amount along with either a copy of the citation or with your correct name and mailing address, citation number, court appearance date listed on the citation, offense and law enforcement agency or department who issued this citation. Make the check or money order payable to the "Clerk of Courts" and mail to the court address listed on the face of the citation in the section "To Mail a Deposit." You may at any time prior to the court date move the court for relief from the stipulation and change your plea to "Not Guilty".

DEPOSIT MADE WITH THE ENFORCEMENT OFFICER PRIOR TO RELEASE. Wisconsin enforcement officers are authorized pursuant to s.23.66, Wis. Stats., to collect cash or credit card deposits from persons who are issued citations and thereby obtain release if an arrest has been made. If a deposit is made, the enforcement officer will issue you a receipt as proof of your deposit.

APPEARANCE REQUIRED. If your citation is marked "Appearance Required YES", you MUST appear in court on the court appearance date on your citation. If the citation is marked as "Appearance Required NO" the court may find you guilty and keep the "Deposit Permitted" amount as payment for your citation. The court has authority and may still decide to summon you rather than accept the "Deposit Permitted" amount you mailed or posted as a deposit with a law enforcement officer to secure your release.

IF YOU DO NOTHING the court may issue a warrant for your arrest, or may find you guilty of failing to appear in court and suspend all hunting, trapping and fishing licenses for violation of Chapter 29, Wis. Stats., if you fail to pay the Deposit Permitted.

NONPAYMENT OF JUDGMENTS. If you fail to appear before the court for your court date hearing pursuant to s.23.795(1), Wis. Stats., or if the court determines at this hearing that the failure to pay judgment is not for good cause or indigence, the court shall order one of the following:

1. That you be imprisoned for a time not to exceed 5 days or until the amount is paid, whichever is less.
2. Modify, suspend, or stay the judgment.
3. If your citation is for a violation of Chapter 29, Chapter 169, or s.90.21, Wis. Stats., the court may revoke or suspend any privilege or approval granted under these chapters respectively.

Chapter 23 of the Wisconsin Statutes, among other statutory and administrative code sections, may contain additional procedures and legal processes applicable to this citation, including trial provisions.

Wildlife Violator Compact Notice

To Defendants of Fish and Wildlife Related Violations

The following information applies to you, if you have been charged with a fish or wildlife related violation of Chapter 29, Wis. Stats., or Chapters NR 10-28, Wis. Adm. Code. Please keep this information for your records.

EFFECTIVE ON APRIL 15, 2008: The State of Wisconsin became a participating member of the Wildlife Violator Compact. The compact provides a reciprocal program to allow a suspension or revocation of any hunting, fishing or trapping license or approval in any participating state as a suspension or revocation in all participating states. If you are not a resident of Wisconsin and fail to appear in court or make the required deposit to comply with the terms of your citation for a fish or wildlife related violation in this state, Wisconsin will notify your state of residence, or home state, and request suspension or revocation of your hunting, fishing, and trapping privileges until you have complied with the terms of the citation or complaint. This revocation will apply in all participating states.

MANDATORY REVOCATION: The Wisconsin Department of Natural Resources is required under s. 29.972(1), Wis. Stats, to deny an application to issue or renew, or revoke if already issued, all hunting, fishing, or trapping licenses, permits or approvals issued to you by this state, if you have committed a fish or wildlife related violation in this state and you fail to appear on your court date or make the required deposit. Revocations for failure to pay, appear or respond as described under s. 29.972(1), Wis. Stats., will remain in effect until you have complied fully with the terms of the citation or complaint and the Wildlife Violator Compact Coordinator has received notification of your compliance from the Clerk of Courts.

PARTICIPATING STATES: There are at least 43 states that are members of the Wildlife Violators Compact, including: ALABAMA, ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, CONNECTICUT, FLORIDA, GEORGIA, IDAHO, ILLINOIS, INDIANA, IOWA, KANSAS, KENTUCKY, LOUISIANA, MAINE, MARYLAND, MICHIGAN, MINNESOTA, MISSISSIPPI, MISSOURI, MONTANA, NEVADA, NEW HAMPSHIRE, NEW MEXICO, NEW YORK, NORTH DAKOTA, OHIO, OKLAHOMA, OREGON, PENNSYLVANIA, RHODE ISLAND, SOUTH CAROLINA, SOUTH DAKOTA, TENNESSEE, TEXAS, UTAH, VIRGINIA, WASHINGTON, WEST VIRGINIA, WISCONSIN, AND WYOMING. Note: this may not be a complete list of participating states since additional states may have joined the Wildlife Violator Compact since the printing of this notice. More information about the Wildlife Violator Compact program can be found in s. 29.03, Wis. Stats.

DATE: 9/20/2018

FROM: Peter Wood, P.E. – DNR Storm Water Engineer

SUBJECT: Wisconn Valley & Technology Park Phase 1 (DNR Site # 62612)
Construction Site Erosion Control Inspection

On September 14, 2018, the Department (DNR) conducted an erosion control inspection at the Wisconn Valley Science & Technology Park Phase 1 construction site. The inspection was conducted in conjunction with representatives of the site development team and the Village of Mount Pleasant.

Observations

Three locations at the site were inspected by the group (see Figure 1):

Location 1 – Pond C

- The primary outlet and emergency spillway are installed and the east pond embankment (adjacent to CTH H) is constructed to final grade. However, only the northern 30% of the permanent pool is excavated to final grade. The DNR approved erosion control plan indicates that the ponds would be constructed per plan (see Figure 2 – Item 4) prior mass topsoil stripping and site grading (See Figure 2 – Items 7 & 8).
- A temporary outlet restrictor plate is installed on the primary outlet (see Photo 1). The restrictor plate includes a 4-inch diameter orifice for controlled discharge. The 4-inch orifice was sized in accordance with DNR sediment basin technical standard 1064 based on the currently constructed permanent pool area and active storage volume (see Photo 2).
- Turbid water was observed flowing from a corrugated pipe at the entrance to the culvert under CTH H (see Photo 3). This pipe is likely an outfall from an existing drain tile system.

Location 2 - Pond B

- Pond B is currently internally drained (no surface overflows). However, runoff has accumulated in Pond B and needs to be pumped to complete construction of the pond.
- A dewatering treatment system is installed in the southeast corner of Pond B. This system is used to treat water pumped from Pond B.
- The dewatering system consists of a DNR Type II geotextile filter bag within a lined sediment trap (see Photo 4). The system discharges to the CTH H road ditch and ultimately discharges to the culvert under CTH H at the Pond C discharge location. DNR dewatering technical standard 1061 requires the addition of a DNR approved water additive for sediment control prior to geotextile filter bags in clay soils.

Location 3 - Pond A

- The southern 30% of the Pond A permanent pool is excavated to final grade (see Photo 5). The current permanent pool area, active storage volume and outlet orifice size of Pond A has been checked for compliance with DNR sediment basin technical standard 1064.

Document Requests

During the inspection, the DNR requested the submittal of the following documents:

- Erosion control inspection reports.
- Erosion control plan modifications.

These documents were received by DNR on 9/19/2018.

Discussions

The following items were discussed by the group:

- DNR agreed to attend weekly site meetings to evaluate and discuss erosion control plan implementation.
- For improved settling of clay particles, the use of DNR approved additive for sediment control (e.g., water applied polymers) will be investigated and considered by the development team.
- The development team indicated that erosion control plan amendments (e.g., Pond C restricted outlet) were made after the discharge event on 9/3/2018.
- DNR will investigate the source of the discharge from the corrugated pipe at the CTH H culvert.

Compliance Assessment

As a result of this inspection, DNR has identified a permit compliance issue:

NR 216.46 – Erosion Control Plan Implementation:

- The “Construction Sequence for Erosion Control” (see Figure 2) is part of the DNR approved erosion control plan. The construction sequence specifies that the ponds are constructed prior to mass topsoil stripping and site grading. At the time of inspection, most of the site has been stripped of topsoil and graded while the ponds are still under construction approximately 4 months after the start of construction.

Figure 2 – Construction Sequence

CONSTRUCTION SEQUENCE FOR EROSION CONTROL INCLUDES:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCING AND INLET PROTECTION.
3. STRIP TOPSOIL FROM STORM WATER BASIN LOCATION AND STOCKPILE.
4. CONSTRUCT STORM WATER BASIN AND OUTLET AND EMERGENCY OVERFLOW. BASIN IS TO BE USED AS A SEDIMENTATION BASIN DURING THE COURSE OF CONSTRUCTION.
5. CONSTRUCT DIVERSION SWALES, DIRECT RUNOFF TO STORM BASIN. INSTALL ASSOCIATED DITCH CHECKS.
6. INSTALL RIP-RAP AT STORM WATER BASIN AS SHOWN ON THE PLANS.
7. STRIP TOPSOIL FROM REMAINDER OF SITE IN A PROGRESSIVE MANNER, AND STOCKPILE.
8. PERFORM ROUGH SITE GRADING. STABILIZE FINISHED AREAS AS THE WORK PROGRESSES. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING AND MULCHING OR MATTING. USE EROSION MATTING WHERE CALLED FOR ON THE PLANS. PER WDNR TECHNICAL STANDARD 1059: AREAS THAT RECEIVE TEMPORARY SEEDING SHALL HAVE A MINIMUM TOPSOIL DEPTH OF 2 INCHES. AREAS THAT RECEIVE PERMANENT SEEDING SHALL HAVE A MINIMAL TOPSOIL DEPTH OF 4 INCHES.
9. MAINTAIN PROPOSED WATERSHED BOUNDARIES THROUGHOUT CONSTRUCTION. IDENTIFY BOUNDARIES ON MAP.
10. INSTALL UTILITIES. INSTALL ANY ADDITIONAL INLET PROTECTION ON NEW STORM SEWER AND INSTALL RIP-RAP AT NEW STORM SEWER OUTFALLS.
11. STABILIZE AREAS REMAINING AREAS WITHIN 7 DAYS OF COMPLETION OF FINAL GRADING AND TOPSOILING. SOIL STABILIZATION SHALL COMPLY WITH TABLE 1- PRESCRIPTIVE COMPLIANCE AREA SOIL STABILIZATION ON SHEET 7600.
12. REMOVE EXCESS SEDIMENT FROM STORMWATER BASINS AND RETURN BASINS TO THEIR DESIGN DIMENSIONS AND VOLUMES.
13. REMOVE EROSION CONTROL MEASURES ONLY WHEN SITE IS FULLY STABILIZED.

Photo 1 – Pond C Outlet Restrictor Plate



Photo 2 – Pond C Permanent Pool



Photo 3 – Discharge from Corrugate Pipe to CTH H Culvert



Photo 4 – Pond B Dewatering Treatment System



Photo 5 – Pond A Permanent Pool





October 12, 2018

Attn: Attorney Vivian Thai
FEWI Development Corporation
611 East Wisconsin Ave
Milwaukee WI 53202

Attn: Attorney Vivian Thai
SIO International Wisconsin Inc
13315 Globe Drive
Mount Pleasant WI 53177

**SUBJECT: NOTICE OF NONCOMPLIANCE – DNR Construction Site Storm Water General Permit
Wisconn Valley Science & Technology Park Phase 1 - DNR Site #62612**

Dear Attorney Thai:

On September 14, 2018, the Department (DNR) conducted an erosion control inspection (report attached) at the Wisconn Valley Science & Technology Park Phase 1 construction site in Mount Pleasant, Wisconsin. The inspection was conducted in response to a request from the Village of Mount Pleasant related to a sediment laden discharge to Lamparek Creek reported in early September.

The discharge event occurred at the location of a storm water pond on the east side of the site (Basin C). To comply with the erosion control plan incorporated into your permit, you should have fully constructed Basin C prior to disturbing the contributing drainage area. However, at the time of the discharge event, approximately 30% of Basin C was constructed and the entire contributing drainage area was disturbed.

The failure to complete construction of Basin C prior to grading the surrounding drainage area was not consistent with the erosion control plan and contributed to the discharge event in early September. This is a violation of NR 216.46, Wis. Adm. Code and the DNR is issuing a citation (fine) for this violation.

DNR acknowledges that changes have been made to Basin C to improve sediment control and the erosion control plan has been amended to reflect these changes. As a result, this violation has been corrected.

Feel free to call me at (262) 884-2360 if you have any questions.

Sincerely,



Peter C. Wood, P.E.
Storm Water Engineer

Cc: Claude Lois, Village of Mount Pleasant
Tony Beyer, Village of Mount Pleasant

Appendix 6

Wetland Permitting Information



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

REPLY TO ATTENTION OF
REGULATORY BRANCH

Regulatory File No. 2017-03856-MHK December 8, 2017

Mr. Richard Reaves
CH2M
6600 Peachtree Dunwoody Road
400 Embassy Row, Suite 600
Atlanta, Georgia 30328

Dear Mr. Reaves:

This letter is in response to your request for an approved jurisdictional determination for two locations identified as Area A and Area C located in Sections 29, 31, and 32, Township 3 North, Range 22 East, Racine County, Wisconsin. The review area for our jurisdictional determinations is identified on the enclosed exhibits labeled MVP-2017-03856-MHK Flying Eagle Area A Page 1 and 2 and MVP-2017-03856-MHK Flying Eagle Area C Page 1 and 2.

The review areas contain no waters of the United States subject to Corps of Engineers (Corps) jurisdiction. Therefore, you are not required to obtain Department of the Army authorization to discharge dredged or fill material within these areas. The rationale for these determinations are provided in the enclosed Approved Jurisdictional Determination forms.

These determinations have been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular sites identified in this request. These determinations may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

If you object to the approved jurisdictional determinations, you may request an administrative appeal under Corps regulations at 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal the determinations, you must submit a completed RFA form to the Mississippi Valley Division Office at the address shown on the form.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the enclosed NAP. It is not necessary to submit an RFA form to the division office if you do not object to the determinations in this letter.

The approved jurisdictional determinations may be relied upon for five years from the date of this letter. However, the Corps reserves the right to review and revise the determinations in response to changing site conditions, information that was not considered during our initial review, or off-site activities that could indirectly alter the extent of wetlands and other resources on-site. The determinations may be renewed at the end of the five year period provided you submit a written request and our staff are able to verify that the limits established during the original determinations are still accurate.

Regulatory Branch (File No. 2017-03856-MHK)

If you have any questions, please contact me in our Brookfield office at (651) 290-5733 or Marie.H.Kopka@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

Marie H. Kopka
Senior Project Manager

Enclosures

cc: Dane Pehrman, CH2M

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 8, 2017

B. ST PAUL, MN DISTRICT OFFICE, FILE NAME, AND NUMBER: Flying Eagle Area A, MVP-2017-03856-MHK

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: WI County/parish/borough: Racine City: Mt. Pleasant

Center coordinates of site (lat/long in degree decimal format): Lat. 42.67902° N, Long. -87.92801° E.

Universal Transverse Mercator: Zone 16 (X 423966.78, Y 4725589.30)

Name of nearest waterbody: unnamed tributary to North Branch Pike River to the east; Kilbourn Road Ditch to the west

Name of watershed or Hydrologic Unit Code (HUC): Great Lakes Region (04040002) to the east; Upper Mississippi Region (07120004) to the west

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: November 7, 2017

Field Determination. Date(s): November 2, 2017

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.: N/A

2. Non-regulated waters/wetlands (check if applicable):¹

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **The review area contains 28 intrastate wetlands (AW1 through AW21, AW49 through AW53, and AW 55 through AW56) and 1 pond (AWB1), a number of which were reviewed in the field by Corps staff. These aquatic resources were delineated by TRC Solutions in 2017. The 28 wetlands and pond are isolated with no surface or shallow subsurface connection to the Kilbourn Road Ditch to the west or the unnamed tributary to the North Branch Pike River to the east. None of these aquatic resources border, neighbor or are contiguous with another water of the U.S. They are not separated from other WOUS by man-made dikes, barriers, or berms. The surrounding land use consists mostly of agricultural with some residential and transportation uses. The disturbance of surrounding land uses precludes an ecological connection to a WOUS.**

These aquatic resources do not support a link to interstate or foreign commerce; are not known to be used by interstate or foreign travelers for recreation or other purposes; do not produce fish or shellfish that could be taken and sold in interstate or foreign commerce; and are not known to be used for industrial purposes by industries in interstate commerce. Therefore, the Corps has determined that these wetlands are not regulated by the Corps under Section 404 of the Clean Water Act.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs: N/A

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY): N/A

¹ Supporting documentation is presented in Section III.F.

