



WIS 23

Project ID 1440-19-00

CTH P-WIS 32

Sheboygan County

Natasa Gunt, P.E. Planning Project Manager - WisDOT 04/27/2017
(Signature, Title) (Date - m/d/yy)

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84.295 Study Statement

This study is being initiated pursuant to the authorities and directives under Wisconsin State Statute 84.295 (1) (Wis. Stat. 84.295) which are more specifically described below.

As a function in the improvement of state trunk highways and connecting highways the Department is authorized to make investigations, surveys and studies of the present and anticipated needs for the improvement of desirable, probable additions to the state trunk highway system.

An 84.295 study is a long-range planning study that examines reasonable future expressway or freeway alternatives to resolve current and future operational and safety concerns on state highways. It identifies a purpose and need, beneficial or adverse environmental effects, and mitigation strategies to minimize or eliminate those impacts. It is supported and complemented through extensive public involvement and interagency coordination, and ultimately provides the Department with appropriate information to make a reasoned choice on evaluating and prioritizing reasonable alternatives.

In the interest of promoting public safety and convenience and the general welfare, and as a result of its investigations, the Department finds that there is a need to study improvements to 8.16 miles of Hwy 23 in Sheboygan County between CTH P - STH 32. This segment of Hwy 23 is currently built to expressway standards pursuant to Wis. Stat. 991.01(7a). This segment has experienced crashes at various intersections, and a study is necessary to determine how these locations can be improved to reduce or eliminate this crash potential.

If the Wis. Stat. 84.295 study identifies reasonable future improvements which address the operational and safety issues and the improvements require additional right-of-way to construct, the Department, pursuant to Wis. Stat. 84.295(10), may determine that in order to prevent conflicting costly economic development on those lands it should proceed to inform the public of the approximate location and widths of rights-of-way needed and proceed to establish such location and the approximate widths of rights-of-way in the following manner.

The Department may prepare a map showing the location of the approximate widths of the rights-of-way needed for the freeway improvements on Hwy 23, other intersecting highways, frontage roads, and for the alteration or relocation of existing public highways. The map shall also show the existing highways and the property lines and record owners of lands needed. It shall hold a public hearing in the matter in a courthouse or other convenient public place in or near the region to be affected by the proposed change, which public hearing shall be advertised and held as are state trunk highway change hearings. The department shall consider and evaluate the testimony presented at the public hearing. Upon approval of the map by the Department, a notice of such action and the map showing the lands or interests therein needed in any county shall be recorded in the office of the register of deeds of such county.

A Wis. Stat. 84.295 Study uses the same evaluation metrics as does a NEPA or WEPA study, and thus borrows from the library of guidelines and worksheets developed for those types of studies. Use of these NEPA or WEPA documents, procedures, or terminologies does not imply that this Wis. Stat. 84.295 is being done as a NEPA or WEPA study.

The following documentation is being attached in the format of an Environmental Report and has been signed by the preparer Constance White, AICP, HNTB Corporation; as a complete analysis for the specific planning study scoped. When the original study was scoped in 2006 it was initiated as an Environmental Assessment with a Finding of No Significant Impact (EA/FONSI). However, as the study progressed and environmental analysis tools changed it was determined that in February of 2016 in conjunction with Federal Highways and WisDOT that an Environmental Report would better suit this level of study. This was due to the lack of current fiscal constraint of the project and the study being a mapping study with Wisconsin State Statute 84.295 in which FHWA has no official approval. Later, in April of 2017, FHWA determined that they would no longer be reviewing or approving the document as their involvement is not needed for mapping action and the project is still not fiscally constrained. Furthermore, WisDOT is in the process of developing a *Planning Document* for studies scoped as Wis. Stat. 84.295 designation and future mapped improvement studies and projects. This planning study document utilizes some aspects of the proposed *Planning Document Template* for ease of records and can be considered a complete Planning and Preservation Study for Wisconsin State Statutes 84.295 actions.

This planning study document must be read entirely in order for the reader to fully understand how reasonable options, referred to in the document as alternatives, are examined and prioritized.

ENVIRONMENTAL EVALUATION OF FACILITIES DEVELOPMENT ACTIONS

Wisconsin Department of Transportation (WisDOT)

DT2094 6/2015

BASIC SHEET 1 – PROJECT SUMMARY

Project ID 1440-19-00 Construction ID N/A	Project Termini County P to WIS 32	Funding Sources <i>(check all that apply)</i> <input type="checkbox"/> Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Local								
Route Designation <i>(if applicable)</i> WIS 23 National Highway System (NHS) Route <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Nearest Community Plymouth, Wisconsin Sheboygan Falls, Wisconsin	Estimated Project Cost and Funding Source (state and/or federal). Year of Expenditure (YOE) dollars include delivery cost. N/A in dollars Real Estate Acquisition Portion of Estimated Cost (YOE) N/A in dollars								
Project Title WIS 23 Freeway Designation and Corridor Preservation	Section / Township / Range Sections 14, 15, 16, 17, 18, 20, 21, 22, 23 and 24 T15N R21E Sections 19, 20, 21, 22, 23 and 27 T15N R22E	Utility Relocation Portion of Estimated Cost (YOE) N/A in dollars								
County Sheboygan		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Right of Way Acquisition</th> <th style="width:30%;">Acres</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Fee</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: right;">TLE</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: right;">PLE</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>	Right of Way Acquisition	Acres	Fee	0	TLE	0	PLE	0
Right of Way Acquisition	Acres									
Fee	0									
TLE	0									
PLE	0									
Bridge Number(s) <i>(if applicable)</i>	For an ER, indicate the date funding was authorized to begin preliminary engineering. For an EA, indicate the date the Process Initiation Letter was accepted by FHWA. N/A. The project was authorized for study on 02/02/2006.									

Functional Classification of Existing Route (FDM 3-5-2)	Urban	Rural	WisDOT Project Classification (FDM 3-5-2)	
Freeway/Expressway	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Resurfacing	<input type="checkbox"/>
Principal Arterial	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pavement Replacement	<input type="checkbox"/>
Minor Arterial	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Reconditioning	<input type="checkbox"/>
Major Collector		<input type="checkbox"/>	Expansion	<input type="checkbox"/>
Minor Collector		<input checked="" type="checkbox"/>	Bridge Rehabilitation	<input type="checkbox"/>
Collector	<input type="checkbox"/>		Bridge Replacement	<input type="checkbox"/>
Local	<input type="checkbox"/>	<input checked="" type="checkbox"/>	"Majors" Project (there are both state and federal majors)	<input type="checkbox"/>
No Functional Class	<input type="checkbox"/>	<input type="checkbox"/>	SHRM	<input type="checkbox"/>
			Reconstruction	<input type="checkbox"/>
			Preventive Maintenance	<input type="checkbox"/>
			Safety	<input type="checkbox"/>
			Other – Describe: Freeway Corridor Preservation (Wis. Stat. s. 84.295)	<input checked="" type="checkbox"/>

FHWA Draft Type 2c Categorical Exclusion (CE)/WisDOT Draft Environmental Report (ER). **No significant impacts indicated by initial assessment.**
 FHWA/WisDOT Draft Environmental Assessment (EA). **No significant impacts indicated by initial assessment.**

(Print – Preparer Name, Title, Company/Organization)	(Date – m/d/yy)
(Signature – Director, Bureau of Technical Services)	(Date – m/d/yy)

(Signature, Title)	(Date – m/d/yy)
<input type="checkbox"/> Region <input type="checkbox"/> Aeronautics <input type="checkbox"/> Rails & Harbors	<input type="checkbox"/> FHWA <input type="checkbox"/> FAA <input type="checkbox"/> FTA <input type="checkbox"/> FRA

FHWA Final Type 2 Categorical Exclusion (CE)/WisDOT Final Environmental Report (ER). It has been determined **no significant impacts will occur** and a Public Hearing is not required.

After reviewing and addressing substantive public comments, updating the Draft CE/ER or Draft EA and coordinating with other agencies, it is determined this action:

- Will NOT significantly affect** the quality of the human environment. This document is a Final CE/Final ER.
- Will NOT significantly affect** the quality of the human environment. This document is a Final EA/Finding of No Significant Impact.
- Has potential to significantly affect** the quality of the human environment. Draft Environmental Impact Statement (EIS) required.

Constance White

4/27/17

Constance White, AICP, HNTB Corporation

(Date – m/d/yy)

(Signature – Director, Bureau of Technical Services)

(Date – m/d/yy)

(Signature, Title)

(Date – m/d/yy)

Region Aeronautics Rails & Harbors

(Signature, Title)

(Date – m/d/yy)

FHWA FAA FTA FRA

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4. Abbreviations and Acronyms

AADT	Annual Average Daily Traffic	MOA	Memorandum of Agreement
ACHP	Advisory Council on Historic Preservation	MPO	Metropolitan Planning Organization
AWDT	Annual Weekday Traffic	NEPA	National Environmental Policy Act
BOA	WisDOT Bureau of Aeronautics	NPS	National Park Service
BLRPC	Bay Lake Regional Plan Commission	NRCS	Natural Resource Conservation Service
C2030	Connections 2030 Statewide Long-range Multi-modal Plan	NRHP	National Register of Historic Places
CE	Categorical Exclusion	OPRT	Old Plank Road Trail
County P	County Highway P (et.al.)	PIM	Public Involvement Meeting
DATCP	Wisconsin Department of Agriculture, Trade and Consumer Protection	PLE	Permanent Limited Easement
dBA	Decibel value of sounds	ROD	Record of Decision
DHV	Design Hourly Volume	RPC	Regional Planning Commission
DDHV	Directional Design Hourly Volume	RTWP	Regional Transportation Work Program
DNR	Wisconsin Department of Natural Resources (also WDNR)	SHPO	State Historic Preservation Office/Officer
DOJ	Department of Justice	TLE	Temporary Limited Easement
EA	Environmental Assessment	TSS	Total suspended solids
EIS	Environmental Impact Statement	USACE	United States Army Corps of Engineers
EPA	United States Environmental Protection Agency	USCG	United States Coast Guard
ER	Environmental Report	USFWS	United States Fish and Wildlife Service
FHWA	Federal Highway Administration	WEPA	Wisconsin Environmental Policy Act
HSIP	Highway Safety Improvement Project	WDNR	Wisconsin Department of Natural Resources (also DNR)
		WisDOT	Wisconsin Department of Transportation
		WIS 23	Wisconsin State Highway 23 (et. al.)

5. Environmental Document Statement

This environmental document is an essential component of the National Environmental Policy Act (NEPA) and Wisconsin Environmental Policy Act (WEPA) project development process, which supports and complements public involvement and interagency coordination.

The environmental document is a full-disclosure document which provides a description of the purpose and need for the proposed project, the existing environment, analysis of the anticipated beneficial or adverse environmental effects resulting from the proposed action and potential mitigation measures to address identified effects. This document also allows others the opportunity to provide input and comment on the proposed action, alternatives and environmental impacts. Finally, it provides the decision maker with appropriate information to make a reasoned choice when identifying a preferred alternative.

This environmental document must be read entirely so the reader understands the reasons that one alternative is selected as the preferred alternative over other alternatives considered.

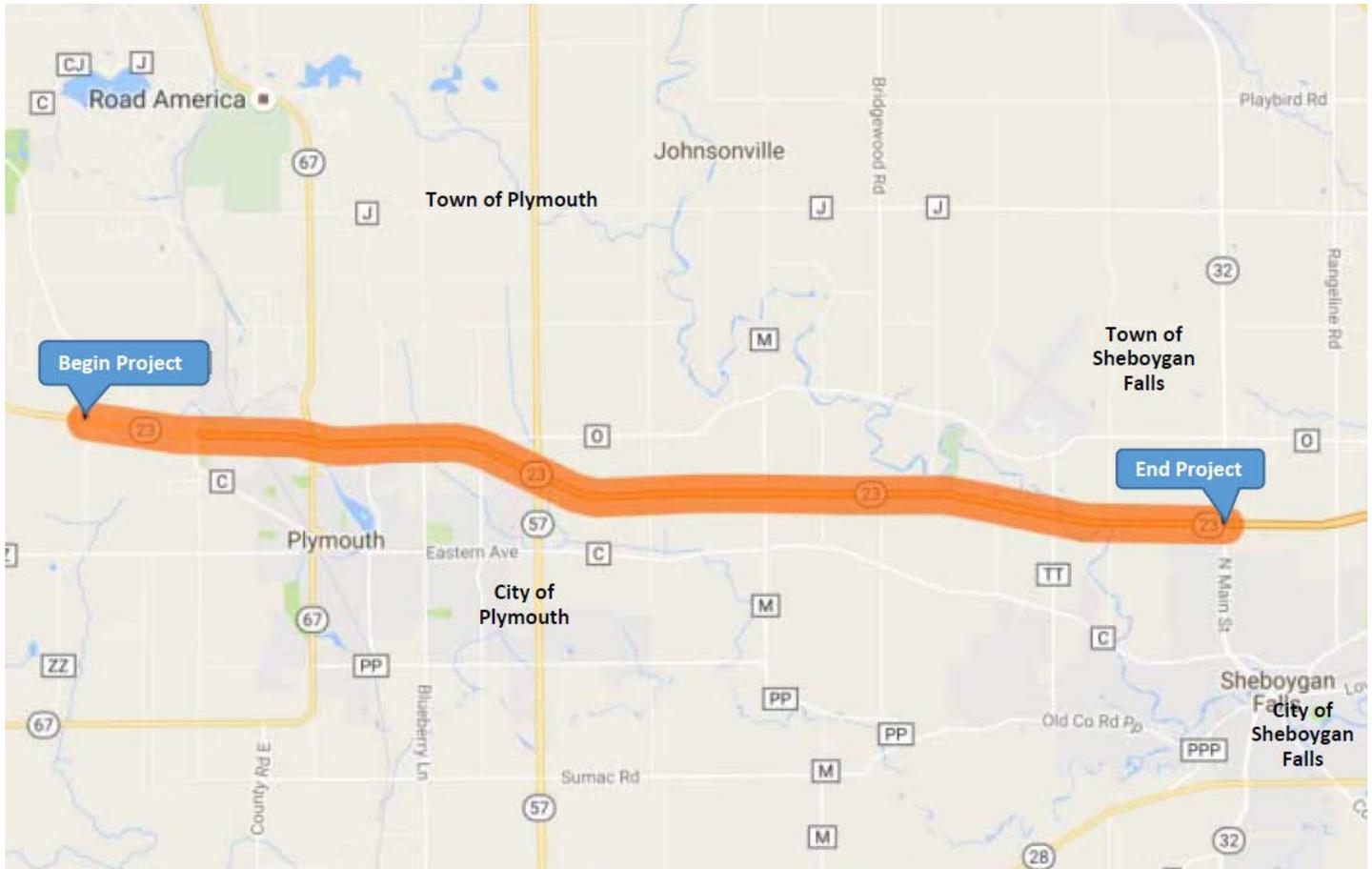
The project that is the subject of this environmental evaluation is the action of officially mapping future improvements that would allow for the conversion of this expressway to a freeway (please refer to Items 1, 2 and 3 below for a complete project description). It is difficult to separate the official mapping from the future actions that the official mapping would enable because, although construction of improvements is neither scheduled nor programmed, this environmental review process needed to locate alternative improvements that would allow for the conversion to take place. As part of this planning process, a preliminary estimation of the potential for environmental impacts was made so that future necessary improvements could be sited appropriately and with the least amount of harm. This early assessment may not be able to fully capture the impacts of those future actions, but approximations can be made at this time. Future projects that may be proposed that would implement the improvements needed to convert this facility into a freeway will be re-analyzed in greater detail at the time such improvement projects are proposed and programmed. New environmental documents would be prepared as may be required at that yet-to-be-determined time in the future.

BASIC SHEET 3 – PURPOSE AND NEED

1. Purpose and Need

This section briefly describes the WIS 23 Freeway Designation and Corridor Preservation project, WisDOT Project ID 1440-19-00, and the project’s purpose and need. Figure 1 shows the project location.

Figure 1: Study Corridor



Description of Existing Facility

Background information

WIS 23 was moved to its current alignment from what is now County C between County P and WIS 32, resulting in bypasses of downtown Plymouth and Sheboygan Falls. Right of way for the bypass was purchased for the existing corridor in the late 1970’s and construction began in the mid 1980’s. The new expressway corridor included some access controls to limit entry points onto WIS 23, but there were many at-grade intersections as well. As traffic continued to grow, subsequent construction projects have added add-lanes, interchanges at WIS 57, WIS 67 and County C, in addition to rehabilitation projects and safety improvement projects.

WIS 23 is an important east-west route now classified as a Connections 2030 connector highway, designated as a highly important state roadway. WIS 23 is designated as the Kettle Country Corridor, serving the local economy and linking major population and economic centers of Fond du Lac and Sheboygan, see Attachment B.

A long-range plan was prepared in 1999 for the section of WIS 23 located west of the project between Fond du Lac and Plymouth (Project ID 1440-13/15-00). The long-range plan recommended the conversion of WIS 23 from a 2-lane roadway to a 4-lane divided highway. An EIS/ROD and a Limited Scope Supplemental EIS was prepared for Project ID 1440-13/15-00 and it received funding for improvements from the state legislature. Construction of some of the planned improvements was scheduled for 2015; although it is currently under a delay and construction has not begun.

In 1997 a Memorandum of Agreement (MOA) was signed between the City of Plymouth, Town of Plymouth, Sheboygan County and the Wisconsin Department of Transportation (WisDOT). This MOA identifies the need to control access between the WIS 67 and WIS 57 interchanges. The MOA set a plan in motion with the intent to

ultimately close the Pleasant View Road intersection and the County OJ intersection, construct a grade separation structure at the County E intersection, and construct an east-west collector roadway between WIS 67 and WIS 57 (see correspondence in Attachment E).

Existing conditions in project area

WIS 23 is a 4-lane divided expressway facility in the Sheboygan County communities of the Town of Plymouth, City of Plymouth and Town of Sheboygan Falls. The corridor length from County P to WIS 32 is 10.2 miles. There are at-grade intersections on WIS 23 at County P, Inez Court, County O/OJ, County E, Pleasant View Road, Willow Road, County M, Hillside Road, Bridgewood Road, Sunset Road, County TT and Meadowlark Road. The existing service interchanges at County C, WIS 67, WIS 57 and WIS 32 are grade separated. The interchanges located at County C and WIS 67 are partial cloverleaf interchanges. The interchanges at WIS 57 and WIS 32 are diamond interchanges. There are two driveways on WIS 23 that serve as agricultural access across WIS 23. These access points were likely established as mitigation for agricultural property severance that occurred during the original construction of WIS 23 on its current alignment. The existing typical section consists of two 12-foot lanes in each direction, separated by a 60-foot median. There are 10-foot (6-foot paved) outside shoulders and 6-foot (3-foot paved) inside shoulders.

Land use in the study corridor is largely agricultural and open space. The cities of Plymouth and Sheboygan Falls are located on either end of the study corridor and are small communities served by residential, commercial, industrial, recreational, governmental and institutional land uses. WIS 23 provides an important connection to and from these communities to the larger cities of Fond du Lac and Sheboygan.

Purpose

The purpose of the project is to prepare for future designation of WIS 23 as a freeway. The purpose of freeway designation as stated in Wisconsin Statutes Section 84.295(1), is to more adequately serve the present and anticipated future needs of highway travel and prevent conflicting and costly economic development on lands needed for future highway right-of way. Section 84.295 authorizes the official mapping of segments of the state trunk highway system as freeways.

Need

Preserve and enhance WIS 23 safety, operations and mobility

Traffic volumes are increasing in the project corridor. Current traffic volumes range from 19,700 AADT near the WIS 32 Interchange to 8,800 AADT near County P. Traffic on WIS 23 near WIS 32 is expected to increase to 22,700 AADT by 2035 (see Figure 2). There are currently twelve at-grade intersections with WIS 23. When direct access exists on a highway facility there is a direct relationship between increased traffic volumes and vehicle conflicts. As traffic increases on WIS 23 the number of conflicts between vehicles entering and exiting from the existing access points on the highway are expected to increase.

As currently configured, movements to and from the intersecting roadways disrupt the flow of traffic as vehicles merge, diverge, and/or cross WIS 23. The disruption is magnified by the presence of semi-truck traffic and slower moving farm equipment. Limiting access would improve safety, operations, mobility, and capacity by restricting where vehicles enter and exit the highway and reducing conflict points. Without this proactive corridor management, crashes, especially side-swipe, angle, and rear-end collisions, would likely increase.

Figure 3 shows the current functional classifications of WIS 23 and intersecting roadways in the study corridor. WIS 23 is designated a principal arterial, the function of which is to provide mobility, both from the state and regional perspectives. Access locations that are managed and limited in number are two defining characteristics of a principal arterial. Currently WIS 23 has a number of at-grade intersections and so does not meet the definition of a principal arterial.

Figure 2: WIS 23 Study Corridor Functional Classification Maps (West and East)

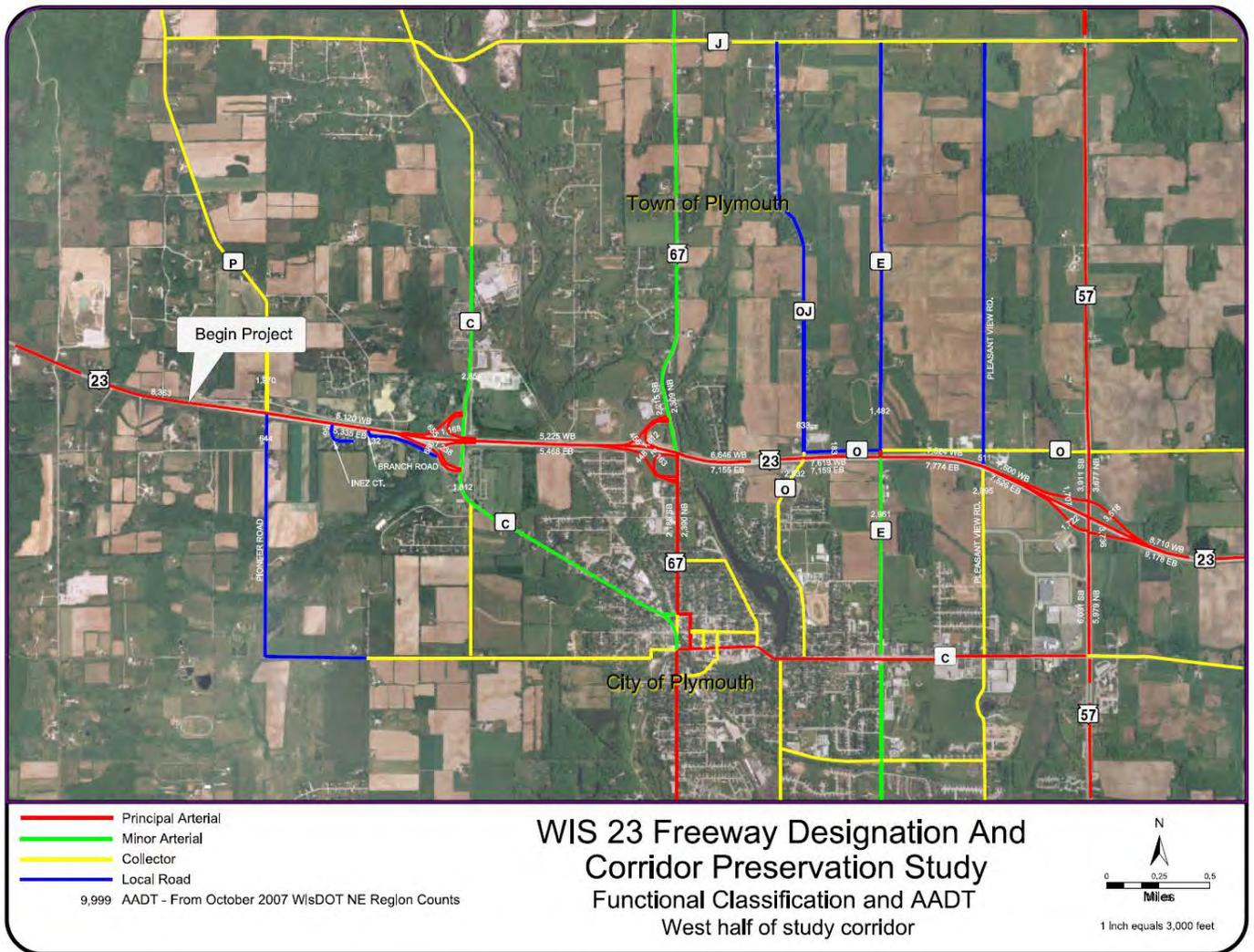
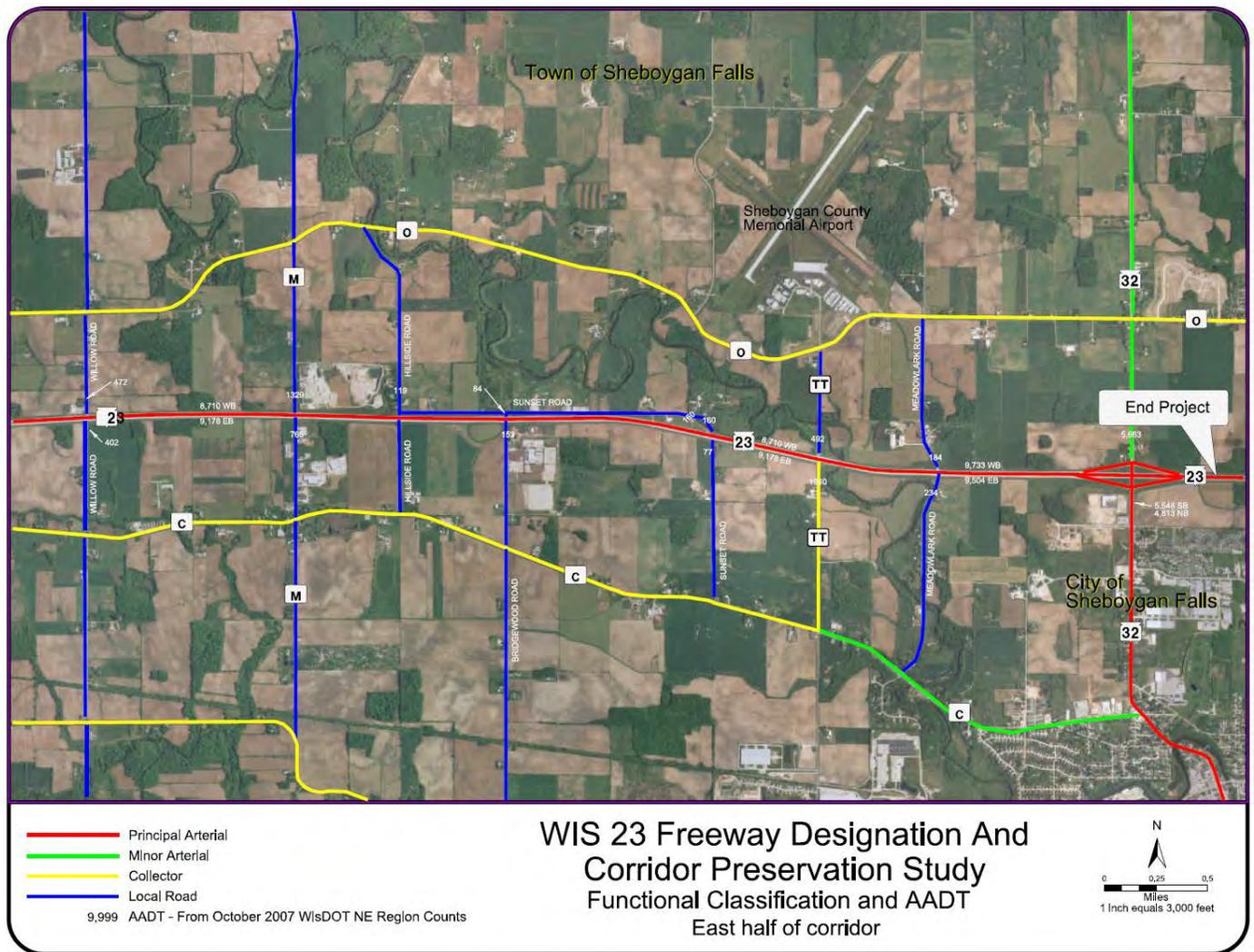


Figure 2: WIS 23 Study Corridor Functional Classification Maps (West and East) (continued)



Corridor Preservation

Funding is not currently available for construction and until such funding is available, preservation of the lands that would be needed for future construction is necessary. Wisconsin grants the authority to preserve future right of way by mapping the lands needed for the conversion including roads needed to provide alternate access when at-grade intersections are eliminated. The state needs to carefully determine what lands would likely be needed and reserve those lands to prevent conflicting and costly development. Section 84.295 is the means provided in Wisconsin to accomplish this.

Section 84.295 requires local governments to maintain the portions of local roads that have been mapped. It also prohibits property owners from building additional structures without first giving WisDOT 60 days notice. Section 84.295 provides state and local governments the right to acquire mapped right-of-way if necessary to save costs associated with subsequently proposed development in the rights of way of the future freeway and alternate access routes.

As evidence of the need to protect the lands from incompatible development, there has been commercial development south of WIS 23 just west of the WIS 57 interchange in the City of Plymouth including big box stores, a car dealership, fast food restaurants, a hotel and hospital. An analysis of aerial photos shows that the only developed property in 1994 was Fleet Farm. By 2005 Walmart and the hotel were present and the hospital was constructed between 2007 and 2008. Since 1992, various industrial and commercial developments have also occurred along Willow Road, County M, Bridgewood Road and Sunset Road to the south and north of WIS 23.

Coordinate state transportation planning with local land use and transportation planning

The Town of Plymouth, City of Plymouth, Town of Sheboygan Falls and City of Sheboygan Falls are all directly affected by the presence of WIS 23 and each community has developed separate comprehensive plans. These plans

have specific transportation planning goals. In addition, the Sheboygan County Non-Motorized Pilot Program has created a county-wide plan for the implementation of bike and pedestrian accommodations. Access to WIS 23 plays a central role and WisDOT worked with the affected local communities and Sheboygan County to identify pertinent land use goals and development plans. To be consistent with local plans, this information needs to guide the freeway conversion process and be considered in the timing of future improvements.

Current direct access on WIS 23 is inconsistent with WisDOT's Connections 2030 Long Range Multimodal Transportation Plan (C2030) and State Access Management Plan goals. The Connections 2030 plan emphasizes the importance of preservation, traffic movement, multi-modal functionality and safety within the WIS 23 corridor. The State Access Management System Plan is composed of two tiers. The section of WIS 23 from County P to WIS 67 is considered a Tier 2A facility and from WIS 67 to WIS 32, a Tier 1 facility. Tier 1 consists of those routes making up Wisconsin's C2030 system. Access management on Tier 1 corridors is essential to maintain the required high level of service between major population and economic centers. Tier 2 is comprised of other state highways where limiting access would be a cost-effective strategy to improve safety, reduce congestion and facilitate planned access to developing land.

WIS 23 meets the requirements of Section 84.295, which authorizes the designation of segments of the state trunk highway system as either freeways or expressways. Freeway designation would fulfill WIS 23's function as a Tier 1 and Tier 2A corridor. The completion and recordation of an official corridor map preserving the future rights of way necessary to convert the existing facility to a freeway would meet the goals for WIS 23 set forth in the C2030 plan and the State Access Management Plan. See also Items 5 and 6 of the Basic Sheets for further discussion of land use and planning.

2. Summary of Alternatives

The subject of this environmental evaluation is the action of officially mapping future roads, interchanges, and access closures to allow the conversion of this expressway to a fully access-controlled freeway and still accommodate access needs for adjacent properties. To locate the best alternative for local access roads and for changes to interchanges necessarily includes an analysis of resources that could reasonably be expected to be impacted by the various alternatives. Preliminary estimates of potential environmental impacts were done to see where improvements could be placed with the least harm to existing resources (such as wetlands, structures, historic and archaeological sites, etc.). This early assessment may not be able to fully predict the impacts, but certain educated approximations can be made at this time. Future projects needed to convert this facility into a freeway will be re-analyzed in greater detail at the time such improvement projects are proposed and programmed. This would capture any substantial changes that may have occurred between the official mapping and actual construction. New environmental documents would be prepared as may be required at that yet-to-be-determined time in the future.

WisDOT identified, analyzed and considered ways to meet the purpose and need and the project and proposed several different ways, which are summarized in this section. A reasonable range of alternatives was considered including the alternative of taking no action.

No Action (No Mapping)

Under the No-Action alternative, there would be no official mapping of the right of way needed to convert WIS 23 into a controlled access freeway in the future. The No-Action alternative would not address the identified need to preserve the right of way required to maintain the mobility and safety of WIS 23 in the future. Development would likely occur within some of the areas required for future right of way resulting in higher future costs of construction related to relocation and land acquisition costs of business or residential properties that may develop in the needed lands.

Without reserving lands required for future transportation facilities, the available options for placement of the necessary new access roads would be limited, reducing the options of locating roads outside of environmentally constrained properties, such as wetlands, woodlands and floodplains. This would not only increase the physical environmental impacts associated with construction of the future freeway conversion improvements, such as wetland function and habitat losses, but also would increase the future costs associated with mitigation measures.

While the No-Action alternative does not meet the purpose and need for the project, it does serve as a baseline for a comparison of impacts to the preferred alternative.

Alternatives Considered for Mapping

The end points selected for this study corridor are County P on the west and WIS 32 on the east. This is a segment that has independent utility and is of sufficient length to address environmental matters on a broad scope. The study corridor was divided into three sections identified as the "West Segment", "Central Segment" and "East Segment".

These sections correspond to the areas where groups of future local roads are proposed to be mapped and correspond to different stakeholder groups, enabling the various groups to focus on their area of interest.

The West Segment extends from Pioneer Road /County P to just west of the WIS 67 interchange. The Central Segment extends from just west of WIS 67 to east of the WIS 57 Interchange and the East Segment extends from just East of the WIS 57 Interchange to the WIS 32 Interchange. All build alternatives are described below from the perspective of future WIS 23 access changes and future construction of local access roads to accommodate access closures. Construction of the improvements is not part of the project at this time; rather these future improvements prescribe the locations of future roads to be officially mapped under Wis. Stats Sec. 84.295. A certain level of design was necessary to clearly identify where future right of way would be required. Refer also to Basic Sheet 6 for Alternatives Comparison Matrices that summarize and compare the project's parameters for each alternative. While the impact of mapping is the basis for the development of this environmental analysis, future construction impacts were also considered to ensure the mapped areas considered future environmental impacts.

WEST SEGMENT ALTERNATIVES (COUNTY P TO WIS 67)

General Discussion

In order to convert the western section of WIS 23 to a freeway, it would be necessary to close the WIS 23 at-grade intersections at County P/Pioneer Road and at Inez Court. (Note: Although within the project corridor, the South Branch Road intersection is assumed to be closed by the time the project is implemented because its closure and reconnection to Inez Court was included under the separate WIS 23 Fond du Lac to Plymouth project immediately to the west. This change was to be constructed in 2015, but has been delayed.)

During the alternative prescreening, the following two features within the West Segment were eliminated from consideration due to public and stakeholder feedback, future expected environmental impacts and design feasibility:

- An interchange in the West Segment was precluded because of the proximity of the C Interchange. The only logical location for an interchange within the West Segment would be at the location of County P. This would result in ramp to ramp distances of approximately one-half mile. This is well below the AASHTO recommended rural interchange spacing of 2 miles.
- An overpass was considered at the County P/Pioneer Rd intersection during the alternative pre-screening phase; however, was found not viable after Stakeholder Meeting #2 due to real estate impacts north of WIS 23 and loss of agricultural property south of WIS 23 associated with the construction of the overpass.

For discussion purposes, the West Segment Alternatives were further subdivided into north alternatives and south alternatives because they operate independently of one another. This division was for the benefit of the stakeholders, public, and local officials.

West Segment North Alternatives (County P to WIS 67)

Alternative W1 North (Dismissed Alternative)

Alternative W1North would include mapping the closure of the County P and Branch Road intersections and the provision of an east-west County P route that would provide a connection between old County P and County C (Figure 3). The western half of the alignment would closely follow the existing Branch Road alignment. Improvements would be made to the horizontal curves on Branch Road to meet design standards for a county highway. The eastern half of the connection would be mapped on new alignment and would intersect County C approximately 1,020 feet from the north County C interchange ramp terminal. Typically, a distance of 1,320 feet is considered to be a desirable offset from a ramp terminal. However, maintaining 1,320 of offset would result in substantial additional wetland impacts. Future improvements would be required at the location of the existing horizontal curves on Branch Road. South of Valley Lane, the existing intersection of County P and WIS 23 would be closed and a cul-de-sac mapped to provide future access to existing residential and commercial property. Existing County P south of Branch Road would be mapped as a T-intersection at the realigned County P to maintain future access for residences and businesses currently located on County P or Valley Lane. Branch Road would also be mapped as a T-intersection with the realigned County P.

Alternative W1 North was dismissed from further consideration because of unfavorable input from the Stakeholder Committee and unfavorable public input related to the greater future impact of converting a portion of a rural town road with residential development to a county highway. In addition, there is a greater estimated cost and more future agricultural impacts with this alternative.

Alternative W2 North (Preferred Alternative)

This alternative would also reroute existing County P along an east-west connection to County C (Figure 4). The western half would closely follow the existing Valley Road alignment where, near its intersection with Branch Road, the alignment would continue east overland to connect to County C, north of the WIS 23/County C interchange. Access to Branch Road would be established through a T-intersection near the location of the curve that currently connects Branch Road and Valley Lane.

The intersection of WIS 23 and County P would be closed. Several residential properties, currently with driveways on County P north, would have access via a new cul-de-sac on the original County P alignment. Access to properties near the existing intersection of Valley Lane and County P will be maintained on Valley Lane. In order to reduce potential impacts to properties along the existing Valley Lane (future County P) the new alignment will be offset slightly to the south of existing Valley Lane. The eastern half of the connection would be on new alignment and would intersect County C approximately 1,020 feet from the north County C interchange ramp terminal. Typically, a distance of 1,320 feet is considered to be a desirable offset from a ramp terminal. However, maintaining 1,320 of offset would result in substantial additional wetland impacts.

WisDOT selected Alternative W2 North as the preferred alternative because of favorable input from the public and the Stakeholder Committee and due to fewer agricultural and residential impacts. In addition, the estimated cost associated with future construction is lower with this alternative. There are slightly higher wetland impacts than Alternative W1 North; however, the agricultural severance impacts are less and overall right of way impacts would be considerably less than Alternative W1 North.

West Segment South Alternatives (County P to WIS 67)

All West Segment South alternatives assume, as explained in the General Discussion above, that the South Branch Road intersection will be closed prior to construction of the roads to be mapped. Both West Segment Alternatives would map a new connection from Pioneer Road to County C (Figure 4). Near the end of the existing Pioneer Road a curve would be mapped that would connect Pioneer Road to an off alignment portion that runs parallel to existing WIS 23 and ultimately connects to the Inez Court/Branch Road connection previously mapped under a separate project and planned for construction in 2015 (although now delayed).

Alternative W1 South (Dismissed Alternative)

With this alternative (Figure 5) a new connection would be mapped on a new north-south alignment between Branch Road and Linda Lane. Linda Lane currently provides access through a residential subdivision from County C via Country Aire Road. The alignment would necessarily cross over wetland and undeveloped property.

This alternative was dismissed because it would result in substantial wetland impacts that sever the headwaters of the Ben Nutt Creek and Jackson Creek. Stakeholder and public input on this alternative was not favorable due to the routing of traffic through an existing residential neighborhood (Linda Lane). The estimated future real estate and construction costs of this alternative would be similar to future estimated costs for other alternatives.

Alternative W2 South (Preferred Alternative)

With this alternative (Figure 4) a new connection between Branch Road and County C would be mapped on its existing alignment and then extended further east to meet up with a new intersection with County C approximately 670 feet south of the County C interchange ramp terminal. Several variations were considered to maximize the County C intersection's distance from the ramp terminal while also avoiding future residential relocations, minimizing wetland impacts associated with future construction, and avoiding the use of Linda Lane as was proposed in Alternative W1 South.

Alternative W2 South was selected as the preferred alternative because it received the most favorable input from the public and the Stakeholder Committee, and would have fewer community and residential impacts from future construction of the mapped alignment. Alternative W2 also has a lower estimated future real estate acquisition and construction cost. Wetland impacts associated with future construction would be 2 acres less than Alternative W1.

Figure 3 Alternative W-1 North(Dismissed Alternatives)

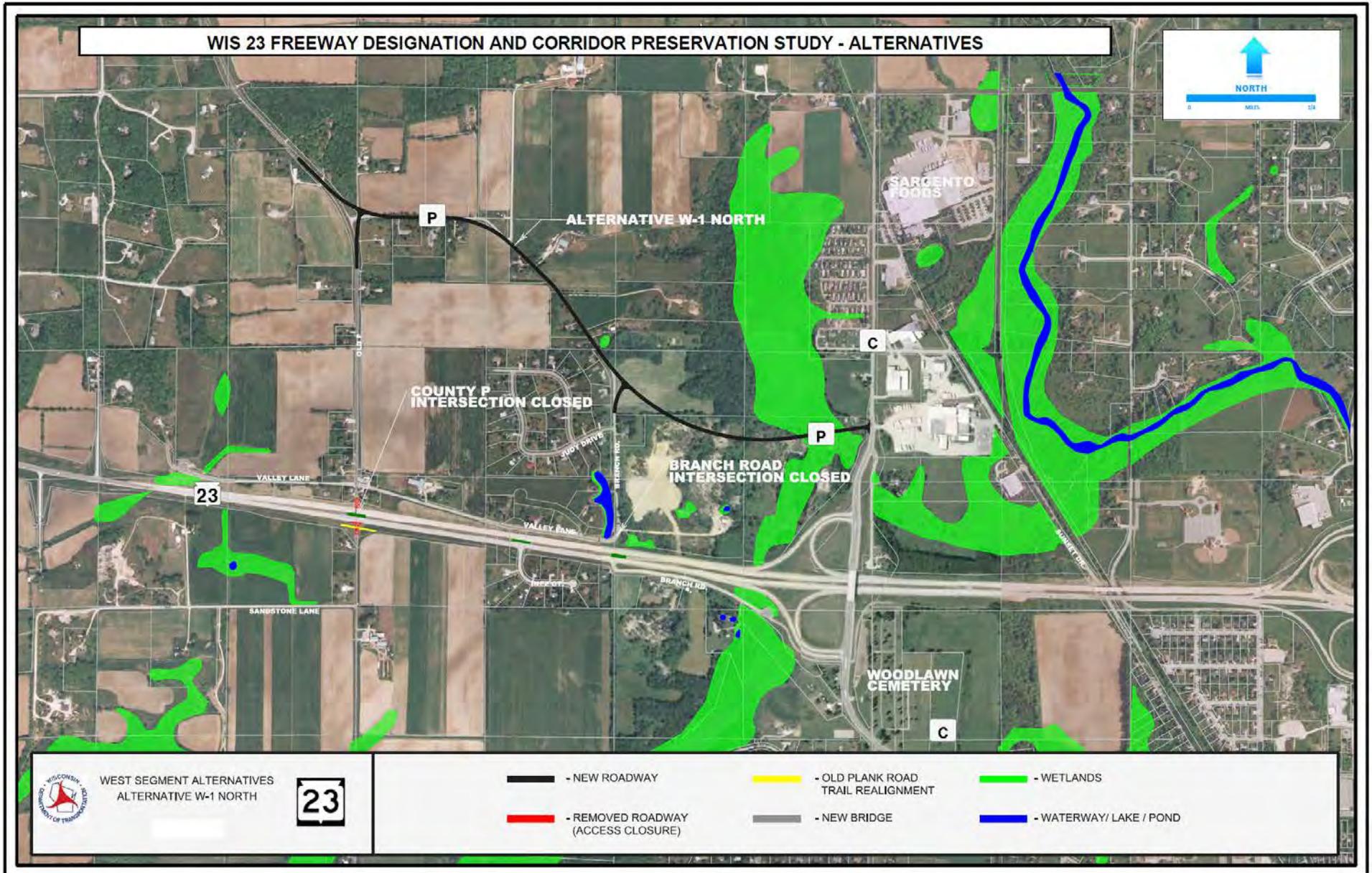
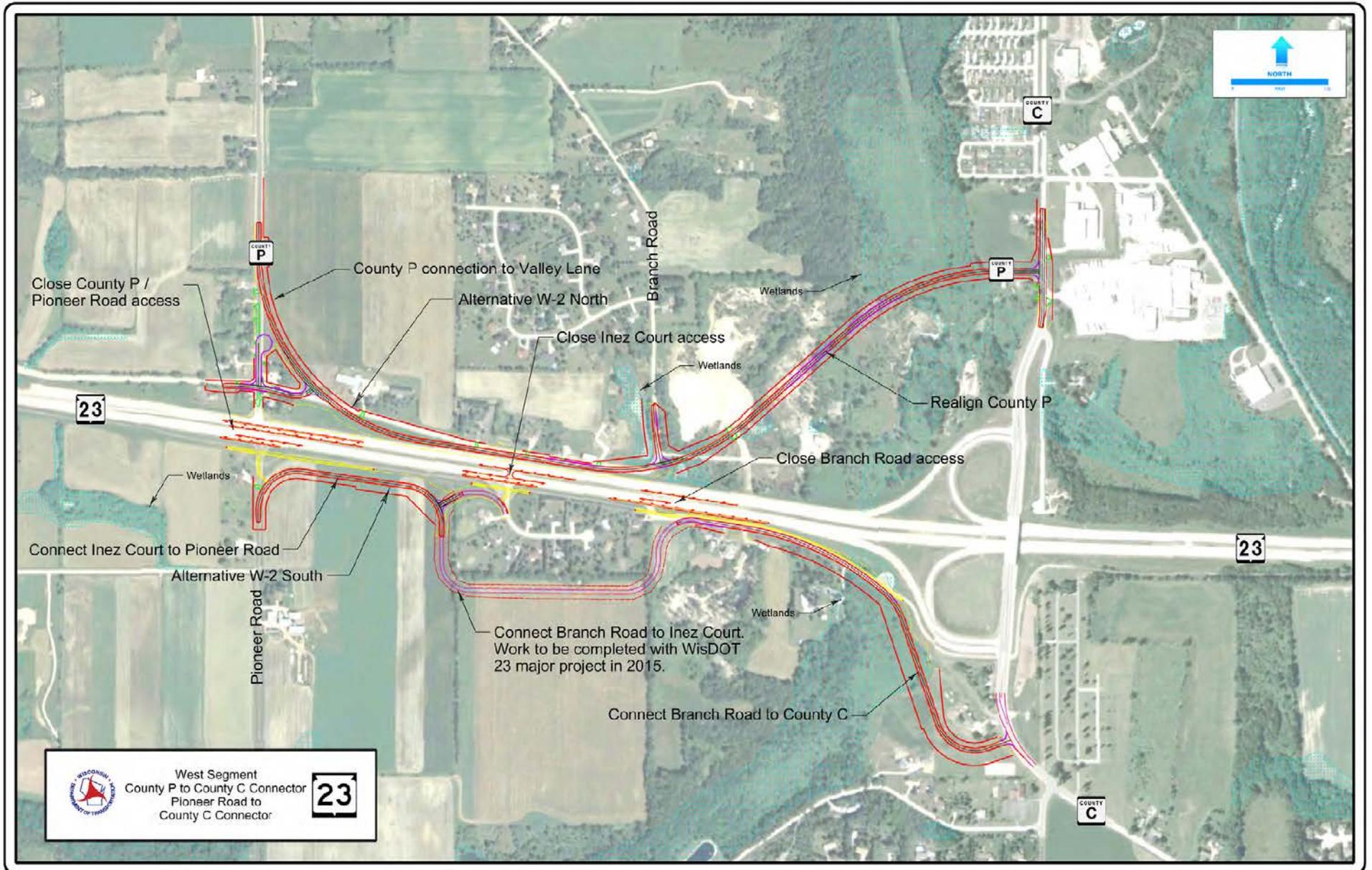


Figure 4: Alternative W2 North and South (Preferred Alternatives)



CENTRAL SEGMENT ALTERNATIVES (WIS 67 TO WIS 57)

General Discussion

The Central Segment alternatives would all require the removal of at-grade intersection access points at the WIS 23 and County O/OJ, County E and Pleasant View Road in order to meet the purpose and need to convert this segment of WIS 23 to a freeway. During the alternative pre-screening phase of the project seven alternative alignments were considered. Many of these alignments were quickly dropped from further consideration because they would have impracticable/unreasonable geometric and/or operational conditions, excessive impacts or they were incompatible with current development plans. The alignments screened out early in the process are displayed in Figure 7.

A brief summary of public/stakeholder involvement in the decision making process and the reasons for elimination of the concepts shown in Figure 7 are as follows:

County E Overpass with south connection to WIS 67 (Figure 7 – Red Alignment)

- This concept was presented at Stakeholder Meeting #3 and Public Involvement Meeting (PIM) #2
- The overpass/underpass at County E was carried forward in all the Alternatives (C1, C2, C3 and C4) discussed further in this section.
- The local communities preferred a connection to WIS 67 south of WIS 23.
- Due to vertical and horizontal constraints at the new intersection with WIS 67, WisDOT eliminated this alternative as infeasible. The vertical alignment would require a significant drop and the horizontal alignment (curvature) and vertical alignment of WIS 67 at this location may have created potential safety hazards if an intersection was constructed at this location.

County O/OJ Overpass with connection to Woodland Road (Figure 7 – Yellow Alignment)

- This concept was presented at Stakeholder Meeting #5.
- The local communities preferred an overpass or underpass at County E.
- The local communities considered Woodland Road to be too far north to be a viable connection to WIS 67 and preferred a connection to WIS 67 south of WIS 23.
- A modified version of the overpass at County O/OJ was carried forward as a part of Alternative C3. The Woodland Road Connection was carried forward as part of Alternative C1. Both of Alternatives C1 and C3 are discussed further in this section.

Kiley Way connection to WIS 23 ramp terminals (Figure 7 – Orange Alignment)

- This concept was presented at Stakeholder Meeting #2 since it is the option defined in the 1997 Memorandum of Agreement between WisDOT, City of Plymouth, Town of Plymouth and Sheboygan County. This alternative was also presented at PIM #2 after it was eliminated, to inform the public with the reasons for elimination of this connection.
- The City of Plymouth supported this alternative in Resolution No. 15 of 2010.
- WisDOT eliminated this alternative due to the location of an at grade intersection at an existing ramp terminal with WIS 67. WisDOT determined this intersection location was likely to result in significant safety and operational issues at this location. WisDOT also eliminated this connection based on environmental impacts to a high quality environmental corridor where a future bridge would be required. Additionally, agency feedback opposed this alternative and suggested that other alternatives that fit the criteria of minimum or no environmental impacts were options and should be considered, see Attachment E.
- A modified version of this connection was carried forward in Alternative C2, discussed further in this section.

Kiley Way connection to Suhrke Road (Figure 7 – Purple Alignment)

- This concept was presented at Stakeholder Meeting #3 and PIM #2.
- At PIM #2 there was significant opposition to this alternative from the public due to the connection to WIS 67 over the Mullet River severing the Riverview Drive Neighborhood. The City of Plymouth strongly objected to this alternative in Resolution No. 15 of 2010.
- WisDOT eliminated this alternative due to significant public opposition and based on environmental impacts to a high quality environmental corridor where a future bridge would be required.
- The portion of this alternative connecting existing Kiley Way at Pleasant View Road to County E was carried forward in Alternatives C1, C2, C3 and C4. These alternatives are discussed further in this section.

Frontage Road connector roadway to WIS 67 ramp terminals (Figure 7 – Blue Alignment)

- This concept was presented at Stakeholder Meeting #2.
- The Stakeholders opposed this alternative due to conflicts with existing and planned development. However, the City of Plymouth did prefer the connection of County O/OJ to the ramp terminals at WIS 67.
- WisDOT eliminated this alternative due to Stakeholder input regarding existing and planned development in addition to the location of an at grade intersection at an existing ramp terminal with WIS 67. WisDOT determined this intersection location was likely to result in significant safety and operational issues at this location. WisDOT also eliminated this connection to the ramp terminals based on environmental impacts to a high quality environmental corridor where a future bridge would be required.

Terrace Avenue connector road (Figure 7 – Green Alignment)

- This concept was presented at Stakeholder Meeting #2.
- There was not direct opposition to this alternative at Stakeholder Meeting #2. However, WisDOT eliminated this alternative after Stakeholder Meeting #2 due to potential impacts to an existing neighborhood at the River Heights Drive connection.
- The portion of this alternative running through the River Heights Drive neighborhood was revisited by WisDOT later in the study at the request of the Town of Plymouth, City of Plymouth and Sheboygan County. This portion of the alignment was carried forward in Alternative C3 which is discussed further in this section.

In 2013, intersection safety improvements projects using Highway Safety Improvement Project (HSIP) funding were completed at the intersections of WIS 23 with County O/OJ, County E and Pleasant View Road. These improvements were required due to the high crash rate and severity of crashes at these intersections. These improvement projects included the construction of right-in and right-out intersections combined with zero offset left turn lanes.

A County E overpass of WIS 23 was considered early in the study, however, impacts were compared between construction of a County E overpass of WIS 23 versus a WIS 23 overpass of County E. Based on the favorable topographic conditions, reconstructing WIS 23 over County E would substantially reduce wetland, stream, real estate, relocation, and access impacts. One residential relocation would be required if County E was constructed over WIS 23. Therefore, the Central Segment alternatives all assume an overpass of WIS 23 over County E as the preferred improvement of the County E intersection.

Central Segment Alternatives (WIS 67 to WIS 57)

Alternative WC7 (Dismissed Alternative)

The concept of a diamond interchange with either an overpass or underpass of County E (Figure 6) was considered early in the study (the overpass option is depicted in Figure 6). This concept included a connection of Kiley Way from Pleasant View Road to County O and an east-west connection from County OJ to County E north of WIS 23. The purpose of these improvements would be to provide continuity of the county highway system. After development of a conceptual layout, this alternative was dismissed by WisDOT for the following reasons:

- The alternative would not meet the interchange spacing requirements as defined in the AASHTO guidelines. Ramp to ramp distances would range from 0.32 miles to 0.64 miles. This spacing is well below the interchange spacing guideline of two miles as defined by AASHTO for a rural freeway. Such closely spaced interchanges can result in safety and operational issues in a freeway corridor.
- The City of Plymouth is already served by three different interchanges within a 3.67-mile corridor and the addition of another interchange would duplicate service that is currently provided at the WIS 57 and WIS 67 interchanges and that already serve the land use and destinations in the area. The existing three interchanges serve the City of Plymouth well into the future with a planned overpass and frontage road street system.

The City of Plymouth supported the construction of an interchange at County E in Resolution 12 of 2011. This resolution is provided in Attachment E. In addition, there was public support of an interchange at County E recorded over the course of the public involvement effort for this project. In addition, there was some opposition to a County E interchange. The public support for the interchange did outweigh the public opposition..

Alternative C1 (Dismissed Alternative)

On the south side of WIS 23, this alternative would close the County O intersection with WIS 23 (Figure 8). County O would then be redirected along a new west-east connecting street that would meet up with a new Kiley Way/County E (Highland Avenue) at-grade intersection and would continue overland east from there to the existing T-intersection of Kiley Way and Pleasant View Road. The Pleasant View Road/WIS 23 at-grade intersection would be closed and replaced with a cul-de-sac. The County E at-grade intersection of WIS 23 would be closed and replaced with a new overpass structure.

On the north side of WIS 23, County O would be realigned so that it would directly connect to County OJ. The intersections that would be closed at both County OJ and Pleasant View Road would not require cul-de-sacs due to the short extension of road required between County O and WIS 23 in the existing configuration. Woodland Road would be extended north of and parallel to WIS 23 and would connect WIS 67 to County E.

Alternative C1 is not preferred because of unfavorable input from the local governments including the lack of close access and the lack of complete connectivity between WIS 67 and WIS 57. The location of Woodland Road is too far north to satisfy the need to provide reasonable alternative access between WIS 57 and WIS 67.

Alternative C2 – (Dismissed Alternative)

On the north side of WIS 23 Alternative C2 is the same as Alternative C1 except that it would not include the new Woodland Drive connection (Figure 9). South of WIS 23 this alternative provides the desired connection between WIS 67 and WIS 57 that Alternative C1 lacked.

On the south side, the west end of the alignment would start at a new intersection across from the existing T-intersection at WIS 67 and Rustic Road and a minimum 450' long bridge would be required over the Mullet River. The County O intersection with WIS 23 would be closed. South of WIS 23 County O would end at a new T-intersection. A new at-grade intersection would be created at County E and the new alignment. The connection would then end at the existing T-intersection of Kiley Way and Pleasant View Road. Like Alternative C1, Alternative C2 would include the replacement of the County E at-grade intersection with an overpass. Alternative C2 would also include the closures proposed under Alternative C1 at County O/OJ and Pleasant View Road.

Alternative C2 was dismissed from further consideration. Although the alignment makes the desired east-west connection, that connection would require spanning the Mullet River. When constructed, this would impact the river and adjacent wetlands and woodlands severing what the Wisconsin DNR described as part of high quality environmental corridor for both wildlife habitat and migration and the largest remaining wooded tract in an urbanizing area. In addition, the only practicable location for the new intersection with WIS 67 would be only 380 feet south of the existing WIS 23 and WIS 67 interchange, which would not be desirable for traffic operations. The desirable distance (FDM 11-5 Attachment 5.2) for access control to the nearest intersection is 1,320 feet. Future real estate impacts that would be caused by future construction would also be the highest among the alternatives because it would require the eventual relocation of the Citgo gas station at the intersection of WIS 23 and County O and a residential relocation near the new Mullet River Bridge crossing.

Alternative C3 - (Dismissed Alternative)

South of WIS 23, Alternative C3 provides a connection starting at the existing T-Intersection of Kiley Way and Pleasant View Road and extends Kiley Way west to an intersection with County E (Figure 10). County O would be realigned to the west and a County E overpass of WIS 23 would be constructed, County O would continue on new alignment to the north and would connect with the existing dead end of Terrace Avenue. The County O alignment would then continue to an intersection with WIS 67 to the west following the existing Terrace Avenue and River Heights Drive alignment. A curve would be constructed connecting county O to County OJ to create a continuous roadway north of WIS 23. WIS 23 would be reconstructed over County E. The at-grade access at Pleasant View Road would be closed with a cul-de-sac removing at-grade access.

Alternative C3 was dismissed from further consideration. Although the alignment makes an east-west connection that was preferred by the City of Plymouth, the residents within the Terrace Avenue/River Heights Drive community adamantly opposed this alternative. The Town of Plymouth Board was not willing to proceed with adopting a resolution in support this proposed alternative. Alternative C3 is not precluded from future mapping by the local community.

Alternative C4 - (Preferred Alternative)

Alternative C4 combines preferred elements of C1, C2 and C3 (Figure 11). South of WIS 23 Alternative C4 essentially matches the configuration of Alternative C1 with a connection between County O and the existing T-Intersection of Kiley Way and Pleasant View Road. On the north side of WIS 23, County O would be realigned so that it would directly connect to County OJ. The intersections that would be closed at both County OJ and Pleasant View Road would not require cul-de-sacs due to the short extension of road required between County O and WIS 23 in the existing configuration. The Woodland Road and Terrace Avenue connections proposed in Alternative C1 and C3 would not be included in the mapping project, rather would be completed by others when needed. This alternative includes many common elements from Alternative C1, C2 and C3, while meeting the project purpose and need.

Alternative C4 is the preferred alternative because of favorable input from the public, Stakeholder Committee, and the local governments. This alternative is also the least expensive and has the least amount of wetland, real estate and agricultural impacts.

Figure 7: Other alternatives considered during pre-screening (Dismissed Alternatives)

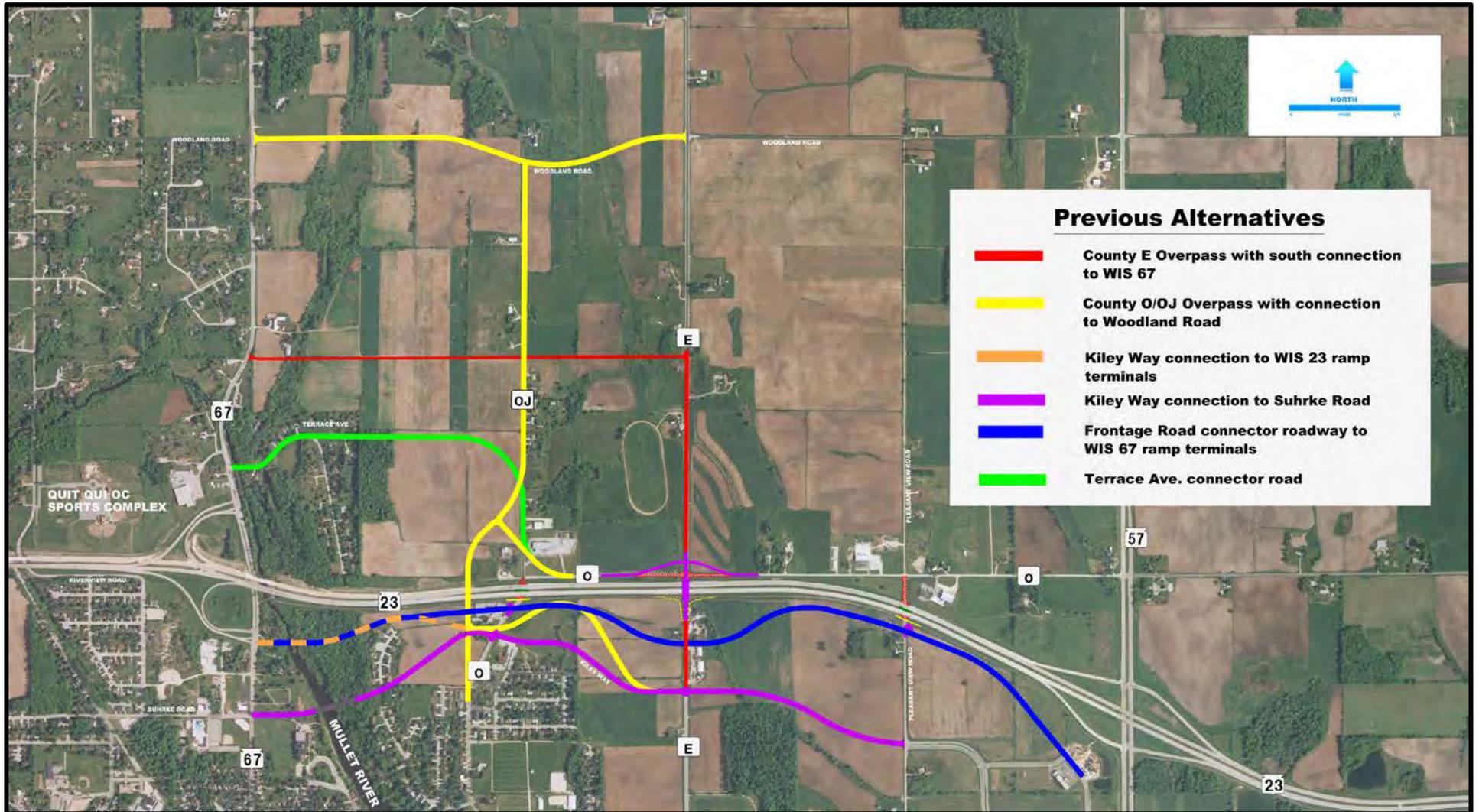


Figure 8: Alternative C1 (Dismissed Alternative)

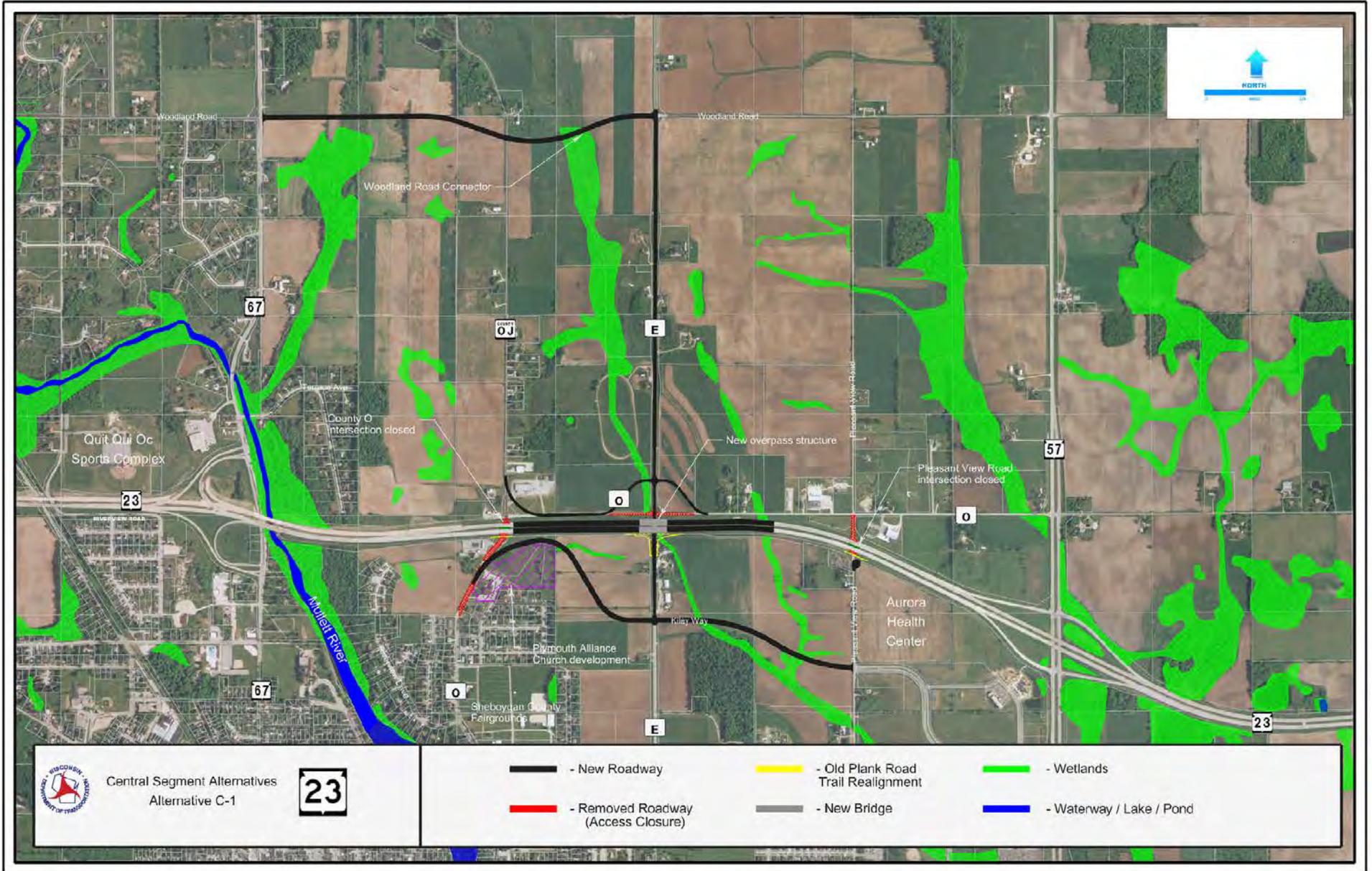


Figure 9: Alternative C-2 (Dismissed Alternative)

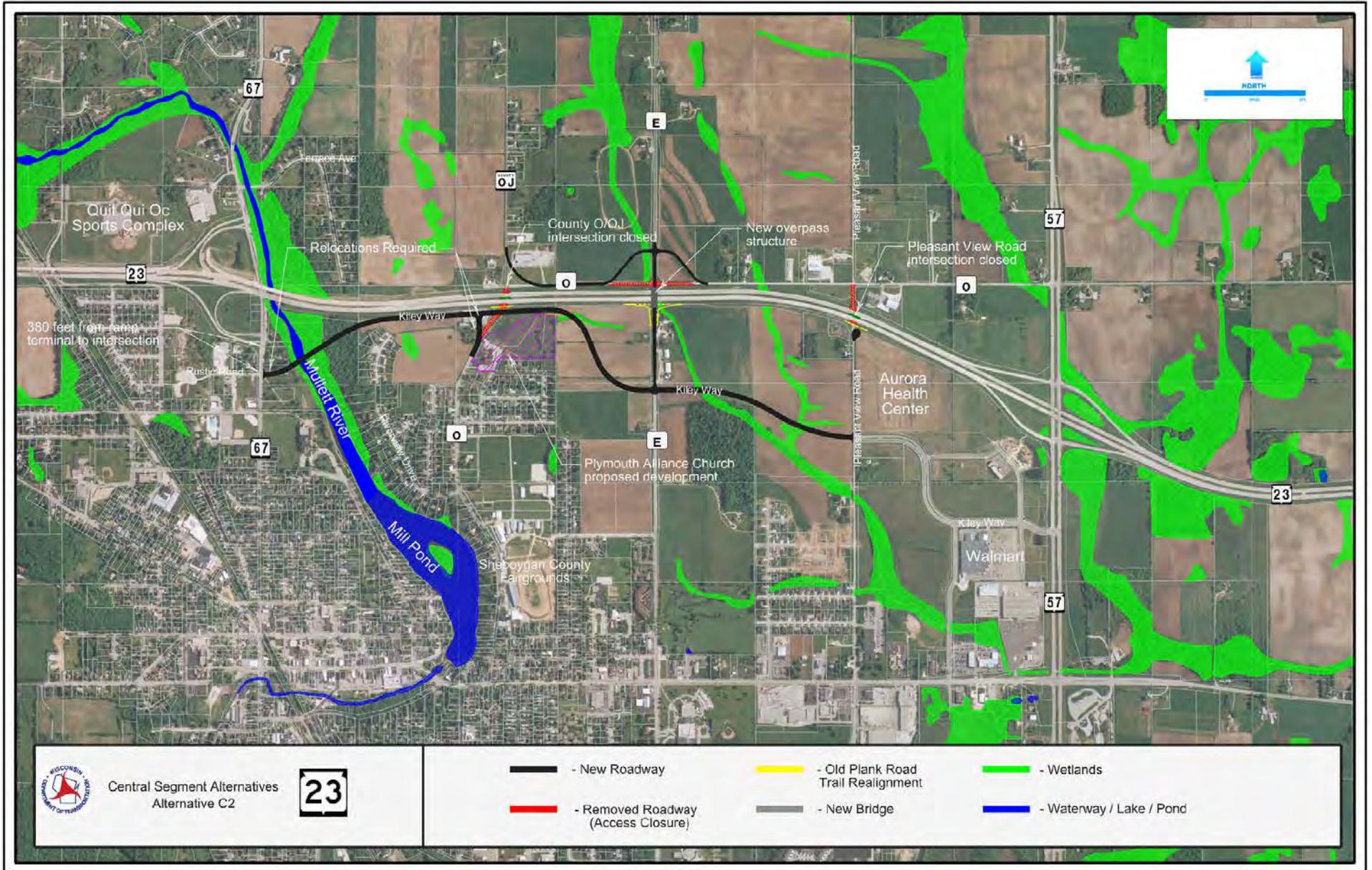


Figure 10: Alternative C3 (Dismissed Alternative)

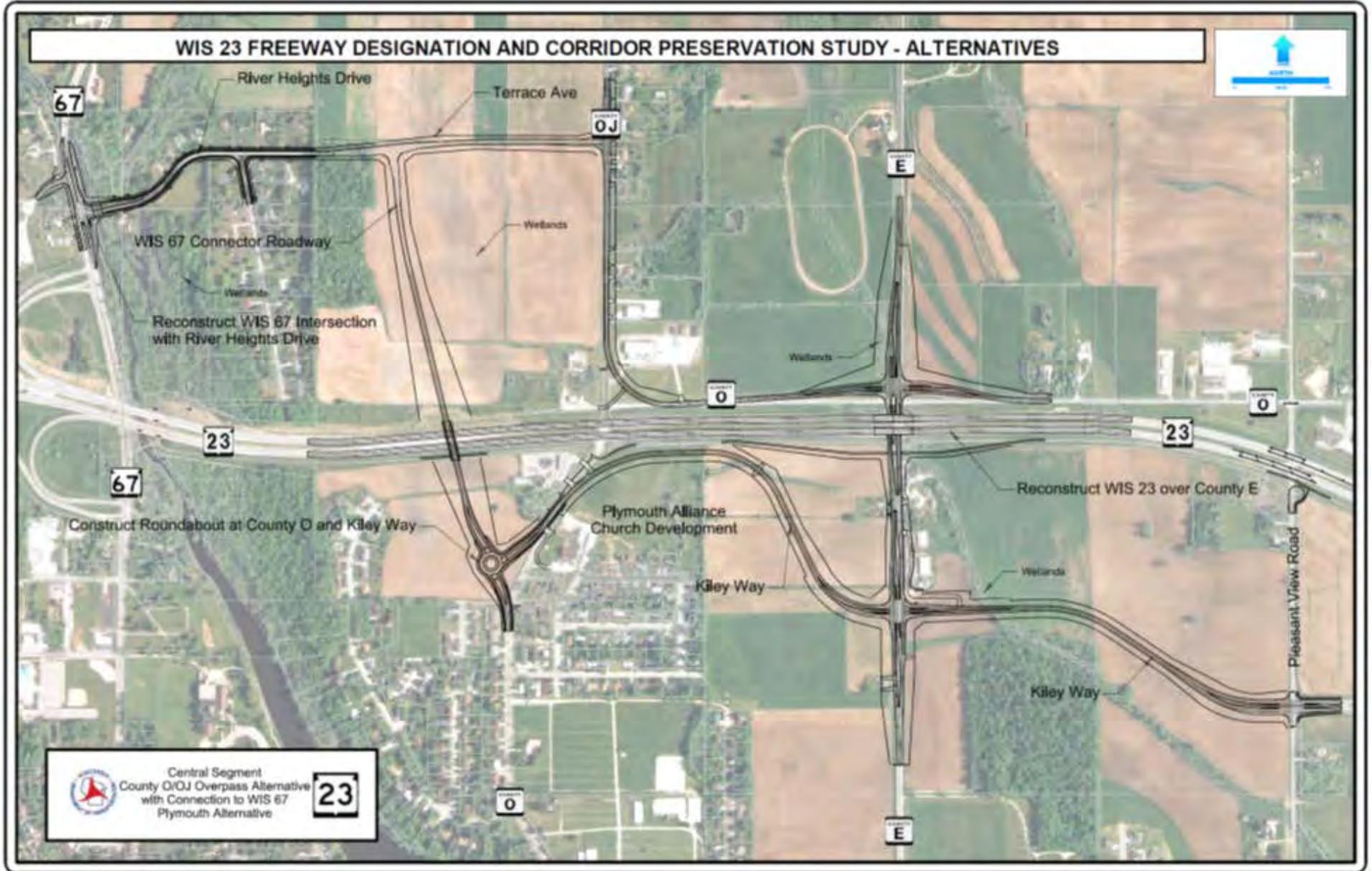
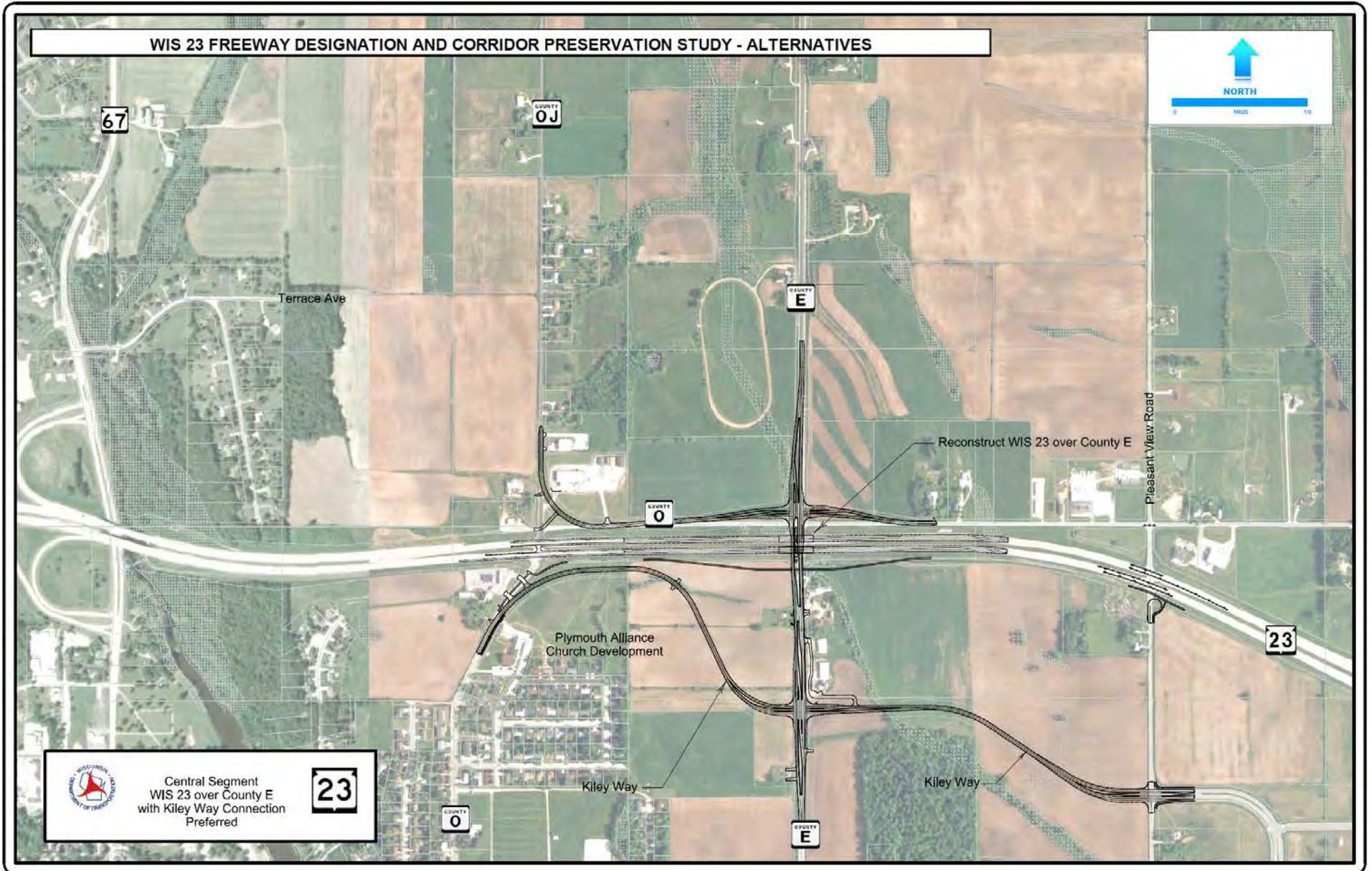


Figure 11: Alternative C4 (Preferred Alternative)



EAST SEGMENT ALTERNATIVES (WIS 57 TO WIS 32)

General Discussion

The East Segment of WIS 23 currently has at-grade intersections at Willow Road, County M, Hillside Road, Bridgewood Road, Sunset Road, County TT and Meadowlark Road. These intersections are well spaced and individual alternatives were evaluated for each intersection. Early in the project the stakeholders and the general public indicated a desire for access via an interchange within this segment. The following discussion looks both at the alternatives evaluated for an interchange and comparisons of the choice of closure with a cul-de-sac or overpassing each of the existing at-grade intersections.