C. SIGNIFICANT NEXUS DETERMINATION: N/A

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY): N/A

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): N/A

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: see attached spreadsheet for acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

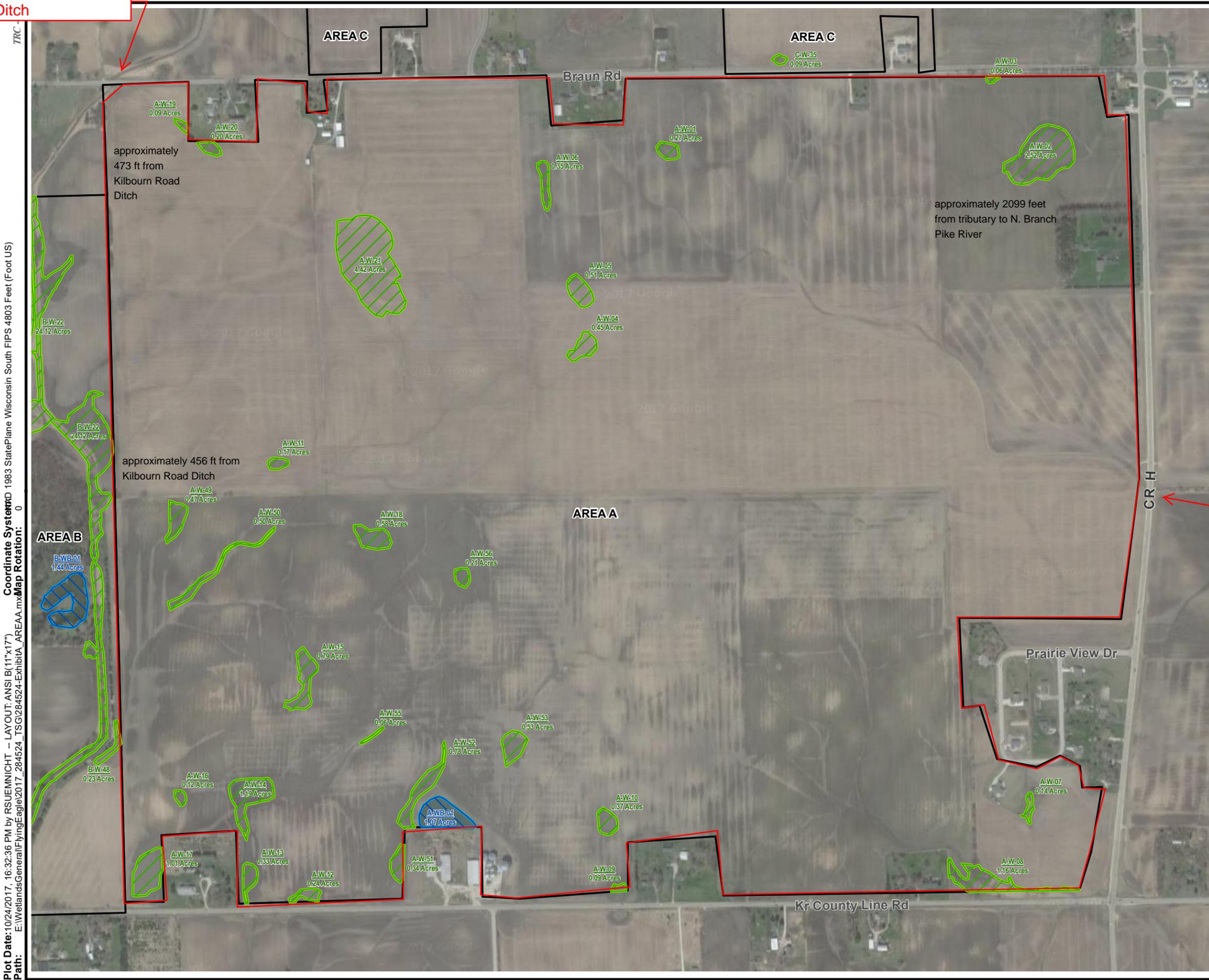
SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: TRC Solutions draft wetland delineation 2017
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24K WI-Sturtevant
- USDA Natural Resources Conservation Service Soil Survey. Citation: Racine County
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s): Wisconsin Wetland Inventory
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): FSA slide review in draft delineation
or Other (Name & Date): ground level photos in draft delineation
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Kilbourn Road Ditch



LEGEND

- TRC DELINEATED WATERBODY
- TRC DELINEATED WETLAND
- STUDY AREA
- Review area

NOTES

- BASE MAP IMAGERY FROM GOOGLE EARTH PRO AND PARTNERS, APRIL 2017.

unnamed tributary to N. Branch Pike River (starts to east of review area)

0 600 1,200 Feet

1" = 600'

1:7,200

PROJECT: FLYING EAGLE VILLAGE OF MOUNT PLEASANT, WISCONSIN

TITLE: WETLAND DELINEATION MAP AREA A

DRAWN BY: FILE→MDP: AUTHOR PROJ. NO.: 284524

CHECKED BY:

APPROVED BY:

DATE: OCTOBER 2017

EXHIBIT A

TRC 150 North Patrick Blvd., Suite 180 Brookfield, WI 53045 Phone: 262.879.1212 www.trcsolutions.com

FILE NO.: 284524-ExhibitA_AREAA.mxd

Plot Date: 10/24/2017 16:32:36 PM by RSUEMNICHT -- LAYOUT: ANSIB(11"x17") Coordinate System: 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US) Path: E:\Wetlands\General\FlyingEagle\2017_284524_TSG\284524-ExhibitA_AREAA.mxd Map Rotation: 0

Aquatic resource name	Size
AW1 (RAPANOS \ ISOLATE)	.27 acre
AW2 (RAPANOS \ ISOLATE)	2.52 acre
AW3 (RAPANOS \ ISOLATE)	.06 acre
AW4 (RAPANOS \ ISOLATE)	.45 acre
AW5 (RAPANOS \ ISOLATE)	.51 acre
AW6 (RAPANOS \ ISOLATE)	.35 acre
AW7 (RAPANOS \ ISOLATE)	.14 acre
AW8 (RAPANOS \ ISOLATE)	1.16 acre
AW9 (RAPANOS \ ISOLATE)	.09 acre
AW10 (RAPANOS \ ISOLATE)	.37 acre
AW11 (RAPANOS \ ISOLATE)	.17 acre
AW12 (RAPANOS \ ISOLATE)	.24 acre
AW13 (RAPANOS \ ISOLATE)	.33 acre
AW14 (RAPANOS \ ISOLATE)	1.19 acre
AW15 (RAPANOS \ ISOLATE)	.79 acre
AW16 (RAPANOS \ ISOLATE)	.12 acre
AW17 (RAPANOS \ ISOLATE)	1.01 acre
AW18 (RAPANOS \ ISOLATE)	.58 acre
AW19 (RAPANOS \ ISOLATE)	.09 acre
AW20 (RAPANOS \ ISOLATE)	.2 acre
AW21 (RAPANOS \ ISOLATE)	4.42 acre
AW49 (RAPANOS \ ISOLATE)	.47 acre
AW50 (RAPANOS \ ISOLATE)	.5 acre
AW51 (RAPANOS \ ISOLATE)	.34 acre
AW52 (RAPANOS \ ISOLATE)	.78 acre
AW53 (RAPANOS \ ISOLATE)	.53 acre
AW55 (RAPANOS \ ISOLATE)	.06 acre
AW56 (RAPANOS \ ISOLATE)	.21 acre
AWB01 (RAPANOS\ISOLATE)	1.07 acre

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 8, 2017

B. ST PAUL, MN DISTRICT OFFICE, FILE NAME, AND NUMBER: Flying Eagle Area C, MVP-2017-03856-MHK

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: WI County/parish/borough: Racine City: Mt. Pleasant

Center coordinates of site (lat/long in degree decimal format): Lat. 42.69073° N, Long. -87.92061° E.

Universal Transverse Mercator: Zone 16 (X 424587.49, Y 4726883.17)

Name of nearest waterbody: unnamed tributary to North Branch Pike River to the east; Kilbourn Road Ditch to the west

Name of watershed or Hydrologic Unit Code (HUC): Great Lakes Region (04040002) to the east; Upper Mississippi Region (07120004) to the west

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: November 7, 2017

Field Determination. Date(s): November 2, 2017

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.: N/A

2. Non-regulated waters/wetlands (check if applicable):¹

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **The review area contains 14 intrastate wetlands (CW34 through CW44, CW57 through CW59), many of which were reviewed in the field by Corps staff. These wetlands were delineated by TRC Solutions in 2017 and are isolated wetlands with no surface or shallow subsurface connection to the Kilbourn Road Ditch to the west or the unnamed tributary to the North Branch Pike River to the east. None of these wetlands border, neighbor or are contiguous with another water of the U.S. These wetlands are not separated from other WOUS by man-made dikes, barriers, or berms. The surrounding land use consists mostly of agricultural with some commercial, residential, and transportation uses. The disturbance of surrounding land uses precludes an ecological connection to a WOUS.**

These wetlands do not support a link to interstate or foreign commerce; are not known to be used by interstate or foreign travelers for recreation or other purposes; do not produce fish or shellfish that could be taken and sold in interstate or foreign commerce; and are not known to be used for industrial purposes by industries in interstate commerce. Therefore, the Corps has determined that these wetlands are not regulated by the Corps under Section 404 of the Clean Water Act.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs: N/A

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY): N/A

¹ Supporting documentation is presented in Section III.F.

C. SIGNIFICANT NEXUS DETERMINATION: N/A

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY): N/A

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): N/A

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: see attached spreadsheet for acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

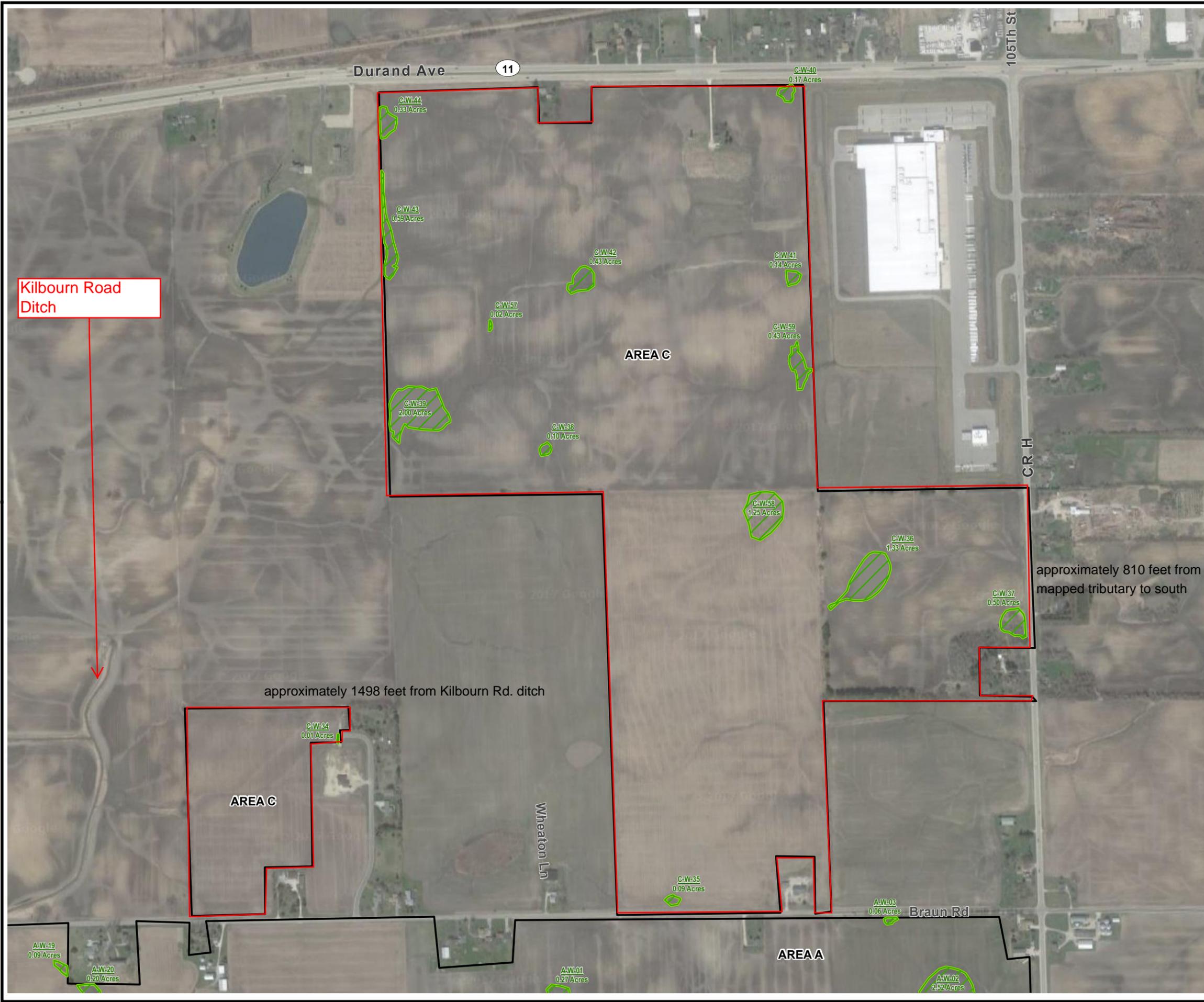
A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: TRC Solutions draft wetland delineation 2017
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24K WI-Sturtevant
- USDA Natural Resources Conservation Service Soil Survey. Citation: Racine County
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s): Wisconsin Wetland Inventory
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): FSA slide review in draft delineation
or Other (Name & Date): ground level photos in draft delineation
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

TRC - GIS

Plot Date: 10/24/2017 16:33:36 PM by RSUEMNICHT -- LAYOUT: ANSIB(11"x17")
 Path: E:\Wetlands\General\FlyingEagle\2017_284524_TSG\284524-ExhibitA_AREA_C.mxd
 Coordinate System: 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US)
 Map Rotation: 0



LEGEND

-  TRC DELINEATED WETLAND
-  STUDY AREA
-  Review area

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO AND PARTNERS, APRIL 2017.



1" = 600'
 1:7,200

PROJECT:		FLYING EAGLE VILLAGE OF MOUNT PLEASANT, WISCONSIN	
TITLE:		WETLAND DELINEATION MAP AREA C	
DRAWN BY: FILE→MDP: AUTHOR		PROJ. NO.:	284524
CHECKED BY:		EXHIBIT A	
APPROVED BY:			
DATE: OCTOBER 2017			
		150 North Patrick Blvd., Suite 180 Brookfield, WI 53045 Phone: 262.879.1212 www.trcsolutions.com	
FILE NO.:		284524-ExhibitA_AREA_C.mxd	

Aquatic Resource ID	Size
CW34 (RAPANOS \ ISOLATE)	.01 acre
CW35 (RAPANOS \ ISOLATE)	.09 acre
CW36 (RAPANOS \ ISOLATE)	1.33 acre
CW37 (RAPANOS \ ISOLATE)	.5 acre
CW38 (RAPANOS \ ISOLATE)	.1 acre
CW39 (RAPANOS \ ISOLATE)	2 acre
CW40 (RAPANOS \ ISOLATE)	.17 acre
CW41 (RAPANOS \ ISOLATE)	.14 acre
CW42 (RAPANOS \ ISOLATE)	.43 acre
CW43 (RAPANOS \ ISOLATE)	.59 acre
CW44 (RAPANOS \ ISOLATE)	.33 acre
CW57 (RAPANOS \ ISOLATE)	.02 acre
CW58 (RAPANOS \ ISOLATE)	1.25 acre
CW59 (RAPANOS \ ISOLATE)	.43 acre

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: CH2M (Richard Reaves)		File No.: 2017-03856-MHK	Date: Dec. 8, 2017
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Marie Kopka
U.S. Army Corps of Engineers
250 Sunnyslope Road, Suite 296
Brookfield, Wisconsin 53005

651-290-5733

If you only have questions regarding the appeal process you may also contact the Division Engineer through:

Administrative Appeals Review Officer
Mississippi Valley Division
P.O. Box 80 (1400 Walnut Street)
Vicksburg, MS 39181-0080
601-634-5820 FAX: 601-634-5816

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:



CH2M
 135 South 84th Street
 Suite 400
 Milwaukee, WI 53214
www.ch2m.com

April 16, 2018

Mr. Josh Brown
 Wisconsin Department of Natural Resources
 101 S Webster Street
 Madison, WI 53703

Subject: **Wetland Compensatory Mitigation In Lieu Fee Purchase for the
 Wisconsin Valley Science and Technology Park – Phase I Project**

Dear Mr. Brown:

On behalf of SIO International Wisconsin, Inc. (SIO), CH2M HILL Engineers, Inc. (CH2M) submits this proposal to purchase Wisconsin Wetland Conservation Trust In Lieu Fee (ILF) credits to satisfy wetland impacts for 16.64 acres of isolated wetlands within the footprint of the Wisconsin Valley Science and Technology Park – Phase I Project (the Project) located in the Village of Mount Pleasant, Wisconsin. This Project will be located in a new electronics and information technology manufacturing zone as created by 2017 Wisconsin Act 58 (the Act). As indicated in the Act, wetland mitigation will be completed at a 2:1 ratio. Based on surveys completed on the site, we believe that Table 1 accurately summarizes the In Lieu Fee that is required.

Table 1. In Lieu Fee Summary

	ILF Watershed	Area (sf)	Area (acre)	Price per credit	2:1 ratio	Cost per watershed
West of Subcontinental Divide	Upper Illinois	573,674	13.17	\$61,000*	2	\$1,606,740
East of Subcontinental Divide	SW Lake Michigan	151,307	3.47	\$62,000*	2	\$430,280
Total						\$2,037,020

*per 2018 fee schedule.