East Segment Alternatives (WIS 57 to WIS 32)

The East Segment Alternatives, shown in Figure 12 through Figure 16, share the following common elements:

East Segment Alternatives Common Elements

- Construct an overpass at County M
- Close Hillside Road intersection and construct a cul-de-sac at Hillside Road south of WIS 23 and connect Sunset Road and Hillside Road at two-way at-grade intersection north of WIS 23
- Close Bridgewood Road intersection and construct a cul-de-sac at Bridgewood Road south of WIS 23 and vacate the portion of Bridgewood Road between Sunset Road and WIS 23 north of WIS 23
- Close Meadowlark Road and construct cul-de-sacs north and south of WIS 23
- Close driveway access points on WIS 23 approximately 0.3 miles west of Sunset Road and 0.3 miles east of Meadowlark Road

Alternative E1 – (Dismissed Alternative)

Alternative E1 (Figure 12) consists of the common elements noted above plus the following improvements

- Construct cul-de-sacs at Willow Road, north and south of WIS 23 (as opposed to a bypass)
- Construct a cul-de-sac at Sunset Road, south of WIS 23 (rather than on both north and south side)
- Extend Highland Road on new alignment from Sunset Road, approximately ½-mile south of WIS 23, passing over WIS 23 and the Sheboygan River to the existing Highland Road T-intersection with County O (north of WIS 23 and west of the Sheboygan County Memorial Airport)
- Construct a new diamond interchange at the Highland Road crossing of WIS 23 approximately 0.25 miles west of the existing WIS 23/Sunset Road intersection
- Close Sunset Road intersection and replace with a cul-de-sac south of WIS 23
- Construct a portion of Sunset Road as a frontage road "bump-out" with access on the new Highland Road side-road no closer than the standard 1,320 feet from the nearest ramp terminal, vacating resulting unneeded portions of existing Sunset Road.
- Provide a new access road to Camp Y-Coda from the new Highland Road
- Construct a new County TT overpass of WIS 23

Alternative E1 was eliminated from further consideration because it was not favored by the Stakeholder Committee, local government, and general public because of access issues. One of the main access points for Sheboygan Falls is County TT. County TT provides emergency access to the Sheboygan County Airport. In addition, Bemis Corporation uses County TT as an access for trucking to their facility on the southwest side of Sheboygan Falls. The location of the Highland Road Interchange would be indirect and would require trucks to pass through downtown Sheboygan Falls or make several turns to access the new interchange. WisDNR commented that this alternative was not preferable due to the requirement for another bridge crossing of the Sheboygan River and higher agricultural impacts than other alternatives. This alternative also had some of the highest environmental, real estate and cost impacts.

Alternative E2 (Dismissed Alternative)

Alternative E2 (Figure 13) consists of the common elements noted above and the following alterations in the segment area:

- Construct cul-de-sacs at Willow Road, north and south of WIS 23
- Construct a cul-de-sac at Sunset Road, north and south of WIS 23
- Construct a partial clover interchange at County TT

- Replace the bridge over the Sheboygan River at County TT
- Widen WIS 23 bridges over the Sheboygan River to accommodate on and off ramps

Alternative E2 was eliminated from further consideration because of unfavorable input from the public for access reasons. Access to a business and a residence south of County TT would be undesirable with respect to its proximity to the ramp terminal. In addition, the proximity of the ramps to WIS 32 would have likely required auxiliary lanes resulting in wetland and other natural environmental impacts. County TT would be constructed over WIS 23 and the high fills required would cause additional flood plain and wetland impacts due to the close proximity of the Sheboygan River. With other available options that would have fewer impacts to wetlands, floodplain, and access, Alternative E2 was dismissed.

Alternative E3 – (Dismissed Alternative)

This alternative (Figure 14) consists of the common elements noted above and the following alterations in the segment area:

- Construct cul-de-sacs at Willow Road, north and south of WIS 23
- Construct a cul-de-sac at Sunset Road, north and south of WIS 23
- Construct a diamond interchange at Bridgewood Road on new alignment just west of the existing Bridgewood Road Interchange
- Extend Bridgewood Road across the Sheboygan River to County O
- Construct bridges over WIS 23 and over the Sheboygan River
- Realign Sunset Road from the Sunset Hill Golf Course west to a connection with Hillside Road
- Realign the intersection of Bridgewood and County C to a 90-degree intersection
- Construct an overpass of County TT

Alternative E3 received unfavorable input from the public and the Stakeholder Committee with respect to access at the interchange location. WisDNR also commented that this alternative was not preferable to other alternatives due to the amount of agricultural impacts and impacts associated with a new structure across the Sheboygan River. This alternative had the highest overall cost and impacts. Because of these issues and because there were more satisfactory alternatives, Alternative E3 was dismissed and eliminated from further consideration.

Alternative E4 (Preferred Alternative)

Alternative E4 is exhibited in two parts. Figure 15 shows the preferred configuration of the East Segment side roads and Figure 16 shows the preferred alternative for the alignment of a new County TT interchange.

Alternative E4 includes the following elements taken from previous alternatives and as developed for Alternative E4:

- Construct an overpass at Willow Road (rather than cul-de-sacs proposed in the other Alternatives)
- Construct an overpass at County M (all alternatives)
- Construct a cul-de-sac at Hillside Road, south of WIS 23 (all alternatives)
- Connect Sunset Road and Hillside Road at two-way at-grade intersection and close north WIS 23 Hillside Road intersection (all alternatives)
- Construct a cul-de-sac at Bridgewood Road, south of WIS 23 (all alternatives)
- Close and remove the intersection of WIS 23 and Bridgewood Road at Sunset Road (all alternatives)
- Close Sunset Road and construct cul-de-sacs north and south of WIS 23 (all alternatives)
- Construct a diamond interchange at County TT offset to the west of the existing intersection
- Utilize roundabouts at ramp terminals and map roundabout footprints
- Construct bridges at County TT over WIS 23 and at a new crossing over the Sheboygan River
- Close old County TT south of WIS 23 and construct a cul de sac
- Close old County TT north of WIS 23, north of Sheboygan River
- Widen existing WIS 23 bridges over the Sheboygan River to accommodate ramps

- Close Meadowlark Road and construct cul-de-sacs north and south of WIS 23 (all alternatives)
- Close private driveway access to WIS 23 at two locations: one at approximately 0.3 miles west of Sunset Road and the other approximately 0.3 miles east of Meadowlark Road (all alternatives)

Alternative E4 is preferred for adoption because of favorable input from the public and the Stakeholder committee and the local governments. The City of Sheboygan Falls supported this alternative and adopted Resolution 13, see Attachment E. This alternative provides access at County TT which is very important to the local communities and businesses. In addition, this alternative avoids more wetland impacts than the other alternatives.

Supplemental Discussion on East Segment Overpasses and Intersection Closures

Overpass and closure alternatives were considered for all local road connections between WIS 57 and WIS 32. Overpasses are preferred at two locations, Willow Road and County M. An overpass option was selected at Willow Road due to the heavy agricultural access requirements to accommodate existing farming operations that frequently cross WIS 23 at Willow Road. An overpass option was selected at County M due to the higher traffic volumes and to maintain the continuity of the existing local road system. Both overpass locations received favorable input from the public and Stakeholder Committee. All other side roads including Hillside Road, Bridgewood Road, Sunset Road and Meadowlark Road were planned as closures with a cul-de-sac or other connection type. In general, public and Stakeholder Committee feedback was positive provided that interchange access was made available at County TT and overpasses were located at key roadways in the corridor. Table 1 is a summary of the local side road alternatives.

Table 1: Summary of WIS 23 Local Road Connection Alternatives Considered (Between WIS 57 and WIS 32)

WIS 23 Existing At-grade Intersection	Preferred Alternative	Other Alternatives Considered
Willow Road	Willow Road overpass	Cul-de-sac Willow Road north and south of WIS 23
County M	County M overpass	Cul-de-sac County M north and south of WIS 23
Hillside Road	Connect Hillside Road to Sunset Road at a two-way intersection north of WIS 23 Cul-de-sac Hillside Road south of WIS 23	Hillside Road Overpass Construct high-speed curve between Hillside Road and Sunset Road north of WIS 23
Bridgewood Road	Close connection to Sunset Road, north of WIS 23 Cul-de-sac Hillside Road, south of WIS 23	None
Sunset Road	Cul-de-sac Sunset Road, north and south of WIS 23	Overpass at Sunset Road
Meadowlark Road	Cul-de-sac Meadowlark Road, north and south of WIS 23	Overpass at Meadowlark Road

Figure 12: Alternative E1 (Dismissed Alternative)

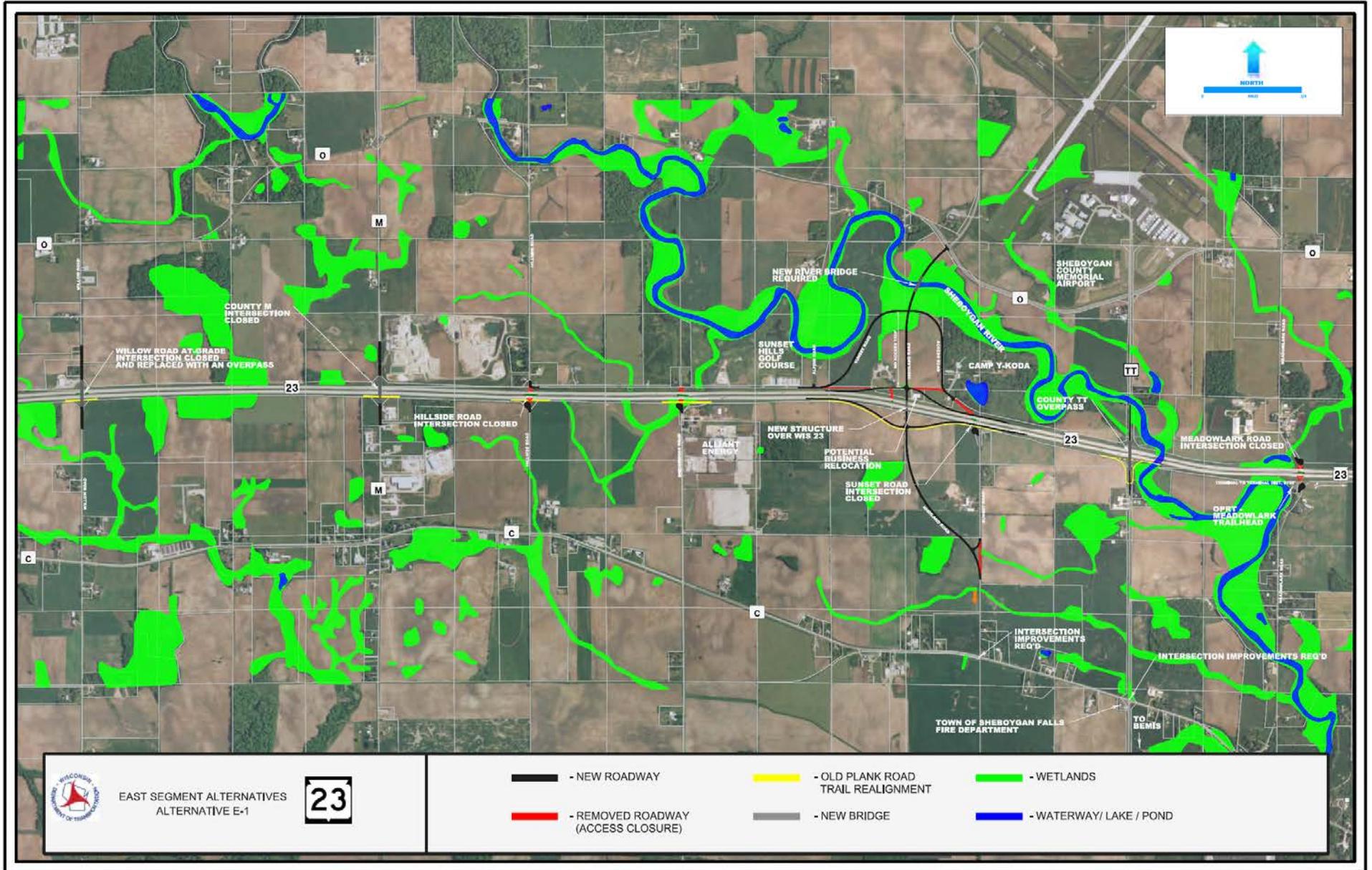


Figure 13: Alternative E2 (Dismissed Alternative)

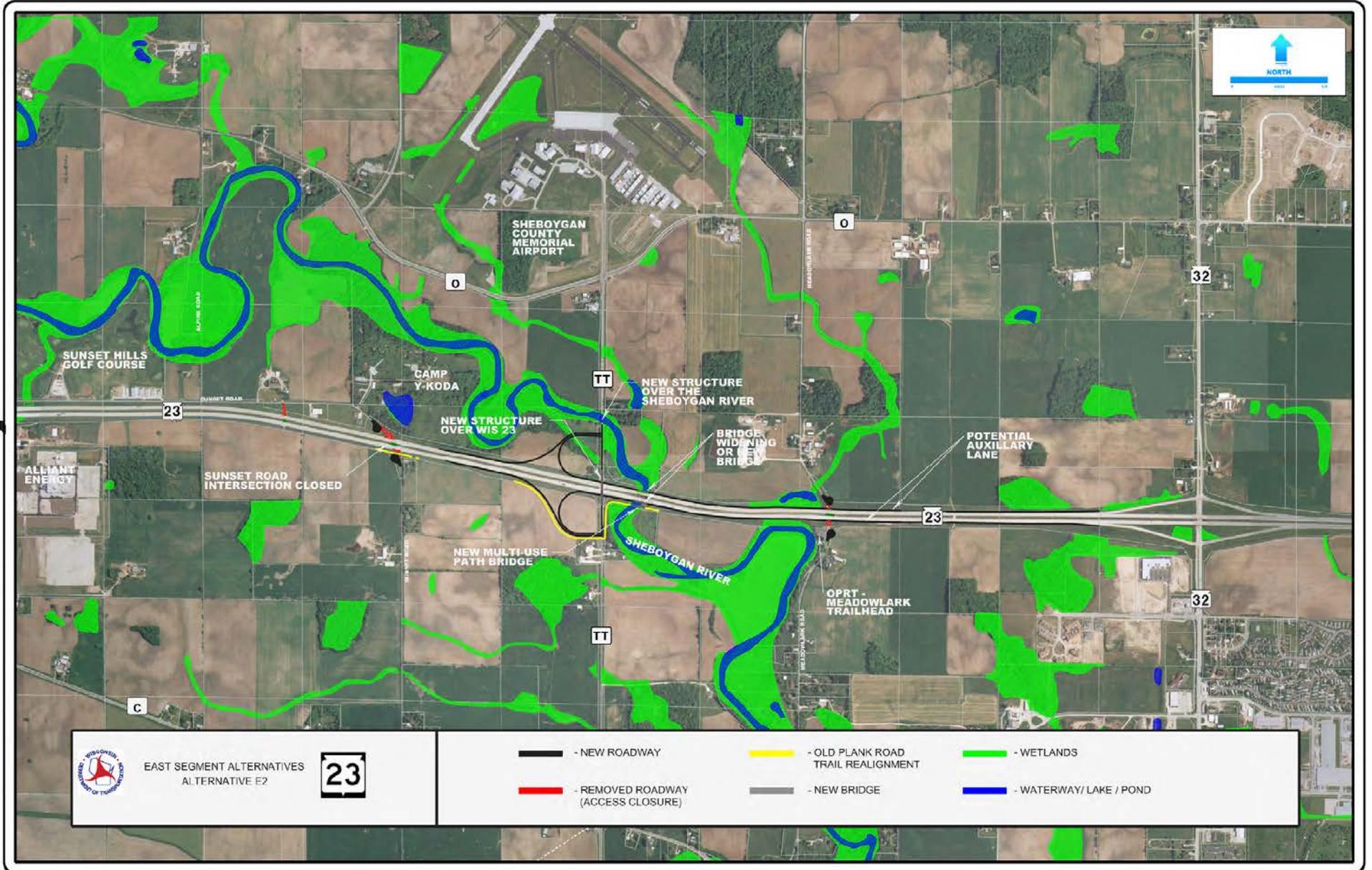


Figure 14: Alternative E3 (Dismissed Alternative)

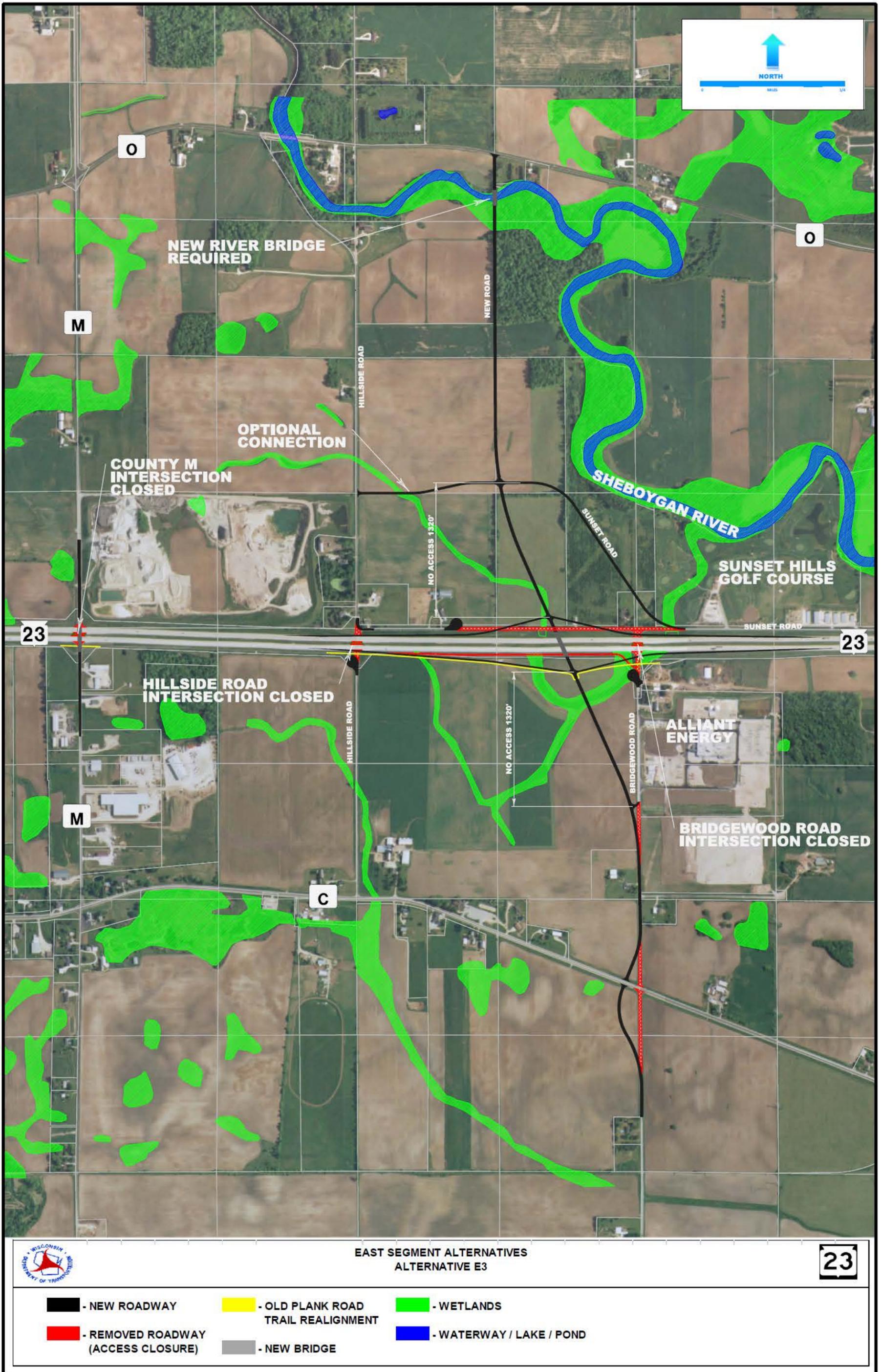
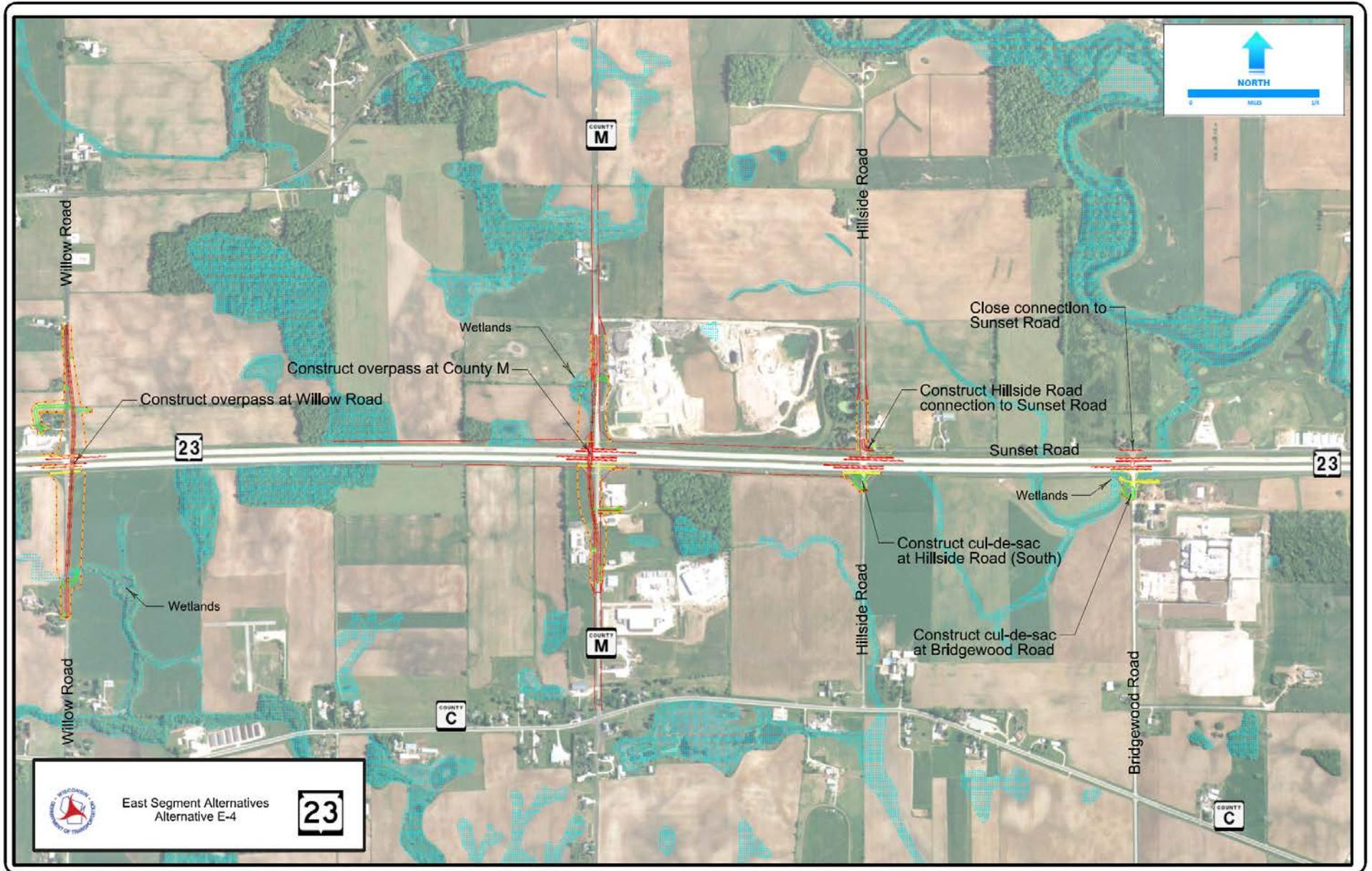


Figure 15: Alternative E4 side roads (Preferred Alternative)



3. Description of Proposed Action

The Proposed Action is to “officially map” lands to accommodate future highway improvements identified in the WIS 23 Corridor Preservation Study under the process established in Wis. Statute 84.295(10). In this case, official mapping will allow incremental improvements and funding strategies that will ultimately achieve the comprehensive system goal of upgrading this facility from an expressway with at-grade intersections, to a freeway with interchange access only.

Official Mapping Process Described

Official mapping involves a process whereby WisDOT identifies highway corridors for preservation. Under the WIS 23 Corridor Preservation Study, WisDOT, local officials and landowners worked cooperatively to determine future needs in the WIS 23 corridor and WisDOT developed future roadway design concepts and a preliminary map of right-of-way.

After a public hearing the official map showing approximate right of way required for future interchanges and other improvements will be filed with the register of deeds. All affected landowners will be notified by certified mail. After recordation of the official map, landowners will be required to notify WisDOT 60 days before making any substantial improvements within the mapped future right of way. The highway will then be converted to a freeway as needed and as funding becomes available. WisDOT and municipalities will be able to purchase the right of way anytime as might be deemed necessary to save the State future expense or to prevent future environmental impacts.

The benefit of the 84.295 process is that by determining the necessary improvements now, uncertainty about future transportation facility need is eliminated for landowners, local governments and WisDOT. Local governments and landowners can create effective land use, economic development and site plans if they know where future interchanges, overpasses, frontage roads and access points are proposed to be located. State taxpayer money is saved by avoiding moving or replacing improvements on land known to be needed for future highway improvements.

Future Highway Improvements Needed to Convert WIS 23 from an Expressway to a Freeway

This ER analyzes the effects of the preservation of future right of way through official mapping. Construction funding of the identified improvements is not programmed at this time. Future construction, which is yet to be scheduled, will require separate compliance with NEPA and/or WEPA including public involvement, environmental analyses, and documentation.

Figure 1 shows the WIS 23 Corridor Preservation Study corridor. Figure 4, Figure 11, Figure 15, and Figure 16 in the Summary of Alternatives section show more detail about the right of way to be officially mapped including access management measures such as closing at-grade intersections and the locating of new local access roads.

For purposes of this ER, enough preliminary engineering was completed so that WisDOT has some measure of assurance that adequate right of way amounts is identified in a manner that minimizes future environmental impacts and construction costs when freeway conversion is actually implemented. Direct impacts of future construction are calculated when possible, however the project impacts include only to officially map and thereby preserve right of way for a future facility. The mapping and freeway designation actions do not have direct effects on resources; however, the potential for indirect effects is there and are discussed when they can be identified given the level of engineering detail and making assumptions about future conditions of the various resources.

To ensure that adequate right of way is reserved for future use, the following future improvements were identified:

- Existing at-grade intersections with WIS 23 at Pioneer Road, County P, Inez Court, County O/OJ, County E, Pleasant View Road, Willow Road, County M, Hillside Road, Bridgewood Road, Sunset Road, County TT and Meadowlark Road will be closed or otherwise modified to prohibit access to WIS 23.
- New overpasses will be constructed at County O (new alignment), County E, Willow Road and County M.
- A new interchange will be constructed at County TT, about 500 feet west of the existing at-grade intersection of County TT. Several sections of the existing local roadway system will be reconstructed or altered to insure internal local road system continuity and access to the freeway.
- Two private driveways will be closed and relocated as part of future construction.
- Changes to the Old Plank Road Trail, a multi-use trail that parallels WIS 23 closely, include rerouting as necessary to safely accommodate the trail at the new County TT interchange and to accommodate road closures at existing at-grade intersections. These changes will not close the existing trail, but will maintain access by trail users.

No transportation management plans, such as detour routes and construction staging have been prepared at this time; but they would be developed during future environmental review when future construction is imminent.

4. Construction and Operational Energy Requirements

The official mapping will not result in any new construction and operational energy requirements. Operation and maintenance of the future freeway would be comparable to the existing facility. Future construction will require the use of materials and fuel. Future new local access roads will require additional operation and maintenance fuel usage. Future cost and availability of materials and fuel is difficult to assess at this time because construction is not yet scheduled and fuel prices are likely to fluctuate over time. No specific energy conservation features are expected to be designed into the future facility unless found to be warranted under future review and design. Future design and construction would accommodate the parallel Oak Plank Road Trail for use by bicycles and pedestrians; however, the trail is not expected to be used in any substantial way as an alternative mode of travel along the facility, it being more of a recreational trail than a commuter trail.

5. Land Use Adjoining the Project and Surrounding Area

Land uses in the study areas include largely agricultural and open space along the mainline. Developed areas exist near the existing interchanges. The land uses include a typical mix that would support the small communities of Plymouth and Sheboygan Falls, which are along a corridor that connects the larger cities of Fond du Lac and Sheboygan, but that are isolated and self-sustaining. WIS 23 currently provides access to scattered business and industrial sites outside city limits. Existing land use designations are illustrated in the maps in Attachment B.

6. Planning and Zoning

Municipalities and townships including the cities and townships of Plymouth and Sheboygan Falls (Sheboygan County) are covered by locally adopted comprehensive plans. The County also has a comprehensive plan that integrates the township plans. Future land use maps from these comprehensive plans are included in Attachment B. Land use plans indicate modest growth in the areas where local roadway connections are planned and the proposed officially mapped locations are compatible with the plans.

Local planning and zoning will permit development in the areas of the planned local roads. Lands that are likely to be affected by future construction of the officially mapped lands include areas that the local access roads will provide access for future development. Local land use plans anticipate the proposed local roads in their plans. The project will map and encourage preservation of the right of way needed for local road access and are by design compatible with local plans.

The cities of Plymouth and Sheboygan Falls have zoning regulations. Existing zoning designations allow for the mix of uses in the incorporated areas. The townships also allow for a full range of uses, but are dominated by agricultural and undeveloped uses.

Transportation planning is addressed in the local comprehensive plans in the area to be officially mapped. The Bay-Lake Regional Planning Commission (BLRPC) and WisDOT provide regional transportation planning in northeastern Wisconsin. The 2015 Regional Transportation Work Program (RTWP). BLRTP assists WisDOT with implementation of Connections 2030, Wisconsin's long range transportation Plan. Bicycle routes are addressed in the Sheboygan County Pedestrian and Bicycle Plan. Safety concerns at the crossings of WIS 23 will be remedied when future closures are constructed. The current plans allow for safety improvements at the locations where adjustments to Old Plank Road Trail intersections would be required. BLRPC incorporated the plans as recommendations for the Year 2045 Sheboygan Area Transportation Plan (SATP), the current long-range transportation plan for the Sheboygan Metropolitan planning area.

Adopted land use and transportation plans in the area to be officially mapped are listed below. See also Attachment B. A review of these locally adopted plans was completed and shows that the proposed local roads and conversion of WIS 23 to a freeway would be compatible with all the plans for future land use development except the City of Plymouth. It is their desire to have an interchange at County E. See discussion under Alternative WC7 (Question 2), which was eliminated from consideration early in the process due to it not being warranted or safe because they are closer than current separation distance standards.

- City of Plymouth Comprehensive Plan (July 12, 2011, updated March 8, 2016)
- Town of Plymouth 20-Year Comprehensive Plan (December 2009)
- City of Sheboygan Falls Comprehensive Plan (September 1, 2009)
- Town of Sheboygan Falls 20-Year Comprehensive Plan (December 2009)

- Common Visions: Sheboygan County Comprehensive Plan, 2010 – 2030 (January 21, 2014)
- Sheboygan County Pedestrian/Bicycle Plan 2015 Update (April 21, 2015)
- Bay Lake Regional Planning Commission 2015 Regional Transportation Work Program (December 12, 2014)
- Connections 2030 Wisconsin Long Range Transportation Plan (October 2009).

7. Indirect Effects and Cumulative Effects

If any of the following boxes are checked, the Pre-Screening Worksheet for EA and ER Projects For Determining the Need to Conduct a Detailed Indirect Effects Analysis found in Appendix A of the WisDOT report titled *Guidance for Conducting an Indirect Effects Analysis* must be completed and attached to this environmental document.

An alternative being carried forward for detailed consideration includes;¹

- Economic development as a purpose and need element of the proposed project.
- Construction of one or more new or additional through lanes.
- Construction of a new interchange or elimination of an existing interchange.
- Construction of one or more additional ramps or relocation of a ramp lane to a new quadrant on an existing interchange.
- Changing an at-grade intersection to a grade-separation with no access or a grade-separation to an at-grade intersection.
- Construction of one or more additional intersections along the mainline created by a new side road access.
- One or more new access points along a side road within 500' of the mainline.

- None of the above boxes have been checked, it has therefore been concluded that the proposed action will not result in indirect effects or cumulative effects.
- The proposed action may result in indirect effects or cumulative effects. The Pre-Screening Worksheet for EA and ER Projects For Determining the Need to Conduct a Detailed Indirect Effects Analysis attached as Attachment C indicates a detailed indirect effects and cumulative effects analysis is not required.
- The proposed action may result in indirect effects or cumulative effects. It has been determined that a detailed indirect effects and cumulative effects analysis is required. See _____ for the detailed analysis.

8. Environmental Justice

How was information obtained about the presence of populations covered by EO 12898? (check all that apply)	
<input checked="" type="checkbox"/> US Census Data	<input type="checkbox"/> Survey Questionnaire
<input type="checkbox"/> Real Estate Company	<input type="checkbox"/> WisDOT Real Estate
<input checked="" type="checkbox"/> Public Involvement Meeting	<input type="checkbox"/> Local Government
<input type="checkbox"/> Official Plan	<input checked="" type="checkbox"/> Windshield Survey*
<input type="checkbox"/> Human Resources Agency Identify agency: Identify plan, approval authority and date of approval:	
<input type="checkbox"/> Other – Identify:	

*Conducting only a windshield survey is not sufficient to make a determination regarding whether or not populations are present.

Based on data obtained from the methods above, are populations covered by EO 12898 present in the project area?

- a. No
- b. Yes – Factor Sheet B-4 must be completed.

9. Title VI of the 1964 Civil Rights Act, the Americans with Disabilities Act or the Age Discrimination Act

Indicate whether or not issues have been identified or concerns have been expressed related to Title VI of the 1964 Civil Rights Act, the Americans with Disabilities Act or the Age Discrimination Act.

- a. No – Issues related to the above laws were not identified and concerns were not expressed.
- b. Yes – Issues related to the above laws were identified and/or concerns were expressed. Explain:

¹ These are the anticipated actions of future construction projects; not of the mapping. Additional analysis of indirect and cumulative impacts of future construction would be completed if necessary as part of the environmental analysis process of future projects.

10. Public Involvement

A. Public Meetings

Date (m/d/yyyy)	Meeting Sponsor (WisDOT, RPC, MPO, etc.)	Type of Meeting (PIM, Public Hearings, etc.)	Location	Approx. Number of Attendees
4/23/2008	WisDOT	Stakeholder's Committee Meeting (#1)	City of Sheboygan Falls City Hall	14
1/7/2009	WisDOT	Stakeholder's Committee Meeting (#2)	City of Plymouth City Hall	17
5/5/2009	WisDOT	Public Involvement Meeting (#1)	City of Plymouth Fire Department	110
9/9/2009	WisDOT	Stakeholder's Committee Meeting (#3)	City of Plymouth Fire Department	22
6/29/2010	WisDOT	Stakeholder's Committee Meeting (#4)	City of Plymouth Fire Department	23
7/19/2010	WisDOT	Public Involvement Meeting (#2)	City of Plymouth City Hall	266
1/26/2011	WisDOT	Stakeholder's Committee Meeting (#5)	City of Plymouth Fire Department	29
3/11/2011	WisDOT	Public Involvement Meeting (#3)	Riverview Middle School	80
10/30/2014	City of Plymouth, Town of Plymouth, Sheboygan County	River Heights Dr./Terrace Ave. Neighborhood Meeting – Alternative Discussion	City of Plymouth Fire Department	38
12/12/2011	WisDOT	Stakeholder's Committee Meeting (#6)	Town of Sheboygan Falls Town Hall	17
5/9/2016	WisDOT	Stakeholder's Committee Meeting (#7)	City of Plymouth Fire Department	7
7/25/2016	WisDOT	Public Involvement Meeting (#4)	Riverview Middle School	76
12/13/16	WisDOT	Public Hearing on Official Map	Riverview Middle School	90

B. Other methods such as those identified in the Public Involvement Plan and Environmental Justice Plan (if applicable):

- The centerlines of the local road right of way to be mapped were surveyed and staked prior to the public hearing so that property owners could better visualize the location of the future roads on the ground, rather than just with a paper map. (November 22, 2016)
- Newsletter #1 (Spring 2008) – Introduced project goals and objectives as well as the project timelines.
- Newsletter #2 (February/March 2011) – Served as an invite for Public Involvement Meeting #3. Introduced alternatives selected for environmental assessment in the east and west segments. Introduced new alternatives in the central segment.
- Newsletter #3 (July 2016) – Served as an invite for Public Involvement Meeting #4. Described recommended alternatives to be studied in the Environmental Report.
- Project webpages were established and maintained on WisDOT's public website that includes the project description, purpose and need, schedule, maps, descriptions of the various alternatives. The webpages also include a repository of public involvement meeting and public hearing materials/documents and project team contact information. The URL is: <http://wisconsindot.gov/Pages/projects/by-region/ne/wis23corridorsheb/default.aspx> .

C. Identify groups that participated in the public involvement process. Include any organizations and special interest groups including but not limited to:

Public involvement efforts were inclusive of all residents and populations in the study area and did not exclude any persons because of income, race, religion, national origin, sex, age, or handicap. A Stakeholder Committee was established and meetings were held at various milestones throughout the Corridor Mapping and Study process. Stakeholders represented included Luedke Farms, Sargento Foods, Sheboygan County Airport, Sheboygan County Highway Department, the Sheboygan MPO (Bay-Lake Regional Plan Commission), City of Plymouth Public Works Department, Sheboygan County Planning Department, citizen member of each

municipality, City of Plymouth Mayor, City of Sheboygan Falls Mayor, Sheboygan Falls' Chamber of Commerce, Town of Sheboygan Falls Chairperson. The list of stakeholder Committee members is included in the meeting summaries. Other participants who signed in at the public meetings included elected officials (both local and state), citizens, business owners and property owners.

D. Indicate plans for additional public involvement, if applicable:

WisDOT plans to coordinate specifically with owners of property that will be included in the official map. As required to help individual affected property owners, WisDOT will employ individual phone calls, site visits or meetings. Future design and construction phases of the project will include additional public involvement anticipated to include public meetings as may be required at that time.

11. Briefly summarize the results of public involvement.

A. Describe the issues, if any, identified by individuals or groups during the public involvement process:

Comments were received during the public involvement process, including during public involvement meetings and at stakeholder meetings. Summaries are included in detail in the Public Meeting Summaries in Attachment D. Specific issues and how they were addressed are included in the table under item B. (below).

B. Briefly describe how the issues identified above were addressed:

The following table addresses both items 11.A. and 11.B. by describing the issues that were identified during public involvement and how each of the concerns were or will be addressed in the design and implementation of the future mapped roadways. No issues or concerns with the mapping process itself have been identified at this time.

Issues and Concerns	How Addressed
<i>Design</i>	
The future location, alterations to access, and alignment of the future local access roads including County TT, Kiley Way, County P/Inez Court, and Sheboygan Falls' business park	Local land owners, stakeholders, agencies, municipal staff and elected officials were consulted during preliminary design to ensure consistency with their planning needs. Wisconsin DNR also participated in project design to avoid and/or minimize potential future impacts to existing wetlands and other environmentally sensitive areas by strategically aligning planned local access roads and new interchanges. Access to WIS 23 was reasonably maintained as part of the preservation plan. Existing local plans were considered and design modifications were made to accommodate these plans where possible (see plans in Attachment B). Local communities were involved in Stakeholder Meetings to ensure that local input was received at all stages of the alternative development (see Attachment D for a public involvement summary). The selection of road closures was vetted through coordination with municipalities as well as through engineering design principles and standards. Seven stakeholder meetings were held to discuss various alternatives for road closures and new roadways required to maintain continuity and mobility in the various communities located along the corridor.
Suggestions for signage and J-turns to increase safety at the County TT intersection	WisDOT's most successful type of modification for this type of intersection would be to close the median at County TT, like other intersections that have had interim improvements along the WIS 23 corridor in recent years. However, at this time no plans have been made for improvements as the intersection crash study is on-going.
Opposition to a bridge over the Mullet River and overpasses at Willow and County M	The alternative that involved a new crossing is not the preferred alternative and was dismissed from further consideration.
The loss of direct access between County TT and WIS 23 due to the construction of the interchange	The recommended alternative at County TT is an interchange and will provide access to all directions of WIS 23. It is assumed that during the construction of the County TT Interchange, access will continue to be provided.

Issues and Concerns	How Addressed
Consider an interchange at Bridgewood Road	A Bridgewood Road interchange was briefly considered, however there was not any considerable support for an interchange at this location from the local communities, residents and other stakeholders. In addition, an interchange at Bridgewood Road had much more agricultural and environmental impacts than other interchanges considered as part of this study. There was considerable support for an interchange at County TT, which currently has much higher traffic volumes than Bridgewood Road and is consistent with local plans for continued access at WIS 23.
Consider an interchange at County E	<p>An interchange at County E was considered during the study. The interchange considered was a diamond interchange with either an overpass or underpass of County E. A connection of Kiley Way from Pleasant View Road to County O was planned as part of the conceptual design. In addition, an east-west connection from County OJ to County E north of WIS 23 was planned to provide continuity of the county highway system. After development of a conceptual layout, this alternative was dismissed by WisDOT for the following reasons:</p> <p>It was determined the alternative does not meet the interchange spacing requirements as defined in the AASHTO guidelines. Ramp to Ramp distances would range from 0.32 miles to 0.64 miles. This spacing is well below the interchange spacing guideline of 2-miles defined by AASHTO for a rural freeway. Closely spaced interchanges can result in safety and operational issues in a freeway corridor.</p> <p>The City of Plymouth is served by three different interchanges within a 3.67-mile corridor addition of another interchange would be a duplication of service with the WIS 57 interchange and the WIS 67 interchanges that serve the land use and destinations in the area. The existing three interchanges serve the City of Plymouth well into the future with a planned overpass and frontage road street system.</p>
Eliminate cul-de-sac near property at County TT	The purpose of the project is to map potential right-of-way for future WisDOT use to meet the goals of conversion of WIS 23 to a freeway. Since construction of any potential cul-de-sac will not occur until the future it is WisDOT's preference to map the larger footprint that the cul-de-sac provides. This will ensure that there is adequate right-of-way for future use, should land use or property ownership of your parcel change prior to design and construction of the final roadway. At this time WisDOT does see a benefit of changing the cul-de-sac to a private drive during future design phases of the project. This change would be a cost savings to the taxpayers of the State and would require less maintenance by the Town of Sheboygan Falls. However, due to the uncertainty of property ownership in the future, WisDOT does intend to map the cul-de-sac at this time. Further analysis on the change of this cul-de-sac to a private drive will occur when final design and construction phases of this project begin in the future.
Traffic, Travel	
Related traffic diversion into neighborhoods	Due to the many intersection closures anticipated as part of the plan, traffic diversion was anticipated to increase along local roads primarily in the Central Segment. To minimize these potential diversions, new local roads are planned, such as the extension of Kiley Way, that would, if a future project is brought forward for construction, provide access to WIS 23 via WIS 57. Also, the plan maintains connectivity of the existing system north and south of WIS 23 through a combination of overpasses and underpasses that are planned for at various locations throughout the corridor.

Issues and Concerns	How Addressed
<p>The effects on employees that use the WIS 23 highway on their commute and how changes in access would affect them</p>	<p>WIS 23 is a commuter route between Plymouth and Sheboygan. This plan, if a future project is brought forward for construction, would affect commuters by closing existing at-grade intersections and rerouting them to existing or planned interchanges. This may create some indirection for some commuters from there previously planned routes. However, by accessing WIS 23 at interchanges, safety is also expected to increase. Plans for County TT currently call for the construction of a diamond interchange. This interchange will allow access to WIS 23. Throughout the course of the plan development there has been significant input and support for an interchange at County TT. The support for continued access at County TT came for the local governments as well as businesses in Sheboygan Falls that frequently use this access. Additional support for an interchange at this location came from the Sheboygan County Memorial Airport.</p>
<p>Remove J-Turns because they are inconvenient</p>	<p>County O/OJ, County E and County M intersections with WIS 23 were experiencing numerous injury crashes. The number of severe crashes at these intersections resulted in the installation of J-turns. While WisDOT understands that the J-turns can result in indirection and inconvenience for the traveling public these safety improvements were necessary to improve safety at these intersections. WisDOT is currently studying whether these safety improvements have decreased injury accidents at these intersections, the preliminary indications are that there has been a substantial reduction in injury crashes at these intersections.</p>
Business	
<p>A request to keep County TT access open to WIS 23 because it is critical for current and future operations of businesses in that locale and to implement interim safety improvements there</p>	<p>WisDOT continues to work with the local governments to determine if interim safety measures could be implemented (signage, pavement marking, rumble strips, access control) at County TT. WisDOT recently met with the Sheboygan County Safety Committee and will continue to work with them. This intersection does not currently have the crash history warranted for a change (like access restriction), but again, considering these recent crashes WisDOT continues to examine it.</p>
Agriculture	
<p>Opposition to the use of agricultural lands for the County TT interchange and how it will have an incremental effect on farmland conversion totals overall</p>	<p>WisDOT reviewed several options near the County TT location; the criteria reviewed in each alternative included real estate, environmental, cost and safety factors to ensure that the recommended alternative minimized these overall impacts to the greatest extent. To build a safe and highly functional interchange to replace the intersection of County TT, WisDOT reviewed many potential locations for this interchange near County TT (see the summary of alternatives discussion of the East Segment on Basic Sheet 3, Question 2, above). County TT currently accommodates a significant number of vehicles with a high percentage of truck traffic from manufacturing facilities located in Sheboygan Falls. After review of all the alternatives with the project stakeholders the preferred alternative for an interchange was a diamond interchange located just to the west of the existing County TT interchange. Due to the rural nature of the area, agricultural impacts were not avoidable. While the partial cloverleaf alternative shown in the alternative discussion would seemingly reduce agricultural impacts, it is not preferable from a safety or operational standpoint. The Partial cloverleaf alternative would also result in a potential business relocation, flood plain impacts and would result in the construction of additional bridges over the Sheboygan River.</p>

Issues and Concerns	How Addressed
Farmland severance	Minimizing farmland severances was considered on all alternatives. Alternative alignments were developed to limit farmland severance by setting the alignments as close to existing right of way or property lines as practical. Farmland severance was unavoidable in some cases.
A closure of Willow Road would create indirection for farming operations that farm both sides of WIS 23.	Willow Road was designed as an overpass, which, if a future project is brought forward for construction, would provide the needed access for farmers that farm both sides of WIS 23 in the Willow Road area.
Land Use and Development	
Input about the likelihood of development	Input about the likelihood of development was considered under the review of potential indirect and cumulative effects (See the discussion of Indirect and Cumulative Effects under Item 7 and in Attachment C).
Consistency with local transportation and land use plans	Local land use and transportation plans were considered during the plan development and are consistent with those plans (See discussion of land use, planning and zoning in Items 5 and 6, above).
Safety	
The need for WisDOT to construct the adjacent WIS 23 project located to the west, for safety reasons	While not a part of the project, safety continues to be a concern along the WIS 23 corridor between Fond du Lac and Plymouth. The Wisconsin Department of Justice (DOJ), on behalf of WisDOT, continues to pursue the appeal in the WIS 23 litigation by proceeding through the required litigation steps.
Costs and Funding	
Questions about the cost breakdown	Cost breakdowns were provided based on general guidance and are not detailed estimates. Costs will be reconsidered in the future when plan development for construction begins.
Wetlands	
Potential wetland impacts	Wetlands were considered throughout the project. The goal was to avoid wetland impacts. In locations where impacts could not be avoided they were minimized to the maximum possible extent. Wetland impacts will be reviewed as part of future studies performed prior to construction of any improvements.
Recreation/ Section 4(f)	
There was concern about potential impacts to the Old Plank Road Trail	Coordination is ongoing with Sheboygan County to ensure there are no substantial permanent or temporary impacts to the trail. Future improvements will realign the trail as needed so that the future roadway changes would not harm the continuity of the Trail. Plans near areas where intersecting roads would be closed presented an opportunity to increase safety for trail users by separating vehicular traffic from trail traffic at all locations where intersections with WIS 23 are closed to thru traffic or where overpasses are installed. Trail users no longer must cross highways at grade along the project corridor. Design plans also maintained connections to other local streets, trails and sidewalks.

Issues and Concerns	How Addressed
<p>Questions regarding how the snowmobile trails in the area will be accommodated.</p>	<p>Crossings at WIS 23/WIS 67 and WIS 23/Sunset Drive (just West of WIS 67) would not be affected by the future construction of the selected alternative.</p> <p>Crossing between Willow Road and County M</p> <p>The current at-grade crossing location would not be permitted by WisDOT after future construction completes the conversion of WIS 23 into a freeway. WisDOT is proposing to construct overpasses at Willow Road and County M that could serve as potential crossing locations to access the OPRT from the north. However, snowmobile crossings of these new overpasses would have to be authorized by the maintaining authorities of these roadways. The potential design of widened shoulders on future Willow Road and County M overpasses was considered in this phase of the project due to their proximity to the OPRT. Future design phases of the project would determine the final bridge widths used. There will also be an opportunity during future design engineering phases of this project, for additional public input.</p> <p>Crossing between County TT and WIS 32</p> <p>The current at-grade crossing location would not be permitted by WisDOT after construction completes the conversion of WIS 23 into a freeway. WisDOT is proposing to construct an interchange at County TT and there is an existing interchange at WIS 32 that could serve as potential crossing locations to access the OPRT from the north. However, snowmobile crossings of this facility would have to be authorized by the maintaining authorities of these roadways. The current Sheboygan County Bicycle plan shows County TT as an existing bicycle route with existing paved shoulders. The width of the future bridge would be determined in the future design phases. Under this study, no improvements are being mapped or recommended at WIS 32.</p> <p>Old Plank Road Trail (OPRT)</p> <p>There would be impacts to the OPRT during any future construction; however, since most construction is anticipated to occur in the summer months, minimal impact to snowmobilers is anticipated. WisDOT is dedicated to maintaining the continuity of the OPRT throughout the project limits with any future construction projects. Sheboygan County will be the maintaining authority of the OPRT within the project limits. As the maintaining authority, it will be the decision of Sheboygan County to allow continued snowmobile access along the OPRT after construction.</p>

12. Local/regional/tribal/federal government coordination

A. Identify units of government contacted and provide the date coordination was initiated.

Unit of Government (MPO, RPC, City, County, Village, Town, Tribal, Federal, etc.)	Coordination Correspondence Attached (Yes/No)	Coordination Initiation Date (m/d/yyyy)	Coordination Completion Date (m/d/yyyy)	Comments
Sheboygan County Planning & Resources Department	Yes	10/16/07	7/24/2016	Stakeholder participant. 10/16/07 Initial coordination letter 3/21/08 Invitation to Stakeholder Committee meeting See correspondence in Attachment E. 9/10/09 email with Jim Hulbert discussing linkages to increase mobility and Old Plank Road Trail. WisDOT corresponded with the County regarding the potential effects of future construction on the Old Plank Road Trail. See the Section 4(f) Technical Memorandum in Attachment F, which contains copies of correspondence.
Bay-Lake Regional Planning Commission	No	10/16/07	3/10/2017	Stakeholder meeting participant. 10/16/07 Initial coordination letter 3/21/08 Invitation to Stakeholder Committee meeting March 10, 2017 adopted Resolution 6- 2017 concurring with the project, see Attachment E.

Unit of Government (MPO, RPC, City, County, Village, Town, Tribal, Federal, etc.)	Coordination Correspondence Attached (Yes/No)	Coordination Initiation Date (m/d/yyyy)	Coordination Completion Date (m/d/yyyy)	Comments
City of Plymouth	Yes	10/16/07	7/25/2016	<p>Stakeholder meeting participant.</p> <p>10/16/07 Initial coordination letter</p> <p>3/21/08 Invitation to Stakeholder Committee meeting</p> <p>Email correspondence dated 9/10/09 from William Immich regarding a memorandum of understanding between WisDOT and the City of Plymouth, Town of Plymouth, and Sheboygan County.</p> <p>Coordinated with the City of Plymouth regarding alternatives that provide connectivity between WIS 57 and WIS 67 south and north of WIS 23.</p> <p>February 9, 2010 WisDOT attended a City Council Meeting coordinating with the City on alternatives.</p> <p>January 22, 2013, Meeting with City to coordinate on alternatives and potential future access changes.</p> <p>January 17, 2014 Meeting to review Central Segment alternatives.</p> <p>See correspondence in Attachment E.</p>
City of Sheboygan Falls	Yes	10/16/07	3/22/17	<p>Stakeholder meeting participant.</p> <p>10/16/07 Initial coordination letter</p> <p>3/21/08 Invitation to Stakeholder Committee meeting</p> <p>July 22, 2016 email concerning County TT changes and potential effects on manufacturing businesses and Sheboygan County Airport.</p> <p>July 25, 2016 email concerning safety concerns at County TT intersection.</p> <p>City of Sheboygan Falls provided input on the design and location of the County TT Interchange and adopted Resolution 13 on March 22, 2017 in support of the project, see Attachment E.</p>

Unit of Government (MPO, RPC, City, County, Village, Town, Tribal, Federal, etc.)	Coordination Correspondence Attached (Yes/No)	Coordination Initiation Date (m/d/yyyy)	Coordination Completion Date (m/d/yyyy)	Comments
Town of Plymouth	No	10/16/07	7/25/2016	10/16/07 Initial coordination letter 3/21/08 Invitation to Stakeholder Committee meeting Several staff meetings were held regarding the River Heights Drive alternative. January 17, 2014 Meeting to review Central Segment alternatives.
Sheboygan County Highway Department	No	10/16/07	7/25/2016	Stakeholder meeting participant. 10/16/07 Initial coordination letter 3/21/08 Invitation to Stakeholder Committee meeting August 25, 2011 meeting to discuss alternatives. January 17, 2014 Meeting to review Central Segment alternatives.
Sheboygan County Airport	Yes	3/21/08	7/25/2016	3/21/08 Invitation to Stakeholder Committee Meeting. Airport personnel provided specific input on the location/configuration of the County TT interchange. Letter 4/11/2008 providing details of a recent engineering/feasibility study for the airport.
Wisconsin Department of Natural Resources	Yes	3/24/08	7/25/2016	See Basic Sheet 5
DATCP	Yes	3/21/08	10/28/2016	See Basic Sheet 5
State Historic Preservation Office	Yes	12/6/16	2/13/2017	See Basic Sheet 5
U.S. Fish & Wildlife Service	Yes	3/21/2008	10/28/2010	See Basic Sheet 5
U.S. Army Corps of Engineers	No	3/21/2008	7/25/2016	See Basic Sheet 5
NRCS	No	3/21/2008	7/25/2016	See Basic Sheet 5
Native American Tribes	Yes	3/24/2008	2/13/2017	See Basic Sheet 5

B. Describe the issues, if any, identified by units of government during the public involvement process:

The local governments generally supported the corridor preservation efforts. See Attachment E for copies of correspondence. The following issues were identified:

- a. The City of Plymouth wanted an east-west connector route between WIS 57 and WIS 67.
- b. The City of Sheboygan Falls wanted to maintain access at County TT because it is used by several industries located in the nearby. The Sheboygan County Airport also wanted to maintain access at the current location of County TT.
- c. WDNR expressed concern for future wetland loss and wildlife habitat.

C. Briefly describe how the issues identified above were addressed:

- a. WisDOT reviewed numerous alternatives to provide access between WIS 57 and WIS 67 north and south of WIS 23. All of these alternatives were dismissed for reasons including, but not limited to, public opposition and environmental impacts. Since a reasonable and feasible alternative to provide connectivity was not discovered, WisDOT chose to not map any of the east-west route alternatives, but rather leave the development of future east-west route for future consideration, which allows the City, County or Town to map an east-west route if they choose to do so.
- b. Numerous alternatives were reviewed at County TT in consideration of input from the City of Plymouth, City of Sheboygan Falls and Sheboygan County Airport, see item 2 above, Summary of Alternatives. The ultimate County TT diamond interchange preferred alternative was favorable to all parties.
- c. WDNR made recommendations for minimizing impacts by locating the roadway in a way that would minimize impacts to natural resources. In locating the roadways to be officially mapped, roadway designers avoided wetlands to the maximum extent practicable. Officially mapping lands will reduce the likelihood of private development using up the non-wetland areas, leaving room for future roads to avoid filling wetlands.

D. Indicate any unresolved issues or ongoing discussions:

The following unresolved issues and ongoing discussions will be addressed during design and environmental review of the future planned roadways.

- The Town of Sheboygan Falls Fire Department has a well located near the Sheboygan River that they will need access to. During the final design phase of the project, the well will have to be accommodated in the plans.
- WDNR would like the Old County TT bridge removed as part of any project to construct a new County TT Interchange. (See Attachment E, Agency Correspondence.)
- Sheboygan County would like signing installed to direct drivers to the Meadowlark Road Trailhead after the closure at Meadowlark occurs.

13. Public Hearing Requirement

- This document is an Environmental Assessment.
- A Notice of Opportunity to Request a Public Hearing **will be** published, or,
- A Public Hearing **will be** held.
- This document is a Type 2c Categorical Exclusion / Environmental Report.
- ² A substantial amount of right-of-way **will** be acquired.
- ³ The proposed action **will** substantially change the layout or functions of connecting roadways or of the facility being improved.
- The proposed action **will** have a substantial adverse impact on abutting property.
- The proposed action **will** have other substantial social, economic, environmental effects.
- The department has made a determination that a public hearing is in the public interest.
- ⁴ None of the above boxes have been checked, it has therefore been concluded that a Notice of Opportunity to Request a Public Hearing **will not** be published and a Public Hearing **is not** required, or,
- A Notice of Opportunity to Request a Public Hearing **will be** published, or,
- ⁵ A Public Hearing **will be** held.

Note: For federally-funded projects, FHWA signature of this environmental document indicates concurrence with the department's Public Hearing requirement determination.

² Right of way will be acquired later when future construction of the mapped roadways is programmed, not for the mapping of the right of way. Additional public involvement would be completed if necessary as part of the environmental analysis process of future projects.

³ Intersections of cross roads will be closed and the new mapped local roads will be constructed, changing the facility from an expressway to an access-controlled freeway.

⁴ A formal public hearing is scheduled for the Section 84.295 mapping action, not the environmental document.

⁵ A formal public hearing is scheduled for the Section 84.295 mapping action, not the environmental document.

BASIC SHEET 4 – TRAFFIC SUMMARY MATRIX

	ALTERNATIVES/SECTIONS					
	West Section No Build (County P to WIS 67)	Central Section No Build (WIS 67 to WIS 57)	East Section No Build (WIS 57 to WIS 32)	West Section Preferred Alternative (County P to WIS 67) *	Central Section Preferred Alternative (WIS 67 to WIS 57) *	East Section Preferred Alternative (WIS 57 to WIS 32) *
TRAFFIC VOLUMES						
Base Yr. AADT Yr. 2015	11,000	16,000	19,700	11,000	16,000	19,700
Const. Yr. AADT Yr. 2025	12,500	17,400	21,200	10,400	13,600	21,300
Const. Plus 10 Yr. AADT Yr. 2035	13,900	18,700	22,700	11,500	14,600	22,700
Design Yr. AADT Yr. 2045	15,300	20,100	24,100	12,600	15,600	24,100
DDHV Yr. 2045	990	1300	1560	820	1010	1560
TRAFFIC FACTORS						
K [<input type="checkbox"/> 30 / <input checked="" type="checkbox"/> 100/ <input type="checkbox"/> 250] (%)	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%
D (%)	60%	60%	60%	60%	60%	60%
Design Year T (% of AADT)	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%
T (% of DHV)	12.2%	12.2%	12.2%	12.2%	12.2%	12.2%
Level of Service	A	A	A	A	A	A
SPEEDS						
Existing Posted	65	65	65	65	65	65
Future Posted	65	65	65	65	65	65
Design Year Project Design Speed	70	70	70	70	70	70
OTHER (specify)						
P (% of AADT)	14.1%	14.1%	14.1%	14.1%	14.1	14.1
K ₈ (% OF AADT)	N/A	N/A	N/A	N/A	N/A	N/A
Other N/A	N/A	N/A	N/A	N/A	N/A	N/A

AAADT = Annual Average Daily Traffic

K [_{30/100/200}] : K₃₀ = Interstate, K₁₀₀ = Rural, K₂₅₀ = Urban, % = AADT in DHV

T = Trucks

DDHV = Directional Design Hourly Volume

D = % DHV in predominate direction of travel

P = % AADT in peak hour

K₈ = % AADT occurring in the average of the 8 highest consecutive hours of traffic on an average day (required only if CO analysis is required).

* This traffic data relates to the future construction projects, not the Section 84.295 mapping action.

1. Identify the agency that generated the data included in the Traffic Summary Matrix.
WisDOT Bureau of Planning and Economic Development
2. Identify the date (month/year) that the traffic forecast data included in the Traffic Summary Matrix was developed.
July 2016
3. Identify the methodology and/or computer program(s) used to develop the data included in the Traffic Summary Matrix.
Linear regression models (developed using relational database software) and travel demand model output (developed using four-step travel demand model software) were used to generate the traffic forecasts for this study.
4. If a metric other than Annual Average Daily Traffic (AADT) is used for describing traffic volumes such as Average Annual Weekday Traffic (AWDT), explain why a different metric was used and how it compares to AADT.
N/A

BASIC SHEET 5 – AGENCY AND TRIBAL COORDINATION

Agency	Coordination Required?	Correspondence Attached?	Comments
WisDOT			
Region Real Estate Section	<input checked="" type="checkbox"/> No	N/A	Coordination is not required because there will be no Fee, PLE or TLE acquisitions.
	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Coordination with the WisDOT Real Estate Section is not required at this time; however, future design phases will require coordination since right of way would be required. No building relocations are anticipated.
Bureau of Aeronautics	<input checked="" type="checkbox"/> No	N/A	<p>March 24, 2008, initial coordination letter sent to BOA. The technical memorandum was also sent for BOA review.</p> <p>April 22, 2008 email from Kim Kaarto with comments on the technical memorandum and recommendations.</p> <p>The Airport was invited to and participated in discussions about the location of the County TT interchange. Further coordination with the BOA would occur when the officially mapped roadways are programmed.</p> <p>May 2, 2016, Kim Kaarto, in response to Stakeholder Meeting #7 reiterated the Bureau's comments previously given.</p> <p>See Attachment E for BOA correspondence.</p>
	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Railroads and Harbors Section	<input checked="" type="checkbox"/> No	N/A	Coordination is not required at this time or in future phases because no railways or harbors are in or planned for the project area.
	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes <input type="checkbox"/> No	
STATE AGENCY			
Natural Resources (DNR)	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>March 24, 2008, initial coordination letter sent out.</p> <p>September 14, 2010 letter from Joanne Kline to Robert Wagner responding to request for comments on the mapping alternatives.</p> <p>September 11, 2014 letter from Jay Schiefelbein to Natasha Gwidt regarding WisDOT's request for review of alternatives.</p> <p>DNR was invited to all stakeholder meetings and public involvement meetings.</p> <p>DNR was consulted during the location of the roadways, especially near the County TT interchange to coordinate on minimization of impacts to wetlands.</p> <p>See Attachment E for DNR correspondence.</p>
State Historic Preservation Office (SHPO)	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>Section 106 Form signed by SHPO on 2/13/2017.</p> <p>See Attachment G for Section 106 correspondence and documentation.</p>
Agriculture (DATCP)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>March 24, 2008 initial coordination letter sent.</p> <p>Letter sent to DATCP October 28, 2016 committing to coordinating during future design phases.</p> <p>See Attachment E for DATCP correspondence.</p>

Agency	Coordination Required?	Correspondence Attached?	Comments
Other (identify)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
FEDERAL AGENCY			
U.S. Army Corps of Engineers (USACE)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>March 24, 2008 initial coordination letter sent.</p> <p>May 4, 2009 email from Rebecca Graser to Robert Wagner requesting consultation as plans are refined for NEPA review.</p> <p>September 28, 2010 email from Anthony Jernigan to Robert Wagner providing input on the mapping alternatives.</p> <p>See Attachment E for USACE correspondence.</p>
U.S. Fish and Wildlife Service (USFWS)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>March 24, 2008, initial coordination letter sent.</p> <p>April 15, 2008 email from WisDOT to Louise Clemency regarding WisDOT's request to attend Stakeholder Meeting. USFWS declined attendance and further comment on the mapping project.</p> <p>October 28, 2010 letter from Betsy Galbraith to Robert Wagner. USFWS provided general information in response to a request for review of the alternatives.</p> <p>See Attachment E for USFWS correspondence.</p>
Natural Resources Conservation Service (NRCS)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>March 24, 2008 initial coordination letter sent.</p> <p>Email received from Sherrie Zenkreed 4/3/08, see Attachment E.</p> <p>The project action of recording an official map will not require the conversion of farmland. The areas to be preserved for future highway use can continue to be used until the land are needed in the future.</p> <p>Coordination with NRCS will be required for future design and construction of the mapped areas that may, at that time, require conversion of farmland.</p>
U.S. National Park Service (NPS)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	The project action of recording an official map will not acquire right of way in parkland or lands protected by the NPS.
U.S. Coast Guard (USCG)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Coordination is not required with the USCG because no commercially navigate waterways are present in the project area.
U.S. Environmental Protection Agency (EPA)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Direct coordination with the EPA is not required at this time.
Advisory Council on Historic Preservation (ACHP)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Coordination with ACHP is not required at this time.
Other (identify)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A

Agency	Coordination Required?	Correspondence Attached?	Comments
SOVEREIGN NATIONS			
American Indian Tribes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<p>April 23, 2008 email from Linda Yazzie, Prairie Band Potawatomi Nation. They are unaware of any resources in the proposed development area.</p> <p>April 3, 2008 Lac Vieux Desert Band of Lake Superior Chippewa Indians. No interest.</p> <p>April 2, 2008 Stockbridge-Munsee Tribal Historic Preservation Office. No interest.</p> <p>October 24, 2016 Email from Potawatomie requesting inclusion in consultation process and requesting copy of archaeological survey reports.</p> <p>November 23, 2016 Transmitted archaeological survey via email to Potawatomie Tribal Historic Preservation Officer.</p> <p>December 14, 2016 Email from Potawatomi issuing a conditional Finding of No Adverse Effect on Historic Properties. Conditions included on Environmental Commitments table.</p> <p>See Attachment G for Section 106 correspondence and documentation.</p>

BASIC SHEET 6 – (1 OF 3) ALTERNATIVES COMPARISON MATRIX

All estimates including costs are based on conditions described in this document at the time of preparation in the year of expenditure (YOE) for the build alternative. The following charts describe the estimated impacts based on build conditions of the selected alternative alignment for future construction projects, *which is not yet programmed and is not the official mapping*, which is the Proposed Action at this time. When construction of the mapped roadways is programmed, environmental review and agency and public involvement will be done to update and verify these potential impacts under the conditions present closer to the time of construction. Early acquisitions could take place if funding becomes available or requests are made by property owners through 84.295 notice requirements and coordination.

WEST SEGMENT PROJECT PARAMETERS	Unit of Measure	Alternatives/Sections		
		No Build ¹	Official Mapping ²	W2
Project Length	Miles	0	0	2.46
PRELIMINARY COST ESTIMATE (YOE)				
Construction	Million \$	\$0	\$0	\$5.9
Real Estate	Million \$	\$0	\$0	\$0.5
TOTAL	Million \$	\$0	\$0	\$6.4
LAND CONVERSIONS				
Total Area Converted to ROW	Acres	0	0	18.9
REAL ESTATE				
Number of Farms Affected	Number	0	0	4
Total Area Required From Farm Operations	Acres	0	0	7.1
AIS Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Farmland Rating	Score	n/a	n/a	n/a
Total Buildings Required	Number	0	0	0
Housing Units Required	Number	0	0	0
Commercial Units Required	Number	0	0	0
Other Buildings or Structures Required	Number & Type	0	0	0
ENVIRONMENTAL FACTORS				
Indirect Effects		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Cumulative Effects		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Environmental Justice Populations		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
National Register Eligible Historic Structures in the Area of Potential Effect	Number	0	0	0
National Register Eligible Archeological Sites in the Area of Potential Effect	Number	0	0	0
Burial Site Protection (authorization required)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
106 MOA Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Section 4(f) Evaluation Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Section 6(f) Land Conversion Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Flood Plain		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Unique Upland Habitat Identified		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Total Wetlands Filled	Acres	0	0	4.9
Stream Crossings	Number	0	0	2
Threatened/Endangered Species		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Noise Analysis Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Receptors Impacted	Number	n/a	n/a	4
Contaminated Sites	Number	0	0	3

¹The estimated cost of routine maintenance through the design year should be included in the "Construction" box for the No Build alternative.

²The Proposed Action of official mapping itself does not result in any direct or indirect impacts to these resources.

BASIC SHEET 6 – (2 OF 3) ALTERNATIVES COMPARISON MATRIX

All estimates including costs are based on conditions described in this document at the time of preparation in the year of expenditure (YOE) for the build alternative. The following charts describe the estimated impacts based on build conditions of the selected alternative alignment for future construction projects, *which is not yet programmed and is not the official mapping, which is the Proposed Action* at this time. When construction of the mapped roadways is programmed, environmental review and agency and public involvement will be done to update and verify these potential impacts under the conditions present closer to the time of construction. Early acquisitions could take place if funding becomes available or requests are made by property owners through 84.295 notice requirements and coordination.