This proposal and its accompanying documents have been the subject of several prior meetings with the Department. The Project area is currently largely in agricultural land use with some isolated wetlands as are shown in the following accompanying documents:

- Approved Jurisdictional Determination, U.S. Army Corps of Engineers, December 8, 2017
- Mitigation Summary Worksheet
- On Site Wetland Summary Figure for Wisconsin Valley Science and Technology Park – Phase I

The *Wetland and Waterway Delineation Report* prepared by TRC Environmental Corporation (dated December 21, 2017) was previously submitted to the Department on April 2, 2018 as part of the WPDES Construction Stormwater Permit Notice of Intent.

The Village of Mount Pleasant currently owns a majority of the land where the Project will be located; however, on or about April 20, 2018, FEWI Development Corporation will acquire a majority of the land identified in this package, with the remaining parcels to be acquired as the Project proceeds. At the time that these remaining parcels have been acquired, additional wetland delineation surveys will be completed. SIO will then file an addendum to this proposal to mitigate for any additional wetland impacts that are identified prior to ground disturbing activities taking place on the areas that are not included in this submittal. Wetlands will not be impacted until the necessary ILF payment has been submitted to the Department.

Should you have any questions on this proposal, please feel free to contact me at 414-847-0209 or michelle.hackett@ch2m.com.

Respectfully Submitted,

A handwritten signature in black ink that reads "Michelle Hackett". The signature is written in a cursive, flowing style.

Michelle Hackett
Permitting Specialist

Mitigation Summary Worksheet

X Preliminary mitigation summary sheet		Final mitigation summary sheet			
CONTACT INFORMATION		APPLICANT		AUTHORIZED REPRESENTATIVE	
Name (Last, First, Middle Initial)		Hong, Yong-Ching "Tiger"		Hackett, Michelle G.	
Title		Senior Consultant		Permitting Specialist	
Organization / Entity		SIO International Wisconsin, Inc.		CH2M	
Mailing Address		13315 Globe Drive,		135 South 84 th Street Suite 400	
City, State, Zip Code		Mount Pleasant, WI 53177		Milwaukee, WI 53214	
Email Address		tiger.yq.hong@foxconn.com		Michelle.Hackett@ch2m.com	
Phone Number (incl. Area Code)		949-231-7028		414-847-0209	
PROJECT INFORMATION					
Project Name			Wisconn Valley Science and Technology Park – Phase I		
Mitigation Service Area			Southwestern Lake Michigan, Upper Illinois		
Latitude Longitude Coordinates			42.67902 N, -87.92801 E		
Municipality Location (City, Village, Town)			Mt. Pleasant		
Township ... Range ... Section			T3N, R22E, S31, 32		
County Location			Racine		
Project Description (including description of wetland impact)			Land development including site grading. See cover letter for more details.		
PROPOSED UNAVOIDABLE WETLAND IMPACTS BY COVER TYPE AND DELINEATED ACREAGE					
Acreage (to nearest 0.01)		Wetland Cover Type			
Upper Illinois Basin	Southwestern Lake Michigan Basin				
1.07		Shallow, Open Water			
	0.14	Deep and Shallow Marshes			
		Sedge Meadows			
12.10	3.33	Fresh (Wet) Meadow			
		Wet to WetMesic Prairie			
		Calcareous Fens			
		Bogs (Open or Coniferous)			
		Shrub – Carr or Alder Thicket			
		Hardwood or Coniferous Swamps			
		Floodplain Forests			
		Seasonally Flooded Basins			
13.17	3.47	Total per basin			
CHECK SELECTION	PROPOSED COMPENSATORY MITIGATION	EXPLAIN WHY TYPE WAS CHOSEN / LIST CONTACTED PARTY	EXPLAIN WHETHER CREDITS ARE AVAILABLE		
	Credit Purchase: Mitigation Bank				
x	Credit Purchase: WI Wetland Conservation Trust (In Lieu Fee)	Due to the large amount of credits needed and limitations in mitigation bank availability, the In Lieu Fee option was chosen. Contacts: Pam Biersach, Josh Brown, Eric Ebersberger	WDNR has requested from USACE a modification to the existing In Lieu Fee instrument to increase the maximum number of advance credits available for sale to accommodate this proposal.		
	Permittee Responsible Mitigation				



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

REPLY TO ATTENTION OF
REGULATORY BRANCH

Regulatory File No. 2017-03856-MHK December 8, 2017

Mr. Richard Reaves
CH2M
6600 Peachtree Dunwoody Road
400 Embassy Row, Suite 600
Atlanta, Georgia 30328

Dear Mr. Reaves:

This letter is in response to your request for an approved jurisdictional determination for two locations identified as Area A and Area C located in Sections 29, 31, and 32, Township 3 North, Range 22 East, Racine County, Wisconsin. The review area for our jurisdictional determinations is identified on the enclosed exhibits labeled MVP-2017-03856-MHK Flying Eagle Area A Page 1 and 2 and MVP-2017-03856-MHK Flying Eagle Area C Page 1 and 2.

The review areas contain no waters of the United States subject to Corps of Engineers (Corps) jurisdiction. Therefore, you are not required to obtain Department of the Army authorization to discharge dredged or fill material within these areas. The rationale for these determinations are provided in the enclosed Approved Jurisdictional Determination forms.

These determinations have been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular sites identified in this request. These determinations may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

If you object to the approved jurisdictional determinations, you may request an administrative appeal under Corps regulations at 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal the determinations, you must submit a completed RFA form to the Mississippi Valley Division Office at the address shown on the form.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the enclosed NAP. It is not necessary to submit an RFA form to the division office if you do not object to the determinations in this letter.

The approved jurisdictional determinations may be relied upon for five years from the date of this letter. However, the Corps reserves the right to review and revise the determinations in response to changing site conditions, information that was not considered during our initial review, or off-site activities that could indirectly alter the extent of wetlands and other resources on-site. The determinations may be renewed at the end of the five year period provided you submit a written request and our staff are able to verify that the limits established during the original determinations are still accurate.

Regulatory Branch (File No. 2017-03856-MHK)

If you have any questions, please contact me in our Brookfield office at (651) 290-5733 or Marie.H.Kopka@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

Marie H. Kopka
Senior Project Manager

Enclosures

cc: Dane Pehrman, CH2M

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 8, 2017

B. ST PAUL, MN DISTRICT OFFICE, FILE NAME, AND NUMBER: Flying Eagle Area A, MVP-2017-03856-MHK

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: WI County/parish/borough: Racine City: Mt. Pleasant

Center coordinates of site (lat/long in degree decimal format): Lat. 42.67902° N, Long. -87.92801° E.

Universal Transverse Mercator: Zone 16 (X 423966.78, Y 4725589.30)

Name of nearest waterbody: unnamed tributary to North Branch Pike River to the east; Kilbourn Road Ditch to the west

Name of watershed or Hydrologic Unit Code (HUC): Great Lakes Region (04040002) to the east; Upper Mississippi Region (07120004) to the west

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: November 7, 2017

Field Determination. Date(s): November 2, 2017

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.: N/A

2. Non-regulated waters/wetlands (check if applicable):¹

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **The review area contains 28 intrastate wetlands (AW1 through AW21, AW49 through AW53, and AW 55 through AW56) and 1 pond (AWB1), a number of which were reviewed in the field by Corps staff. These aquatic resources were delineated by TRC Solutions in 2017. The 28 wetlands and pond are isolated with no surface or shallow subsurface connection to the Kilbourn Road Ditch to the west or the unnamed tributary to the North Branch Pike River to the east. None of these aquatic resources border, neighbor or are contiguous with another water of the U.S. They are not separated from other WOUS by man-made dikes, barriers, or berms. The surrounding land use consists mostly of agricultural with some residential and transportation uses. The disturbance of surrounding land uses precludes an ecological connection to a WOUS.**

These aquatic resources do not support a link to interstate or foreign commerce; are not known to be used by interstate or foreign travelers for recreation or other purposes; do not produce fish or shellfish that could be taken and sold in interstate or foreign commerce; and are not known to be used for industrial purposes by industries in interstate commerce. Therefore, the Corps has determined that these wetlands are not regulated by the Corps under Section 404 of the Clean Water Act.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs: N/A

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY): N/A

¹ Supporting documentation is presented in Section III.F.

C. SIGNIFICANT NEXUS DETERMINATION: N/A

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY): N/A

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): N/A

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: see attached spreadsheet for acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: TRC Solutions draft wetland delineation 2017
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24K WI-Sturtevant
- USDA Natural Resources Conservation Service Soil Survey. Citation: Racine County
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s): Wisconsin Wetland Inventory
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): FSA slide review in draft delineation
or Other (Name & Date): ground level photos in draft delineation
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Aquatic resource name	Size
AW1 (RAPANOS \ ISOLATE)	.27 acre
AW2 (RAPANOS \ ISOLATE)	2.52 acre
AW3 (RAPANOS \ ISOLATE)	.06 acre
AW4 (RAPANOS \ ISOLATE)	.45 acre
AW5 (RAPANOS \ ISOLATE)	.51 acre
AW6 (RAPANOS \ ISOLATE)	.35 acre
AW7 (RAPANOS \ ISOLATE)	.14 acre
AW8 (RAPANOS \ ISOLATE)	1.16 acre
AW9 (RAPANOS \ ISOLATE)	.09 acre
AW10 (RAPANOS \ ISOLATE)	.37 acre
AW11 (RAPANOS \ ISOLATE)	.17 acre
AW12 (RAPANOS \ ISOLATE)	.24 acre
AW13 (RAPANOS \ ISOLATE)	.33 acre
AW14 (RAPANOS \ ISOLATE)	1.19 acre
AW15 (RAPANOS \ ISOLATE)	.79 acre
AW16 (RAPANOS \ ISOLATE)	.12 acre
AW17 (RAPANOS \ ISOLATE)	1.01 acre
AW18 (RAPANOS \ ISOLATE)	.58 acre
AW19 (RAPANOS \ ISOLATE)	.09 acre
AW20 (RAPANOS \ ISOLATE)	.2 acre
AW21 (RAPANOS \ ISOLATE)	4.42 acre
AW49 (RAPANOS \ ISOLATE)	.47 acre
AW50 (RAPANOS \ ISOLATE)	.5 acre
AW51 (RAPANOS \ ISOLATE)	.34 acre
AW52 (RAPANOS \ ISOLATE)	.78 acre
AW53 (RAPANOS \ ISOLATE)	.53 acre
AW55 (RAPANOS \ ISOLATE)	.06 acre
AW56 (RAPANOS \ ISOLATE)	.21 acre
AWB01 (RAPANOS\ISOLATE)	1.07 acre

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 8, 2017

B. ST PAUL, MN DISTRICT OFFICE, FILE NAME, AND NUMBER: Flying Eagle Area C, MVP-2017-03856-MHK

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: WI County/parish/borough: Racine City: Mt. Pleasant

Center coordinates of site (lat/long in degree decimal format): Lat. 42.69073° N, Long. -87.92061° E.

Universal Transverse Mercator: Zone 16 (X 424587.49, Y 4726883.17)

Name of nearest waterbody: unnamed tributary to North Branch Pike River to the east; Kilbourn Road Ditch to the west

Name of watershed or Hydrologic Unit Code (HUC): Great Lakes Region (04040002) to the east; Upper Mississippi Region (07120004) to the west

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: November 7, 2017

Field Determination. Date(s): November 2, 2017

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.: N/A

2. Non-regulated waters/wetlands (check if applicable):¹

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **The review area contains 14 intrastate wetlands (CW34 through CW44, CW57 though CW59), many of which were reviewed in the field by Corps staff. These wetlands were delineated by TRC Solutions in 2017 and are isolated wetlands with no surface or shallow subsurface connection to the Kilbourn Road Ditch to the west or the unnamed tributary to the North Branch Pike River to the east. None of these wetlands border, neighbor or are contiguous with another water of the U.S. These wetlands are not separated from other WOUS by man-made dikes, barriers, or berms. The surrounding land use consists mostly of agricultural with some commercial, residential, and transportation uses. The disturbance of surrounding land uses precludes an ecological connection to a WOUS.**

These wetlands do not support a link to interstate or foreign commerce; are not known to be used by interstate or foreign travelers for recreation or other purposes; do not produce fish or shellfish that could be taken and sold in interstate or foreign commerce; and are not known to be used for industrial purposes by industries in interstate commerce. Therefore, the Corps has determined that these wetlands are not regulated by the Corps under Section 404 of the Clean Water Act.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs: N/A

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY): N/A

¹ Supporting documentation is presented in Section III.F.

C. SIGNIFICANT NEXUS DETERMINATION: N/A

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY): N/A

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): N/A

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: see attached spreadsheet for acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

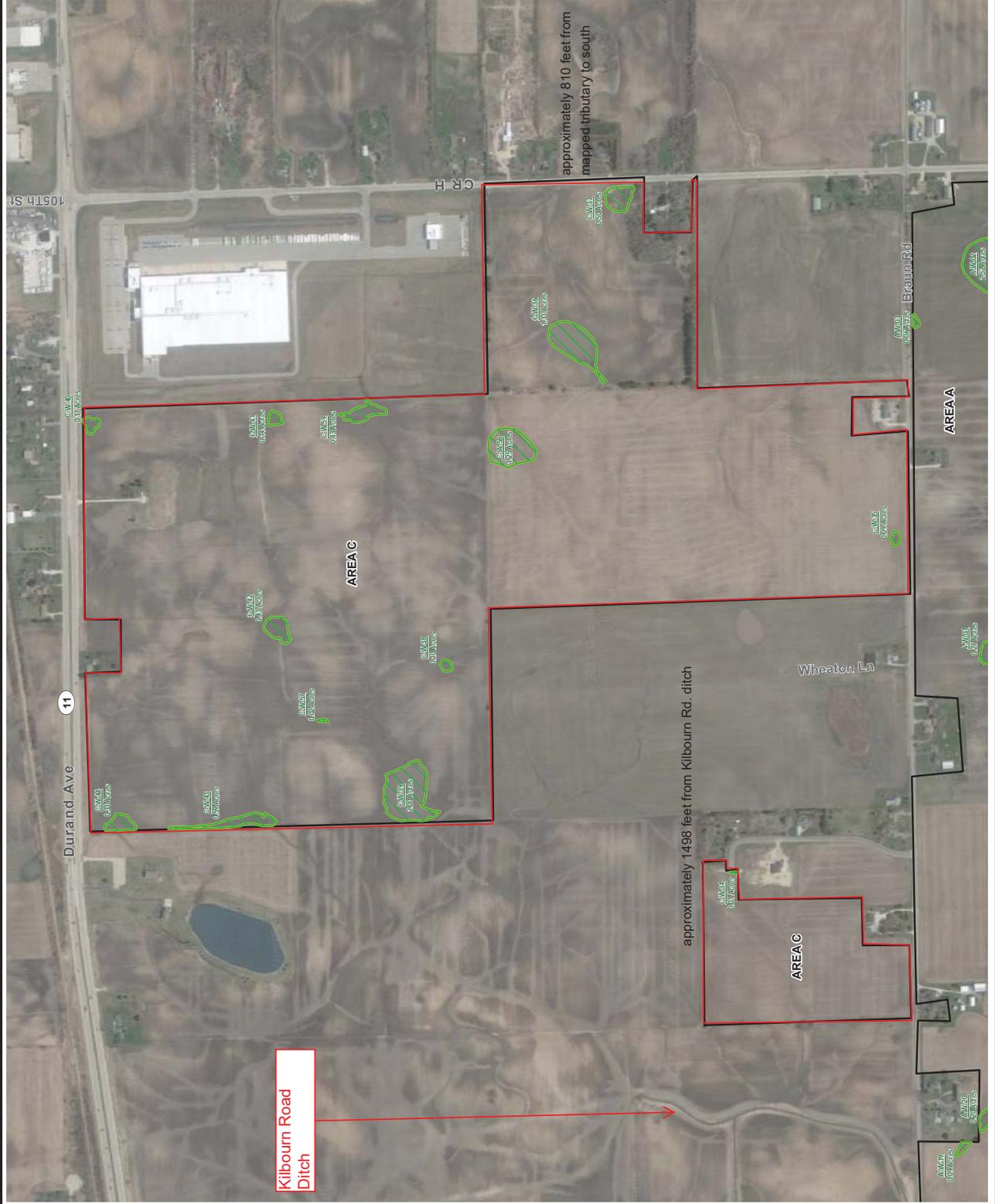
- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: TRC Solutions draft wetland delineation 2017
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24K WI-Sturtevant
- USDA Natural Resources Conservation Service Soil Survey. Citation: Racine County
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s): Wisconsin Wetland Inventory
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): FSA slide review in draft delineation
or Other (Name & Date): ground level photos in draft delineation
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:



TRC - GIS

Path: E:\Wind\General\FlyingEagle\2017_284524_TSG\284524-ExhibitA-AREAC.mxd Map Rotation: 0
 Coordinate System: 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US)

LEGEND

-  TRC DELINEATED WETLAND
-  STUDY AREA
-  Review area

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO AND PARTNERS, APRIL 2017.