CENTRAL SEGMENT PROJECT PARAMETERS	Unit of Measure	Alternatives/Sections ²					
		No Build	Official Mapping ¹	C1	C2	C3	C4
Project Length	Miles	0	0	4.17	3.60	5.61	3.16
PRELIMINARY COST ESTIMATE (YOE)							
Construction	Million \$	0	0	\$21.8	\$29.2	\$31.9	\$18.9
Real Estate	Million \$	0	0	\$1.4	\$2.0	\$1.6	\$0.8
TOTAL	Million \$	0	0	\$19.7	\$31.2	\$33.5	\$19.7
LAND CONVERSIONS							
Total Area Converted to ROW	Acres	0	0	26	32	48	27.6
REAL ESTATE							
Number of Farms Affected	Number	0	0	11	7	8	6
Total Area Required From Farm Operations	Acres	0	0	45	33	48	21.8
AIS Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Farmland Rating	Score	n/a	n/a	n/a	n/a	n/a	n/a
Total Buildings Required	Number	0	0	0	2	0	0
Housing Units Required	Number	0	0	0	1	0	0
Commercial Units Required	Number	0	0	0	1	0	0
Other Buildings or Structures Required	Number & Type	0	0	0	0	0	0
ENVIRONMENTAL FACTORS							
Indirect Effects		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Cumulative Effects		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Environmental Justice Populations		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
National Register Eligible Historic Structures in the Area of Potential Effect	Number	0	0	1	1	1	1
National Register Eligible Archeological Sites in the Area of Potential Effect	Number	0	0	0	0	0	0
Burial Site Protection (authorization required)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
106 MOA Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Section 4(f) Evaluation Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Section 6(f) Land Conversion Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Flood Plain		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Unique Upland Habitat Identified		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Total Wetlands Filled	Acres	0	0	5	6	7	2.6
Stream Crossings	Number			1	2	2	1
Threatened/Endangered Species		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Noise Analysis Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Receptors Impacted	Number	n/a	n/a	0	0	0	0
Contaminated Sites	Number	0	0	n/a	n/a	n/a	1

¹The estimated cost of routine maintenance through the design year should be included in the "Construction" box for the No Build alternative.

²The estimates and impacts assessed in these matrices are related to the future construction of the alternatives; as opposed to the impacts of the mapping itself, which is the actual project proposed at this time. Further detailed environmental review will be done when construction is proposed.

BASIC SHEET 6 – (3 OF 3) ALTERNATIVES COMPARISON MATRIX

All estimates including costs are based on conditions described in this document at the time of preparation in the year of expenditure (YOE) for the build alternative. The following charts describe the estimated impacts based on build conditions of the selected alternative alignment for future construction projects, *which is not yet programmed and is not the official mapping, which is the Proposed Action* at this time. When construction of the mapped roadways is programmed, environmental review and agency and public involvement will be done to update and verify these potential impacts under the conditions present closer to the time of construction. Early acquisitions could take place if funding becomes available or requests are made by property owners through 84.295 notice requirements and coordination.

EAST SEGMENT PROJECT PARAMETERS	Unit of Measure	Alternatives/Sections		
		No Build ¹	Official Mapping	E4
Project Length	Miles			
PRELIMINARY COST ESTIMATE (YOE)				
Construction	Million \$	\$0	\$0	\$24.1
Real Estate	Million \$	\$0	\$0	\$0.7
TOTAL	Million \$	\$0	\$0	\$24.8
LAND CONVERSIONS				
Total Area Converted to ROW	Acres	0	73	62.6
REAL ESTATE				
Number of Farms Affected	Number	0	0	19
Total Area Required From Farm Operations	Acres	0	0	54.5
AIS Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Farmland Rating	Score	n/a	n/a	n/a
Total Buildings Required	Number	0	0	0
Housing Units Required	Number	0	0	0
Commercial Units Required	Number	0	0	0
Other Buildings or Structures Required	Number & Type	0	0	0
ENVIRONMENTAL FACTORS				
Indirect Effects		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cumulative Effects		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Environmental Justice Populations		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
National Register Eligible Historic Structures in the Area of Potential Effect	Number	0	0	0
National Register Eligible Archeological Sites in the Area of Potential Effect	Number	0	0	0
Burial Site Protection (authorization required)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
106 MOA Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Section 4(f) Evaluation Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Section 6(f) Land Conversion Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Flood Plain		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Unique Upland Habitat Identified		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Total Wetlands Filled	Acres		0	3
Stream Crossings	Number		0	2
Threatened/Endangered Species		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Noise Analysis Required		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Receptors Impacted	Number	n/a	n/a	3
Contaminated Sites	Number	0	0	0

¹The estimated cost of routine maintenance through the design year should be included in the "Construction" box for the No Build alternative.

²The estimates and impacts assessed in these matrices are related to the future construction of the alternatives; as opposed to the impacts of the mapping itself, which is the actual project proposed at this time. Further detailed environmental review will be done when construction is proposed.

BASIC SHEET 7 – EIS SIGNIFICANCE CRITERIA

In determining whether a proposed action is a “major action significantly affecting the quality of the human environment,” the proposed action must be assessed in light of the following criteria (1) if significant impact(s) will result, the preparation of an environmental impact statement (EIS) should commence immediately. Indicate whether the issue listed below is a concern for the proposed action or alternative and (2) if the issue is a concern, explain how it is to be addressed or where it is addressed in the environmental document.

1. Will the proposed action stimulate substantial indirect environmental effects?

No

Yes – Explain or indicate where addressed.

For additional information, see Attachment C, which includes a screening document for indirect and cumulative effects of the proposed action.

2. Will the proposed action contribute to cumulative effects of repeated actions?

No

Yes – Explain or indicate where addressed.

For additional information, see Attachment C, which includes a screening document for indirect and cumulative effects of the proposed action.

3. Will the creation of a new environmental effect result from this proposed action?

No

Yes – Explain or indicate where addressed.

4. Will the proposed action impact geographically scarce resources?

No

Yes – Explain or indicate where addressed.

5. Will the proposed action have a precedent-setting nature?

No

Yes – Explain or indicate where addressed.

6. Is the degree of controversy associated with the proposed action high?

No

Yes – Explain or indicate where addressed.

7. Will the proposed action be in conflict with official agency plans or local, state, tribal, or national policies, including conflicts resulting from potential effects of transportation on land use and transportation demand?

No

Yes – Explain or indicate where addressed.

BASIC SHEET 8 – ENVIRONMENTAL COMMITMENTS

Attach a copy of this page to the design study report and the PS&E submittal package.

Factor Sheet	Commitment (If none, include "No special or supplemental commitments required.")
<p>COMMITMENT TO REEVALUATE ALL ENVIRONMENTAL FACTORS If or when any future projects are programmed, WisDOT would reevaluate all environmental factors, reinstate public involvement efforts, reinstate coordination with all agencies and Native American tribes, and prepare an environmental document to evaluate the Proposed Action prior to initiating construction. WisDOT's Project Manager will ensure fulfillment of this commitment. The detailed information for each commitment below is based upon the resources present and factors identified at the time of preparation of this review.</p>	
<p>A-1 General Economics</p>	<p>No commitments are required as part of the mapping action. For future construction, WisDOT would develop contract provisions that may require the contractor to maintain through, local, and emergency traffic through the project area during construction with a goal to maximize access to businesses and regional commercial traffic and to minimize delays. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.</p>
<p>A-2 Business</p>	<p>No commitments are required as part of the mapping action. For future construction, WisDOT would develop contract provisions that may require the contractor to maintain through, local, and emergency traffic through the project area during construction with a goal to maximize access to businesses and minimize delays. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.</p>
<p>A-3 Agriculture</p>	<p>No commitments are required as part of the mapping action. For future construction, WisDOT would develop contract provisions that may require the contractor to maintain through, local, and emergency traffic through the project area during construction in order to maximize access to agricultural areas and agricultural related businesses while minimizing delays. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review and coordination with DATCP would proceed as may be required for environmental review of the future construction of the planned improvements.</p>
<p>B-1 Community or Residential</p>	<p>No commitments are required as part of the mapping action. WisDOT would develop contract provisions that may require the contractor to maintain through, local, and emergency traffic through the project area during construction in order to maintain access to residents and minimize delays. The Old Plank Road Trail would be accommodated through the project area. During design, the project would further evaluate and include measures in the project plans to minimize impacts to properties. The Town of Sheboygan Falls Fire Department currently has a well near the Sheboygan River at the proposed County TT Interchange. This well will need to be perpetuated through the design and access needs to be provided as part of the future final design. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.</p>
<p>B-2 Indirect Effects</p>	<p>No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.</p>
<p>B-3 Cumulative Effects</p>	<p>No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.</p>
<p>B-4 Environmental Justice</p>	<p>No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.</p>

Factor Sheet	Commitment (If none, include "No special or supplemental commitments required.")
B-5 Historic Resources	<p>No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.</p> <p>For future construction, WisDOT will re-coordinate Section 106 based on the chosen alternative/project.</p>
B-6 Archaeological/Burial Sites	<p>No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.</p> <p>For future construction, WisDOT will re-coordinate Section 106 based on the chosen alternative/project.</p>
B-7 Tribal Coordination/Consultation	<p>For future construction, WisDOT will re-coordinate Section 106 based on the chosen alternative/project and shall update Tribal coordination and consultation.</p> <p>If human remains or archaeological materials are inadvertently discovered anywhere within the construction corridor, but particularly along WIS 23 between Sunset Road and Meadowlark Road, construction must cease and The Forest County Potawatomie Tribal Historic Preservation Officer will be contacted immediately for consultation on possible recovery and treatment protocols.</p>
B-8 Section 4(f) and 6(f) or Other Unique Areas	<p>No commitments are required as part of the mapping action. Future design would be required to avoid or minimize impacts to the Old Plank Road Trail and any historic sites including the National Register of Historic Places (NRHP) eligible Henry Krumrey Farm and any other properties that may qualify for listing on the NRHP as would be required by Section 4(f) at the time of future environmental review. Any properties that may become Section 6(f) properties in the future would also be considered as may be required at that time. This commitment would be reevaluated at the time of the construction environmental review.</p>
B-9 Aesthetics	<p>No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.</p>
C-1 Wetlands	<p>No commitments are required as part of the mapping action. Since wetland boundaries can change over time, new wetland delineations would be completed closer to the time of construction to determine wetland type, functions, and values. Under current requirements, unavoidable wetland losses must be addressed through a permit process with the USACE (a Section 404 Permit) and would be compensated for at an operating WisDOT Wetland Bank Site in accordance with the WisDOT/WDNR Cooperative Agreement and in coordination with WDNR and USACE. The Section 404 Permit may be reviewed by USFWS as a cooperating review agency. The requirements of the permit would be reflected in the plans and contract special provisions. Additional methods and alternative analysis would be evaluated to further avoid and minimize wetland impacts. Additional coordination would occur with WDNR and USACE to develop alternatives to attempt to avoid and minimize impacts to wetlands. If wetlands cannot be avoided, mitigation requirements would need to be coordinated with WDNR and USACE. WisDOT's Project Manager would be responsible for ensuring fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.</p>

Factor Sheet	Commitment (If none, include "No special or supplemental commitments required.")
C-2 Rivers, Streams and Floodplains	No commitments are required as part of the mapping action. For future design and construction, appropriate erosion control measures and best management practices would be added to the project plans and specifications to avoid temporary changes in water quality unnamed waterways, Sheboygan River, Jackson Creek, adjacent wetlands, and floodplains. Any waterway and fish passage would be maintained during construction at the unnamed waterway crossings. Roadway crossings of any waterways would be designed to avoid increased in backwater. Any requirements would be included in the project plans and contract specifications. WisDOT's Project Manager would be responsible to ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.
C-3 Lakes or other Open Water	No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.
C-4 Groundwater, Wells and Springs	No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.
C-5 Upland Wildlife and Habitat	No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.
C-6 Coastal Zones	No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.
C-7 Threatened and Endangered Species	No commitments are required as part of the mapping action. While no threatened and endangered species were identified by the resource agencies directly in the project area, field reviews were not completed at this time. For future design and construction, field reviews and additional agency coordination would be completed to identify any threatened and endangered species and designs changed to avoid and minimize project effects. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.
D-1 Air Quality	No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.
D-2 Construction Stage Sound Quality	No commitments are required as part of the mapping action. WisDOT Standard Specifications 107.8(6) and 108.7.1 would be applied if applicable. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.
D-3 Traffic Noise	No commitments are required as part of the mapping action. This commitment would be reevaluated at the time of the construction environmental review.
D-4 Hazardous Substances or Contamination	No commitments are required as part of the mapping action. Contaminated sites identified in the Phase I Hazardous Materials Investigation that would impact the construction of the future roadways will be updated prior to construction. This would include a review of agency records and databases, site visits, and Phase I Hazardous Materials Investigation documentation as might be required to ensure no contaminated sites are present that may impact construction activities. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.

Factor Sheet	Commitment (If none, include "No special or supplemental commitments required.")
D-5 Storm Water	<p>No commitments are required as part of the mapping action. The future construction projects would be subject to any stormwater management requirements as may be in effect at the time of construction. Currently the requirements would include a 40% Total Suspended Solids (TSS) reduction per Trans 401 post-construction standards. Stormwater runoff treatment would be incorporated into the stormwater management strategy for the Proposed Action to meet Trans 401 post-construction standards. Anticipated stormwater management measures would include roadside vegetated ditches for treatment of stormwater to achieve or exceed the required sediment reduction and provide for stormwater control prior to discharge off the right-of-way. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.</p>
D-6 Erosion Control	<p>No commitments are required as part of the mapping action. The future construction projects would be required to implement erosion control measures to avoid impacts. Currently the requirements per the Cooperative Agreement between WisDOT and WDNR and Trans 401 of Wisconsin's Administrative Code include developing and implementing an Erosion Control Implementation Plan, which would be reviewed by WDNR prior to construction. Detailed erosion control measures would be determined during future design. Erosion control would be monitored during construction. WisDOT's Project Manager would ensure fulfillment of this commitment. This commitment would be reevaluated at the time of the construction environmental review.</p>
E-1 Other Preservation/Official Mapping	<p>Under Wis. Stat. Section 84.295, WisDOT has committed to long-term coordination with the property owners within the officially mapped areas. If a property owner wants to develop a portion of their property within the officially mapped area, WisDOT has the opportunity to acquire the future right-of-way prior to the improvements being completed. WisDOT may also allow the development to occur without early acquisition. The property owner would be compensated for any approved improvements within the acquisition area if the future right-of-way is acquired. No early acquisitions are anticipated at this time. WisDOT's Real Estate Section will ensure fulfillment of this commitment.</p>

BASIC SHEET 9 – ENVIRONMENTAL FACTORS MATRIX (CHECK ALL THAT APPLY)

Factors	Adverse	Benefit	None Identified	Factor Sheet Attached	Effects
<p>A. ECONOMIC FACTORS <i>Factor Sheet A-1, General Economics, must be included if Factor Sheet A-2 or A-3 is completed.</i></p>					
<p>A-1 General Economics</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Official mapping:</i> Preservation of land for future right of way associated with converting WIS 23 from an expressway to a freeway would not affect the general economics of the study area in Sheboygan County. While mapping would preserve lands for future local road right of way, the preserved lands are planned locally to incorporate their future plans for land use and development. The areas to be preserved can continue to be used until the land are needed. No early acquisitions are proposed at this time.</p> <p><i>Future roadway construction and access closures:</i> The proposed action of mapping the corridor is not expected to result in an immediate effect on economic development. However, as envisioned in Wis. Stats. 84.295 the action is expected to save the state money in the future when construction occurs by preventing development on lands reserved for right of way, thus keeping the future cost of purchasing right of way lower. Additional environmental review and final engineering would occur and the economic impacts will be reassessed at that time. See Factor Sheet A-1.</p>
<p>A-2 Business</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Official Mapping:</i> No impacts to businesses will occur due to the proposed action of official mapping.</p> <p><i>Future roadway construction and access closures:</i> In the future, when the improvements are implemented there will be changes to access that may affect business. See Factor Sheet A-2.</p>
<p>A-3 Agriculture</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><i>Official Mapping:</i> No impacts are expected from official mapping.</p> <p><i>Future roadway construction and access closures:</i> Agricultural access at the proposed closure of Willow Road will be provided via a WIS 23 overpass as indicated on the project plans. Current farmlands were mapped and the acreages of impacts recorded (see Basic Sheet 6), however additional environmental review on the future construction would be required prior to construction.</p> <p>Two agricultural access points that cross WIS 23 will also require removal. The first is located 1,500 feet west of the existing intersection of Sunset Road with WIS 23. The second is located 1,675 feet east of the existing intersection of Meadowlark Road and WIS 23. Relocation of these access points will be addressed prior to construction.</p>

Factors	Adverse	Benefit	None Identified	Factor Sheet Attached	Effects Note: If the effects on the environmental factor can't be adequately summarized in several sentences, the Factor Sheet for the environmental factor must be included.
B. SOCIAL/CULTURAL FACTORS					
B-1 Community or Residential	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Official Mapping:</i> Official mapping of future right of way would not result in any changes within the community nor would it affect community services.</p> <p><i>Future roadway construction and access closures:</i> These effects would not be felt until future construction, which has not been funded and scheduled at this time. Additional environmental review on the future design and construction would be required prior to construction.</p>
B-2 Indirect Effects	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Attachment C includes the "Pre-Screening for Determining the Need to Conduct a Detailed Indirect Effects Analysis".</p> <p>Indirect effects are defined as those effects that are "caused by the action and occur later in time or farther removed in distance, but still reasonably foreseeable".</p> <p><i>Official Mapping:</i> Preserving right-of-way for future improvements would not result in substantial indirect effects.</p> <p><i>Future roadway construction and access closures:</i> Indirect effects would be studied again at the time the mapped roadways are scheduled for construction.</p>
B-3 Cumulative Effects	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Attachment C includes the "Pre-Screening for Determining the Need to Conduct a Detailed Indirect Effects Analysis".</p> <p>Cumulative impacts are the impacts on the environment, which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.</p> <p><i>Official Mapping:</i> Preserving right-of-way for future improvements would not result in cumulative effects because there are no direct impacts associated with official mapping.</p> <p><i>Future roadway construction and access closures:</i> Cumulative effects would be studied again at the time the mapped roadways are scheduled for construction.</p>
B-4 Environmental Justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><i>Official mapping</i> No affected populations are present.</p> <p><i>Future roadway construction and access closures:</i> Effects of environmental justice populations would need to be studied at the time the mapped roadways are scheduled for construction to determine whether minority or low-income populations are present at the time of construction.</p>

Factors	Adverse	Benefit	None Identified	Factor Sheet Attached	Effects Note: If the effects on the environmental factor can't be adequately summarized in several sentences, the Factor Sheet for the environmental factor must be included.
<i>For B-5 through B-8, if any of these resources are present on the project, involve the REC early because of possible project schedule implications.</i>					
B-5 Historic Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>An architecture/history survey was completed in the Area of Potential Effects for the future facility. The Henry Krumrey Farmhouse was identified as potentially historic and a Determination of Eligibility for the National Register was conducted. The site was determined to be eligible.</p> <p><i>Official mapping:</i> There will be no impacts to the Henry Krumrey Farmhouse site as a result of recording the official map.</p> <p><i>Future roadway construction and access closures:</i> The future right of way borders the Henry Krumrey Farmhouse historic site boundary along its western border. Current design plans show acquisition of a strip of land here to accommodate widening of County E. No impacts to any structures are required. To bring County E up to current access, safety and design standards, access to the site would be consolidated into one driveway and another access will be provided along future Kiley way. Currently access is gained from a number of points along several hundred feet of County E.</p>
B-6 Archaeological/Burial Sites	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>WisDOT corresponded with the Tribes and documentation of the cemetery was completed by an archaeologist (see Attachment G).</p> <p><i>Official Mapping:</i> The proposed action will not affect burials or archaeological sites.</p> <p><i>Future roadway construction and access closures:</i> Based upon cemetery documentation and archaeological surveys (see Attachment G) no sites will be impacted by future construction on the mapped properties. During environmental review of the future construction Phase, coordination with potential consulting parties will resume. Typically, WisDOT commits to taking certain actions if human remains are inadvertently/accidentally discovered during construction including stoppage of all ground disturbing activities in the immediate area of the discovery in compliance with Wisconsin Statute 157.70 and the Native American Graves Protection and Repatriation Act. WisDOT or their construction contractor would also contact the State Historic Preservation Officer (SHPO) and immediately implement measures to protect the human remains from inclement weather and vandalism, and notify appropriate law enforcement officials to determine whether or not the remains are subject to a criminal investigation by local or federal authorities.</p>
B-7 Tribal Coordination /Consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>One response letter was received for the Native American Tribes. See Attachment G, which includes correspondence.</p> <p><i>Official mapping and future roadway construction</i> No cultural resource impacts to Native American Tribes are anticipated from either the Official Mapping or future construction. The Native American Tribes will be contacted again during environmental review of the future construction phase.</p>

Factors	Adverse	Benefit	None Identified	Factor Sheet Attached	Effects
<p>B-8 Section 4(f) and 6(f) or Other Unique Areas</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Note: If the effects on the environmental factor can't be adequately summarized in several sentences, the Factor Sheet for the environmental factor must be included.</p> <p>Official Mapping: The proposed action will not impact any of the identified or potential Section 4(f) or 6(f) properties identified in the Section 4(f) Technical Memorandum (see below).</p> <p>No Section 6(f) properties have been identified.</p> <p>Future roadway construction and access closures: A technical memorandum was prepared (see Attachment F) that identified Section 4(f) properties present within the area. The future proposed improvements may affect one historic property (the Henry Krumrey Farmhouse) and one recreational property (the Old Plank Road Trail, which parallels WIS 23). Right of way mapping considered the need to avoid these resources and Sheboygan County was consulted during the planning process. It was found that the project would not impair the continuity of the trail and that new wayfinding signage would be required for the Meadowlark Road trailhead. When construction is proposed, additional review of Section 4(f) resources will be done to identify if any new Section 4(f) and Section 6(f) resources are present and to continue coordination to avoid and minimize impacts to these resources.</p>
<p>B-9 Aesthetics</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Official Mapping: No impacts to aesthetics would occur as a result of official mapping.</p> <p>Future roadway construction and access closures: Changes in views to and from the proposed local access roads and interchanges would result from the proposed future roads. Aesthetic enhancements were not considered as part of this study; however further evaluation of aesthetic enhancements would be considered if the Proposed Action is programmed. The proposed roads and interchanges would be consistent with local plans. These effects would be further considered when the mapped roadways are scheduled for construction.</p>
C. NATURAL RESOURCE FACTORS					
<p>C-1 Wetlands</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Official Mapping: No impacts to wetlands would occur as a result of official mapping.</p> <p>Future roadway construction and access closures: Future roadway construction would impact wetlands. During future design phases, additional design refinements in coordination with WDNR and USACE would be required to further minimize wetland impacts and in order to obtain the necessary permits from those agencies for placing fill in wetlands. See Factor Sheet C-1.</p>
<p>C-2 Rivers, Streams and Floodplains</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Official Mapping: No impacts to rivers, streams, and floodplains would occur as a result of official mapping.</p> <p>Future roadway construction and access closures: Future roadways would cross the Sheboygan River, Jackson Creek, and three unnamed waterways. See Factor Sheet C-2</p>

Factors	Adverse	Benefit	None Identified	Factor Sheet Attached	Effects
C-3 Lakes or Other Open Water	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Note: If the effects on the environmental factor can't be adequately summarized in several sentences, the Factor Sheet for the environmental factor must be included.</p> <p><i>Official Mapping:</i> No impacts to lakes or other open waters would occur as a result of official mapping.</p> <p><i>Future roadway construction and access closures</i> No impacts to lakes or other open waters would occur as a result of future construction.</p>
C-4 Groundwater, Wells, and Springs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><i>Official Mapping:</i> No impacts to groundwater, wells and springs would occur as a result of official mapping.</p> <p><i>Future roadway construction and access closures</i> This resource will be assessed when the mapped roadways are scheduled for construction.</p>
C-5 Upland Wildlife and Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Official Mapping:</i> No impacts to groundwater, wells and springs would occur as a result of official mapping.</p> <p><i>Future roadway construction and access closures</i> See Factor Sheet C-5. This resource will be reassessed when the mapped roadways are scheduled for construction.</p>
C-6 Coastal Zones	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><i>Official Mapping:</i> No impacts that would harm coastal water and air quality would occur as a result of official mapping.</p> <p><i>Future roadway construction and access closures</i> This resource would be assessed when the mapped roadways are scheduled for construction. The Federal Consistency Review Process would be followed as required and the review criteria applied to ensure the project is consistent with federally approved state coastal policies to protect Lake Michigan coastal water and air quality.</p>
C-7 Threatened and Endangered Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><i>Effects of Official Mapping:</i> No impacts to species would occur as a result of official mapping.</p> <p><i>Future roadway construction and access closures:</i> No threatened and endangered species have been identified. Future roadway construction would be assessed when they are scheduled for construction.</p>
D. PHYSICAL FACTORS					
D-1 Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Effects of Official Mapping:</i> Direct or indirect impacts to air quality would not occur as a result of official mapping</p> <p><i>Future roadway construction and access closures:</i> An air quality evaluation would be done if required during the analysis of future projects. See Factor Sheet D-1.</p>

Factors	Adverse	Benefit	None Identified	Factor Sheet Attached	Effects
D-2 Construction Stage Sound Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Note: If the effects on the environmental factor can't be adequately summarized in several sentences, the Factor Sheet for the environmental factor must be included.</p> <p><i>Effects of Official Mapping:</i> Construction noise impacts will not result from official mapping since no construction will occur as part of the official mapping process.</p> <p><i>Future roadway construction and access closures:</i> WisDOT Standard Specifications 107.8(6) and 108.7.1 would apply. See attached Factor Sheet D-2.</p>
D-3 Traffic Noise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Effects of Official Mapping:</i> Traffic noise changes would not directly result from official mapping, since no construction would occur as part of the official mapping process.</p> <p><i>Future roadway construction and access closures:</i> A noise analysis was performed that indicated that seven residences would be exposed to noise levels that approach or exceed the noise level criteria of 67 dBA. A traffic noise analysis would be updated if required during the environmental analysis of future projects. See Factor Sheet D-3.</p>
D-4 Hazardous Substances or Contamination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Effects of Official Mapping:</i> Officially mapping the roadway will not involve construction and therefore the presence of hazardous materials will not create impacts.</p> <p><i>Future roadway construction and access closures:</i> A Phase 1 Hazardous Materials Assessment was conducted for the Preferred Alternative. Three Phase 2 assessments were recommended. See Factor Sheet D-4.</p>
D-5 Stormwater	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Effects of Official Mapping:</i> Officially mapping the roadway will not involve construction and therefore stormwater related impacts will not occur.</p> <p><i>Future roadway construction and access closures:</i> Further drainage analysis would be performed during the final design phase prior to construction. See Factor Sheet E-4.</p>
D-6 Erosion Control and Sediment Control	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>Effects of Official Mapping:</i> Officially mapping the roadway will not involve construction and therefore erosion and sediment related impacts will not occur.</p> <p><i>Future roadway construction and access closures:</i> Further analysis would be performed during the final design phase prior to construction. Sediment and erosion control methods would be required. See Factor Sheet E-5.</p>
E. OTHER FACTORS					
E-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

Appendix A: Factor Sheets

BUSINESS EVALUATION FACTOR SHEET
WETLAND EVALUATION FACTOR SHEET
RIVERS, STREAMS AND FLOODPLAINS EVALUATION FACTOR SHEET
UPLAND WILDLIFE AND HABITAT EVALUATION FACTOR SHEET
AIR QUALITY EVALUATION FACTOR SHEET
CONSTRUCTION STAGE SOUND QUALITY EVALUATION
TRAFFIC NOISE EVALUATION FACTOR SHEET
HAZARDOUS SUBSTANCES OR CONTAMINATION EVALUATION FACTOR SHEET
STORMWATER EVALUATION FACTOR SHEET
EROSION CONTROL EVALUATION FACTOR SHEET

GENERAL ECONOMICS EVALUATION

Factor Sheet A-1

Alternative West Segment: W2 North and South Central Segment: C4 East Segment: E4	Total Length of Center Line of Existing Roadway (WIS 23) 10.2 miles Length of This Alternative W2=2.46 miles C4=3.19 miles E4=4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Briefly describe the existing economic characteristics of the area around the project:

Economic Activity	Description
a. Agriculture	Agricultural operations exist along the majority of the corridor including dairy farms and row crops.
b. Retail business	Gas station, automobile sales
c. Light industry	Recycling business, A number of light industrial businesses north of WIS 23 with access from the existing County C interchange
d. Heavy industry	Sargento Foods Inc. factory, Plymouth Foam Inc. factory and Plymouth Industries factory just north of County C interchange The City of Plymouth has a number of manufacturers within its incorporated area to the south as well. Sheboygan Falls Energy Facility, located south of WIS 23 on Bridgewood Road. Northeast Asphalt Aggregate Quarry on County M.
d. Recreation	Old Plank Road Trail runs along the entire corridor. Quit Qui Oc (a private 30-acre sports complex near the WIS 67 interchange). Sunset Hills Golf Course near Alpine Road Camp Y-Koda – YMCA camp at WIS 23 and Sunset Road
e. Service businesses	Most of the businesses in the corridor offer services including realtors, automotive repair, insurance.
f. Health Services	Aurora Health Center location near the WIS 57 interchange
g. Offices	Small office complex near the WIS 57 interchange

2. Discuss the economic advantages and disadvantages of the proposed action and whether advantages would outweigh disadvantages. Indicate how the project would affect the characteristics described in item 1 above:

In the interest of promoting public safety and convenience and the general welfare, the legislature of the state of Wisconsin declared in Wisconsin Statutes Section 84.295 that the intent of the proposed action is to provide for the development of a well-balanced and integrated state trunk highway system to further modernize and improve it to adequate standards. This more adequately serves the present and anticipated future needs of highway travel, and toward that end prevents conflicting costly economic development on areas of lands to be available as right-of-way when needed for future highway construction.

3. What effect will the proposed action have on the potential for economic development in the project area?

- The proposed project will have no effect on economic development.
- The proposed project will have an effect on economic development.
 - Increase, describe: n/a
 - Decrease, describe: n/a

The proposed action of mapping the corridor is not expected to result in an immediate effect on economic development. However, as envisioned in Wis. Stats. 84.295 the action is expected to save the state money in the future when construction occurs by preventing development on lands reserved for right of way, thus keeping the future

cost of purchasing right of way lower. When the mapped improvements are funded, additional environmental review and final engineering would occur. Analysis of the economic characteristics would be updated and the economic advantages and disadvantages of the future action will be reassessed and documented at that time.

BUSINESS EVALUATION

Factor Sheet A-2

Alternative West Segment: W2 North and South Central Segment: C4 East Segment: E4	Total Length of Center Line of Existing Roadway: (WIS 23) 10.2 miles Length of This Alternative: (Local Roads) W2=2.46 miles C4=3.19 miles E4: 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. Is a Conceptual Stage Relocation Plan attached to this document?

- Yes
- No - (Explain) The official mapping process does not require relocation of any properties. When construction is proposed, the need for relocations will be reassessed and addressed in a conceptual stage relocation plan if required at that time.

2. Describe the economic development or existing business areas affected by the proposed action:

Land uses in the study areas include largely agricultural and open space along the mainline of WIS 23. Developed areas exist near the existing interchanges. The local communities offer various economic development incentives including loan programs, tax incremental finance districts and various business assistance programs.

The land uses include a typical mix that would support the small communities of Plymouth and Sheboygan Falls, which are along a corridor that connects the larger cities of Fond du Lac and Sheboygan. WIS 23 currently provides access to scattered business and industrial sites. Existing land use designations are illustrated in the maps in Attachment C.

3. Identify and discuss existing modes of transportation and their traffic within the economic development or existing business area:

Existing businesses are almost exclusively accessed by motor vehicle. Some pedestrian and bicycle access is provided to businesses along the Oak Plank Trail. This includes the following:

- Citgo Gas Station at the intersection of WIS 23 and F, 1232 County O
- Restaurant (Rosie's Valley Inn) at the corner of CTH P and Valley Lane
- Northeast Asphalt
- Sheboygan County Budget Auto, at Willow Road and WIS 23
- Luedke Farms Shop and Grain at the intersection of WIS 23 and CTH E
- J & J Recycling at W5172 County O
- Maritime Insurance Group W5142 County O (has nearby access at 57 interchange)
- Plymouth Self Storage N6128 Pleasant View Road (has nearby access at 57 interchange)
- Van Horn Automotive W5073 County O (has nearby access at 57 interchange)
- Office Complex at W5073 County O (has nearby access at 57 interchange)
- Pleasant View Realty at N6050 Pleasant View Road
- Aurora Health Center at 2600 Kiley Way (has nearby access at 57 interchange)

4. Identify and discuss effects on the economic development potential and existing businesses that are dependent upon the transportation facility for continued economic viability:

- The proposed project will have no effect on a transportation-dependent business or industry.
- The proposed action may change the conditions for a business that is dependent upon the transportation facility. Identify effects, including effects which may occur during construction.

The official mapping process will not affect existing businesses. In the future, when the improvements are implemented there will be changes to access that may affect business. For example, the Citgo Gas Station currently has direct access to WIS 23 via the at-grade intersection at County O. By closing this intersection, customers that see the station from the freeway, may have difficulty in finding their way to the station/mini-market. This type of business relies heavily on easy access to the main highway. Mitigation measures would be analyzed in a future environmental document to be completed prior to the proposed improvements being constructed.

5. Describe both beneficial and adverse effects on:

- A. The existing business area affected by the proposed action. Include any factors identified by business people that they feel are important or controversial.

The proposed action of official mapping would not affect existing businesses. When future construction is proposed, WisDOT will coordinate with affected businesses and appropriate measures would be taken to mitigate temporary construction effects.

- B. The existing employees in businesses affected by the proposal. Include, as appropriate, a discussion of effects on minority populations or low-income populations.

When future construction is proposed, an assessment of existing employees of any businesses that would be affected will be made and documented.

6. Estimated number of businesses and jobs that would be created or displaced because of the project:

The proposed action will not create or displace businesses or jobs. This estimate would be completed in a future environmental document.

Business/Job Type	Businesses			Jobs	
	Created	Displaced	Value	Created	Displaced
Retail	0	0	0	0	0
Service	0	0	0	0	0
Wholesale	0	0	0	0	0
Manufacturing	0	0	0	0	0
Other (List)	0	0	0	0	0
	0	0	0	0	0

7. Are any owners or employees of created or displaced businesses elderly, disabled, low-income or members of a minority group?

The proposed action will not create or displace businesses or jobs. This estimate would be completed in a future environmental document. Environmental Justice populations present at the time of construction would need to be assessed and mitigation measures developed as may be required at that time.

- No
 Yes – If yes, complete Factor Sheet B-4, Environmental Justice Evaluation.

8. Is Special Relocation Assistance Needed?

The proposed action will not involve any relocations. This estimate would be completed in a future design and environmental review phase.

- No
 Yes – Describe special relocation needs.

9. Identify all sources of information used to obtain data in item 8:

N/A

- WisDOT Real Estate Conceptual Stage Relocation Plan
 Newspaper listing(s)
 Multiple Listing Service (MLS)
 Other - Identify:

10. Describe the business relocation potential in the community:

- A. Total number of available business buildings in the community. N/A
- B. Number of available and comparable business buildings by type and price (Include business buildings in price ranges comparable to those being dislocated, if any).
N/A Number of available and comparable type business buildings in the price range of _____
N/A Number of available and comparable type business buildings in the price range of _____

N/A Number of available and comparable type business buildings in the price range of _____

11. Describe how relocation assistance will be provided in compliance with the WisDOT Relocation Manual or FHWA regulation 49 CFR Part 24. Check all that apply:

The proposed action will not displace businesses. This analysis would be completed in a future design and environmental review phase. The following actions would be completed as may be required at the time of construction.

- Business acquisitions and relocations will be completed in accordance with the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended." In addition to providing for payment of "Just Compensation" for property acquired, additional benefits are available to eligible displaced persons forced to relocate from their business. Some available benefits include relocation advisory services, reimbursement of moving expenses, replacement of business payments. In compliance with State law, no person would be displaced unless a comparable replacement business would be provided.

Compensation is available to all displaced persons without discrimination. Before initiating property acquisition activities, property owners will be contacted and given an explanation of the details of the acquisition process and Wisconsin's Eminent Domain Law under Section 32.05, Wisconsin Statutes. Any property to be acquired will be inspected by one or more professional appraisers. The property owner will be invited to accompany the appraiser during the inspection to ensure the appraiser is informed of every aspect of the property. Property owners will be given the opportunity to obtain an appraisal by a qualified appraiser that will be considered by WisDOT in establishing just compensation. Reasonable cost of an owner's appraisal will be reimbursed to the owner if received within 60 days of initiation of negotiations. Based on the appraisal(s) made, the value of the property will be determined, and that amount offered to the owner.

- Describe other relocation assistance requirements, not identified above.

12. Identify any difficulties relocating a business displaced by the proposed action and describe any special services needed to remedy identified unusual conditions:

The proposed action will not displace businesses. This analysis would be completed as a part of future environmental documentation when the improvements to be mapped are implemented..

13. Describe any additional measures that will be used to minimize adverse effects or provide benefits to those relocated. Also discuss accommodations made to minimize adverse effects to businesses that may be affected by the project, but not relocated:

The proposed action will not displace businesses. This analysis would be completed as a part of future environmental documentation when the improvements to be mapped are implemented..

WETLANDS EVALUATION

(9/2013)

Wisconsin Department of Transportation

Factor Sheet C-1

Alternative C4 Site A: STH 23 over CTH O Site B: Kiley Way	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of this alternative (C4): 3.19 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. Describe Wetlands:

	SITE A					
	Wetland 1		Wetland 2		Wetland 3	
Name (if known) or wetland number¹	A1		A2		A3	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	22 15N 21E		22 15N 21E		22 15N 21E	
Location (Latitude)	43°45'40.76"N		43°45'40.92"N		43°45'41.09"N	
Location (Longitude)	87°58'4.38"W		87°57'47.72"W		87°57'44.07"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s)²	M(D)		M(D)		M(D)	
Wetland Loss	Acres <u>0.194</u>		Acres <u>0.059</u>		Acres <u>0.308</u>	
Wetland is: (Check all that apply)³	Yes	No	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body	X		X			X
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain		X		X		
• If adjacent or contiguous, identify stream, lake or water body	Unnamed Creek (53600) Mullet R. Watershed					

¹Use wetland numbering from the project wetland delineation report.

²Use wetland types as specified in the "WisDOT FDM 24-5 Attachment 10.2 Wetland Type Correspondence Table"

³If wetland is contiguous to a stream, complete Factor Sheet C-2, Rivers, Streams and Floodplains Impact Evaluation. If wetland is contiguous to a lake or other water body, complete Factor Sheet C-3, Lake or Water Body Impact Evaluation.

	SITE A (continued)					
	Wetland 4		Wetland 5		Wetland 6	
Name (if known) or wetland number¹	A4		A5		A6	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	15 15N 21E		15 15N 21E		23 15N 21E	
Location (Latitude)	43°45'44.04"N		43°45'41.22"N		43°45'40.98"N	
Location (Longitude)	87°57'42.74"W		87°57'40.08"W		87°57'22.08"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s)²	RPE(D)		M(D)		M(D)	
Wetland Loss	Acres <u>0.407</u>		Acres <u>0.149</u>		Acres <u>0.088</u>	
Wetland is: (Check all that apply)³	Yes	No	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body		X		X	X	
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain						X
• If adjacent or contiguous, identify stream, lake or water body	Unnamed Creek (53600) Mullet R. Watershed				NA	

	SITE A (continued)					
	Wetland 7		Wetland 8		Wetland 9	
Name (if known) or wetland number ¹	A7		A8		A9	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	23 15N 21E		23 15 N 21E		23 15N 21E	
Location (Latitude)	43°45'38.79"N		43°45'38.23"N		43°45'38.67"N	
Location (Longitude)	87°57'40.28"W		87°57'40.39"W		87°57'20.47"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s) ²	M(D)		RPE(D)		M(D)	
Wetland Loss	Acres 0.036		Acres 0.228		Acres 0.017	
Wetland is: (Check all that apply) ³	Yes	No	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body		X		X	X	
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain						X
• If adjacent or contiguous, identify stream, lake or water body	Unnamed Creek (53600) Mullet R. Watershed				NA	

	SITE B					
	Wetland 1		Wetland 2		Wetland 3	
Name (if known) or wetland number ¹	B1		B2		B3	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	22 15N 21E		23 15N 21E		23 15N 21E	
Location (Latitude)	43°45'37.14"N		43°45'27.91"N		43°45'23.29"N	
Location (Longitude)	87°57'54.23"W		87°57'32.92"W		87°57'14.63"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s) ²	M(D)		RPE(D)		M(D)	
Wetland Loss	Acres 0.328		Acres 0.227		Acres 0.526	
Wetland is: (Check all that apply) ³	Yes	No	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body	X			X	X	
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain		X				X
• If adjacent or contiguous, identify stream, lake or water body	NA		Unnamed Creek (53600) Mullet R. Watershed		NA	

2. Are any impacted wetlands considered "wetlands of special status" per WisDOT Wetland Mitigation Banking Technical Guideline, page 10 (6 categories)?

- No
 Yes:
- Advanced Identification Program (ADID) Wetlands
 - Public or private expenditure has been made to restore, protect, or ecologically manage the wetland on either public or private land
 - Other – Describe: _____

3. Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, other:

Official Mapping work
 No work in wetlands is required to record the official map.

Future project work
 Fill and/or excavation to construct improvements.

4. List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland: (List should include permanent, migratory and seasonal residents).

Wetland A-4 – amphibians and raccoon; B-2 - Red wing black bird, various frog and migratory bird species, raccoon; all others: amphibians, migratory passerines, small mammals, muskrat and raccoon expected

5. Federal Highway Administration (FHWA) Wetland Policy:

- Not Applicable - Explain
- Individual Wetland Finding Required - Summarize why there are no practicable alternatives to the use of the wetland.
- Statewide Wetland Finding: **NOTE: All three boxes below must be checked for the Statewide Wetland Finding to apply.**
 - Project is either a bridge replacement or other reconstruction within 0.3 mile of the existing location.
 - The project requires the use of 7.4 acres or less of wetlands.
 - The project has been coordinated with the DNR and there have been no significant concerns expressed over the proposed use of the wetlands.

6. Erosion control or storm water management practices which will be used to protect the wetland are indicated on form: (Check all that apply)

- Factor Sheet D-6, Erosion Control Evaluation.
- Factor Sheet D-5, Stormwater Evaluation.
- Neither Factor Sheet - Briefly describe measures to be used

7. U S Army Corps of Engineers (USACE) Jurisdiction - Section 404 Permit (Clean Water Act)

- Not Applicable - No fill to be placed in wetlands or wetlands are not under USACE jurisdiction.
- Applicable - Fill will be placed in wetlands under the jurisdiction of the USACE.
Indicate area of wetlands filled: Acres 0.00 (official mapping) / 2.567 acres (future projects)
Type of 404 permit anticipated:
 - Individual Section 404 Permit required.
 - General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404 Compliance.

Indicate which GP or LOP is required:

- Non-Reporting GP** [GP-002-WI (*expires 5/31/16*) or GP-004-WI (*expires 12/31/17*)]
- Reporting GP** [GP-002-WI, GP-003-WI (*expires 12/31/17*), or GP-004-WI]
- Letter of Permission** [LOP-06-WI (*in effect 4/17/06, no expiration date*)]
- Programmatic GP** [Applies to projects not covered under the DOT/DNR Cooperative Agreement]

8. Wisconsin Department of Natural Resources Coordination - Section 401 Water Quality Certification

- DNR has provided concurrence on the project wetland delineation. Received on: (Date)
- Other- Explain
Corridor preservation study delineations are preliminary. Final delineation and concurrence will be completed as part of environmental documents for future projects..

9. Section 10 Waters (Rivers and Harbors Act). For navigable waters of the United States (Section 10) indicate which 404 permit is required:

- No Section 10 Waters
- Section 10 Waters
 - Reporting GP** [GP-003-WI (*expires 12/31/17*)]
 - Reporting GP** [GP-004-WI (*expires 12/31/17*)]

Indicate whether Pre-Construction Notification (PCN) to the USACE is:

- Not applicable.
- Required: Submitted on: (Date)

Status of PCN

USACE has made the following determination on: (Date)

USACE is in the process of review, anticipated date of determination is: (Date)

10. Wetland Avoidance and Impact Minimization: [Note: Required before compensation is acceptable]

Note: The following does not apply for the Project (official mapping) but would apply for future projects. Wetland avoidance and minimization would be further analyzed as part of the environmental analysis and documentation on future projects.

A. Wetland Avoidance:

1. Describe methods used to avoid the use of wetlands, such as using a lower level of improvement or placing the roadway on new location, etc.:

Avoidance and minimization of wetland losses were important criteria in the alternative development and selection process. The preferred alternative avoids wetlands where practicable in view of other logistical constraints including avoidance of other environmental impacts including farmland acquisition and severances, and residential and business relocations and in consideration of access and transportation design concerns related to existing infrastructure and site availability. In this light, roadway horizontal alignments were modified to avoid or minimize wetland impacts. Roadway vertical alignments were adjusted near wetlands to limit the footprint and sloping required near wetlands.

This alternative originally required County E to go over WIS 23. After further study, it was determined that constructing WIS 23 over County E could substantially reduce wetland and other impacts; however, this alternative would come at a higher construction cost. Based on consideration of the overall analysis of these two configurations it was decided to pursue the reduction of impacts provided with the WIS 23 over County E configuration.

Several alternatives that crossed the Mullet River through a wooded environmental corridor would have resulted in greater wetland impacts. These alternatives are not being mapped as part of this study. The discussion about their elimination as alternatives is provided in Basic Sheet 3 – Central Segment Alternatives.

2. Indicate the total area of wetlands avoided:

Acres: 0.20*

* The proposed action of officially mapping right of way will not directly impact wetlands as they presently exist in the corridor. However, the difference in impacts between the County E over WIS 23 alternative versus WIS 23 over County E was determined to be 0.20 acres of wetlands saved using the preferred alternative.

The total area of wetlands avoided would be assessed and calculated in future design and environmental review phases for future construction if and when it is programmed. Since wetland boundaries can change over time, new wetland delineations would be completed closer to the time of construction to determine wetland type and an assessment of wetland functions and values would be conducted. Design modifications may be required to further avoid or minimize acreage of wetland impacts.

B. Minimize the amount of wetlands affected:

1. Describe methods used to minimize the use of wetlands, such as increasing side slopes or use of retaining walls or beam guard, equalizer pipes, upland disposal of hydric soils, etc.:

Future right of way needs in wetland areas were determined in consultation with the Wisconsin Department of Natural Resources (DNR). To identify the future right of way that may be required, minimization techniques were considered. Side slopes adjacent to wetlands were steepened to 3:1. Horizontal alignments were designed to pass through the narrowest portion of a wetland when crossings were required. Vertical alignments were adjusted to reduce the height of fills where wetlands were impacted. Supplementary minimization techniques such as steeper slope embankments, narrower medians, and the use of retaining walls will be considered during future design phases of the project in coordination with DNR and USACE.

2. Indicate the total area of wetlands saved through minimization:

Acres:

The mapping required for this project will not directly impact wetlands as they presently exist in the corridor. The total area of wetlands saved through minimization will be calculated in future design phases of the project when construction is proposed. Since wetland boundaries can change over time, new wetland delineations would be completed closer to the time of construction to determine wetland type and an assessment of

wetland functions and values would be conducted. Design modifications may be required to further avoid or minimize acreage of wetland impacts.

11. Compensation for Unavoidable Wetland Loss:

Note: The following does not apply for the Project (official mapping) but would apply for future projects. Wetland avoidance and minimization would be further analyzed as part of the environmental analysis and documentation on future projects.

According to Section 404(b)(1), of the Clean Water Act, wetland compensatory mitigation procedures and sequencing will conform to the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (EPA) joint rule on Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Parts 325 and 332; and 40 CFR Part 230 - dated April 10, 2008). Compensatory mitigation will be consistent with amendments to the Cooperative Agreement between DNR and WisDOT on compensatory mitigation for unavoidable wetland losses (July 2012), and the WisDOT Interagency Coordination Agreement and Wetland Mitigation Banking Technical Guidelines with DNR, USACE, EPA, USFWS and FHWA (March 2002).

	Type	Acre(s) Loss	Ratio	Compensation Type and Acreage	
				On-site	DOT Mitigation Bank site
RPF(N)	Riparian wetland (wooded)				
RPF(D)	Degraded riparian wetland (wooded)				
RPE(N)	Riparian wetland (emergent)				
RPE(D)	Degraded riparian wetland (emergent)	0.862	1.6		1.379
M(N)	Wet and sedge meadows, wet prairie, vernal pools, fens				
M(D)	Degraded meadow	1.705	1.5		2.558
SM	Shallow marsh				
DM	Deep marsh				
AB(N)	Aquatic bed				
AB(D)	Degraded aquatic bed				
SS	Shrub Swamp, shrub carr, alder thicket				
WS(N)	Wooded swamp				
WS(D)	Degraded wooded swamp				
Bog	Open and forested bogs				

D = Degraded
N = Non-degraded

12. If compensation is not possible within the drainage area and floristic province thru the use of the DOT mitigation bank, explain why and describe how a search for an on-site compensation site was conducted:

A site search is not required for the proposed action. Under current requirements, unavoidable wetland losses would be permitted through the USACE (Section 404 Permit) and would be compensated for at an operating WisDOT Wetland Bank Site in accordance with the WisDOT/WDNR Cooperative Agreement and in coordination with WDNR and USACE. The Section 404 Permit may be reviewed by USFWS as a cooperating review agency. The requirements of the permit would be reflected in the plans and contract special provisions. Additional methods and alternative analysis would be evaluated to further avoid and minimize wetland impacts. Additional coordination would occur with WDNR and USACE to develop alternatives to attempt to avoid and minimize impacts to wetlands. If wetlands cannot be avoided, mitigation requirements would need to be coordinated with WDNR and USACE.

13. Summarize the coordination with other agencies regarding the compensation for unavoidable wetland losses. Attach appropriate correspondence.

No direct unavoidable wetland losses are anticipated for the proposed action. However, future design and construction actions would require WisDOT to comply with requirements to avoid wetland losses. An environmental document would be prepared in coordination with other agencies responsible for addressing unavoidable wetland losses. Compensation for those losses would be analyzed and developed at that time. Data presented in this document is provided as an estimate of current impacts and documentation of actions taken to avoid and minimize wetland impacts as part of locating the anticipated right of way for future roadway use.



1440-19-00

WETLAND IMPACTS EXHIBIT

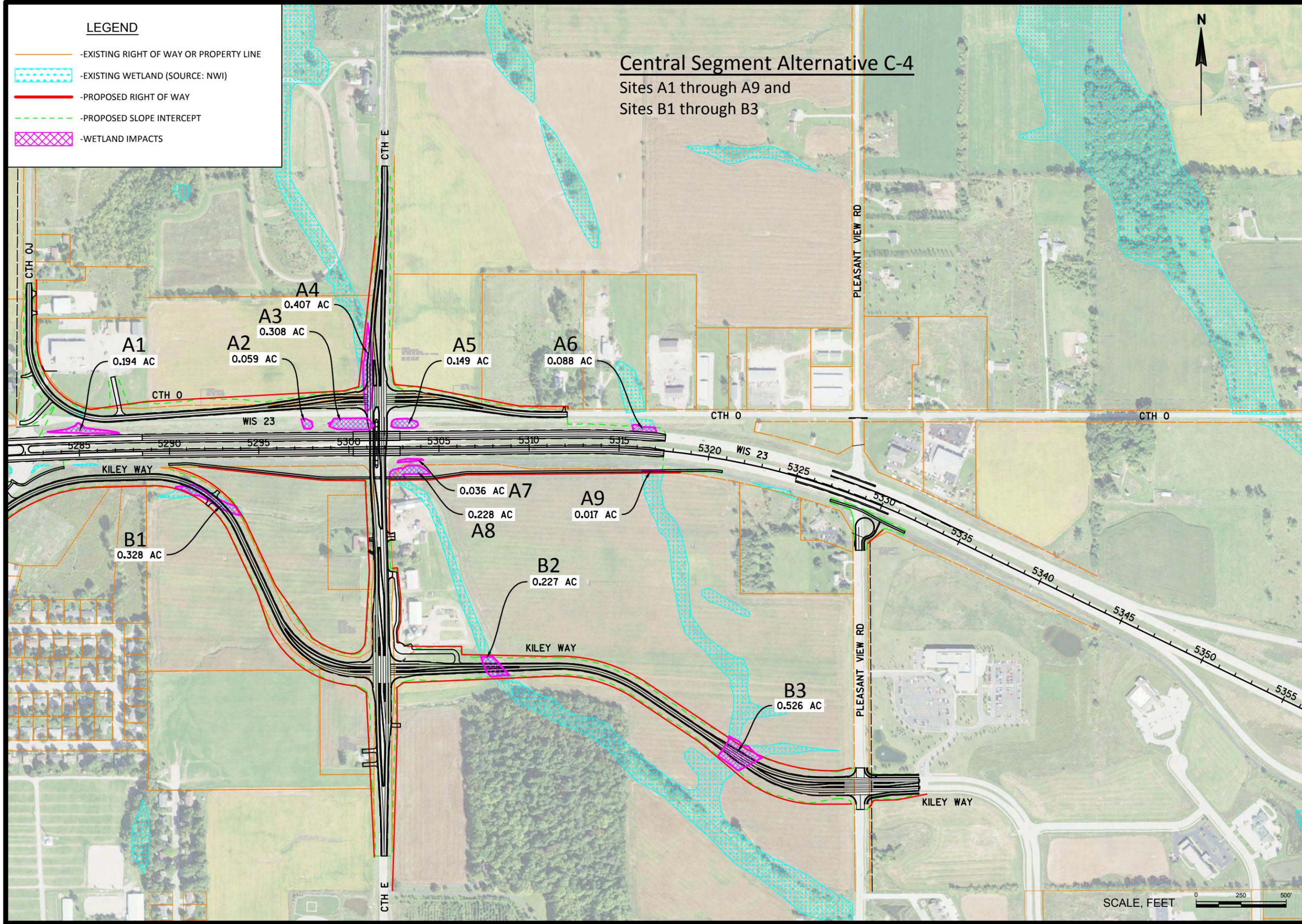
WIS 23
SHEBOYGAN COUNTY
CTH P - WIS 32



Central Segment Alternative C-4 Sites A1 through A9 and Sites B1 through B3

LEGEND

- EXISTING RIGHT OF WAY OR PROPERTY LINE
- EXISTING WETLAND (SOURCE: NWI)
- PROPOSED RIGHT OF WAY
- PROPOSED SLOPE INTERCEPT
- WETLAND IMPACTS



SCALE, FEET



WIS 23

1"=500'

Exhibit

Sheet 3 of 7

WETLANDS EVALUATION

(9/2013)

Wisconsin Department of Transportation

Factor Sheet C-1

Alternative E4 Site A: Willow Road Overpass Site B: CTH M Overpass Site C: Hillside Road Cut-off Site D: Bridgewood Road Site E: CTH TT Interchange Site F: Meadowlark Road Cut-off	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of this Alternative (E4): 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. Describe Wetlands:

	SITE A		SITE B	
	Wetland 1	Wetland 2	Wetland 1	
Name (if known) or wetland number ¹	A1	A2	B1	
County	Sheboygan	Sheboygan	Sheboygan	
Location (Section-Township-Range)	Sec 24 T15N R21E	Sec 19 T15N R22E	Sec 19 T15N R22E	
Location (Latitude)	43°45'4.36"N	43°45'4.64"N	43°45'23.00"N	
Location (Longitude)	87°55'17.18"W	87°55'16.33"W	87°54'5.46"W	
Location Map	See Exhibit 1	See Exhibit 1	See Exhibit 1	
Wetland Type(s) ²	M(D)	M(D)	WS(D)	
Wetland Loss	Acres <u>0.061</u>	Acres <u>0.225</u>	Acres <u>0.876</u>	
Wetland is: (Check all that apply) ³	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body		X		X
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain				X
• If adjacent or contiguous, identify stream, lake or water body	Unnamed Intermittent Tributary (53700) Mullet R. Watershed		N/A	

	SITE C		SITE D	
	Wetland 1	Wetland	Wetland 2	
Name (if known) or wetland number ¹	C1	D1	D2	
County	Sheboygan	Sheboygan	Sheboygan	
Location (Section-Township-Range)	20 15N 22E	21 15N 22E	21 15N 22E	
Location (Latitude)	43°45'21.65"N	43°45'14.52"N	43°45'14.70"N	
Location (Longitude)	87°53'28.13"W	87°52'51.13"W	87°52'49.60"W	
Location Map	See Exhibit 1	See Exhibit 1	See Exhibit 1	
Wetland Type(s) ²	DM	M(D)	M(D)	
Wetland Loss	Acres <u>0.122</u>	Acres <u>0.266</u>	Acres <u>0.143</u>	
Wetland is: (Check all that apply) ³	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body	X			X
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain		X		
• If adjacent or contiguous, identify stream, lake or water body	N/A	Connected by culvert to Unnamed intermittent tributary (WBIC 5027374) to Sheboygan River		

	SITE E					
	Wetland 1		Wetland 2		Wetland 3	
Name (if known) or wetland number ¹	E1		E2		E3	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	27 15N 22E		27 15N 22E		27 15N 22E	
Location (Latitude)	43°44'30.96"N		43°44'33.82"N		43°44'41.17"N	
Location (Longitude)	87°51'0.57"W		87°51'1.66"W		87°51'0.20"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s) ²	M(D)		M(D)		M(D)	
Wetland Loss	Acres 0.029		Acres 0.533		Acres 0.271	
Wetland is: (Check all that apply) ³	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> Isolated from stream, lake or other surface water body 		X		X		X
<ul style="list-style-type: none"> Not contiguous (in contact with a stream, lake, or other water body, but within 100-year floodplain) 						
<ul style="list-style-type: none"> If adjacent or contiguous, identify stream, lake or water body 	N/A		N/A		N/A	

	SITE E (continued)					
	Wetland 4		Wetland 5		Wetland 6	
Name (if known) or wetland number ¹	E4		E5		E6	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	27 15N 22E		27 15N 22E		22 15N 22E	
Location (Latitude)	43°44'41.26"N		43°44'45.61"N		43°45'4.16"N	
Location (Longitude)	87°51'1.31"W		87°51'16.05"W		87°50'56.29"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s) ²	M(D)		M(D)		RPE(D)	
Wetland Loss	Acres 0.008		Acres 0.095		Acres 0.379	
Wetland is: (Check all that apply) ³	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> Isolated from stream, lake or other surface water body 		X		X		X
<ul style="list-style-type: none"> Not contiguous (in contact with a stream, lake, or other water body, but within 100-year floodplain) 						
<ul style="list-style-type: none"> If adjacent or contiguous, identify stream, lake or water body 	N/A		N/A		Sheboygan River	

	SITE E (continued)					
	Wetland 7		Wetland 8		Wetland 9	
Name (if known) or wetland number ¹	E7		E8		E9	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	22 15N 22E		22 15N 22E		22 15N 22E	
Location (Latitude)	43°45'6.78"N		43°45'14.27"N		43°45'17.61"N	
Location (Longitude)	87°50'54.38"W		87°51'8.28"W		87°51'6.01"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s) ²	RPE(D)		RPF(D)		RPE(D)	
Wetland Loss	Acres 0.002		Acres 0.543		Acres 0.200	
Wetland is: (Check all that apply) ³	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> Isolated from stream, lake or other surface water body 		X		X		X
<ul style="list-style-type: none"> Not contiguous (in contact with a stream, lake, or other water body, but within 100-year floodplain) 						

	SITE E (continued)		
	Wetland 7	Wetland 8	Wetland 9
<ul style="list-style-type: none"> If adjacent or contiguous, identify stream, lake or water body 	Sheboygan River	Sheboygan River (oxbow/tributary)	Sheboygan River

	SITE E (continued)		SITE F	
	Wetland 10	Wetland 11	Wetland 1	
Name (if known) or wetland number ¹	E10	E11	F1	
County	Sheboygan	Sheboygan	Sheboygan	
Location (Section-Township-Range)	22 15N 22E	22 15N 22E	23 15N 22E	
Location (Latitude)	43°45'24.60"N	43°45'24.27"N	43°45'4.59"N	
Location (Longitude)	87°51'2.27"W	87°51'0.48"W	87°50'21.40"W	
Location Map	See Exhibit 1	See Exhibit 1	See Exhibit 1	
Wetland Type(s) ²	M(D)	M(D)	M(D)	
Wetland Loss	Acres 0.131	Acres 0.119	Acres 0.051	
Wetland is: (Check all that apply) ³	Yes	No	Yes	No
<ul style="list-style-type: none"> Isolated from stream, lake or other surface water body 		X		X
<ul style="list-style-type: none"> Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain 				
<ul style="list-style-type: none"> If adjacent or contiguous, identify stream, lake or water body 	N/A	N/A	Old cut off ox-bow of Sheboygan River	

¹Use wetland numbering from the project wetland delineation report.

²Use wetland types as specified in the "WisDOT FDM 24-5 Attachment 10.2 Wetland Type Correspondence Table"

³If wetland is contiguous to a stream, complete Factor Sheet C-2, Rivers, Streams and Floodplains Impact Evaluation.

If wetland is contiguous to a lake or other water body, complete Factor Sheet C-3, Lake or Water Body Impact Evaluation.

2. Are any impacted wetlands considered "wetlands of special status" per WisDOT Wetland Mitigation Banking Technical Guideline, page 10 (6 categories)?

- No
- Yes:
- Advanced Identification Program (ADID) Wetlands
 - Public or private expenditure has been made to restore, protect, or ecologically manage the wetland on either public or private land
 - Other – Describe: Adjacent to Sheboygan R. – a Natural Heritage Inventory (NHI) waterway

3. Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, other:

Fill and/or excavation

4. List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland: (List should include permanent, migratory and seasonal residents).

No wildlife observed in these areas, but would expect amphibians, migratory passerines, small mammals, muskrat raccoon, and deer.

5. Federal Highway Administration (FHWA) Wetland Policy:

- Not Applicable - Explain
- Individual Wetland Finding Required - Summarize why there are no practicable alternatives to the use of the wetland.
- Statewide Wetland Finding: **NOTE: All three boxes below must be checked for the Statewide Wetland Finding to apply.**
 - Project is either a bridge replacement or other reconstruction within 0.3 mile of the existing location.
 - The project requires the use of 7.4 acres or less of wetlands.

The project has been coordinated with the DNR and there have been no significant concerns expressed over the proposed use of the wetlands.

6. Erosion control or storm water management practices which will be used to protect the wetland are indicated on form: (Check all that apply)

- Factor Sheet D-6, Erosion Control Evaluation.
 Factor Sheet D-5, Stormwater Evaluation.
 Neither Factor Sheet - Briefly describe measures to be used

7. U S Army Corps of Engineers (USACE) Jurisdiction - Section 404 Permit (Clean Water Act)

- Not Applicable - No fill to be placed in wetlands or wetlands are not under USACE jurisdiction.
 Applicable - Fill will be placed in wetlands under the jurisdiction of the USACE.

Indicate area of wetlands filled: Acres 0.00 (official mapping) / 4.558 acres (future projects)

Type of 404 permit anticipated:

- Individual Section 404 Permit required.
 General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404 Compliance.

Indicate which GP or LOP is required:

- Non-Reporting GP** [GP-002-WI (*expires 5/31/16*) or GP-004-WI (*expires 12/31/17*)]
 Reporting GP [GP-002-WI, GP-003-WI (*expires 12/31/17*), or GP-004-WI]
 Letter of Permission [LOP-06-WI (*in effect 4/17/06, no expiration date*)]
 Programmatic GP [Applies to projects not covered under the DOT/DNR Cooperative Agreement]

8. Wisconsin Department of Natural Resources Coordination - Section 401 Water Quality Certification

- DNR has provided concurrence on the project wetland delineation. Received on: (Date)
 Other- Explain

Corridor preservation study delineations are preliminary. Final delineation and concurrence will be completed as part of environmental documents for future projects.

9. Section 10 Waters (Rivers and Harbors Act). For navigable waters of the United States (Section 10) indicate which 404 permit is required:

- No Section 10 Waters
 Section 10 Waters
 Reporting GP [GP-003-WI (*expires 12/31/17*)]
 Reporting GP [GP-004-WI (*expires 12/31/17*)]

Indicate whether Pre-Construction Notification (PCN) to the USACE is:

- Not applicable.
 Required: Submitted on: (Date)

Status of PCN

USACE has made the following determination on: (Date)

USACE is in the process of review, anticipated date of determination is: (Date)

10. Wetland Avoidance and Impact Minimization: [Note: Required before compensation is acceptable]

Note: The following does not apply for the Project (official mapping) but would apply for future projects. Wetland avoidance and minimization would be further analyzed as part of the environmental analysis and documentation on future projects.

A. Wetland Avoidance:

1. Describe methods used to avoid the use of wetlands, such as using a lower level of improvement or placing the roadway on new location, etc.:

Avoidance and minimization of wetland losses were important criteria in the alternative development and selection process. The preferred alternative avoids wetlands where practicable in view of other logistical constraints including avoidance of other environmental impacts including farmland acquisition and severances, and residential and business relocations and in consideration of access and transportation

design concerns related to existing infrastructure and site availability. In this light, roadway horizontal alignments were modified to avoid or minimize wetland impacts. Roadway vertical alignments were adjusted near wetlands to limit the footprint and sloping required near wetlands. The preferred alternative interchange type for the County TT Interchange is a diamond interchange, which significantly avoids and minimizes wetland impacts when compared to the other alternative interchange configurations considered.

The analysis of alternatives, resulted in the selection of the alternative that avoided the most wetland impacts.

2. Indicate the total area of wetlands avoided:

Acres: 0.93*

* The proposed action of officially mapping right of way will not directly impact wetlands as they presently exist in the corridor. However, the difference in impacts between the partial clover interchange alternative and the diamond interchange was determined to be 3.23 acres vs. 2.30 acres; the preferred alternative to be mapped would save 0.93 acres of wetland impacts.

The total area of wetlands avoided would be reassessed and calculated in future design and environmental review phases for future construction. Since wetland boundaries can change over time, new wetland delineations would be completed closer to the time of construction to determine wetland type and an assessment of wetland functions and values would be conducted. Design modifications may be required to further avoid or minimize acreage of wetland impacts.

B. Minimize the amount of wetlands affected:

1. Describe methods used to minimize the use of wetlands, such as increasing side slopes or use of retaining walls or beam guard, equalizer pipes, upland disposal of hydric soils, etc.:

Future right of way needs in wetland areas were determined in consultation with the Wisconsin Department of Natural Resources (DNR). To identify the future right of way that may be required, minimization techniques were considered. Sideslopes adjacent to wetlands were steepened to 3:1. Horizontal alignments were designed to pass through the narrowest portion of a wetland when crossings were required. Vertical alignments were adjusted to reduce the height of fills where wetlands were impacted. Supplementary minimization techniques such as steeper slope embankments, narrower medians, and the use of retaining walls will be considered during future design phases of the project in coordination with DNR and USACE.

2. Indicate the total area of wetlands saved through minimization:

Acres:

The mapping required for this project will not directly impact wetlands as they presently exist in the corridor. The total area of wetlands saved through minimization will be calculated in future design phases of the project when construction is proposed. Since wetland boundaries can change over time, new wetland delineations would be completed closer to the time of construction to determine wetland type and an assessment of wetland functions and values would be conducted. Design modifications may be required to further avoid or minimize acreage of wetland impacts.

11. Compensation for Unavoidable Wetland Loss:

Note: The following does not apply for the Project (official mapping) but would apply for future projects. Wetland avoidance and minimization would be further analyzed as part of the environmental analysis and documentation on future projects.

According to Section 404(b)(1), of the Clean Water Act, wetland compensatory mitigation procedures and sequencing will conform to the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (EPA) joint rule on Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Parts 325 and 332; and 40 CFR Part 230 - dated April 10, 2008). Compensatory mitigation will be consistent with amendments to the Cooperative Agreement between DNR and WisDOT on compensatory mitigation for unavoidable wetland losses (July 2012), and the WisDOT Interagency Coordination Agreement and Wetland Mitigation Banking Technical Guidelines with DNR, USACE, EPA, USFWS and FHWA (March 2002).

	Type	Acre(s) Loss	Ratio	Compensation Type and Acreage	
				On-site	DOT Mitigation Bank site
RPF(N)	Riparian wetland (wooded)				
RPF(D)	Degraded riparian wetland (wooded)	0.543	1.6		0.869
RPE(N)	Riparian wetland (emergent)				
RPE(D)	Degraded riparian wetland (emergent)	0.581	1.6		0.930
M(N)	Wet and sedge meadows, wet prairie, vernal pools, fens				
M(D)	Degraded meadow	2.436	1.5		3.654
SM	Shallow marsh				
DM	Deep marsh	0.122	1.5		0.183
AB(N)	Aquatic bed				
AB(D)	Degraded aquatic bed				
SS	Shrub Swamp, shrub carr, alder thicket				
WS(N)	Wooded swamp				
WS(D)	Degraded wooded swamp	0.876	1.5		1.314
Bog	Open and forested bogs				

D = Degraded
N = Non-degraded

12. If compensation is not possible within the drainage area and floristic province thru the use of the DOT mitigation bank, explain why and describe how a search for an on-site compensation site was conducted:

A site search is not required for the proposed action. Under current requirements, unavoidable wetland losses would be permitted through the USACE (Section 404 Permit) and would be compensated for at an operating WisDOT Wetland Bank Site in accordance with the WisDOT/WDNR Cooperative Agreement and in coordination with WDNR and USACE. The Section 404 Permit may be reviewed by USFWS as a cooperating review agency. The requirements of the permit would be reflected in the plans and contract special provisions. Additional methods and alternative analysis would be evaluated to further avoid and minimize wetland impacts. Additional coordination would occur with WDNR and USACE to develop alternatives to attempt to avoid and minimize impacts to wetlands. If wetlands cannot be avoided, mitigation requirements would need to be coordinated with WDNR and USACE.

13. Summarize the coordination with other agencies regarding the compensation for unavoidable wetland losses. Attach appropriate correspondence.

No direct unavoidable wetland losses are anticipated for the proposed action. However, future design and construction actions would require WisDOT to comply with requirements to avoid wetland losses. An environmental document would be prepared in coordination with other agencies responsible for addressing unavoidable wetland losses. Compensation for those losses would be analyzed and developed at that time. Data presented in this document is provided as an estimate of current impacts and documentation of actions taken to avoid and minimize wetland impacts as part of locating the anticipated right of way for future roadway use.

WETLANDS EVALUATION

(9/2013)

Wisconsin Department of Transportation

Factor Sheet C-1

Alternative W2 Site A: North Connector Site B: South Connector	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of this Alternative (Local Roads): 2.46 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. Describe Wetlands:

	SITE A					
	Wetland 1		Wetland 2		Wetland 3	
Name (if known) or wetland number¹	A1		A2		A3	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	17 15N 21E		17 15N 21E		17 15N 21E	
Location (Latitude)	43°45'50.64"N		43°45'48.29"N		43°45'49.82"N	
Location (Longitude)	88° 0'41.14"W		88° 0'37.78"W		88° 0'34.43"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s)²	SM		WS(D)		SM	
Wetland Loss	Acres <u>0.433</u>		Acres <u>0.150</u>		Acres <u>0.644</u>	
Wetland is: (Check all that apply)³	Yes	No	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body		X	X		X	
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain				X		X
• If adjacent or contiguous, identify stream, lake or water body	Isolated, manmade pond		N/A		N/A	
¹ Use wetland numbering from the project wetland delineation report. ² Use wetland types as specified in the "WisDOT FDM 24-5 Attachment 10.2 Wetland Type Correspondence Table" ³ If wetland is contiguous to a stream, complete Factor Sheet C-2, Rivers, Streams and Floodplains Impact Evaluation. If wetland is contiguous to a lake or other water body, complete Factor Sheet C-3, Lake or Water Body Impact Evaluation.						

	SITE A (continued)					
	Wetland 4		Wetland 5		Wetland 6	
Name (if known) or wetland number¹	A4		A5		A6	
County	Sheboygan		Sheboygan		Sheboygan	
Location (Section-Township-Range)	17 15N 21E		17 15N 21E		17 15N 21E	
Location (Latitude)	43°45'51.02"N		43°45'56.79"N		43°46'0.15"N	
Location (Longitude)	88° 0'30.62"W		88° 0'25.35"W		88° 0'11.80"W	
Location Map	See Exhibit 1		See Exhibit 1		See Exhibit 1	
Wetland Type(s)²	SM		SS		SS	
Wetland Loss	Acres <u>0.242</u>		Acres <u>0.334</u>		Acres <u>1.056</u>	
Wetland is: (Check all that apply)³	Yes	No	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body	X		X			X
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain		X		X		
• If adjacent or contiguous, identify stream, lake or water body	N/A		N/A		Unnamed tributary to Jackson Creek	

	SITE B					
	Wetland 1 Site B		Wetland 2 Site B			
Name (if known) or wetland number ¹	B1		B2			
County	Sheboygan		Sheboygan			
Location (Section-Township-Range)	20 15N 21E		17 15N 21E			
Location (Latitude)	43°45'37.71"N		43°45'41.65"N			
Location (Longitude)	88° 0'17.90"W		88° 0'20.98"W			
Location Map	See Exhibit 1		See Exhibit 1			
Wetland Type(s) ²	SS		RPE(D)			
Wetland Loss	Acres 1.691		Acres 0.326			
Wetland is: (Check all that apply) ³	Yes	No	Yes	No	Yes	No
• Isolated from stream, lake or other surface water body		X		X		
• Not contiguous (in contact with) a stream, lake, or other water body, but within 100-year floodplain						
• If adjacent or contiguous, identify stream, lake or water body	Jackson Creek		Jackson Creek			

2. Are any impacted wetlands considered "wetlands of special status" per WisDOT Wetland Mitigation Banking Technical Guideline, page 10 (6 categories)?

- No
 Yes:
- Advanced Identification Program (ADID) Wetlands
 - Public or private expenditure has been made to restore, protect, or ecologically manage the wetland on either public or private land
 - Other – Describe: _____

3. Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, other:

Fill and/or excavation

4. List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland: (List should include permanent, migratory and seasonal residents).