PROJECT:

FLYING EAGLE
 VILLAGE OF MOUNT PLEASANT, WISCONSIN

TITLE: **WETLAND DELINEATION MAP**
WORK AREA COPY

DRAWN BY: FILE - MDP, AUTHOR: PROJ. NO.: 284524

APPROVED BY: DATE: OCTOBER 2017

EXHIBIT A



150 North Patrick Blvd., Suite 100
 Mount Pleasant, WI 53406
 Phone: 262.493.1212
 www.trcsolutions.com

FILE NO.: 284524-EXHIBIT A, AREAC.mxd

Aquatic Resource ID	Size
CW34 (RAPANOS \ ISOLATE)	.01 acre
CW35 (RAPANOS \ ISOLATE)	.09 acre
CW36 (RAPANOS \ ISOLATE)	1.33 acre
CW37 (RAPANOS \ ISOLATE)	.5 acre
CW38 (RAPANOS \ ISOLATE)	.1 acre
CW39 (RAPANOS \ ISOLATE)	2 acre
CW40 (RAPANOS \ ISOLATE)	.17 acre
CW41 (RAPANOS \ ISOLATE)	.14 acre
CW42 (RAPANOS \ ISOLATE)	.43 acre
CW43 (RAPANOS \ ISOLATE)	.59 acre
CW44 (RAPANOS \ ISOLATE)	.33 acre
CW57 (RAPANOS \ ISOLATE)	.02 acre
CW58 (RAPANOS \ ISOLATE)	1.25 acre
CW59 (RAPANOS \ ISOLATE)	.43 acre

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: CH2M (Richard Reaves)		File No.: 2017-03856-MHK	Date: Dec. 8, 2017
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Marie Kopka
U.S. Army Corps of Engineers
250 Sunnyslope Road, Suite 296
Brookfield, Wisconsin 53005

651-290-5733

If you only have questions regarding the appeal process you may also contact the Division Engineer through:

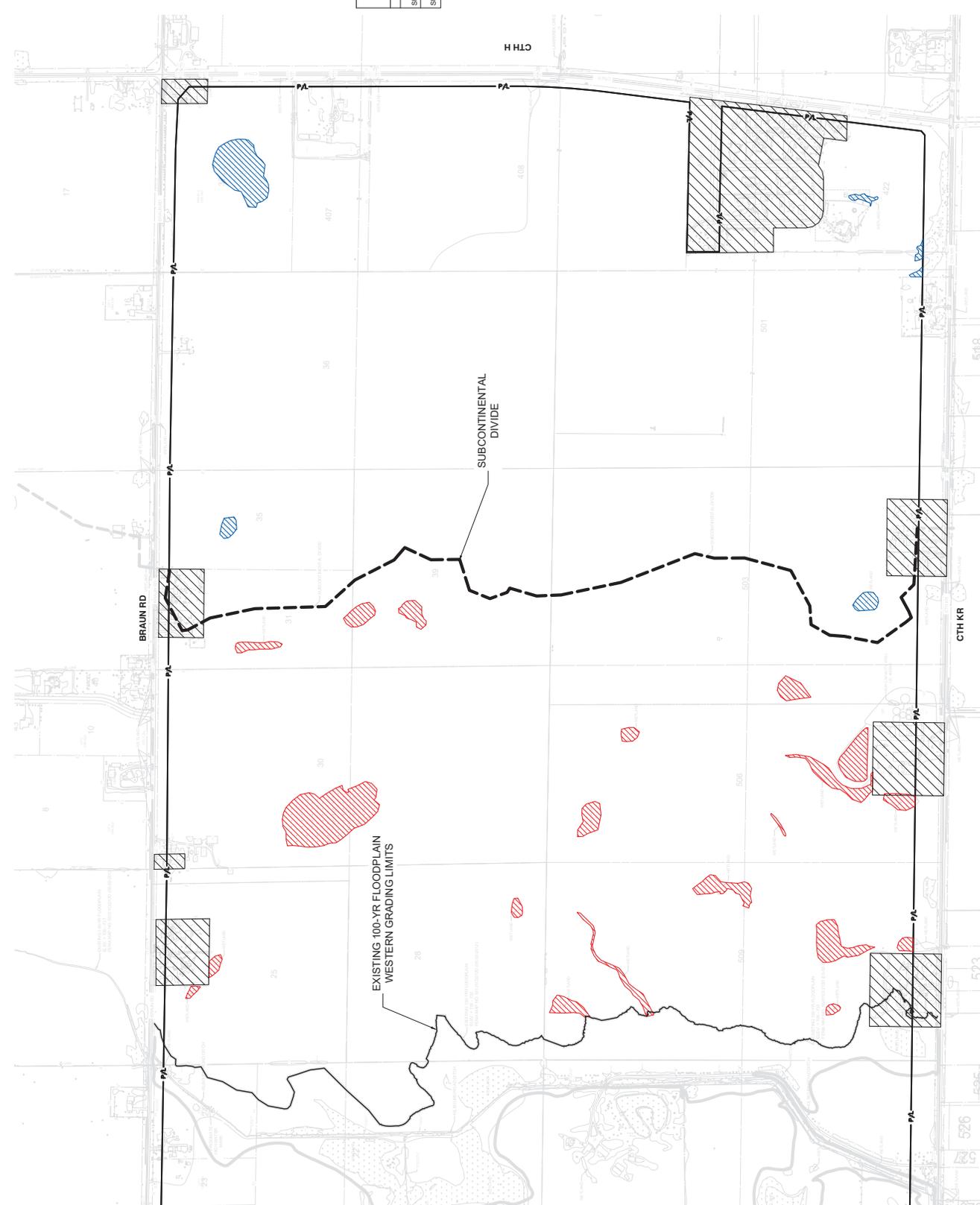
Administrative Appeals Review Officer
Mississippi Valley Division
P.O. Box 80 (1400 Walnut Street)
Vicksburg, MS 39181-0080
601-634-5820 FAX: 601-634-5816

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:



Notice: Pursuant to § 281.36, Wis. Stats., this Mitigation Summary Worksheet (MSS) must be completed in its entirety and submitted to the Department of Natural Resources (DNR) prior to the required pre-application meeting set up by the DNR. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin Open Records law [§§ 19.31 – 19.39, Wis. Stats.]

This MSS is required for Wisconsin Department of Natural Resources Wetland Individual Permit (IP) applications as wetland compensatory mitigation is required for all issued IP projects. The applicant, or authorized representative, shall complete all fields below and submit this MSS along with their required pre-application materials in advance of the mandatory pre-application meeting. A final version of the MSS shall then be re-submitted along with the final IP application following completion of the pre-application meeting reflecting any resulting alterations to the proposed project representing the final wetland compensatory mitigation details.

<input type="checkbox"/> Preliminary mitigation summary sheet	<input checked="" type="checkbox"/> Final mitigation summary sheet
---	--

CONTACT INFORMATION	APPLICANT	AUTHORIZED REPRESENTATIVE
Name (Last, First, Middle Initial)		
Title		
Organization / Entity	WI Department of Transportation Southeast Region	
Mailing Address	141 NW Barstow Street	
City, State, Zip Code	Waukesha, WI 53187	
Email Address		
Phone Number (incl. Area Code)		

PROJECT INFORMATION	
Project Name	Wisconn Valley Way
Mitigation Service Area	Upper Illinois (0.86 acres)
Latitude---Longitude Coordinates	
Municipality Location (City, Village, Town)	Village of Mount Pleasant, Racine County
Township --- Range --- Section	T3N, R22E, Sections 29, 30, 31, and 32
County Location	Racine
Project Description (including description of wetland impact)	Construction of Wisconn Valley Way from County KR to approximately WIS 11

PROPOSED UNAVOIDABLE WETLAND IMPACTS BY COVER TYPE AND DELINEATED ACREAGE	
Acreage (to nearest 0.01)	Wetland Cover Type
Upper Illinois - 0.20	Shallow, Open Water
	Deep and Shallow Marshes
	Sedge Meadows
Upper Illinois - 0.66	Fresh (Wet) Meadow
	Wet to Wet-Mesic Prairie
	Calcareous Fens
	Bogs (Open or Coniferous)
	Shrub – Carr or Alder Thicket
	Hardwood or Coniferous Swamps
	Floodplain Forests
	Seasonally Flooded Basins

CHECK SELECTION	PROPOSED COMPENSATORY MITIGATION	EXPLAIN WHY TYPE WAS CHOSEN / LIST CONTACTED PARTY	EXPLAIN WHETHER CREDITS ARE AVAILABLE
<input type="checkbox"/>	Credit Purchase: Mitigation Bank		
<input checked="" type="checkbox"/>	Credit Purchase: WI Wetland Conservation Trust (In-Lieu Fee)		
<input type="checkbox"/>	Permittee Responsible Mitigation		

Notice: Pursuant to § 281.36, Wis. Stats., this Mitigation Summary Worksheet (MSS) must be completed in its entirety and submitted to the Department of Natural Resources (DNR) prior to the required pre-application meeting set up by the DNR. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin Open Records law [§§ 19.31 – 19.39, Wis. Stats.]

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<input type="checkbox"/> Preliminary mitigation summary sheet		<input checked="" type="checkbox"/> Final mitigation summary sheet	
CONTACT INFORMATION		APPLICANT	
Name (Last, First, Middle Initial)		Jeff Bohan	
Title		WisDOT SE Region Technical Services	
Organization / Entity		WI Department of Transportation Southeast Region	
Mailing Address		141 NW Barstow Street	
City, State, Zip Code		Waukesha, WI 53187	
Email Address			
Phone Number (incl. Area Code)			
PROJECT INFORMATION			
Project Name		WisConn Valley Way Box Culvert	
Mitigation Service Area		Upper Illinois (0.10 acre)	
Latitude---Longitude Coordinates			
Municipality Location (City, Village, Town)		Village of Mount Pleasant, Racine County	
Township --- Range --- Section		T3N, R22E	
County Location		Racine	
Project Description (including description of wetland impact)		Construction of box culvert over tributary to Kilbourn Ditch	
PROPOSED UNAVOIDABLE WETLAND IMPACTS BY COVER TYPE AND DELINEATED ACREAGE			
Acreage (to nearest 0.01)		Wetland Cover Type	
Upper IL - 0.10 acre		Shallow, Open Water	
		Deep and Shallow Marshes	
		Sedge Meadows	
		Fresh (Wet) Meadow	
		Wet to Wet-Mesic Prairie	
		Calcareous Fens	
		Bogs (Open or Coniferous)	
		Shrub – Carr or Alder Thicket	
		Hardwood or Coniferous Swamps	
		Floodplain Forests	
		Seasonally Flooded Basins	
CHECK SELECTION	PROPOSED COMPENSATORY MITIGATION	EXPLAIN WHY TYPE WAS CHOSEN / LIST CONTACTED PARTY	EXPLAIN WHETHER CREDITS ARE AVAILABLE
<input type="checkbox"/>	Credit Purchase: Mitigation Bank		
<input checked="" type="checkbox"/>	Credit Purchase: WI Wetland Conservation Trust (In-Lieu Fee)		
<input type="checkbox"/>	Permittee Responsible Mitigation		

Notice: Pursuant to § 281.36, Wis. Stats., this Mitigation Summary Worksheet (MSS) must be completed in its entirety and submitted to the Department of Natural Resources (DNR) prior to the required pre-application meeting set up by the DNR. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin Open Records law [§§ 19.31 – 19.39, Wis. Stats.]

This MSS is required for Wisconsin Department of Natural Resources Wetland Individual Permit (IP) applications as wetland compensatory mitigation is required for all issued IP projects. The applicant, or authorized representative, shall complete all fields below and submit this MSS along with their required pre-application materials in advance of the mandatory pre-application meeting. A final version of the MSS shall then be re-submitted along with the final IP application following completion of the pre-application meeting reflecting any resulting alterations to the proposed project representing the final wetland compensatory mitigation details.

<input type="checkbox"/> Preliminary mitigation summary sheet	<input checked="" type="checkbox"/> Final mitigation summary sheet
---	--

CONTACT INFORMATION	APPLICANT	AUTHORIZED REPRESENTATIVE
Name (Last, First, Middle Initial)		
Title		
Organization / Entity	WI Department of Transportation	Southeast Region
Mailing Address	141 NW Barstow Street	
City, State, Zip Code	Waukesha, WI 53187	
Email Address		
Phone Number (incl. Area Code)		

PROJECT INFORMATION	
Project Name	Braun Road Reconstruction / Expansion
Mitigation Service Area	Upper Illinois (0.88acre) / SW Lake Michigan (0.39acre)
Latitude---Longitude Coordinates	
Municipality Location (City, Village, Town)	Village of Mount Pleasant, Racine County
Township --- Range --- Section	T3N, R22E, Sections 28,29,30,31,32,33
County Location	Racine
Project Description (including description of wetland impact)	Reconstruction of Braun Road from I-94 East Frontage Road to CTH H

PROPOSED UNAVOIDABLE WETLAND IMPACTS BY COVER TYPE AND DELINEATED ACREAGE	
Acreage (to nearest 0.01)	Wetland Cover Type
Upper IL - 0.13 acre	Shallow, Open Water
	Deep and Shallow Marshes
	Sedge Meadows
Upper IL - 0.75 acre, SWLM - 0.39 acre	Fresh (Wet) Meadow
	Wet to Wet-Mesic Prairie
	Calcareous Fens
	Bogs (Open or Coniferous)
	Shrub – Carr or Alder Thicket
	Hardwood or Coniferous Swamps
	Floodplain Forests
	Seasonally Flooded Basins

CHECK SELECTION	PROPOSED COMPENSATORY MITIGATION	EXPLAIN WHY TYPE WAS CHOSEN / LIST CONTACTED PARTY	EXPLAIN WHETHER CREDITS ARE AVAILABLE
<input type="checkbox"/>	Credit Purchase: Mitigation Bank		
<input checked="" type="checkbox"/>	Credit Purchase: WI Wetland Conservation Trust (In-Lieu Fee)		
<input type="checkbox"/>	Permittee Responsible Mitigation		

Notice: Pursuant to § 281.36, Wis. Stats., this Mitigation Summary Worksheet (MSS) must be completed in its entirety and submitted to the Department of Natural Resources (DNR) prior to the required pre-application meeting set up by the DNR. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin Open Records law [§§ 19.31 – 19.39, Wis. Stats.]

This MSS is required for Wisconsin Department of Natural Resources Wetland Individual Permit (IP) applications as wetland compensatory mitigation is required for all issued IP projects. The applicant, or authorized representative, shall complete all fields below and submit this MSS along with their required pre-application materials in advance of the mandatory pre-application meeting. A final version of the MSS shall then be re-submitted along with the final IP application following completion of the pre-application meeting reflecting any resulting alterations to the proposed project representing the final wetland compensatory mitigation details.

<input type="checkbox"/> Preliminary mitigation summary sheet	<input checked="" type="checkbox"/> Final mitigation summary sheet
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CONTACT INFORMATION	APPLICANT	AUTHORIZED REPRESENTATIVE
Name (Last, First, Middle Initial)		
Title		
Organization / Entity	WI Department of Transportation	Southeast Region
Mailing Address	141 NW Barstow Street	
City, State, Zip Code	Waukesha, WI 53187	
Email Address		
Phone Number (incl. Area Code)		

PROJECT INFORMATION	
Project Name	CTH KR Reconstruction / Expansion
Mitigation Service Area	Upper Illinois (2.46 acre) / SW Lake Michigan (1.69 acre)
Latitude---Longitude Coordinates	
Municipality Location (City, Village, Town)	Village of Mount Pleasant, Racine County
Township --- Range --- Section	T3N, R22E, Sections 31,32,33
County Location	Racine
Project Description (including description of wetland impact)	Reconstruction of CTH KR from I-94 East Frontage Road to CTH H

PROPOSED UNAVOIDABLE WETLAND IMPACTS BY COVER TYPE AND DELINEATED ACREAGE	
Acreage (to nearest 0.01)	Wetland Cover Type
Upper IL - 0.25 acre	Shallow, Open Water
Upper IL - 0.11	Deep and Shallow Marshes
	Sedge Meadows
Upper IL - 1.94 acre, SWLM - 1.02 acre	Fresh (Wet) Meadow
	Wet to Wet-Mesic Prairie
	Calcareous Fens
	Bogs (Open or Coniferous)
Upper IL - 0.16 SWLM - 0.33	Shrub – Carr or Alder Thicket
SWLM - 0.34	Hardwood or Coniferous Swamps
	Floodplain Forests
	Seasonally Flooded Basins

CHECK SELECTION	PROPOSED COMPENSATORY MITIGATION	EXPLAIN WHY TYPE WAS CHOSEN / LIST CONTACTED PARTY	EXPLAIN WHETHER CREDITS ARE AVAILABLE
<input type="checkbox"/>	Credit Purchase: Mitigation Bank		
<input checked="" type="checkbox"/>	Credit Purchase: WI Wetland Conservation Trust (In-Lieu Fee)		
<input type="checkbox"/>	Permittee Responsible Mitigation		

Notice: Pursuant to § 281.36, Wis. Stats., this Mitigation Summary Worksheet (MSS) must be completed in its entirety and submitted to the Department of Natural Resources (DNR) prior to the required pre-application meeting set up by the DNR. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin Open Records law [§§ 19.31 – 19.39, Wis. Stats.]

This MSS is required for Wisconsin Department of Natural Resources Wetland Individual Permit (IP) applications as wetland compensatory mitigation is required for all issued IP projects. The applicant, or authorized representative, shall complete all fields below and submit this MSS along with their required pre-application materials in advance of the mandatory pre-application meeting. A final version of the MSS shall then be re-submitted along with the final IP application following completion of the pre-application meeting reflecting any resulting alterations to the proposed project representing the final wetland compensatory mitigation details.

<input type="checkbox"/> Preliminary mitigation summary sheet		<input checked="" type="checkbox"/> Final mitigation summary sheet	
CONTACT INFORMATION		APPLICANT	
Name (Last, First, Middle Initial)			
Title			
Organization / Entity		WI Department of Transportation Southeast Region	
Mailing Address		141 NW Barstow Street	
City, State, Zip Code		Waukesha, WI 53187	
Email Address			
Phone Number (incl. Area Code)			
PROJECT INFORMATION			
Project Name		International Drive Extension	
Mitigation Service Area		SW Lake Michigan (0.74 acre)	
Latitude---Longitude Coordinates			
Municipality Location (City, Village, Town)		Village of Mount Pleasant, Racine County	
Township --- Range --- Section		T3N, R22E, Sections 17,18,19,20	
County Location		Racine	
Project Description (including description of wetland impact)		Extension of International Drive	
PROPOSED UNAVOIDABLE WETLAND IMPACTS BY COVER TYPE AND DELINEATED ACREAGE			
Acreage (to nearest 0.01)		Wetland Cover Type	
0.28 acre		Shallow, Open Water	
0.28 acre		Deep and Shallow Marshes	
		Sedge Meadows	
0.18 acre		Fresh (Wet) Meadow	
		Wet to Wet-Mesic Prairie	
		Calcareous Fens	
		Bogs (Open or Coniferous)	
		Shrub – Carr or Alder Thicket	
		Hardwood or Coniferous Swamps	
		Floodplain Forests	
		Seasonally Flooded Basins	
CHECK SELECTION	PROPOSED COMPENSATORY MITIGATION	EXPLAIN WHY TYPE WAS CHOSEN / LIST CONTACTED PARTY	EXPLAIN WHETHER CREDITS ARE AVAILABLE
<input type="checkbox"/>	Credit Purchase: Mitigation Bank		
<input checked="" type="checkbox"/>	Credit Purchase: WI Wetland Conservation Trust (In-Lieu Fee)		
<input type="checkbox"/>	Permittee Responsible Mitigation		

Wetland Impact Summary Table – WIS 142 - County E (Mainline) Project ID # 1030-23-79

Wetland Impact Figure	Graef Wetland ID (2017 unless noted)	Latitude Longitude (Decimal Degrees)	Project Location/Station	WisDOT Wetland Type	Temporary Impact (acres/sf) + # of days impact will occur	Fill Impact Acres (SF)	Cut Impact Acres (SF)	Total Permanent Impact Acres (Fill + Cut)	Debit Wetland Type	Ratio	Debit (acres)	Mitigation Bank	Major Watershed Basin (Mississippi or Great Lakes)	Additional Notes
142-E1, 142-E2	WA-16	42.6228° N 87.9521° W	IH-94 NB RT, STA 486+00-490+25	SM (D)	0	0.074 (3,221)	0.198 (8,623)	0.272	M	1.0	0.272	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 1.8 & FQI value 3.5; wet ditch impact
142-E1, 142-E3, 142-E4	WA-17	42.6256° N 87.9521° W	IH-94 NB RT, STA 483+60-520+00	M (D)	0	0.702 (30,594)	0	0.702	M	1.0	0.702	Jacobson	Mississippi	Dominant Wetland Vegetation is Reed Canary Grass; C value 2.4 & FQI value 7.3; wet ditch impact
142-E1, 142-E5	WA-18	42.6330° N 87.9521° W	IH-94 NB RT, STA 524+35-525+00	SM (D)	0	0	0.014 (626)	0.014	M	1.0	0.014	Jacobson	Mississippi	Additional wetland impacts on CTH E interchange. Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 2.5 & FQI value 3.5; wet ditch impact
142-E1, 142-E4, 142-E6	WA-36	42.6308° N 87.9528° W	IH-94 SB LT, STA 499+10-525+00	SM (D)	0	0.667 (29,076)	0	0.667	M	1.0	0.667	Jacobson	Mississippi	Additional wetland impacts on CTH E interchange; Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 1.0 & FQI value 1.7; wet ditch impact
142-E1, 142-E2	WA-37	42.6239° N 87.9528° W	IH-94 SB LT, STA 486+00-496+45	SM (D)	0	0.191 (8,341)	0	0.191	M	1.0	0.191	Jacobson	Mississippi	Dominant Wetland Vegetation is Common Reed; C value 3.3 & FQI value 6.5; wet ditch impact
Total											1.846	1.846		

Wetland Impact Summary Table - County E Interchange Project ID # 1030-23-72

Wetland Impact Figure	Graef Wetland ID (2017 unless noted)	Latitude Longitude (Decimal Degrees)	Project Location/Station	WisDOT Wetland Type	Temporary Impact (acres/ft) + # of days impact will occur	Fill Impact Acres (SF)	Cut Impact Acres (SF)	Total Permanent Impact Acres (Fill + Cut)	Debit Wetland Type	Ratio	Debit (acres)	Mitigation Bank	Major Watershed Basin (Mississippi or Great Lakes)	Additional Notes
Sheet 2	W-18	42.6334 N, 87.9521 W	526+00 RT	SM (D)	0	0.005 (203)	0.031 (1,327)	0.036	M	1.0	0.035	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 2.5 & FQI value 3.5; wet ditch impact
Sheet 4	W-19	42.6471 N, 87.9522 W	576+00 RT	SM (D)	0	0.206 (8,977)	0.006 (272)	0.212	M	1.0	0.212	Jacobson	Mississippi	Dominant Wetland Vegetation is Common Reed; C value 1.0 & FQI value 1.0; wet ditch impact
Sheet 4	W-32	42.6461 N, 87.9530 W	572+50 LT	SM (D)	0	0.383 (16,862)	0.015 (637)	0.397	M	1.0	0.397	Jacobson	Mississippi	Waterway Characteristics; Dominant Wetland Vegetation is Common Reed & Narrowleaf Cattail; C value 4.0 & FQI value 5.7; wet ditch impact
Sheet 4	W-33	42.6449 N, 87.9531 W	568+00 LT	M (D)	0	0.007 (299)	0.184 (7,992)	0.190	M	1.0	0.190	Jacobson	Mississippi	Dominant Wetland Vegetation is Common Reed and Expressway Sedge; C value 1.0 & FQI value 1.0; wet ditch impact
Sheet 3	W-34	42.6389 N, 87.9530 W	546+00 LT	SM (D)	0	0.152 (6,608)	0	0.152	M	1.0	0.152	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail & Seaside Goldenrod; C value 1.0 & FQI value 1.0; wet ditch impact
Sheet 2	W-35	42.6358 N, 87.9532 W	536+00 LT	SM (D)	0	0.014 (596)	0	0.014	M	1.0	0.014	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail; C value 3.5 & FQI value 4.9; wet ditch impact
Sheet 2	W-36	42.6334 N, 87.9529 W	526+00 LT	SM (D)	0	0.127 (5,536)	0	0.127	M	1.0	0.127	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 1.0 & FQI value 1.7; wet ditch impact
Sheet 3	W-40	42.6433 N, 87.9535 W	562NW+00 LT	SS	0	0.000 (1,809)	0.042 (1,809)	0.042	M	1.2	0.050	Jacobson	Mississippi	Waterway Characteristics; Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 2.2 & FQI value 3.0
Sheet 2	W-79	42.6367 N, 87.9521 W	538+00 RT	SM (D)	0	0.030 (1,285)	0.000	0.030	M	1.0	0.030	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 2.3 & FQI value 4.0; wet ditch impact
Sheet 2	W-80	42.6376 N, 87.9518 W	541SE+50 RT	SM (D)	0	0.004 (161)	0.004	0.004	M	1.0	0.004	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail; C value 0.0 & FQI value 0.0; wet ditch impact
Sheet 2-3	W-81	42.6377 N, 87.9518 W	542SE+00 RT	SM (D)	0	0.077 (3,336)	0	0.077	M	1.0	0.077	Jacobson	Mississippi	Dominant Wetland Vegetation is Common Reed; C value 1.3 & FQI value 3.5; wet ditch impact
Sheet 2-3	W-82	42.6378 N, 87.9520 W	542SE+00 RT/LT	SM (D)	0	0.168 (7,321)	0	0.168	M	1.0	0.168	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 2.5 & FQI value 5.0; wet ditch impact
Sheet 3	W-93	42.6403 N, 87.9511 W	154+00 RT	SM (D)	0	0.047 (2,061)	0.096 (4,287)	0.146	M	1.0	0.146	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Common Reed; C value 2.5 & FQI value 5.0; wet ditch impact
Sheet 4	W-96	42.6460 N, 87.9523 W	572+00 RT	SM (D)	0	0.276 (12,011)	0.006 (240)	0.281	M	1.0	0.281	Jacobson	Mississippi	Waterway Characteristics; Dominant Wetland Vegetation is Common Reed; C value 1.0 & FQI value 1.4; wet ditch impact
Sheet 3-4	W-87	42.6411 N, 87.9520 W	554NE+00 RT/LT	SM (D)	0	0.4318 (18,809)	0.080 (3,480)	0.512	M	1.0	0.512	Jacobson	Mississippi	Waterway Characteristics; Dominant Wetland Vegetation is Narrowleaf Cattail and Common Reed; C value 2.7 & FQI value 11.2
Sheet 3	W-89	42.6411 N, 87.9522 W	554+00 RT	SM (D)	0	0.278 (12,098)	0	0.278	M	1.0	0.278	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Common Reed; C value 2.7 & FQI value 11.2; This wetland impact was previously mitigated at the Jacobson Mitigation Bank in Walworth County and impacted during the CTH E Interchange east and west frontage roads construction in 2010 under WisDOT project ID's 1030-23-70 & 1030-23-71
Sheet 2	W-109	42.6372 N, 87.9530 W	540+00 LT	SM (D)	0	0.041 (1,779)	0.011 (488)	0.052	M	1.0	0.052	Jacobson	Mississippi	Dominant Wetland Vegetation is Common Reed; C value 2.1 & FQI value 6.0; wet ditch impact
Sheet 3	W-119	42.6413 N, 87.9530 W	555+00 LT	SM (D)	0	0.104 (4,517)	0	0.104	M	1.0	0.104	Jacobson	Mississippi	Wet ditch impact
Total													2,827	

Wetland Impact Summary Table – County E to County KR (Mainline) Project ID # 1035-03-79

Wetland Impact Figure	Graef Wetland ID (2017 unless noted)	Latitude Longitude (Decimal Degrees)	Project Location/Station	WisDOT Wetland Type	Temporary Impact (acres/sf) + # of days impact will occur	Fill Impact Acres (SF)	Cut Impact Acres (SF)	Total Permanent Impact Acres (Fill + Cut)	Debit Wetland Type	Ratio	Debit (acres)	Mitigation Bank	Major Watershed Basin (Mississippi or Great Lakes)	Additional Notes	
E-KR1, E-KR2	W-19	42.6496° N 87.9522° W	IH-94 NB RT, STA 582+00-587+00	SM (D)	0	0.124 (5,404)	0	0.124	M	1.0	0.124	Jacobson	Mississippi	Additional wetland impacts on CTH E interchange. Dominant Wetland Vegetation is Common Reed; C value 1.0 & FQI value 1.0; wet ditch impact	
E-KR1, E-KR3	W-20	42.6530° N 87.9524° W	IH-94 NB RT, STA 580+30-604+05	SM (D)	0	0.268 (11,691)	0	0.268	M	1.0	0.268	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail; C value 2.0 & FQI value 3.5; wet ditch impact	
E-KR1, E-KR4	W-21	42.6567° N 87.9524° W	IH-94 NB RT, STA 605+40-614+20	SM (D)	0	0.177 (7,723)	0	0.177	M	1.0	0.177	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 2.0 & FQI value 3.5; wet ditch impact	
E-KR1, E-KR4	W-22A	42.6603° N 87.9525° W	IH-94 NB RT, STA 621+30-626+55	M	0	0.050 (2,183)	0	0.050	M	1.0	0.050	Jacobson	Mississippi	Wet ditch impact	
E-KR1, E-KR5	W-22B	42.6619° N 87.9525° W	IH-94 NB RT, STA 629+35-630+70	M	0	0.012 (541)	0	0.012	M	1.0	0.012	Jacobson	Mississippi	Wet ditch impact	
E-KR1, E-KR6	W-22C	42.6626° N 87.9525° W	IH-94 NB RT, STA 632+25-632+50	M	0	0.004 (176)	0	0.004	M	1.0	0.004	Jacobson	Mississippi	Additional wetland impacts on CTH KR interchange; wet ditch impact	
E-KR1, E-KR5	W-23	42.6608° N 87.9523° W	IH-94 NB RT, STA 623+80-628+05	SM (D)	0	0.097 (4,233)	0	0.097	M	1.0	0.097	Jacobson	Mississippi	Dominant Wetland Vegetation is Common Reed, Narrowleaf Cattail and Reed Canary Grass; C value 2.3 & FQI value 4.0; wet ditch impact	
E-KR1, E-KR6	W-28	42.6622° N 87.9531° W	IH-94 SB LT, STA 630+05-632+50	SM (D)	0	0.078 (3,411)	0	0.078	M	1.0	0.078	Jacobson	Mississippi	Additional wetland impacts on CTH KR interchange; Dominant Wetland Vegetation is Common Reed and Reed Canary Grass; C value 3.2 & FQI value 9.7; wet ditch impact	
E-KR1, E-KR4, E-KR5	W-29	42.6581° N 87.9531° W	IH-94 SB LT, STA 607+90-628+60	SM (D)	0	0.478 (20,812)	0	0.478	M	1.0	0.478	Jacobson	Mississippi	Dominant Wetland Vegetation is Common Reed and Narrowleaf Cattail; C value 2.5 & FQI value 3.5; wet ditch impact	
Total											1.288				

Wetland Impact Summary Table - County KR Interchange (Structure and Crossroads) Project ID # 1035-03-71

Wetland Impact Figure	Graef Wetland ID (2017 unless noted)	Latitude Longitude (Decimal Degrees)	Project Location/Station	WisDOT Wetland Type	Temporary Impact (acres/sf) + # of days impact will occur	Fill Impact Acres (SF)	Cut Impact Acres (SF)	Total Permanent Impact Acres (Fill + Cut)	Debit Wetland Type	Ratio	Debit (acres)	Mitigation Bank	Major Watershed Basin (Mississippi or Great Lakes)	Additional Notes
11CR-1	W-121	42.6694 -87.9595	29+75	M	0	0.000 (895)	0.021 (895)	0.021	M	1.0	0.021	Jacobson	Mississippi	
11CR-1	W-122	42.6694 -87.9581	36+00	M	0	0.096 (2,871)	0	0.096	M	1.0	0.096	Jacobson	Mississippi	Wet ditch impact
11CR-1	W-123	42.6697 -87.9601	31+50	WS	0	0.000 (1,754)	0.040 (1,754)	0.040	M	1.2	0.048	Jacobson	Mississippi	
11CR-2	W-1*	42.6698 -87.9513	54+00	WS	0	0.240 (10,423)	0	0.240	M	1.2	0.288	Jacobson	Mississippi	
11CR-2	W-28*	42.6658 -87.9526	47+25	SM (D)	0	0.152 (6,816)	0	0.152	M	1.0	0.152	Jacobson	Mississippi	Dominant Wetland Vegetation is Common Reed and Reed Canary Grass; C value 3.2 & FQI value 9.7; wet ditch impact
11CR-2	W-41*	42.6686 -87.9515	53+75	SM	0	0.145 (6,297)	0.265 (11,535)	0.410	M	1.0	0.410	Jacobson	Mississippi	Wet ditch impact
11CR-2	W-115	42.6692 -87.9566	39+75	M (D)	0	0.100 (4,354)	0	0.100	M	1.0	0.100	Jacobson	Mississippi	Dominant Wetland Vegetation is Reed Canary Grass; C value 2.5 & FQI value 8.9
11CR-2	W-107	42.6696 -87.9574	38+00	M (D)	0	0.026 (1,127)	0.060 (2,622)	0.086	M	1.0	0.086	Jacobson	Mississippi	Dominant Wetland Vegetation is Reed Canary Grass; C value 3.4 & FQI value 9.1; wet ditch impact
11CR-2	W-99*	42.6697 -87.955	42+50	M (D)	0	0.417 (18,114)	0	0.417	M	1.0	0.417	Jacobson	Mississippi	Dominant Wetland Vegetation is Reed Canary Grass; C value 0.0 & FQI value 0.0; wet ditch impact
11CR-2	W-42	42.6696 -87.9515	54+25	SM (D)	0	0.319 (13,893)	0	0.319	M	1.0	0.319	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Reed Canary Grass; C value 2.6 & FQI value 10.3; wet ditch impact
11CR-2	W-102*	42.6712 -87.9532	66+00	SM (D)	0	0.013 (563)	0	0.013	M	1.0	0.013	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail and Seaside Goldenrod; C value 2.0 & FQI value 2.8; wet ditch impact
11CR-2	W-114*	42.6706 -87.9529	51+00	SM (D)	0	0.018 (802)	0	0.018	M	1.0	0.018	Jacobson	Mississippi	Dominant Wetland Vegetation is Reed Canary Grass; C value 1.5 & FQI value 2.1; wet ditch impact
11CR-3	W-117	42.6698 -87.9503	56+75	SM	0	0.135 (5,883)	0	0.135	M	1.0	0.135	Jacobson	Mississippi	
11CR-3	W-111	42.6693 -87.9503	56+80	M (D)	0	0.061 (2,670)	0	0.061	M	1.0	0.061	Jacobson	Mississippi	Dominant Wetland Vegetation is Reed Canary Grass; C value 2.4 & FQI value 8.8; wet ditch impact
11CR-3	W-110	42.6692 -87.9477	62+25	M (D)	0	0.066 (2,858)	0	0.066	M	1.0	0.066	Jacobson	Mississippi	Dominant Wetland Vegetation is Narrowleaf Cattail & Reed Canary Grass; C value 3.4 & FQI value 12.8; wet ditch impact
11CR-3	W-116	42.6700 -87.9477	63+25	M (D)	0	0.240 (10,474)	0	0.240	M	1.0	0.240	Jacobson	Mississippi	Dominant Wetland Vegetation is Reed Canary Grass; C value 2.8 & FQI value 9.3
Total											2.414	2.470		