Wetland A-1 – American black duck, red-wing blackbird, mallard, Canada geese; A-2 and A-6 - American goldfinch; B-1 - American goldfinch, eastern towhee; all wetland areas: deer, migratory passerines, amphibians either observed or expected.

5. Federal Highway Administration (FHWA) Wetland Policy:

- Not Applicable - Explain
- Individual Wetland Finding Required - Summarize why there are no practicable alternatives to the use of the wetland.
- Statewide Wetland Finding: **NOTE: All three boxes below must be checked for the Statewide Wetland Finding to apply.**
 - Project is either a bridge replacement or other reconstruction within 0.3 mile of the existing location.
 - The project requires the use of 7.4 acres or less of wetlands.
 - The project has been coordinated with the DNR and there have been no significant concerns expressed over the proposed use of the wetlands.

6. Erosion control or storm water management practices which will be used to protect the wetland are indicated on form: (Check all that apply)

- Factor Sheet D-6, Erosion Control Evaluation.
- Factor Sheet D-5, Stormwater Evaluation.
- Neither Factor Sheet - Briefly describe measures to be used

7. U S Army Corps of Engineers (USACE) Jurisdiction - Section 404 Permit (Clean Water Act)

Not Applicable - No fill to be placed in wetlands or wetlands are not under USACE jurisdiction.

Applicable - Fill will be placed in wetlands under the jurisdiction of the USACE.

Indicate area of wetlands filled: Acres 0.00 (official mapping) / 4.876 acres (future projects)

Type of 404 permit anticipated:

Individual Section 404 Permit required.

General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404 Compliance.

Indicate which GP or LOP is required:

Non-Reporting GP [GP-002-WI (*expires 5/31/16*) or GP-004-WI (*expires 12/31/17*)]

Reporting GP [GP-002-WI, GP-003-WI (*expires 12/31/17*), or GP-004-WI]

Letter of Permission [LOP-06-WI (*in effect 4/17/06, no expiration date*)]

Programmatic GP [Applies to projects not covered under the DOT/DNR Cooperative Agreement]

8. Wisconsin Department of Natural Resources Coordination - Section 401 Water Quality Certification

DNR has provided concurrence on the project wetland delineation. Received on: (Date)

Other- Explain

Corridor preservation study delineations are preliminary. Final delineation and concurrence will be completed as part of environmental documents for future projects.

9. Section 10 Waters (Rivers and Harbors Act). For navigable waters of the United States (Section 10) indicate which 404 permit is required:

No Section 10 Waters

Section 10 Waters

Reporting GP [GP-003-WI (*expires 12/31/17*)]

Reporting GP [GP-004-WI (*expires 12/31/17*)]

Indicate whether Pre-Construction Notification (PCN) to the USACE is:

Not applicable.

Required: Submitted on: (Date)

Status of PCN

USACE has made the following determination on: (Date)

USACE is in the process of review, anticipated date of determination is: (Date)

10. Wetland Avoidance and Impact Minimization: [Note: Required before compensation is acceptable]

Note: The following does not apply for the Project (official mapping) but would apply for future projects. Wetland avoidance and minimization would be further analyzed as part of the environmental analysis and documentation on future projects.

A. Wetland Avoidance:

1. Describe methods used to avoid the use of wetlands, such as using a lower level of improvement or placing the roadway on new location, etc.:

Avoidance and minimization of wetland losses were important criteria in the alternative development and selection process. The preferred alternative avoids wetlands where practicable in view of other logistical constraints including avoidance of other environmental impacts including farmland acquisition and severances, and residential and business relocations and in consideration of access and transportation design concerns related to existing infrastructure and site availability. In this light, roadway horizontal alignments were modified to avoid or minimize wetland impacts. Roadway vertical alignments were adjusted near wetlands to limit the footprint and sloping required near wetlands. Alternative W-1 South crossed and would have severed a wetland that form the headwaters of the Ben Nutt and Jackson Creek. This connection would have resulted in higher woodland and wetland impacts. The discussion about the elimination of this alternative is provided in Basic Sheet 3 – West Segment Alternatives.

2. Indicate the total area of wetlands avoided:
Acres:

The proposed action of officially mapping right of way will not directly impact wetlands as they presently exist in the corridor. The total area of wetlands avoided would be assessed and calculated in future design and environmental review phases for future construction if and when it is programmed. Since wetland boundaries can change over time, new wetland delineations would be completed closer to the time of construction to determine wetland type and an assessment of wetland functions and values would be conducted. Design modifications may be required to further avoid or minimize acreage of wetland impacts.

B. Minimize the amount of wetlands affected:

1. Describe methods used to minimize the use of wetlands, such as increasing side slopes or use of retaining walls or beam guard, equalizer pipes, upland disposal of hydric soils, etc.:

Future right of way needs in wetland areas were determined in consultation with the Wisconsin Department of Natural Resources (DNR). To identify the future right of way that may be required, minimization techniques were considered. Side slopes adjacent to wetlands were steepened to 3:1. Horizontal alignments were designed to pass through the narrowest portion of a wetland when crossings were required. Vertical alignments were adjusted to reduce the height of fills where wetlands were impacted. Supplementary minimization techniques such as steeper slope embankments, narrower medians, and the use of retaining walls will be considered during future design phases of the project in coordination with DNR and USACE.

2. Indicate the total area of wetlands saved through minimization:
Acres:

The mapping required for this project will not directly impact wetlands as they presently exist in the corridor. The total area of wetlands saved through minimization will be calculated in future design phases of the project when construction is proposed. Since wetland boundaries can change over time, new wetland delineations would be completed closer to the time of construction to determine wetland type and an assessment of wetland functions and values would be conducted. Design modifications may be required to further avoid or minimize acreage of wetland impacts.

11. Compensation for Unavoidable Wetland Loss:

Note: The following does not apply for the Project (official mapping) but would apply for future projects. Wetland avoidance and minimization would be further analyzed as part of the environmental analysis and documentation on future projects.

According to Section 404(b)(1), of the Clean Water Act, wetland compensatory mitigation procedures and sequencing will conform to the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (EPA) joint rule on Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Parts 325 and 332; and 40 CFR Part 230 - dated April 10, 2008). Compensatory mitigation will be consistent with amendments to the Cooperative Agreement between DNR and WisDOT on compensatory mitigation for unavoidable wetland losses (July 2012), and the WisDOT Interagency Coordination Agreement and Wetland Mitigation Banking Technical Guidelines with DNR, USACE, EPA, USFWS and FHWA (March 2002).

	Type	Acre(s) Loss	Ratio	Compensation Type and Acreage	
				On-site	DOT Mitigation Bank site
RPF(N)	Riparian wetland (wooded)				
RPF(D)	Degraded riparian wetland (wooded)				
RPE(N)	Riparian wetland (emergent)				
RPE(D)	Degraded riparian wetland (emergent)	0.326	1.6		0.5216
M(N)	Wet and sedge meadows, wet prairie, vernal pools, fens				
M(D)	Degraded meadow				
SM	Shallow marsh	1.319	1.5		1.9785
DM	Deep marsh				
AB(N)	Aquatic bed				
AB(D)	Degraded aquatic bed				
SS	Shrub Swamp, shrub carr, alder thicket	3.081	1.7		5.2377
WS(N)	Wooded swamp				
WS(D)	Degraded wooded swamp	0.150	1.5		0.225
Bog	Open and forested bogs				

D = Degraded
N = Non-degraded

12. If compensation is not possible within the drainage area and floristic province thru the use of the DOT mitigation bank, explain why and describe how a search for an on-site compensation site was conducted:

A site search is not required for the proposed action. Under current requirements, unavoidable wetland losses would be permitted through the USACE (Section 404 Permit) and would be compensated for at an operating WisDOT Wetland Bank Site in accordance with the WisDOT/WDNR Cooperative Agreement and in coordination with WDNR and USACE. The Section 404 Permit may be reviewed by USFWS as a cooperating review agency. The requirements of the permit would be reflected in the plans and contract special provisions. Additional methods and alternative analysis would be evaluated to further avoid and minimize wetland impacts. Additional coordination would occur with WDNR and USACE to develop alternatives to attempt to avoid and minimize impacts to wetlands. If wetlands cannot be avoided, mitigation requirements would need to be coordinated with WDNR and USACE.

13. Summarize the coordination with other agencies regarding the compensation for unavoidable wetland losses. Attach appropriate correspondence.

No direct unavoidable wetland losses are anticipated for the proposed action. However, future design and construction actions would require WisDOT to comply with requirements to avoid wetland losses. An environmental document would be prepared in coordination with other agencies responsible for addressing unavoidable wetland losses. Compensation for those losses would be analyzed and developed at that time. Data presented in this document is provided as an estimate of current impacts and documentation of actions taken to avoid and minimize wetland impacts as part of locating the anticipated right of way for future roadway use.



1440-19-00

WETLAND IMPACTS EXHIBIT
WIS 23
SHEBOYGAN COUNTY
CTH P - WIS 32

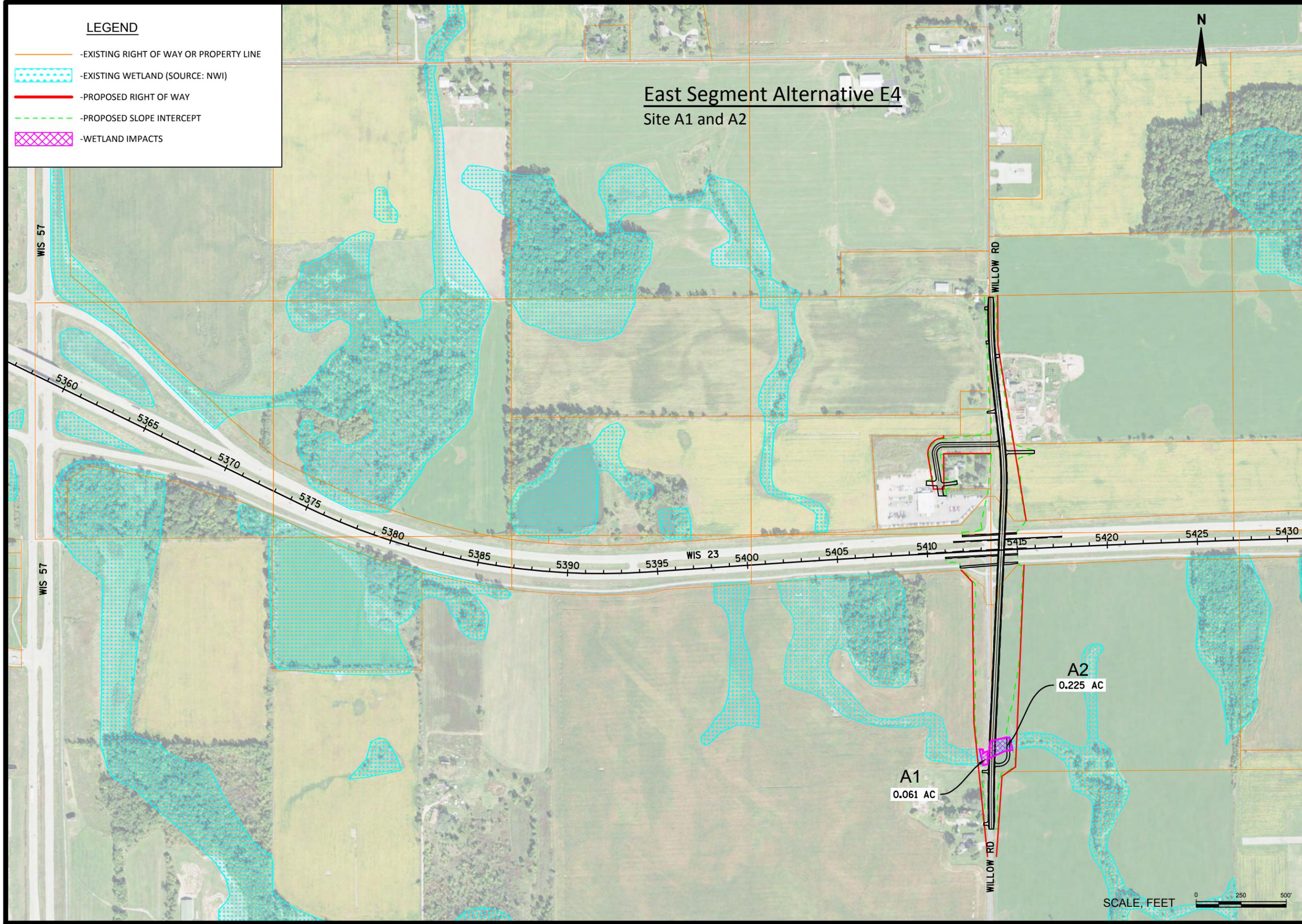
WIS 23
1"=500'
Exhibit
Sheet 4 of 7



East Segment Alternative E4
Site A1 and A2

LEGEND

-  -EXISTING RIGHT OF WAY OR PROPERTY LINE
-  -EXISTING WETLAND (SOURCE: NWI)
-  -PROPOSED RIGHT OF WAY
-  -PROPOSED SLOPE INTERCEPT
-  -WETLAND IMPACTS





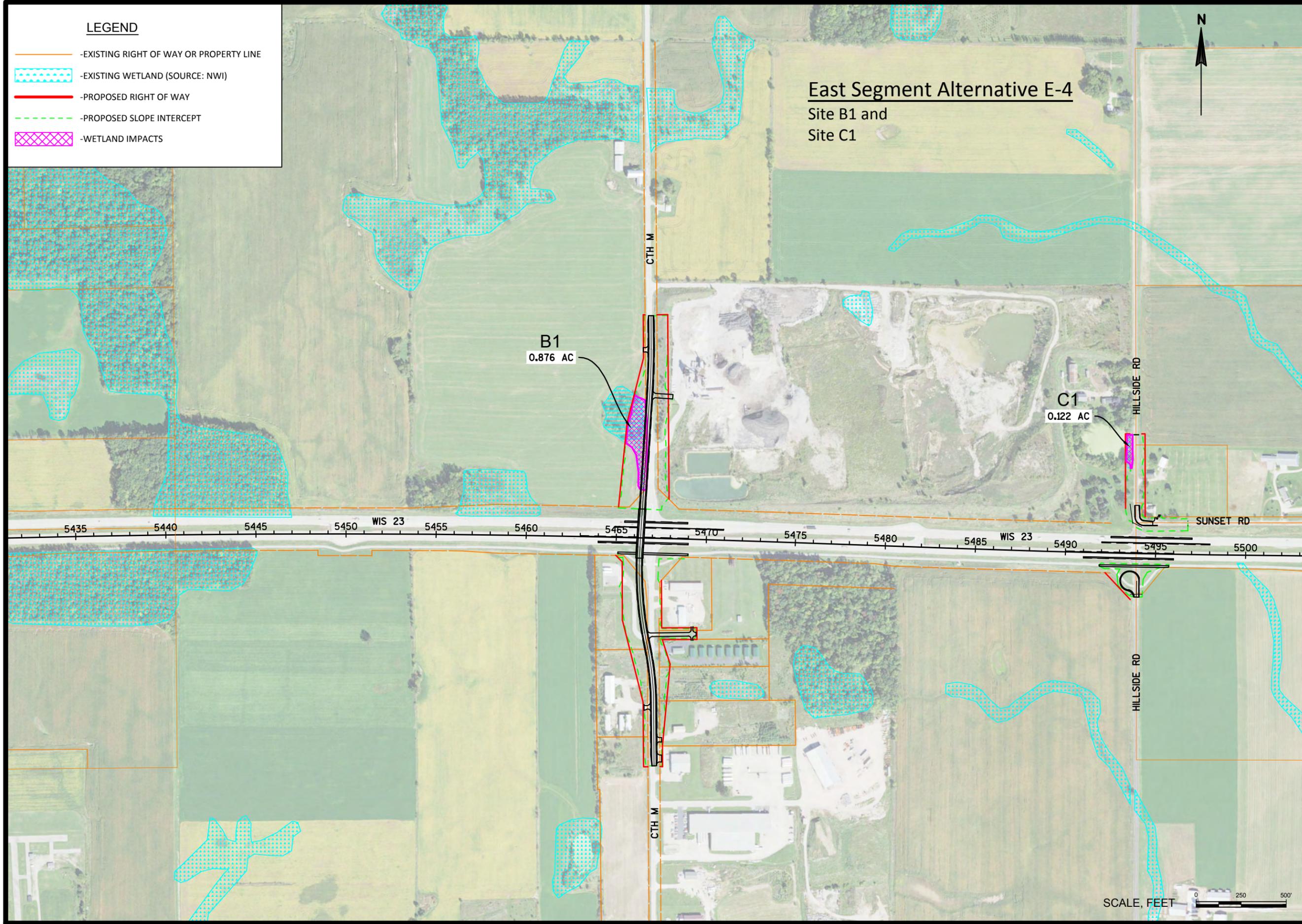
1440-19-00

WETLAND IMPACTS EXHIBIT

WIS 23
SHEBOYGAN COUNTY
CTH P - WIS 32

LEGEND

-  -EXISTING RIGHT OF WAY OR PROPERTY LINE
-  -EXISTING WETLAND (SOURCE: NWI)
-  -PROPOSED RIGHT OF WAY
-  -PROPOSED SLOPE INTERCEPT
-  -WETLAND IMPACTS



East Segment Alternative E-4 Site B1 and Site C1

B1
0.876 AC

C1
0.122 AC

5435 5440 5445 5450 WIS 23 5455 5460 5465 5470 5475 5480 5485 WIS 23 5490 5495 5500

CTH M

CTH M

HILLSIDE RD

HILLSIDE RD

SUNSET RD

SCALE, FEET
0 250 500'

WIS 23
1"=500'
Exhibit
Sheet 5 of 7



1440-19-00

WETLAND IMPACTS EXHIBIT
WIS 23
SHEBOYGAN COUNTY
CTH P - WIS 32

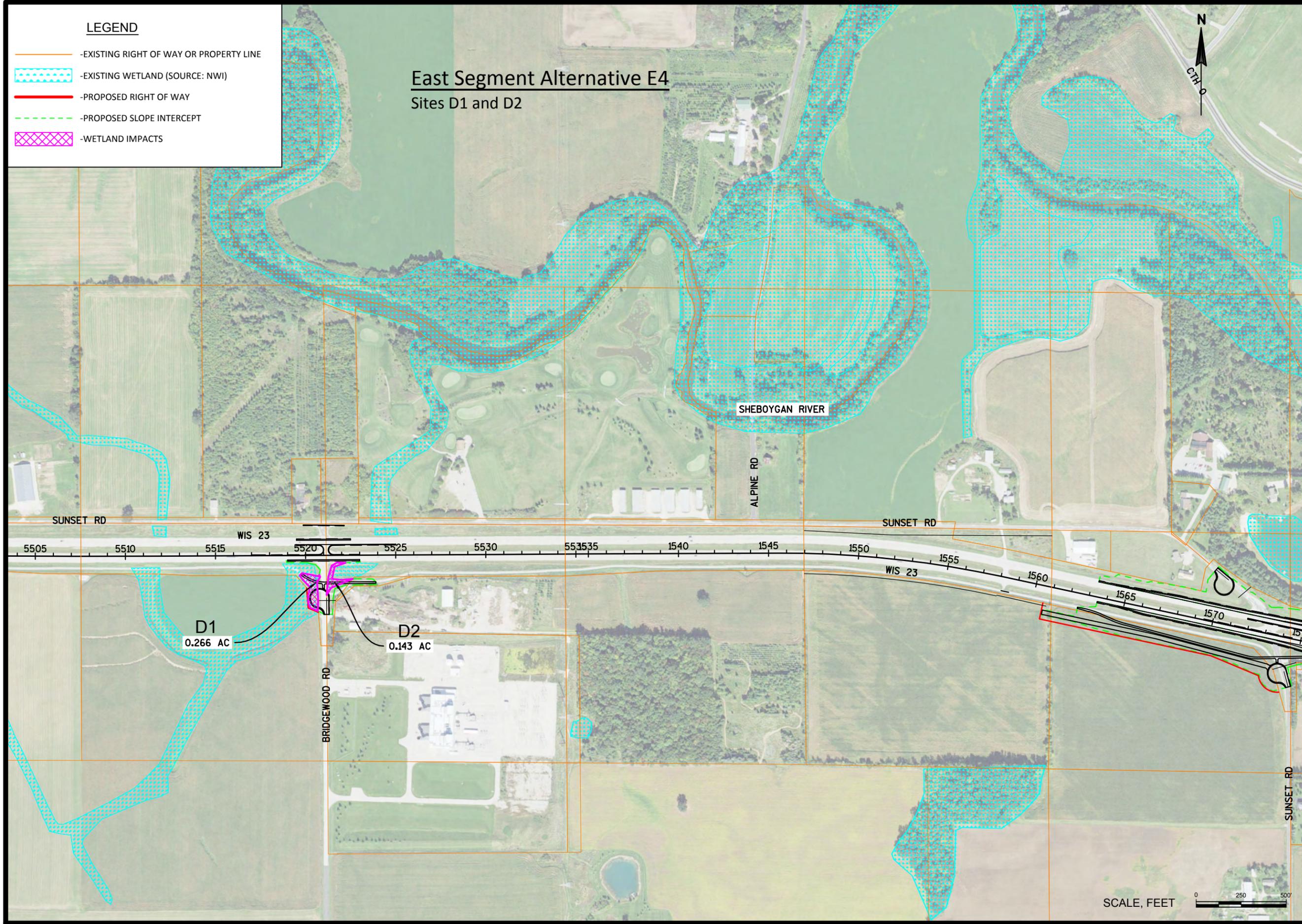
WIS 23
1"=500'
Exhibit
Sheet 6 of 7



East Segment Alternative E4
Sites D1 and D2

LEGEND

-  -EXISTING RIGHT OF WAY OR PROPERTY LINE
-  -EXISTING WETLAND (SOURCE: NWI)
-  -PROPOSED RIGHT OF WAY
-  -PROPOSED SLOPE INTERCEPT
-  -WETLAND IMPACTS





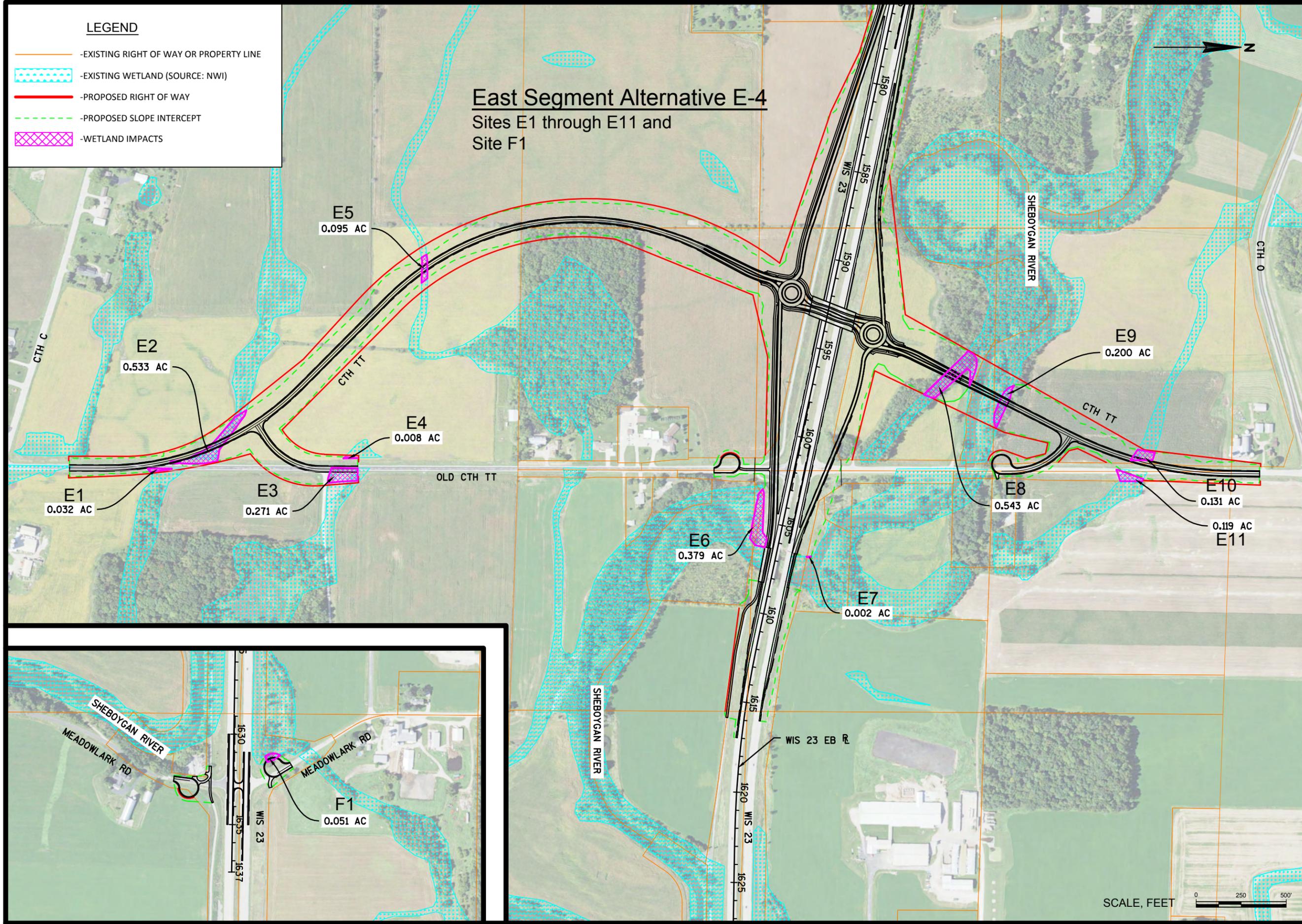
1440-19-00

WETLAND IMPACTS EXHIBIT
WIS 23
SHEBOYGAN COUNTY
CTH P - WIS 32

LEGEND

- EXISTING RIGHT OF WAY OR PROPERTY LINE
- EXISTING WETLAND (SOURCE: NWI)
- PROPOSED RIGHT OF WAY
- PROPOSED SLOPE INTERCEPT
- WETLAND IMPACTS

East Segment Alternative E-4
Sites E1 through E11 and
Site F1



SCALE, FEET
0 250 500'

WIS 23
1"=500'
Exhibit
Sheet 7 of 7

RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

Factor Sheet C-2

Alternative C4	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of This Alternative (Local Roads C4): 3.19 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. **Stream Name:** Unnamed Creek (53600)

2. **Stream Type: (Indicate Trout Stream Class, if known)**

- Unknown
- Warm water
- Cold water

If trout stream, identify trout stream classification: _____

Wild and Scenic River

3. **Size of Upstream Watershed Area: (Square miles or acres)**

680 acres

4. **Stream flow characteristics:**

- Permanent Flow (year-round)
- Temporary Flow (dry part of year)

5. **Stream Characteristics:**

A. Substrate:

- 1. Sand
- 2. Silt
- 3. Clay
- 4. Cobbles
- 5. Other-describe:

B. Average Water Depth: 12"

C. Vegetation in Stream

- Absent
- Present - If known describe:

D. Identify Aquatic Species Present:

Forage fish community; benthic macroinvertebrates

E. If water quality data is available, include this information:

Not available

F. Is this river or stream on the WDNR's "Impaired Waters" list?

- No
- Yes - List: _____

6. **If bridge or box culvert replacement, are migratory bird nests present?**

- Not Applicable
- None identified
- Yes – Identify Bird Species present
Estimated number of nests is:

7. **Is a Fish & Wildlife Depredation Permit required to remove swallow nests?**

- Not Applicable
- Yes
- No - Describe mitigation measures:

8. **Describe land adjacent to stream:**

Row crops, highway embankment, narrow riparian zone

9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site:

None

10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment: [Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]

The proposed action of official mapping will not involve any actual construction. This unnamed creek currently crosses under the intersection of WIS 23 and County E. The creek also passes under existing County O. Under the future construction project, County E would be reconstructed at this location and County O would be realigned slightly to the north requiring a new stream crossing. Existing culvert pipe would be replaced with new drainage structures at both the County O and County E crossing locations. Determination of structure type and size would be determined in future design phases.

The planned extension of Kiley Way would also cross this creek just east of County E. This crossing would be a new crossing and new drainage structures would be placed to accommodate the stream and maintain flow. Determination of structure type and size would be determined during future design phases.

Based on review of WDNR Surface Water Data Viewer the work described above is not within the 100-year floodplain.

11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:

The proposed action of official mapping will not involve any work in the stream and so there would be no backwater effects created. Detailed hydraulic analysis was not performed for this phase of the study. Detailed hydraulic analysis would be performed in a future final design phase and structure types and sizes would be determined at that time, if necessary. Structures would be sized to ensure that backwaters created would be less than 0.01 ft (3 mm). The proposed action would be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program and Governor's Executive Order #73 as may be required at that time.

12. Describe and provide the results of coordination with any floodplain zoning authority:

Since a hydraulic analysis has not been completed for this phase of the project, coordination with floodplain zoning authorities is not required. Such coordination would occur during future environmental review and documentation.

13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?

- No impacts would occur.
- Significant interruption or termination of emergency vehicle service or a community's only evacuation route.
- Significant flooding with a potential for property loss and a hazard to life.
- Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:

No changes in floodplain use will occur as a result of the proposed action of official mapping. It is anticipated that existing and planned floodplain uses would continue after the alternative is constructed. Current land use includes primarily wetlands within the floodplain areas. Portions of the wetlands would be filled to accommodate fill slopes of the future facility. Since floodplains change over the course of time, this subject will be reassessed during future environmental review and documentation.

15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:

No impacts to water quality within the floodplain will occur as a result of the proposed action of official mapping. For future construction phases, there are no long term impacts anticipated on the floodplain. During construction, there may be a temporary impact to the floodplain including potential off-site sedimentation. Such temporary impacts would be minimized through the use of erosion control best management practices (BMPs). Biota inhabiting this unnamed creek are adapted to the adjacent agricultural and transportation land uses and the future transportation project would result in insubstantial changes.

16. Are measures proposed to enhance beneficial effects?

- No
 Yes. Describe: _____

RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

Factor Sheet C-2

Alternative E4	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of This Alternative (E4): 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. **Stream Name:** Sheboygan River

2. **Stream Type: (Indicate Trout Stream Class, if known)**

- Unknown
- Warm water
- Cold water

If trout stream, identify trout stream classification: _____

Wild and Scenic River

3. **Size of Upstream Watershed Area: (Square miles or acres)**

>200 square miles

4. **Stream flow characteristics:**

- Permanent Flow (year-round)
- Temporary Flow (dry part of year)

5. **Stream Characteristics:**

A. Substrate:

- 1. Sand
- 2. Silt
- 3. Clay
- 4. Cobbles
- 5. Other-describe:

B. Average Water Depth: 1-2 feet

C. Vegetation in Stream

Absent

Present - If known describe:

Water plantain (*Alisma triviale*); Reed canary grass (*Phalaris arundinacea*); various algal species

D. Identify Aquatic Species Present:

Smallmouth bass, northern pike, crappie, and panfish; rock bass, walleye, and channel catfish. Poor water quality tolerant species such as common carp, fathead minnows, creek chub, and johnny darter also present. Intolerant species present in reaches of this segment include hornyhead chub, longnose dace, stonecat and logperch (Fago 1985). Macroinvertebrate collections (Aartila 1992) dominated by *Certopsyche morosa bifida* [a caddisfly].

E. If water quality data is available, include this information:

The Hilsenhoff biotic index value for this segment is 5.428 indicating "fair" water quality with substantial organic pollution likely (<http://dnr.wi.gov/water/waterDetail.aspx?WBIC=50700>). Polluted runoff from agricultural activities is a major problem and particularly evident in downstream reaches. Water quality is limited by cropland runoff, streambank pasturing, turbidity, bioturbation, and low flows.

(<http://dnr.wi.gov/water/waterDetail.aspx?WBIC=50700>)

F. Is this river or stream on the WDNR's "Impaired Waters" list?

- No
- Yes - List: _____

6. If bridge or box culvert replacement, are migratory bird nests present?

- Not Applicable
- None identified
- Yes – Identify Bird Species present:
Barn swallows (*Hirundo rustica*) observed flying in/out nests beneath westbound WIS 23 bridge.
Estimated number of nests is: 4

7. Is a Fish & Wildlife Depredation Permit required to remove swallow nests?

- Not Applicable
- Yes
- No - Describe mitigation measures:

8. Describe land adjacent to stream:

WIS 23 crossing: undeveloped floodplain; agricultural use
Proposed County TT crossing: Town of Falls Fire and Rescue Training area south of river; undeveloped floodplain north of river; agricultural use.

9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site:

None

10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment: [Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]

A bridge is proposed over the Sheboygan River as part of the County TT Interchange work. Bridge type selection and development of bridge plans was not performed as part of the study and would be performed as part of future final design projects. The assumed bridge type would likely require the placement of piers within the floodplain and potentially fills associated with grading and abutment slope construction. This work would cross the Sheboygan River and elements of the work may be within the 100-year floodplain. Determination of structure type and size would be determined in future design phases.

11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:

The proposed action of official mapping will not involve any work in the stream and so there would be no backwater effects created. Detailed hydraulic analysis was not performed for this phase of the study. Detailed hydraulic analysis would be performed in a future final design phase and structure types and sizes would be determined at that time, if necessary. Structures would be sized to ensure that backwaters created would be less than 0.01 ft (3 mm). The proposed action would be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program and Governor’s Executive Order #73 as may be required at that time.

12. Describe and provide the results of coordination with any floodplain zoning authority:

Since a hydraulic analysis has not been completed for this phase of the project, coordination with floodplain zoning authorities is not required. Such coordination would occur during future environmental review and documentation..

13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?

- No impacts would occur.
- Significant interruption or termination of emergency vehicle service or a community's only evacuation route.
- Significant flooding with a potential for property loss and a hazard to life.
- Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:

No changes in floodplain use will occur as a result of the proposed action of official mapping. It is anticipated that existing and planned floodplain uses would continue after the alternative is constructed. Current land use includes primarily wetlands within the floodplain areas. Portions of the wetlands would be filled to accommodate fill slopes of the future facility. Since floodplains change over the course of time, this subject will be reassessed during future environmental review and documentation.

15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:

No impacts to water quality within the floodplain will occur as a result of the proposed action of official mapping. For future construction phases, there are no long term impacts anticipated on the floodplain. During construction, there may be a temporary impact to the floodplain including potential off-site sedimentation. Such temporary impacts would be minimized through the use of erosion control best management practices (BMPs). Biota inhabiting this unnamed creek are adapted to the adjacent agricultural and transportation land uses and the future transportation project would result in insubstantial changes. Biota in this stream are already adapted to agriculture and adjacent transportation land use.

16. Are measures proposed to enhance beneficial effects?

- No
 Yes. Describe:

The new County TT bridge would be located west of the existing County TT bridge. As part of the future construction project the existing County TT bridge would be replaced. The removal of this bridge has the potential to enhance beneficial effects. Analysis of this bridge removal and any potential beneficial effects will be completed in future phases of the project.

RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

Factor Sheet C-2

Alternative E4	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of This Alternative (E4): 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. **Stream Name:** Unnamed Creek (53700) - Drains to Mullet River

2. **Stream Type: (Indicate Trout Stream Class, if known)**

- Unknown
- Warm water
- Cold water

If trout stream, identify trout stream classification: _____

Wild and Scenic River

3. **Size of Upstream Watershed Area: (Square miles or acres)**

190 acres

4. **Stream flow characteristics:**

- Permanent Flow (year-round)
- Temporary Flow (dry part of year)

5. **Stream Characteristics:**

A. Substrate:

- 1. Sand
- 2. Silt
- 3. Clay
- 4. Cobbles
- 5. Other-describe: _____

B. Average Water Depth: 2-3" where flowing; 6-8" at culvert outlet

C. Vegetation in Stream

- Absent
- Present - If known describe:

Shallow bed of waterway dominated by reed canary grass (*Phalaris arundinacea*); Vegetation along bank dominated by reed canary grass (*Phalaris arundinacea*); Jewelweed (*Impatiens capensis*) and giant ragweed (*Ambrosia trifida*) also observed.

D. Identify Aquatic Species Present:

Forage fish community; benthic macroinvertebrates

E. If water quality data is available, include this information:

Not available

F. Is this river or stream on the WDNR's "Impaired Waters" list?

- No
- Yes - List: _____

6. **If bridge or box culvert replacement, are migratory bird nests present?**

- Not Applicable
- None identified
- Yes – Identify Bird Species present
Estimated number of nests is: _____

7. **Is a Fish & Wildlife Depredation Permit required to remove swallow nests?**

- Not Applicable
- Yes
- No - Describe mitigation measures: _____

8. **Describe land adjacent to stream:**

Row crops, highway embankment, narrow riparian zone

Project ID# 1440-19-00

9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site:

None

10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment: [Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]

The proposed action of official mapping will not involve any actual construction. Future construction grading for the overpass of Willow Road would cross this stream just south of WIS 23. This crossing would replace an existing crossing at the same location and new drainage structures would be placed to accommodate the stream and maintain flow. A new driveway would also be required to cross this stream at a new location and a new drainage structure would be required. Determination of structure type and size would be determined in future design phases.

Based on review of WDNR Surface Water Data Viewer the work described above is not within the 100-year floodplain.