*Wetland spans two project I.D.s. Additional impacts shown in I.D. 1035-03-71

Wetland Impact Summary Table - County KR to WIS 11 (Mainline) Project ID # 1030-24-79

Wetland Impact Figure	Graef Wetland ID	Latitude Longitude (Decimal Degrees)	Project Location/Station	WisDOT Wetland Type	Temporary Impact (acres) + # of days impact will occur	Fill Impact Acres (SF)	Cut Impact Acres (SF)	Total Permanent Impact Acres (Fill + Cut)	Debit Wetland Type	Ratio	Debit (acres)	Mitigation Bank	Major Watershed Basin (Mississippi or Great Lakes)	Additional Notes
12M-1	W-101*	42.6775, -87.9533	687+00	SM	0	0.080 (3,502)	0	0.080	M	1.0	0.080	Jacobson	Mississippi	Partially mitigated on ID 1030-24-78; wet ditch impact
12M-1	W-7	42.6804, -87.9528	693+00	M	0	0.039 (1,697)	0	0.039	M	1.0	0.039	Jacobson	Mississippi	Partially mitigated on ID 1030-24-77
12M-2	W-8	42.6816, -87.9527	705+00	SM	0	0.239 (10,397)	0	0.239	M	1.0	0.239	Jacobson	Mississippi	Wet ditch impact
12M-2	W22-2A	42.6809, -87.9533	699+00	SM	0	0.066 (2,884)	0	0.066	M	1.0	0.066	Jacobson	Mississippi	Partially mitigated on ID 1030-24-78; wet ditch impact
12M-3	W-10	42.6854, -87.9527	715+00	SM	0	0.299 (13,023)	0	0.299	M	1.0	0.299	Jacobson	Mississippi	Wet ditch impact
12M-3	W-14	42.6856, -87.9535	717+25	SM	0	0.171 (7,440)	0	0.171	M	1.0	0.171	Jacobson	Mississippi	Wet ditch impact
12M-3	W-22-1**	42.6880, -87.9529	722+00	SM	0	0.630 (27,453)	0	0.630	M	1.0	0.630	Jacobson	Mississippi	Partially mitigated on ID 1030-24-77; wet ditch impact
12M-3	W-22-2D**	42.6884, -87.9536	726+50	SM	0	0.502 (21,862)	0	0.502	M	1.0	0.502	Jacobson	Mississippi	Partially mitigated on ID 1030-24-78; wet ditch impact
						Total	0	2.026			2.026			

*Wetland spans two project I.D.s. Additional impacts shown in I.D. 1035-03-72

**Wetland spans two project I.D.s. Additional impacts shown in I.D. 1030-24-72.

Wetland Impact Summary Table – WIS 11 Interchange (Mainline and Ramps) Project ID # 1030-24-72

Wetland Impact Figure	Graef Wetland ID (2015)	Latitude Longitude (Decimal Degrees)	Project Location/Station	WisDOT Wetland Type	Temporary Impact (acres) + # of days impact will occur	Fill Impact Acres (SF)	Cut Impact Acres (SF)	Total Permanent Impact Acres (Fill + Cut)	Debit Wetland Type	Ratio	Debit (acres)	Mitigation Bank	Major Watershed Basin (Mississippi or Great Lakes)	Additional Notes
13M-1	W-22-20**	42.6894, -87.9537	730+00	SM	0	0.018 (769)	0.010 (412)	0.028	M	1.0	0.028	Jacobson	Mississippi	Wet ditch impact
13M-1	W-3-3	42.6906, -87.954	734+50	SM	0	0.088 (3,846)	0.024 (1,057)	0.112	M	1.0	0.112	Jacobson	Mississippi	Partially mitigated on ID 1030-24-70; wet ditch impact
13M-1	W-22-1**	42.6894, -87.9531	730+50	SM	0	0.028 (1,231)	0	0.028	M	1.0	0.028	Jacobson	Mississippi	Partially mitigated on ID 1030-24-70; wet ditch impact
13M-1	W-12	42.6918, -87.9531	736+00	M	0	0.419 (18,243)	0.018 (802)	0.437	M	1.0	0.437	Jacobson	Mississippi	Partially mitigated on ID 1030-24-70
13M-2	W-16	42.6943, -87.956	750+12	SM	0	0.043 (1,851)	0	0.043	M	1.0	0.043	Jacobson	Mississippi	Wet ditch impact
13M-2	W-3-1*	42.6951, -87.9555	751+75	M	0	0.418 (18,226)	0.068 (2,955)	0.486	M	1.0	0.486	Jacobson	Mississippi	
13M-2	W-3-2	42.6936, -87.955	746+50	SM	0	0.240 (10,459)	0.074 (3,232)	0.314	M	1.0	0.314	Jacobson	Mississippi - River	Partially mitigated on ID 1030-24-70
13M-2	W-15*	42.6954, -87.9568	754+00	SM	0	0	0.017 (745)	0.017	M	1.0	0.017	Jacobson	Mississippi	Wet ditch impact
13M-3	W-30	42.6934, -87.9526	746+85	SM	0	0.079 (3,440)	0	0.079	M	1.0	0.079	Jacobson	Mississippi	Partially mitigated on ID 1030-24-70
13M-3	W-29	42.6939, -87.9524	747+50	M	0	0.130 (5,644)	0	0.130	M	1.0	0.130	Jacobson	Mississippi	Partially mitigated on ID 1030-24-70
13M-3	W-21*	42.6949, -87.951	755+00	M	0	0.239 (10,390)	0.014 (594)	0.253	M	1.0	0.253	Jacobson	Mississippi	Partially mitigated on ID 1030-24-70
13M-3	W-22*	42.6947, -87.9521	750+00	SM	0	0.283 (12,342)	0	0.276	M	1.0	0.276	Jacobson	Mississippi River	Wet ditch impact
13M-3	W-35	42.6970, -87.953	757+68	SM	0	0	0.018 (801)	0.018	M	1.0	0.018	Jacobson	Mississippi	Partially mitigated on ID 1030-24-74; wet ditch impact
13M-4	W-32	42.6978, -87.9544	760+00	SM	0	0.145 (6,293)	0.001 (59)	0.146	M	1.0	0.146	Jacobson	Mississippi	Partially mitigated on ID 1030-24-74; wet ditch impact
13M-4	W-42	42.6994, -87.9544	766+91	SM	0	0	0.016 (690)	0.016	M	1.0	0.016	Jacobson	Mississippi	Wet ditch impact
13M-4	W-40	42.7012, -87.9541	773+25	SM	0	0.018 (779)	0	0.018	M	1.6	0.029	Hope Marsh II	Great Lakes	
13M-4	W-44	42.7024, -87.9541	776+00	SM	0	0.014 (587)	0	0.014	M	1.6	0.022	Hope Marsh II	Great Lakes	Partially mitigated on ID 1030-24-74; wet ditch impact
13M-5	W-36	42.6979, -87.9532	760+00	SM	0	0.025 (1,079)	0	0.025	M	1.0	0.025	Jacobson	Mississippi	Partially mitigated on ID 1030-24-74; wet ditch impact
13M-5	W-58	42.6992, -87.9532	766+00	SM	0	0.038 (1,634)	0	0.038	M	1.0	0.038	Jacobson	Mississippi	Partially mitigated on ID 1030-24-74; wet ditch impact
13M-5	W-59	42.7009, -87.9535	772+00	SM	0	0.061 (2,653)	0	0.061	RPE	1.6	0.098	Hope Marsh II	Great Lakes	Partially mitigated on ID 1030-24-70; wet ditch impact
13M-5	W-3-5	42.7024, -87.953	773+73	M, SM	0	0	0.100 (4,340)	0.100	RPE	1.6	0.160	Hope Marsh II	Great Lakes	Partially mitigated on ID 1030-24-70; wet ditch impact
							Total	2.639			2.755			

**Wetland spans two project I.D.s. Additional impacts shown in I.D. 1030-24-71

**Wetland spans two project I.D.s. Additional impacts shown in I.D. 1030-24-79

Wetland Impact Summary Table – WIS 20 Crossroad Project ID # 1033-02-71

Wetland Impact Figure	Gravel Wetland ID (2016 unless noted)	Latitude Longitude (Decimal Degrees)	Project Location/Station	WisDOT Wetland Type	Temporary Impact (acres/sf) + # of days impact will occur	Fill Impact Acres (SF)	Cut Impact Acres (SF)	Total Permanent Impact Acres (Fill + Cut)	Debit Wetland Type	Ratio	Debit (acres)	Mitigation Bank	Major Watershed Basin (Mississippi or Great Lakes)	Additional Notes
Sheet 2-3	W-1 (2014)	42.7279 N, 87.9603 W	275+00 LT	SM (D)		0.155 (6,741)	0.074 (3,243)	0.229	RPE	1.5	0.344	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-3	42.7245 N, 87.9571 W	2858+25 LT	M (D)		0.003 (108)	0.000 (18)	0.003	RPE	1.5	0.004	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-4	42.7252 N, 87.9566 W	2861+00 RT	M (D)		0	0.040 (1,731)	0.040	RPE	1.5	0.060	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-5	42.7295 N, 87.9556 W	289+50 RT	M (D)		0	0.022 (938)	0.022	RPE	1.5	0.032	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-6	42.7264 N, 87.9546 W	861SW+50 LT	SM (D)		0	0.061 (2,665)	0.061	RPE	1.5	0.092	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-7	42.7254 N, 87.9544 W	861SW+50 RT	SM (D)		0.009 (377)	0.020 (850)	0.028	RPE	1.5	0.042	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 2-3	W-8 (2014)	42.7269 N, 87.9585 W	281+00 RT	SM (D)		0.126 (5,505)	0.159 (6,923)	0.285	RPE	1.5	0.428	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 4	W-9	42.7241 N, 87.9496 W	307+00 RT	SM (D)		0.248 (10,815)	0.151 (6,580)	0.399	RPE	1.5	0.589	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-10	42.7248 N, 87.9518 W	300+50 RT	M (D)		0.010 (430)	0.076 (3,322)	0.086	RPE	1.5	0.129	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-11	42.7247 N, 87.9533 W	859SE+50 RT	SM (D)		0	0.126 (5,483)	0.126	RPE	1.5	0.189	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-12	42.7250 N, 87.9517 W	300+50	M (D)		0	0.097 (4,210)	0.097	RPE	1.5	0.145	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-13	42.7267 N, 87.9527 W	863NE+00 RT	SM (D)		0.061 (2,635)	0.076 (3,298)	0.136	RPE	1.5	0.204	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-14	42.7256 N, 87.9528 W	862NE+13 RT	SM (D)		0	0.002 (96)	0.003	RPE	1.5	0.004	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 4	W-15	42.7232 N, 87.9455 W	318+50	M (D)		0.001 (62)	0	0.001	RPE	1.5	0.002	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 4	W-16	42.7235 N, 87.9471 W	314+00	SM (D)		0	0.050 (2,170)	0.050	RPE	1.5	0.075	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-18	42.7267 N, 87.9529 W	866NE+00 LT	SM (D)		0	0.040 (1,747)	0.040	RPE	1.5	0.060	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-19	42.7264 N, 87.9554 W	289+50 LT	M (D)		0	0.008 (346)	0.008	RPE	1.5	0.012	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-19a	42.7267 N, 87.9547 W	866NW+00 LT	M (D)		0	0.037 (1,605)	0.037	RPE	1.5	0.055	Hope Marsh II	Great Lakes	Wet ditch impact
Sheet 3	W-20	42.7265 N, 87.9544 W	865NW+50 RT	M (D)		0.004 (182)	0	0.004	RPE	1.5	0.006	Hope Marsh II	Great Lakes	Wet ditch impact
Total											2.483			

Waterway Impact Number	Waterway Impact Description	Creek/Tributary below OHWM	Fill				Debit Ratio	Jacobson Bank Debit
			Acres	Type	SF	LF		
1	Unnamed Tributary to Kilbourn Road Ditch CTH E to CTH KR Mainline	Sta 624+00	0.022	Riprap	252	14	1.0	0.022
				Pipe/End wall	702	39		
				Roadway	0	0		
2	Unnamed Tributary to Kilbourn Road Ditch CTH KR Interchange Mainline and Ramps	Sta 665+30 RT	0.035	Riprap	0	0	1.0	0.035
				Riprap	0	0		
				Roadway	1,536	120		
3	Unnamed Tributary to Kilbourn Road Ditch CTH KR Interchange Mainline and Ramps	Sta 666+15 LT	0.002	Roadway	98	15	1.0	0.002
				Endwall	52	8		
				Roadway	79	15		
4	Unnamed Tributary to Kilbourn Road Ditch CTH KR Interchange Crossroad	Sta 56+75	0.135	Riprap	0	0	1.0	0.135
				Endwall	0	0		
				Roadway	2,766	180		
5	Unnamed Tributary to Kilbourn Road Ditch STH 11 Interchange Mainline and Ramps	Sta 747+50 SB On Ramp, Sta 747+00 SB Off Ramp"	0.171	Riprap	0	0	1.0	0.171
				Endwall	0	0		
				Roadway	7,456	222		
6	Unnamed Tributary to Kilbourn Road Ditch STH 11 Interchange Crossroad	Sta 127+00	0.061	Riprap	196	24	1.0	0.061
				Endwall	120	8		
				Roadway	2,347	100		
Total "Waters of the U.S." Impacts			0.426	--	15,604	745	--	0.426

Wetland Impact Summary Table – STH 20 to CTH K (Mainline-South)

Exhibit #	CH2M Wetland #	Wetland Station	Area of Fill (Acres)	Area of Fill (Sq. Ft.)	Area of Cut (Acres)	Area of Cut (Sq. Ft.)	Total Permanent Impacts	Wetland Type	Debit Wetland Type	Debit Ratio	Bank Debits (acres)	Mitigation Bank
	I.D. 1030-11-80											
1	W-03	I-94 Sta. 895+95 – 907+84 LT	0.038	1,658	0	0	0.038	M(D)	RPE	1.0	0.04	Hope Marsh Phase II
	W-04	I-94 Sta. 917+72 – 423+47 LT	0.091	3,965	0	0	0.091	M(D)	RPE	1.0	0.09	Hope Marsh Phase II
2	W-05	I-94 Sta. 924+27 – 941+70 LT	0.245	10,667	0.001	42	0.246	M(D)	RPE	1.0	0.25	Hope Marsh Phase II
3	W-06*	I-94 Sta. 949+17 – 968+00 LT	0.635	27,669	0	0	0.635	M(D)	RPE	1.0	0.64	Hope Marsh Phase II
4	W-35	I-94 Sta. 903+10 – 924+09 RT	0.82	35,726	0.014	626	0.834	M(D)	RPE	1.0	0.83	Hope Marsh Phase II
5	W-34*	I-94 Sta. 926+72 – 968+00 RT	1.578	68,762	0	0	1.578	M(D)	RPE	1.0	1.58	Hope Marsh Phase II
6			3.407	148,447	0.015	668	3.422					3.43
	Impact Totals											
	Debit Totals											

Wetland Impact Summary Table – STH 20 to CTH K (Mainline-North)

Exhibit #	CH2M Wetland #	Wetland Station	Area of Fill (Acres)	Area of Fill (Sq. Ft.)	Area of Cut (Acres)	Area of Cut (Sq. Ft.)	Total Permanent Impacts	Wetland Type	Debit Wetland Type	Debit Ratio	Bank Debits (acres)	Mitigation Bank
	I.D. 1030-11-79											
7	W-06*	I-94 Sta. 968+00 – 986+46 LT	0.597	25,996	0.011	472	0.608	M(D)	M/RPF	1.5	0.912	Fox (STH 50)
8	W-07	I-94 Sta. 1003+88 – 1022+91 LT	0.412	17,956	0	0	0.412	M(D)	M	1.0	0.412	Fox (STH 50) & remaining credits of STH 20, Pike River, & Goetsch
9	W-34*	I-94 Sta. 968+00 – 1002+73 RT	0.755	32,872	0.089	3,879	0.844	M(D)	M	1.5	1.266	Fox (STH 50)
10			0.11	4,792	0	0	0.11					0.165
11	W-33	I-94 Sta. 1003+21 – 1007+39 RT	0.11	4,792	0	0	0.11	M(D)	M	1.5	0.165	Fox (STH 50)

CTH K Interchange, STH 20 to CTH K & CTH K to 7-Mile Road
 Project IDs 1030-11-80, 1030-11-79, 1030-11-72, 1030-25-79, and 1035-01-79

*Wetland W-34 spans two project IDs (1030-11-80 and 1030-11-79) and is shown in Exhibits 5, 6, 9 and 10. Wetland W-06 spans two project IDs (1030-11-80 and 1030-11-79) and is shown in Exhibits 3 and 7.

Wetland Impact Summary Table -- CTH K Interchange (Mainline)

Exhibit #	CH2M Wetland #	Wetland Station	Area of Fill (Acres)	Area of Fill (Sq. Ft.)	Area of Cut (Acres)	Area of Cut (Sq. Ft.)	Total Permanent Impacts	Wetland Type	Debit Wetland Type	Debit Ratio	Bank Debits (acres)	Mitigation Bank
	I.D. 1030-11-72											
18	W-08	I-94 Sta. 1030+50 - 1038+75 LT	0.36	15,699	0	0	0.36	M(D)	RPE	1.0	0.36	Hope Marsh Phase II
	W-09	I-94 Sta. 1041+95 - 1048+40 LT	0.138	5,998	0	0	0.138	M(D)	RPE	1.0	0.14	Hope Marsh Phase II
19	W-10	I-94 Sta. 1042+25 - 1055+50 LT	0.646	28,141	0	0	0.646 ¹	M(D)	RPE	1.0	1.019	Hope Marsh Phase II
		I-94 Sta. 1050+10 - 1055+10 LT	0.071	3,109	0	0	0.071	M(D)	RPE			Hope Marsh Phase II
	W-11	I-94 Sta. 1056+05 - 1072+05 LT	0.302	13,147	0	0	0.302	M(D)	RPE	1.0	0.21	Hope Marsh Phase II
		I-94 Sta. 1056+40 - 1065+85 LT	0.212	9,238	0	0	0.212	M(D)	RPE	1.0	0.21	Hope Marsh Phase II
20	S-02	I-94 Sta. 1069+43 - 1070+50 LT	0.007	304	0	0	0.007	AB	RPE	1.1	0.011	Hope Marsh Phase II
	W-13	I-94 Sta. 1073+66 - 1093+00 LT	0.51	22,222	0	0	0.51	M(D)	RPE	1.0	0.51	Hope Marsh Phase II
21	W-29	I-94 Sta. 1063+87 - 1074+11 RT	0.244	10,647	0	0	0.244	M(D)	RPE	1.0	0.873	Hope Marsh Phase II
		I-94 Sta. 1069+52 - 1093+00 RT	0.629	27,383	0	0	0.629 ²	M(D)	RPE	1.0		Hope Marsh Phase II
22	W-30	I-94 Sta. 1055+64 - 1056+60 RT	0.028	1,239	0	0	0.028	M(D)	RPE	1.0	0.458	Hope Marsh Phase II
		I-94 Sta. 1055+87 - 1066+14 RT	0.192	8,357	0	0	0.192	M(D)	RPE	1.0		Hope Marsh Phase II
23	W-31	I-94 Sta. 1060+00 - 1062+31 RT	0.238	10,356	0	0	0.238 ³	M(D)	RPE	1.0	0.217	Hope Marsh Phase II
		I-94 Sta. 1040+96 - 1049+59 RT	0.043	1,887	0	0	0.043	M(D)	RPE	1.0		Hope Marsh Phase II
24	W-32	I-94 Sta. 1046+14 - 1055+35 RT	0.174	7,572	0	0	0.174	M(D)	RPE	1.0	0.40	Hope Marsh Phase II
		I-94 Sta. 1024+00 - 1037+57 RT	0.077	3,342	0.319	13,890	0.396 ⁴	M(D)	RPE	1.0		Hope Marsh Phase II

IH 94, Mainline
Racine County
CTH K Interchange, STH 20 to CTH K & CTH K to 7-Mile Road
Form 3500-53 attachment
7/21/2017
Project IDs 1030-11-80, 1030-11-79, 1030-11-72, 1030-25-79, and 1035-01-79

25	W-07 (Graef 2016)	CTH K Sta. 38+48 - 40+16	0.042	1,840	0	0	0.042	SM	RPE	1.1	0.44	Hope Marsh Phase II
	Impact Totals		3.913	170,481	0.319	13,890	4.233				4.242	
	Debit Totals											

¹Includes 0.062 acres that are outside slope intercepts, but are within a ditch anticipated to drain after construction of IH-94 (lateral effect).
²Includes 0.340 acres that are outside slope intercepts, but are within a ditch anticipated to drain after construction of IH-94 (lateral effect).
³Includes 0.044 acres that are outside slope intercepts, but are within a ditch anticipated to drain after construction of IH-94 (lateral effect).
⁴Includes 0.225 acres that are outside slope intercepts, but are within a ditch anticipated to drain after construction of IH-94 (lateral effect).

Wetland Impact Summary Table – County KR to WIS 11 (Frontage Roads)

Exhibit #	GRAEF Wetland #	Wetland Station	Area of Fill (Acres)	Area of Fill (SF)	Area of Cut (Acres)	Area of Cut (SF)	Wetland Type	Debit Ratio	Jacobson Bank Debits (acres)
	<i>I.D. 1030-24-77</i>								
1	W-3	EFR Sta. 5664+00 – 5677+23 R/LT	0.341	14854	-	-	SM	1.0	0.341
2	W-1	EFR Sta. 5664+00 – 5675+10 LT	0.027	1175	0.001	44	SM	1.0	0.028
		EFR Sta. 5664+00 – 5675+10 LT	0.012	538	-	-	WS	1.2	0.012
3	W-2	EFR Sta. 5690+79 – 5383+59 LT	-	-	0.021	899	SM	1.0	0.021
4	W-5	EFR Sta. 5683+49 – 5683+89 RT	0.015	651	-	-	M	1.0	0.015
5	W-4	EFR Sta. 5683+86 – 5686+02 LT	0.123	5375	-	-	SM	1.0	0.123
6	W-4A	EFR Sta. 5686+41 – 5690+27 R/LT	0.141	6157	-	-	SM	1.0	0.141
7	W-22-3	EFR Sta. 5690+62 – 5693+27 RT	0.039	1722	-	-	SM	1.0	0.039
8	W-7	EFR Sta. 5690+28 – 5693+58 LT	0.009	390	0.008	360	M	1.0	0.017
9	W-8	EFR Sta. 5694+49 – 5710+88 LT	-	-	0.002	75	SM	1.0	0.002
10	W-6	EFR Sta. 5697+12 – 5710+85 RT	0.153	6671	-	-	SM	1.0	0.153
11	W-10	EFR Sta. 3711+39 – 3719+05 LT	0.003	150	-	-	M	1.0	0.003
12	W-22-3A	EFR Sta. 3711+47 – 3722+29 RT	0.194	8461	0.083	3626	SM	1.0	0.277
13	W-22-1*	EFR Sta. 3719+87 – 3731+14 LT	-	-	0.147	6420	SM	1.0	0.147
14	W-9*	EFR Sta. 3725+91 – 3730+00 RT	0.073	3170	-	-	SM	1.0	0.073
	<i>I.D. 1030-24-78</i>								
15	W-11	WFR Sta. 4677+90 – 4690+31 RT	0.119	5196	-	-	SM	1.0	0.119
16	W-64	WFR Sta. 4681+93 – 4683+49 LT	-	-	0.062	2691	M	1.0	0.062
17	W-22-2A	WFR Sta. 4696+48 – 4698+05 RT	0.067	2925	0.012	513	SM	1.0	0.079
18	W-22-2	Not Impacted	N/A	N/A	N/A	N/A	N/A		
19	W-13	WFR Sta. 4710+74 – 4711+00 LT	0.006	250	0.004	187	SM	1.0	0.228
20	W-13	WFR Sta. 2711+65 – 2714+52 LT	-	-	0.055	2395	SM		
21	W-13	WFR Sta. 2716+16 – 2733+37 LT	0.158	6884	0.005	200	SM		
22	W-22-2C	WFR Sta. 2715+35 – 2720+34 LT	0.001	40	0.006	240	SM	1.0	0.007
23	W-22-2D	WFR Sta. 2722+08 – 2730+56 RT	-	-	0.007	317	SM	1.0	0.007
24	W-3-3	WFR Sta. 2732+65 – 2736+34 RT	0.032	1400	0.177	7693	SM	1.0	0.209
		WFR Sta. 2734+17 – 2734+31 RT	0.017	730	-	-	AB	1.0	0.017
Impact Totals			1.530	66,739	0.590	25,660			2.120

Wetland Impact Summary Table – WIS 11 Interchange (Frontage Roads)

Exhibit #	GRAEF Wetland #	Wetland Station	Area of Fill (Acres)	Area of Fill (SF)	Area of Cut (Acres)	Area of Cut (SF)	Wetland Type	Debit Ratio	Jacobson Bank Debits (acres)
	<i>I.D. 1030-24-70</i>								
25	W-22-1*	EFR Sta. 3730+00 – 3731+16 LT	-	-	0.049	2136	SM	1.0	0.049
26	W-9*	EFR Sta. 3730+00 – 3734+58 RT	0.075	3263	-	-	SM	1.0	0.075
27	W-12	EFR Sta. 3722+66 – 3743+78 LT	0.207	9012	0.084	3650	SM	1.0	0.291
28	W-30	EFR Sta. 3743+78 – 3745+27 LT	-	-	0.006	255	SM	1.0	0.006
29	W-29	EFR Sta. 3745+16 – 3747+34 LT	0.062	2697	-	-	SM	1.0	0.062
		EFR Sta. 3745+16 – 3747+34 LT	-	-	0.038	1650	M	1.0	0.038
30	W-21	EFR Sta. 3749+92 – 3754+20 LT	0.042	1844	-	-	SM	1.0	0.042
31	W-23	EFR Sta. 3759+07 – 3759+18 RT	-	-	0.001	48	SM	1.0	0.001
32	W-25	EFR Sta. 3755+54 – 3755+60 RT	0.002	58	-	-	SM	1.0	0.002
33	W-34	EFR Sta. 5756+52 – 5757+66 LT	-	-	0.026	1114	M	1.0	0.026
34	W-33	Swale 3 Sta. 300+00 – 301+41 R/LT	-	-	0.029	1252	SM	1.0	0.029
35	W-37	EFR Sta. 5764+75 – 5776+14 LT	0.007	318	-	-	SM	1.0	0.011
36		EFR Sta. 3711+39 – 3719+05 LT	0.004	160	-	-	SM		
37	W-3-5	EFR Sta. 5777+50 – 5778+31 LT	0.001	28	-	-	M	1.0	0.001
38	W-20	EFR Sta. 5781+95 – 5782+51 R/LT	0.035	1544	-	-	SM	1.0	0.035
	<i>I.D. 1030-24-74</i>								
39	W-3-2	WFR Sta. 2743+77 – 2748+37 RT	-	-	0.137	5976	SM	1.0	0.137
40	W-3-2A	WFR Sta. 2746+76 – 2747+03 LT	-	-	0.008	333	SM	1.0	0.008
41	W-27	WFR Sta. 2757+82 – 2758+00 LT	0.013	551	-	-	M	1.0	0.013
42	W-17	WFR Sta. 2759+18 – 2759+37 LT	0.013	582	-	-	SM	1.0	0.013
43	W-31	WFR Sta. 4751+89 – 4752+12 RT	0.001	40	0.005	232	SM	1.0	0.006
		WFR Sta. 4751+95 – 4752+03 RT	0.001	48	0.002	100	AB	1.0	0.003
44	W-43	WFR Sta. 4774+78 – 4776+22 LT	0.082	3560	0.020	891	M	1.0	0.102
45	W-44	WFR Sta. 4775+79 – 4779+21 RT	0.103	4500	0.012	517	SM	1.0	0.115
46	W-45	WFR Sta. 4777+45 – 4778+30 LT	0.005	200	0.018	801	SM	1.0	0.023
47	W-46	WFR Sta. 4779+60 – 4781+41 LT	0.022	951	-	-	M	1.0	0.022
48	W-47	WFR Sta. 4783+49 – 4784+42 RT	-	-	0.011	466	SM	1.0	0.011
49	W-41	58 th Rd Sta. 47+84 – 48+30 LT	-	-	0.006	273	SM	1.0	0.006
50	W-32	58 th Rd Sta. 47+81 – 48+21 RT	0.184	8000	0.061	2662	SM	1.0	0.245
51	W-58	58 th Rd Sta. 51+51 – 51+78 LT	-	-	0.002	82	SM	1.0	0.002
52	W-36	Access Rd Sta. 74B+13 – 79B+75 LT	0.063	2738	0.063	2738	SM	1.0	0.126
53	W-35	Access Rd Sta. 74B+06 – 75B+76 LT	0.053	2300	0.009	392	SM	1.0	0.062
	Impact Totals		0.975	42,394	0.587	25,568			1.562

Wetland Impact Summary Table – WIS 11 to WIS 20 (Frontage Roads)

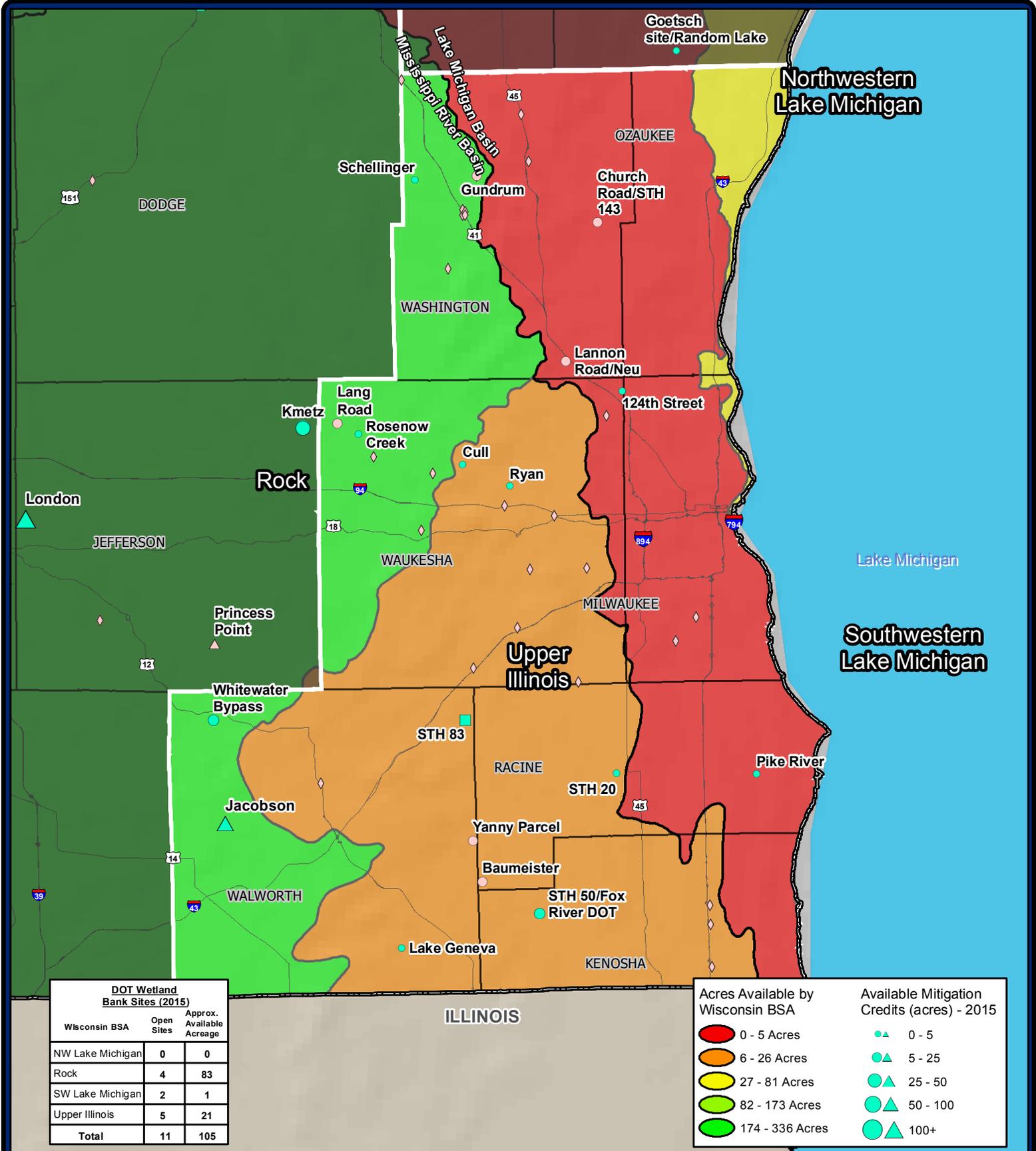
Exhibit #	GRAEF Wetland #	Wetland Station	Area of Fill (Acres)	Area of Fill (SF)	Area of Cut (Acres)	Area of Cut (SF)	Wetland Type	Debit Ratio	Jacobson Bank Debits (acres)
	<i>I.D. 1033-02-77</i>								
54	W-60	EFR Sta. 5791+00 – 5792+76 LT	0.002	105	-	-	SM	1.0	0.002
55	W-62	EFR Sta. 5797+81 – 5799+52 LT	0.003	145	-	-	SM	1.0	0.003
56	W-63	EFR Sta. 5811+43 – 5816+94 LT	-	-	0.011	497	SM	1.0	0.011
57	W-19-1	EFR Sta. 5822+93 – 5824+82 RT	0.039	1708	0.024	1026	M	1.0	0.063
58	W-X**	EFR Sta. 5106+00 RT	0.013	543	-	-	SM	1.0	0.013
	<i>I.D. 1033-02-78</i>								
59	W-49	WFR Sta. 4786+91 – 4787+27 RT	-	-	0.003	132	SM	1.0	0.003
60	W-50	WFR Sta. 4790+56 – 4792+19 RT	0.007	294	-	-	SM	1.0	0.007
61	W-48	WFR Sta. 4793+95 – 4795+13 LT	0.021	934	-	-	M	1.0	0.021
62	W-51	WFR Sta. 4798+85 – 4803+46 RT	-	-	0.040	1743	SM	1.0	0.040
63	W-53	WFR Sta. 4806+45 – 4813+78 RT	0.091	3970	-	-	SM	1.0	0.091
64	W-52	WFR Sta. 4806+62 – 4807+18 LT	0.004	191	-	-	M	1.0	0.004
65	W-54	WFR Sta. 4815+98 – 4819+16 RT	0.073	3167	-	-	SM	1.0	0.073
66	W-55	WFR Sta. 4821+66 – 4822+36 LT	0.016	709	-	-	SM	1.0	0.085
67		WFR Sta. 4823+68 – 4826+45 LT	0.048	2112	0.021	905	SM		
68	W-56	WFR Sta. 4834+56 – 4838+15 LT	0.087	3779	-	-	SM	1.0	0.087
69	W-57	WFR Sta. 4838+82 – 4845+08 LT	0.135	5863	-	-	SM	1.0	0.135
Impact Totals			0.539	23,520	0.099	4,303			0.638

*Wetland W-22-1 spans two project IDs (1030-24-77 and 1030-24-70) and is shown in both Exhibits 13 and 25. Wetland W-9 spans two project IDs (1030-24-77 and 1030-24-70) and is shown in both Exhibits 14 and 26.

**Wetland W-X is located approximately 5 miles north of project 1033-02-77, in segment CTH K to CTH G just south of Bell Road along the EFR. This wetland was not included in the GRAEF delineation but was identified through field review, therefore it does not have a GRAEF Wetland #.

MITIGATION

WisDOT proposes to mitigate the unavoidable impacts to 4.33 acres of wetlands under the WisDOT Wetland Mitigation Banking Technical Guidelines and the Wisconsin Bank Service Areas. WisDOT is working on transitioning to the WDNR watersheds/bank regions. WisDOT Mitigation will occur at the Jacobson mitigation bank in Walworth County. The Jacobson bank site and project location are very close to the floristic province and the majority of the project lies within the Upper Illinois bank service area (Mississippi Basin). For these reasons, a 1:1 ratio will be used for the M, AB, and SM impacts and a 1.2:1 ratio will be used for the WS impact. **The total debit is 4.33 acres.** The Wetland Impact Tracking Form can be found in Exhibit C. A map of the project location in relation to the Upper Illinois bank service area can also be found in Exhibit C.



DOT Wetland Bank Sites (2015)		
Wisconsin BSA	Open Sites	Approx. Available Acreage
NW Lake Michigan	0	0
Rock	4	83
SW Lake Michigan	2	1
Upper Illinois	5	21
Total	11	105

Acres Available by Wisconsin BSA

- 0 - 5 Acres
- 6 - 26 Acres
- 27 - 81 Acres
- 82 - 173 Acres
- 174 - 336 Acres

Available Mitigation Credits (acres) - 2015

- ▲ 0 - 5
- ▲ 5 - 25
- ▲ 25 - 50
- ▲ 50 - 100
- ▲ 100+

Available DOT Wetland Credits in Wisconsin Bank Service Areas Within DOT SE Office Region (2015)



Location
State of Wisconsin

0 5 10 Miles

Project Information
Modified January 10, 2017

Legend

- ▲ Open Bank Site¹
- Open Project Specific w/ Surplus¹
- Site In Development¹
- ▲ Closed Bank Site¹
- Closed Project Specific w/ Surplus¹
- ◆ Project Specific¹ (On-Site or Near-Site)
- Major Basin Boundary (2-digit HUC)
- Wisconsin Bank Service Areas
- WisDOT Office Regions

¹ All site locations are based on best available data as of December 2016. The accuracy of site locations have not been verified by WisDOT staff.
Map created on 1/3/2017 by Pearson (WisDOT) and Giblin (Stantec)



June 18, 2018

Laci Kazan
WisDOT SE Region
141 NW Barstow Street
Waukesha, WI 53187-0798

Memo to File(s): Wetland Mitigation and DNR 401 Water Quality Certification for I-94 N/S Projects

Dear Laci:

To rectify discrepancies in documentation for wetland mitigation for I-94 N/S projects that were grouped together differently in permit application and/or DNR concurrence letters, I'm providing a memo to the file that can be used to document what banks/credits were used for each project. The information in this letter only documents 401 Water Quality Certification for each set of projects and the mitigation plan for each corresponding set of projects. Additional environmental provisions for each set of projects included in the final concurrence letters should be incorporated into the project provisions and construction process. These letters are attached for reference.

For Projects: 1030-11-79/80, 1035-01-79, 1030-11-72, & 1030-25-79

I-94 Racine 5 Expansion Projects
CTH K Interchange, STH 20 to CTH K & CTH K to 7-Mile Road
Racine County

Thank you for the information regarding the project referenced above. Based on the information provided to us on October 12, 2017, the final project design addresses the environmental issues raised through the initial review and coordination process. The Department has determined that the water quality, floodplain and wetland protection objectives of the DOT/DNR Cooperative Agreement have been met. This concurrence also constitutes Water Quality Certification pursuant to Section 401, Clean Water Act. The Department has evaluated this proposal and has determined that this activity will be conducted in a manner which is consistent with the standards contained in NR 103 and NR 299, Wisconsin Administrative Code and water quality certification is granted.

Should the scope of the project change, consultation with this agency must be reinitiated. Further comment on the project may be presented at the preconstruction conference. This final concurrence is conditioned on the project construction being in conformance with our initial review letter and other previous coordination, with the DOT/DNR Cooperative Agreement and on the following project specific conditions:

Wetland Mitigation Plan

This project will impact **a total of 13.29 acres** of Waters of the U.S. Wetland Types impacted include 13.24 acres degraded wet meadow (M(D)), 0.04 acres of shallow marsh (SM), and 0.01 areas aquatic bed (AB). WisDOT proposes to mitigate the unavoidable impacts to 13.29 acres of wetlands under the WisDOT Wetland Mitigation Banking Technical Guidelines and the Wisconsin Bank Service Areas. Mitigation will use all bank sites located in the Great Lakes Basin. The three bank sites used for mitigation include the following: Pike River (Racine County), Goetsch (Sheboygan County), & Hope Marsh Phase II (Marquette County). The bank sites and

project location are in the same floristic province. The project location, Goetsch, and Pike River banks all lie within the Southwestern Lake Michigan BSA. The Hope Marsh Phase II bank site lies in the Fox BSA and a higher quality wetland will be used to mitigate for the wetland losses from the project. Following the ratios set in the WisDOT Wetland Mitigation Banking Technical Guidelines for projects within the same floristic boundary line, but outside of the drainage/watershed, WisDOT is proposing a 1.5:1 ratio to be used for the M(D) impacts and a 1.6:1 ratio will be used for the AB and SM impacts. **The total debit is 19.93 acres.**

For Projects: 1030-20-84, 1030-20-87, 1035-01-72, 1035-01-74, 1035-01-82

N-S Freeway South Milwaukee Rdwy/Mainline, Elm Rd Interchange
N-S Freeway IH 94/ Seven Mile Road to College Ave
Milwaukee/Racine County

Thank you for the information regarding the project referenced above. Based on the information provided to the Wisconsin Department of Natural Resources (DNR), the final project design addresses the environmental issues raised through the initial review and coordination process. DNR has determined that the water quality, floodplain and wetland protection objectives of the DNR/DOT (Wisconsin Department of Transportation) Cooperative Agreement have been met. This concurrence also constitutes Water Quality Certification pursuant to Section 401, under the Federal Clean Water Act. The DNR has evaluated this proposal and has determined that this activity will be conducted in a manner which is consistent with the standards contained in chapters NR 103 and NR 299, Wis. Adm. Code, Water Quality Certification is granted.

Should the scope of the project change, consultation with the DNR must be reinitiated. Any additional project related work proposed under the Erosion Control Implementation Plan (ECIP) will be evaluated by DNR within 14 days for sensitive resources, potential impacts to the environment, and erosion and sediment control. Those proposed activities shown to be in compliance with Ch. 283, Wis. Stats will be added to the original application as an amendment. Further comments on the project may be presented at the preconstruction conference. DNR understands that project construction will be in conformance with our initial review letter, previous coordination, the DNR/DOT Cooperative Agreement, and the following:

Wetland Mitigation Plan

This project will result in the filling of 24.90 acres of wetlands and 0.83 acres of waterway in the Southwest Lake Michigan Watershed, Lake Michigan Basin. The wetland type(s) are classified as:

Aquatic Bed = 0.83 acres
Riparian wetland emergent = 2.03 acres
Riparian wetland wooded = 0.57 acres
Shallow Marsh = 2.30 acres
Shrub Carr = 0.99 acres
Wooded Swamp = 0.03 acres
Marsh = 0.19 acres
Marsh (Degraded) = 6.71 acres
Shallow Marsh (Degraded) = 11.97 acres
Wooded Swamp (Degraded) = 0.11 acres

The DNR understands that these losses will be charged against the Hope Marsh bank in Marquette County. Basin types are the same, mitigation ratios vary based on wetland type and replacement credits available. **The total debit at the Hope Marsh Bank is 41.11 credits**, as documented in the Wetland Impact Tracking Form. The project will also result in 1.11 acres of temporary wetland impacts. Hydrology will not be impacted by placement or removal of fill in these areas and all areas will be restored with native seeding within 90 days.

Please let me know if additional documentation is needed for these projects. If you have any questions, please contact this office at 414.507.4946.

Sincerely,

A handwritten signature in cursive script that reads "Kristina Betzold".

Kristina Betzold
Environmental Analysis & Review Specialist
Southeast Region

CC: April Marcangeli, USACE
Dobra Payant, WDOT
Frank Pritzlaff, WDOT
Jason Dahlgren, WDOT

I-94 Wetland Impact Summary Information from WDNR
22-Oct-18

WETLAND IMPACT

Impact Watershed	Project Section	ID	Wetland Impact (ac) **	Ratio	Mitigation (ac)	Mitigation Bank	Watershed Location of Bank			
Des Plaines	Mainline WIS142 - County E	1030-23-79	1.846	1.0	1.846	Jacobson	Mississippi - Rock River	Out of Watershed		
	County E Interchange	1030-23-72	2.819	1.0-1.2	2.827	Jacobson	Mississippi - Rock River	Out of Watershed		
	Mainline County E to County KR	1035-03-79	1.288	1.0	1.288	Jacobson	Mississippi - Rock River	Out of Watershed		
	County KR Interchange - Structure & Crossroads	1035-03-71	2.414	1.0-1.2	2.47	Jacobson	Mississippi - Rock River	Out of Watershed		
	County KR Interchange - Mainline and Ramps	1035-03-72	2.928	1.0-1.2	2.987	Jacobson	Mississippi - Rock River	Out of Watershed		
	Mainline County KR to WIS 11	1030-24-79	2.026	1	2.026	Jacobson	Mississippi - Rock River	Out of Watershed		
	WIS 11 Interchange (WIS 11 EB and WB)	1030-24-71	1.268	1	1.268	Jacobson	Mississippi - Rock River	Out of Watershed		
	WIS 11 Interchange (Mainline and Ramps)*	1030-24-72	2.639	1	2.755	Jacobson	Mississippi - Rock River	Out of Watershed		
TOTAL IMPACTS IN DES PLAINES WATERSHED*			Subtotal		17.228		17.467	Jacobson	Mississippi - Rock River	Out of Watershed
Lake Michigan	WIS 11 Interchange (Mainline and Ramps)*	1030-24-72	0.193	1.6	0.309	Hope Marsh II	Great Lakes	In Watershed		
	WIS 11 to WIS 20 Mainline	1033-02-79	0.457	1.6	0.731	Hope Marsh II	Great Lakes	In Watershed		
	WIS 20 Crossroad Project	1033-02-71	1.655	1.5	2.483	Hope Marsh II	Great Lakes	In Watershed		
	Total Impacts Lake Michigan Watershed	Subtotal	2.305		3.523					

*as identified in Graeef Wetland tables
** Includes 4.0 Acres of USACE Jurisdictional Wetland Impact

WATERS IMPACTS

Waterway Impact Description	Roadway Sta	Waters Impact (ac)	Ratio	Mitigation (ac)	Mitigation Bank	Watershed Location of Bank	
1 - Mainline County E to County KR - UNT to Kilbourn	624+00	0.022	1	0.022	Jacobson	Mississippi - Rock River	Out of Watershed
2 - County KR Interchange Mainline and Ramps - UNT to Kilbourn	665+30 RT	0.035	1	0.035	Jacobson	Mississippi - Rock River	Out of Watershed
3 - County KR Interchange Mainline and Ramps - UNT to Kilbourn	66+15 LF	0.002	1	0.002	Jacobson	Mississippi - Rock River	Out of Watershed
4 - County KR Interchange Crossroad - UNT to Kilbourn	56+75	0.135	1	0.135	Jacobson	Mississippi - Rock River	Out of Watershed
5 - WIS 11 Interchange Mainline and Ramps - UNT to Kilbourn	747+50, 747+00	0.171	1	0.171	Jacobson	Mississippi - Rock River	Out of Watershed
6 - WIS 11 Interchange Crossroads	127+00	0.061	1	0.061	Jacobson	Mississippi - Rock River	Out of Watershed
TOTAL IMPACTS DES PLAINES RIVER		0.426		0.426			Out of Watershed

FRONTAGE ROADS WETLAND IMPACT - Form 3500-53

Project Section	ID	Wetland Impact (ac)	Ratio	Mitigation (ac)	Mitigation Bank	Watershed Location of Bank	
Des Plaines	County KR to WIS 11 Frontage Roads	2.12	1.0-1.2	2.12	Jacobson	Mississippi - Rock River	Out of Watershed
	WIS 11 Interchange Frontage Roads	1.562	1	1.562	Jacobson	Mississippi - Rock River	Out of Watershed
TOTAL IN DES PLAINES RIVER WATERSHED		3.682		3.682			Out of Watershed
Lake Michigan	WIS 11 to WIS 20 Frontage Roads	0.638	1	0.638	Jacobson	Mississippi - Rock River	Out of Watershed
TOTAL		4.32		8.002			

	Impact Totals		Mitigation Provided			
TOTAL DES PLAINES RIVER WATERSHED IMPACTS	21.336		21.575	21.575	All wetland mitigation - out of watershed	
TOTAL LAKE MICHIGAN WATERSHED IMPACTS	2.943		4.161	0	Out of Watershed	
TOTALS	24.279		25.736	21.575	Total Out of Watershed	

In Watershed Mitigation Provided	4.161
Percent Provided In Watershed	16%

Local Roads Wetland Mitigation Summary from WDNR
14-Oct-18

	Project Section	Wetland Impact (ac)	Ratio	Mitigation (ac)	Mitigation Bank	Watershed
Lake Michigan	Braun Road	0.39	2.0	0.78	TBD	Lake Michigan
	County KR	1.69	2.0	3.38	TBD	Lake Michigan
	International Drive Extension	0.74	2.0	1.48	TBD	Lake Michigan
	TOTAL LAKE MICHIGAN	2.82		5.64		Sub Total Cost

	Project Section	Wetland Impact (ac)	Ratio	Mitigation (ac)	Mitigation Bank	Watershed
Upper Illinois	Braun Road	0.88	2.0	1.76	TBD	Upper Illinois
	County KR	2.46	2.0	4.92	TBD	Upper Illinois
	Wisconsin Valley Way	0.96	2.0	1.92	TBD	Upper Illinois
	TOTAL UPPER ILLINOIS	4.3		8.6		Sub Total Cost

TOTALS	7.12		14.24		Total Cost
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