11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:

The proposed action of official mapping will not involve any work in the stream and so there would be no backwater effects created. Detailed hydraulic analysis was not performed for this phase of the study. Detailed hydraulic analysis would be performed in a future final design phase and structure types and sizes would be determined at that time, if necessary. Structures would be sized to ensure that backwaters created would be less than 0.01 ft (3 mm). The proposed action would be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program and Governor's Executive Order #73 as may be required at that time.

12. Describe and provide the results of coordination with any floodplain zoning authority:

Since a hydraulic analysis has not been completed for this phase of the project, coordination with floodplain zoning authorities is not required. Such coordination would occur during future environmental review and documentation.

13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?

- No impacts would occur.
- Significant interruption or termination of emergency vehicle service or a community's only evacuation route.
- Significant flooding with a potential for property loss and a hazard to life.
- Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:

No changes in floodplain use will occur as a result of the proposed action of official mapping. It is anticipated that existing and planned floodplain uses would continue after the alternative is constructed. Current land use includes primarily wetlands within the floodplain areas. Portions of the wetlands would be filled to accommodate fill slopes of the future facility. Since floodplains change over the course of time, this subject will be reassessed during future environmental review and documentation.

15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:

No impacts to water quality within the floodplain will occur as a result of the proposed action of official mapping. For future construction phases, there are no long term impacts anticipated on the floodplain. During construction, there may be a temporary impact to the floodplain including potential off-site sedimentation. Such temporary impacts would be minimized through the use of erosion control best management practices (BMPs). Biota inhabiting this unnamed creek are adapted to the adjacent agricultural and transportation land uses and the future transportation project would result in insubstantial changes.

16. Are measures proposed to enhance beneficial effects?

No

Yes. Describe: _____

RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

Factor Sheet C-2

Alternative W2	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of this Alternative (Local Roads): 2.46 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. **Stream Name:** Jackson Creek (54700)

2. **Stream Type: (Indicate Trout Stream Class, if known)**

- Unknown
- Warm water
- Cold water

If trout stream, identify trout stream classification: Class II

Wild and Scenic River

3. **Size of Upstream Watershed Area: (Square miles or acres)**

120 acres

4. **Stream flow characteristics:**

- Permanent Flow (year-round)
- Temporary Flow (dry part of year)

5. **Stream Characteristics:**

A. Substrate:

- 1. Sand
- 2. Silt
- 3. Clay
- 4. Cobbles
- 5. Other-describe:

B. Average Water Depth: 18 inches

C. Vegetation in Stream

- Absent
- Present - If known describe:

D. Identify Aquatic Species Present:

Trout; benthic macroinvertebrates

E. If water quality data is available, include this information:

Jackson Creek originates from a spring area in the northeast quarter of section 20. The stream flows northeasterly, crossing Highway 23, through a small marsh, and eventually draining into the Mullet River. In 1978 the stream was downgraded from a Class I trout stream to a Class II for its entire length. Increased silt entering the stream and the resulting impacts were responsible for the classification change. The silt comes from poor erosion control practices related to the construction of a housing subdivision and an industrial park northwest of the city of Plymouth. There is also concern that two abandoned gravel pits located in sections 17 and 20 of the town of Plymouth may be contributing to the pollutant load of the creek. The DNR owns 20 acres of land bordering a tributary to Jackson Creek in the town of Plymouth, section 17. Fish and stream habitat surveys in 2001 rated good, and the benthic macroinvertebrate community rated excellent.

F. Is this river or stream on the WDNR's "Impaired Waters" list?

- No
- Yes - List: _____

6. **If bridge or box culvert replacement, are migratory bird nests present?**

- Not Applicable
- None identified
- Yes – Identify Bird Species present
Estimated number of nests is:

7. **Is a Fish & Wildlife Depredation Permit required to remove swallow nests?**

- Not Applicable
- Yes
- No - Describe mitigation measures:

8. Describe land adjacent to stream:

North of WIS 23, the stream runs through a narrow forested riparian swamp flanked by old gravel pits. To the south is a broad headwater area of deciduous forested swamp. The affected area consists of shallow marsh and shrub swamp previously disturbed by road work.

9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site:

None

10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment: [Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]

The proposed action of official mapping will not involve any work in, over, or adjacent to the stream. Work in a future construction project would likely involve the following:

North of WIS 23 the new extension of County P east to County C on new alignment runs adjacent to the bend of Jackson Creek at the west of the location where the Jackson Creek crosses County C (north of WIS 23). South of WIS 23 the new frontage road crosses Jackson Creek just west of County C. This crossing would be an extension of an existing crossing and new drainage structures would be placed to accommodate the stream and maintain flow. Determination of structure type and size would be determined in future design phases.

Based on review of WDNR Surface Water Data Viewer the work described above is not currently within the 100-year floodplain.

11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:

The proposed action of official mapping will not involve any work in the stream and so there would be no backwater effects created. Detailed hydraulic analysis was not performed for this phase of the study, however the future roadway to be mapped was designed to avoid crossing the Jackson Creek and so no structures would be required. Detailed hydraulic analysis would be performed in a future final design phase and structure type and sizes would be determined at that time, if necessary. Structures would be sized to ensure that backwaters created would be less than 0.01 ft (3 mm). The proposed action would be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program and Governor’s Executive Order #73.

12. Describe and provide the results of coordination with any floodplain zoning authority:

Since a hydraulic analysis has not been completed for this phase of the project, coordination with any floodplain zoning authorities would occur during future environmental review and documentation.

13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?

- No impacts would occur.
- Significant interruption or termination of emergency vehicle service or a community's only evacuation route.
- Significant flooding with a potential for property loss and a hazard to life.
- Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:

No changes in floodplain use will occur as a result of the proposed action of official mapping. It is anticipated that existing and planned floodplain uses would continue after the alternative is constructed. Current land use includes primarily wetlands within the floodplain areas. Portions of the wetlands would be filled to accommodate fill slopes of the future

facility. Since floodplains change over the course of time, this subject will be reassessed during future environmental review and documentation.

15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:

No impacts to water quality within the floodplain will occur as a result of the proposed action of official mapping. For future construction phases, there are no long term impacts anticipated on the floodplain. During construction, there may be a temporary impact to the floodplain including potential off-site sedimentation. Such temporary impacts would be minimized through the use of erosion control best management practices (BMPs). This waterway was downgraded in 1978 from a Class 1 trout stream due to residential and industrial development, and the biota inhabiting Jackson Creek are adapted to the adjacent agricultural and transportation land uses and the future transportation project would result in insubstantial changes. Extensive riparian wetlands beyond the project area would provide protective functions.

16. Are measures proposed to enhance beneficial effects?

- No
- Yes. Describe: _____

RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

Factor Sheet C-2

Alternative W2	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of this Alternative (Local Roads): 2.46 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. **Stream Name:** Unnamed tributary to Jackson Creek

2. **Stream Type: (Indicate Trout Stream Class, if known)**

- Unknown
- Warm water
- Cold water

If trout stream, identify trout stream classification: _____

- Wild and Scenic River

3. **Size of Upstream Watershed Area: (Square miles or acres)**

212 acres

4. **Stream flow characteristics:**

- Permanent Flow (year-round)
- Temporary Flow (dry part of year)

5. **Stream Characteristics:**

A. Substrate:

- 1. Sand
- 2. Silt
- 3. Clay
- 4. Cobbles
- 5. Other-describe:

B. Average Water Depth: 6 inches

C. Vegetation in Stream

- Absent
- Present - If known describe:

D. Identify Aquatic Species Present:

Trout; benthic macroinvertebrates

E. If water quality data is available, include this information:

Not available

F. Is this river or stream on the WDNR's "Impaired Waters" list?

- No
- Yes - List: _____

6. **If bridge or box culvert replacement, are migratory bird nests present?**

- Not Applicable
- None identified
- Yes – Identify Bird Species present
Estimated number of nests is:

7. **Is a Fish & Wildlife Depredation Permit required to remove swallow nests?**

- Not Applicable
- Yes
- No - Describe mitigation measures:

8. **Describe land adjacent to stream:**

To the west of the stream is a shrub swamp; to the east is upland old field.

9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site:

None

10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment: [Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]

The proposed action of official mapping will not involve any actual construction. The new extension of County P crosses this stream just west of County C. Under the future construction project, this crossing would be a new crossing and new drainage structures would be placed to accommodate the stream and maintain flow. Determination of structure type and size would be determined in future design phases.

Based on review of WDNR Surface Water Data Viewer the work described above is not within the 100-year floodplain.

11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:

The proposed action of official mapping will not involve any work in the stream and so there would be no backwater effects created. Detailed hydraulic analysis was not performed for this phase of the study. Detailed hydraulic analysis would be performed in a future final design phase and structure types and sizes would be determined at that time, if necessary. Structures would be sized to ensure that backwaters created would be less than 0.01 ft (3 mm). The proposed action would be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program and Governor’s Executive Order #73 as may be required at that time.

12. Describe and provide the results of coordination with any floodplain zoning authority:

Since a hydraulic analysis has not been completed for this phase of the project, coordination with floodplain zoning authorities is not required. Such coordination would occur during future environmental review and documentation.

13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?

- No impacts would occur.
- Significant interruption or termination of emergency vehicle service or a community's only evacuation route.
- Significant flooding with a potential for property loss and a hazard to life.
- Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:

No changes in floodplain use will occur as a result of the proposed action of official mapping. It is anticipated that existing and planned floodplain uses would continue after the alternative is constructed. Current land use includes primarily wetlands within the floodplain areas. Portions of the wetlands would be filled to accommodate fill slopes of the future facility. Since floodplains change over the course of time, this subject will be reassessed during future environmental review and documentation.

15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:

No impacts to water quality within the floodplain will occur as a result of the proposed action of official mapping. For future construction phases, there are no long term impacts anticipated on the floodplain. Such temporary impacts would be minimized through the use of erosion control best management practices (BMPs). This minor waterway is not expected to be substantially affected. Extensive riparian wetlands beyond the project area will provide protective functions. This waterway is being crossed to avoid a double crossing of Jackson Creek, which is a trout stream.

16. Are measures proposed to enhance beneficial effects?

- No
- Yes. Describe: _____

Factor Sheet C-5

Alternative C4	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of this alternative (C4): 3.19 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Proposed Work in Upland Areas:

A. Describe the nature of proposed work in the upland habitat area (e.g., grading, clearing, grubbing, etc.):

The purpose of this project is to map right-of-way for future use. Mapping of the right-of-way in itself will not result in impacts to upland wildlife and habitat. Impacts described in this basic sheet were developed as part of an alternative analysis of proposed improvements that will require additional environmental documentation during a future design development. No construction is scheduled at this time; however, the mapped areas are anticipated to be constructed at some undetermined time in the future and would likely involve construction of the mapped roads. Due to the long-term nature of any future potential construction, additional environmental approvals and updates would be required when warranted and as funding becomes available. Construction will involve grading, clearing and grubbing as required.

2. Vegetation/Habitat:

A. Give a brief description of the upland habitat area. Include prominent plant community(ies) at the project site (list vegetation with a brief description of each community type if more than one present).

Agricultural fields in row crops (corn and soybeans) and old field/roadside meadow (brome grass, chicory, wild lettuce, Queen Anne’s lace, goldenrod, wild parsnip) make up the majority of the upland cover in the Alternative C4 area. Southeast of WIS 23 and County O, at the west end of the proposed Kiley Way extension is an area that appears to be restored tallgrass prairie dominated by big bluestem grass, bee balm, compass plant, cup plant, prairie dock and black-eyed Susan.

B. Will the project result in changes in the vegetative cover of the roadside?

Yes. Some prairie, row crop, and old field areas will be converted to road embankment for Kiley Way and the overpass.

3. Wildlife:

A. Identify and describe any observed or expected wildlife associations with the plant community(ies) listed in question #1:

Small mammals, migratory birds (primarily passerines, but also Canada geese and Sandhill cranes), and raptors can be expected to inhabit or forage in uplands in the vicinity of Alternative C4.

B. Identify and describe any known wildlife or bird use areas or movement corridors that will be severed or affected by the proposed action:

The proposed Kiley Way extension will cross a narrow stream corridor that provides limited cover for small mammals. Otherwise, there are no known important wildlife or bird corridors that will be affected by Alternative C4.

C. Discuss other direct impacts on wildlife and estimate significance:

No applicable impacts of significance are expected from Alternative C4.

D. Identify and discuss any probable indirect impacts on wildlife in the area expected due to the project:

No applicable impacts of significance are expected from Alternative C4.

E. Describe measures to avoid and/or minimize adverse effects or to enhance beneficial effects:

Roadside landscaping would benefit upland habitat.

Factor Sheet C-5

Alternative W2	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of this Alternative (Local Roads): 2.46 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Proposed Work in Upland Areas:

- A. Describe the nature of proposed work in the upland habitat area (e.g., grading, clearing, grubbing, etc.):
The purpose of this project is to map right-of-way for future use. Mapping of the right-of-way in itself will not result in impacts to upland wildlife and habitat. Impacts described in this basic sheet were developed as part of an alternative analysis of proposed improvements that will require additional environmental documentation during a future design development. No construction is scheduled at this time; however, the mapped areas are anticipated to be constructed at some undetermined time in the future and would likely involve construction of the mapped roads. Due to the long-term nature of any future potential construction, additional environmental approvals and updates would be required when warranted and as funding becomes available. Construction will involve grading, clearing and grubbing as required.

2. Vegetation/Habitat:

- A. Give a brief description of the upland habitat area. Include prominent plant community(ies) at the project site (list vegetation with a brief description of each community type if more than one present).

The former gravel pit area north of WIS 23 is dominated by pioneer and weedy species including quaking aspen, spotted knapweed, sweet clover, and smooth brome grass. Lawn areas and meadows (smooth brome, Kentucky bluegrass, Queen Anne’s lace, thistle, milkweed) are also common in this area. To the south there is a horse pasture of bluegrass, and another area of meadow similar to that described for the north side of the highway. Toward the west end of this alternative, uplands are in row crops. Along Branch Road, there is a small evergreen woodlot.

- B. Will the project result in changes in the vegetative cover of the roadside?

Yes. Part of a woodlot, some row crops, and several old field areas will be converted to road embankment.

3. Wildlife:

- A. Identify and describe any observed or expected wildlife associations with the plant community(ies) listed in question #1:

Small mammals, migratory birds (primarily passerines, but also Canada geese and sandhill cranes), and raptors can be expected to inhabit or forage in uplands in the vicinity of Alternative W2.

- B. Identify and describe any known wildlife or bird use areas or movement corridors that will be severed or affected by the proposed action:

There are no known important wildlife or bird corridors that will be affected by Alternative W2.

- C. Discuss other direct impacts on wildlife and estimate significance:

No applicable impacts of significance are expected from Alternative W2. The County P extension is unlikely to create a significant new barrier to wildlife movement.

- D. Identify and discuss any probable indirect impacts on wildlife in the area expected due to the project:

No applicable impacts of significance are expected from Alternative W2.

- E. Describe measures to avoid and/or minimize adverse effects or to enhance beneficial effects:

Roadside landscaping would benefit upland habitat.

CONSTRUCTION STAGE SOUND QUALITY EVALUATION

Wisconsin Department of Transportation

Factor Sheet D-2

Alternative West Segment: W2 North and South Central Segment: C4 East Segment: E4	Total Length of Center Line of Existing Roadway: (WIS 23) 10.2 miles Length of This Alternative: (Local Roads) W2 = 2.46 miles C4 = 3.19 miles E4 = 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Identify and describe residences, schools, libraries, or other noise sensitive areas near the proposed action and which will be in use during construction of the proposed action. Include the number of persons potentially affected:

There are one hundred three (103) residences (Land Use Category B), one (1) cemetery, two (2) active sport areas, one (1) medical facility, and two (2) places of worship (Land Use Category C), two (2) restaurants, and three (3) offices (Land Use Category E) abutting proposed WIS 23 for the right-of-way for the preservation plan. The remaining land uses abutting the right-of-way include one (1) maintenance facility, three (3) retail facilities and agricultural lands (Land Use Categories F and G).

2. Describe the types of construction equipment to be used on the project. Discuss the expected severity of noise levels including the frequency and duration of any anticipated high noise levels:

The proposed action is to officially map right of way, which involves no construction. There will be no noise impacts associated with the recordation of maps. However, the potential impacts of the future construction of the improvements maps were preliminarily analyzed and the results presented for informational purposes. In a future design phase, when construction is proposed, new noise studies would be conducted concurrent with the environmental review of the updated designs.

During the future construction phase, noise would be generated by construction equipment used to construct improvements. Typical construction equipment would include backhoes, dump trucks, graders, cranes, bulldozers, cement mixer trucks and paving equipment. The noise generated by this type of construction equipment will vary greatly, depending upon the equipment type and model, mode and duration of operation, and specific type of work effort; however, typical noise levels may occur in the 75 to 95 dBA range (at 50 feet). Other distance-typical noise level ranges are shown on **Table 1: Construction Noise/Distance Relationships**.

Variations in building setbacks and land use, local intensity of specific construction activities, and sequencing and timing of construction would result in varying degrees of exposure to construction noise and hence varying levels of resulting construction noise impacts. Adverse effects related to construction noise are anticipated to be of a localized, temporary, and transient nature.

3. Describe the construction stage noise abatement measures to minimize identified adverse noise effects. Check all that apply:

- WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply.
- WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply with the exception that the hours of operation requiring the engineer's written approval for operations will be changed to _____ P.M. until _____ A.M.
- Special construction stage noise abatement measures will be required. Describe:

No noise abatement measures are proposed at this time. During the future design phase, new noise studies would be conducted and the need for noise abatement measures will be reviewed and applied as required at that time.

**Table 1: Construction Noise/
Distance Relationships**

Distance from Construction Site (feet)	Range of Typical Noise Levels (dBA)¹
25	82 – 102
50	75 – 95
100	69 – 89
200	63 – 83
300	59 – 79
400	57 – 77
500	55 – 75
1000	49 – 69

¹ Point sources = 6 dBA reduction per doubling of distance

Source: FDM 23-40, Attachment 1.1

TRAFFIC NOISE EVALUATION

Factor Sheet D-3

Alternative West Segment: W2 North and South Central Segment: C4 East Segment: E4	Total Length of Center Line of Existing Roadway: (WIS 23) 10.2 miles Length of This Alternative: (Local Roads) W2 = 2.46 miles C4 = 3.19 miles E4 = 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Need for Sound Level Analysis:

Is the proposed action considered a Type I project or WisDOT Retrofit Project per FDM 23-10-1?

- No – Complete only Factor Sheet D-2, Construction Stage Sound Quality Evaluation.
- Yes – Complete Factor Sheet D-2, Construction Stage Sound Quality Evaluation, and the rest of this sheet.

The proposed action is planning and preservation action and not construction. This traffic noise evaluation is analyzing a future construction phase. Environmental review will be completed in the future on the planned improvements. This analysis is intended to provide adequate evaluation for the location of the planned improvements to be mapped. Factor Sheet D-2 has also been completed.

2. Traffic Data:

Indicate whether traffic volumes for sound prediction are different from the Design Hourly Volume (DHV) on Basic Sheet 6, Traffic Summary Matrix:

- No
- Yes – Indicate volumes and explain why they were used:

Automobiles	Veh/hr
Trucks	Veh/hr
Or Percentage (T)	%

3. Sound Level Analysis Technique

Identify and describe the noise analysis technique or program used to identify existing and future sound levels: (See attached receptor location map as Exhibit 13). A receptor location map must be included with this document.

Aerial photos and land use data of the entire study area were reviewed to select 80 representative noise receptors. Receptor locations are identified on Exhibit 1. The Federal Highway Administration's (FHWA) Traffic Noise Model v 2.5 (TNM[®]2.5) was used to model existing (2015) and future (2045) peak hour noise levels at the 80 representative noise receptors.

4. Sensitive Receptors

Identify sensitive receptors, e.g., schools, libraries, hospitals, residences, etc. potentially affected by traffic sound: (See attached receptor location map).

There are one hundred three (103) residences (Land Use Category B), one (1) cemetery, two (2) active sport areas, one (1) medical facility, and two (2) places of worship (Land Use Category C), two (2) restaurants, and three (3) offices (Land Use Category E) abutting the WIS 23 right-of-way for the preservation plan. The remaining land uses abutting the right-of-way include one (1) maintenance facility, three (3) retail facilities and agricultural lands (Land Use Categories F and G).

The future noise levels developed with TNM indicate that seven (7) residences would be exposed to L_{eq} noise levels that approach or exceed the Noise Level Criteria of 67 dBA. No receptors in the project study area would be exposed to an increase in sound levels of 15 dBA or more. The results of the TNM analysis are presented on Factor Sheet D-3, Page 3.

5. Noise Impacts

If this proposal is implemented will future sound levels produce a noise impact?

- No

- Yes - The impact will occur because:
- The Noise Level Criteria (NLC) is approached (1 dBA less than the NLC) or exceeded.
 - Existing sound levels will increase by 15 dBA or more.

6. Abatement

Will traffic noise abatement measures be implemented?

- Not applicable – Traffic noise impacts will not occur.
- No – Traffic noise abatement is not reasonable or feasible (explain why). In areas currently undeveloped, local units of government were notified of predicted sound levels for land use planning purposes. A copy of this written notification is included with this final environmental document.

Various methods were reviewed to mitigate the noise impact of the proposed WIS 23 right of way preservation plan. Among these were vertical and horizontal alignment shifts, restriction of truck traffic to specific times of the day, a total prohibition of truck traffic, the use of berms and the use of sound barriers.

Shifts in the alignment are not practical because of limited right-of-way and the need to terminate the project on existing alignment. Prohibition of truck traffic is not feasible for this project. Limited right-of-way also would not permit the construction of berms. Noise barriers, to be effective, must be solid with no gaps. Along WIS 23 there are seven (7) scattered residences (Receptor Locations N5, N10, N39, N50, N52, N72, and N80) that would be exposed to a design hour noise level that approaches or exceeds the 67 dBA L_{eq} NLC. It is impossible to construct a noise barrier for individual properties that meets the feasibility and reasonableness criteria of FDM 23 Noise.

In the undeveloped areas of the project the 66 dBA L_{eq} setback distance along WIS 23 would be 131 feet from County P to WIS 67, 145 feet from WIS 67 to WIS 57, and 179 feet from WIS 57 to WIS 32. This setback distance indicates that noise levels within this distance, measured perpendicular to the centerline of the nearest lane in either direction, is 66 dBA L_{eq} or greater. This setback distance was developed to assist local planning authorities in developing land use control over the remaining undeveloped lands along the project in order to prevent further development of incompatible land use.

Based on the study completed, mitigation of noise impacts for the Preferred Alternative is neither feasible nor reasonable.

The noise abatement criteria will be analyzed again as part of the environmental analysis and documentation for future projects.

- Yes – Traffic noise abatement has been determined to be feasible and reasonable. Describe any traffic noise abatement measures which are proposed to be implemented. Explain how it will be determined whether or not those measures will be implemented:

Receptor Location or Site Identification (See attached map)	Distance from C/L of Near Lane to Receptor in feet (ft.)	Number of Families or People Typical of this Receptor Site	Sound Level L_{eq}^1 (dBA)			Impact Evaluation		
			Noise Level Criteria ² (NLC)	Future Sound Level	Existing Sound Level	Difference in Future and Existing Sound Levels (Col. e minus Col. f)	Difference in Future Sound Levels and Noise Level Criteria (Col. e minus Col. d)	Impact ³ or No Impact
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
N1	224	Res (1)	67	61	60	1	-6	N
N2	225	Res (1)	67	61	61	0	-6	N
N3	177	Res (2)	67	64	63	1	-3	N
N4	156	Res (2)	67	64	64	0	-3	N
N5	131	Res (1)	67	66	65	1	-1	I
N6	366	Res (1)	67	57	56	1	-10	N
N7	430	Res (2)	67	55	55	0	-12	N
N8	387	Res (2)	67	57	56	1	-10	N
N9	306	Res (1)	67	58	57	1	-9	N
N10	115	Res (1)	67	68	67	1	1	I
N11	407	Res (1)	67	57	55	2	-10	N
N12	183	Res (1)	67	54	52	2	-13	N
N13	273	Cemetery	67	56	55	1	-11	N
N14	252	Res (1)	67	60	60	0	-7	N
N15	223	Res (3)	67	62	61	1	-5	N
N16	195	Res (2)	67	62	61	1	-5	N
N17	220	Res (3)	67	61	60	1	-6	N
N18	154	Res (3)	67	62	61	1	-5	N
N19	417	Res (1)	67	57	56	1	-10	N
N20	382	Res (4)	67	56	56	0	-11	N
N21	374	Res (3)	67	56	55	1	-11	N
N22	329	Res (4)	67	57	56	1	-10	N
N23	270	Place of Worship	67	58	57	1	-9	N
N24	193	Res (3)	67	54	53	1	-13	N
N25	418	Res (1)	67	59	59	0	-8	N
N26	374	Res (1)	67	57	57	0	-10	N
N27	248	Res (2)	67	61	61	0	-6	N
N28	397	Res (1)	67	55	55	0	-12	N
N29	682	Place of Worship	67	54	52	2	-13	N
N30	428	Res (1)	67	56	56	0	-11	N
N31	823	Res (6)	67	52	51	1	-15	N
N32	993	Res (10)	67	50	49	1	-17	N
N33	447	Res (1)	67	56	56	0	-11	N
N34	528	Res (1)	67	55	55	0	-12	N
N35	134	Office (1)	72	67	67	0	-5	N
N36	294	Res (1)	67	59	59	0	-8	N
N37	188	Medical Facility	67	63	63	0	-4	N
N38	241	Restaurant	72	58	57	1	-14	N

¹ Use whole numbers only.

² Insert the actual Noise Level Criteria from FDM 23-30, Table 2.1.

³ An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, **or**, future sound levels approach or exceed the Noise Level Criteria ("approach" is defined as 1 dB less than the Noise Level Criteria, therefore an impact occurs when Column (h) is -1 dB or greater). I = Impact, N = No Impact.

Receptor Location or Site Identification (See attached map)	Distance from C/L of Near Lane to Receptor in feet (ft.)	Number of Families or People Typical of this Receptor Site	Noise Level Criteria ⁴ (NLC)	Future Sound Level	Existing Sound Level	Difference in Future and Existing Sound Levels (Col. e minus Col. f)	Difference in Future Sound Levels and Noise Level Criteria (Col. e minus Col. d)	Impact ⁵ or No Impact
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
N39	149	Res (1)	67	67	64	3	0	I
N40	551	Res (2)	67	56	54	2	-11	N
N41	547	Res (1)	67	58	57	1	-9	N
N42	277	Retail Facility	--	60	59	1	--	N
N43	261	Res (2)	67	59	58	1	-8	N
N44	104	Office (1)	72	69	68	1	-3	N
N45	476	Res (1)	67	56	55	1	-11	N
N46	123	Maintenance Facility	--	68	68	0	--	N
N47	328	Res (1)	67	60	59	1	-7	N
N48	399	Res (1)	67	58	57	1	-9	N
N49	485	Active Sport Area	67	56	55	1	-11	N
N50	162	Res (1)	67	66	65	1	-1	I
N51	216	Res (1)	67	63	62	1	-4	N
N52	147	Res (1)	67	67	66	1	0	I
N53	334	Res (1)	67	59	58	1	-8	N
N54	369	Res (1)	67	59	58	1	-8	N
N55	126	Retail Facility	--	68	67	1	--	N
N56	161	Office (1)	72	64	64	0	-8	N
N57	553	Res (1)	67	58	56	2	-9	N
N58	379	Retail Facility	--	57	57	0	--	N
N59	195	Res (1)	67	61	61	0	-6	N
N60	242	Res (1)	67	59	59	0	-8	N
N61	259	Res (1)	67	60	60	0	-7	N
N62	324	Res (1)	67	58	58	0	-9	N
N63	457	Res (1)	67	54	54	0	-13	N
N64	475	Res (1)	67	56	55	1	-11	N
N65	320	Res (1)	67	59	59	0	-8	N
N66	404	Active Sport Area	67	57	56	1	-10	N
N67	446	Res (1)	67	54	54	0	-13	N
N68	212	Res (1)	67	53	52	1	-14	N
N69	171	Res (1)	67	59	58	1	-8	N
N70	119	Res (1)	67	51	43	8	-16	N
N71	260	Res (1)	67	60	58	2	-7	N
N72	108	Res (1)	67	68	66	2	1	I
N73	181	Res (1)	67	63	61	2	-4	N
N74	231	Res (1)	67	61	59	2	-6	N
N75	248	Res (1)	67	61	58	3	-6	N
N76	134	Res (1)	67	64	64	0	-3	N
N77	355	Restaurant	72	57	55	2	-15	N

⁴ Insert the actual Noise Level Criteria from FDM 23-30, Table 2.1.

⁵ An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, **or**, future sound levels approach or exceed the Noise Level Criteria ("approach" is defined as 1 dB less than the Noise Level Criteria, therefore an impact occurs when Column (h) is -1 dB or greater). I = Impact, N = No Impact.

Receptor Location or Site Identification (See attached map)	Distance from C/L of Near Lane to Receptor in feet (ft.)	Number of Families or People Typical of this Receptor Site	Noise Level Criteria ⁶ (NLC)	Future Sound Level	Existing Sound Level	Difference in Future and Existing Sound Levels (Col. e minus Col. f)	Difference in Future Sound Levels and Noise Level Criteria (Col. e minus Col. d)	Impact ⁷ or No Impact
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
N78	304	Res (1)	67	58	57	1	-9	N
N79	181	Res (1)	67	62	61	1	-5	N
N80	117	Res (1)	67	66	65	1	-1	I

⁶ Insert the actual Noise Level Criteria from FDM 23-30, Table 2.1.

⁷ An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, or, future sound levels approach or exceed the Noise Level Criteria (“approach” is defined as 1 dB less than the Noise Level Criteria, therefore an impact occurs when Column (h) is –1 dB or greater). I = Impact, N = No Impact.



**Division of Transportation
System Development**
Northeast Regional Office
944 Vanderperren Way
Green Bay, WI 54304

**Scott Walker, Governor
Dave Ross, Secretary**
Internet web site: www.wisconsindot.gov

Telephone: (920)492-5643
Facsimile (FAX): (920)492-5640
E-mail: ner.dtsd@dot.wi.gov

March 29, 2017

Daniel W. Hein, Chairman
Town of Sheboygan Falls
1512 N. 40th Street
Sheboygan, WI 53081

Subject: WisDOT Project I.D. 1440-19-00
WIS 23 Right of Way Official Mapping under Wis. Stats. Sec. 84.295
County P to WIS 32
Sheboygan County

Dear Chairman Hein,

To promote compatibility between future development and anticipated highway sound levels and to avoid future noise impacts the Wisconsin Department of Transportation notifies local officials of future traffic noise impacts on undeveloped lands not currently permitted.

An Environmental Report for the referenced project is being completed. The noise analysis prepared has identified that noise impacts would occur with completion of the proposed roadway project.

In an effort to prevent future traffic noise impacts on the currently undeveloped lands within your jurisdiction, the 66 dBA Leq setback distance along WIS 23 would be 400 feet. This setback distance indicates that noise levels within this distance, measured perpendicular to the centerline of the nearest lane in either direction, is 66 dBA Leq or greater.

This sound level information and setback distance should be used to ensure that the desired compatibility between potential future development and highway is achieved.

There are several types of administrative controls available, including the use of exclusive zoning, public ownership, and various forms of legal controls such as building codes, subdivision, regulations, health codes, etc. These and others are described in a publication produced by the Federal Highway Administration (FHWA) entitled "The Audible Landscape: A Manual for Highway Noise and Land Use". The sole purpose of this manual is to assist local government officials, developers, and designers in dealing with noise-sensitive land uses near highways.

The Department distributed copies of this booklet to nearly every municipality within the state. While this manual was originally developed in the 1970's, it is still an excellent tool to assist

local government officials by indicating ways in which local government officials can guide the development of undeveloped land in the vicinity of existing highways. This manual and other information about noise compatible land use planning can be found on the FHWA website at https://www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/audible_landscape/.

The official "Date of Public Knowledge" for consideration of noise impacts at the project level is defined in 23 CFR 772.5 as the date of approval of the Categorical Exclusion (CE), the Finding of No Significant Impact (FONSI), or the Record of Decision (ROD), as defined in 23 CFR part 771. Any new development permitted after this date in the project corridor is not eligible for consideration of noise abatement. Even though new development would not be eligible for noise abatement, noise impacts on the new development and the feasibility and reasonableness of abatement were evaluated for planning purposes.

Accompanying this letter for your information is Factor Sheet D-3. I have also enclosed a copy of the project site plan, which shows the noise modeling receptors used to determine the setback distances.

If you have any further questions in regard to this subject or regarding this project in general, please feel free to contact me at (920) 492-4125.

Sincerely,

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

Natasha Gwidt, P.E., WisDOT Project Manager

Enclosures

cc: Mike Helmrick, WisDOT Regional Environmental Coordinator
Jay Waldschmidt, WisDOT Central Office Noise Engineer
Connie White, AICP, Environmental Planner, HNTB Corporation
John R Jaeckel, P.E., Noise Consultant, HNTB Corporation



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March 29, 2017

Laura Raeder, Clerk Treasurer
Town of Plymouth
N6152 Riverview Road
Plymouth, WI 53073

Subject: WisDOT Project I.D. 1440-19-00
WIS 23 Right of Way Official Mapping under Wis. Stats. Sec. 84.295
County P to WIS 32
Sheboygan County

Dear Ms. Raeder,

To promote compatibility between future development and anticipated highway sound levels and to avoid future noise impacts the Wisconsin Department of Transportation notifies local officials of future traffic noise impacts on undeveloped lands not currently permitted.

An Environmental Report for the referenced project is being completed. The noise analysis prepared has identified that noise impacts would occur with completion of the proposed roadway project.

In an effort to prevent future traffic noise impacts on the currently undeveloped lands within your jurisdiction, the 66 dBA Leq setback distance along WIS 23 would be 400 feet. This setback distance indicates that noise levels within this distance, measured perpendicular to the centerline of the nearest lane in either direction, is 66 dBA Leq or greater.

This sound level information and setback distance should be used to ensure that the desired compatibility between potential future development and highway is achieved.

There are several types of administrative controls available, including the use of exclusive zoning, public ownership, and various forms of legal controls such as building codes, subdivision, regulations, health codes, etc. These and others are described in a publication produced by the Federal Highway Administration (FHWA) entitled "The Audible Landscape: A Manual for Highway Noise and Land Use". The sole purpose of this manual is to assist local government officials, developers, and designers in dealing with noise-sensitive land uses near highways.

The Department distributed copies of this booklet to nearly every municipality within the state. While this manual was originally developed in the 1970's, it is still an excellent tool to assist

local government officials by indicating ways in which local government officials can guide the development of undeveloped land in the vicinity of existing highways. This manual and other information about noise compatible land use planning can be found on the FHWA website at https://www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/audible_landscape/.

The official "Date of Public Knowledge" for consideration of noise impacts at the project level is defined in 23 CFR 772.5 as the date of approval of the Categorical Exclusion (CE), the Finding of No Significant Impact (FONSI), or the Record of Decision (ROD), as defined in 23 CFR part 771. Any new development permitted after this date in the project corridor is not eligible for consideration of noise abatement. Even though new development would not be eligible for noise abatement, noise impacts on the new development and the feasibility and reasonableness of abatement were evaluated for planning purposes.

Accompanying this letter for your information is Factor Sheet D-3. I have also enclosed a copy of the project site plan, which shows the noise modeling receptors used to determine the setback distances.

If you have any further questions in regard to this subject or regarding this project in general, please feel free to contact me at (920) 492-4125.

Sincerely,

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

Natasha Gwidt, P.E., WisDOT Project Manager

Enclosures

cc: Mike Helmrick, WisDOT Regional Environmental Coordinator
Jay Waldschmidt, WisDOT Central Office Noise Engineer
Connie White, AICP, Environmental Planner, HNTB Corporation
John R Jaeckel, P.E., Noise Consultant, HNTB Corporation

HAZARDOUS SUBSTANCES OR CONTAMINATION EVALUATION Wisconsin Department of Transportation

Factor Sheet D-4 (5/12)

Alternative West Segment: W2 North and South Central Segment: C4 East Segment: E4	Total Length of Center Line of Existing Roadway: (WIS 23) 10.2 miles Length of This Alternative: (Local Roads) W2=2.46 miles C4=3.19 miles E4: 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

1. Briefly describe the results of the Phase 1 Hazardous Materials Assessment for this alternative. Do not use property identifiers (owner name, address or business name):

Site Reference #	Land Use of Concern (Past or Present)	Contaminants of Concern	Phase 1 Recommendations	Phase 2 Recommended?
				Y/N
Site 40/41 (East Segment)	Former Gas Station	Petroleum/Metals	Phase 2 within proposed right of way	Y
Site A (Central Segment)	Ag. Coop.	Petroleum/Agricultural	Phase 2 within proposed right of way	Y
Site F (West Segment)	Former sand and gravel pit, currently truck repair and towing	Petroleum/Chlorinated/Metals/Glycols	Phase 1 HMA on the property grounds and if necessary a Phase 2 within proposed right of way	Unknown at this time

Attach additional sheets, if necessary
 Additional comments: _____

2. Were any parcels not included in the Phase 1 assessment?

- No
 Yes - How many: One (Site F)
 Why were they not reviewed?

This large parcel is private property. Observations were made from the right of way.

3. Have Phase 2 or 2.5 Assessments been completed? Discuss the results:

Site Reference #	Phase 2/2.5 Recommendations	Remediation Recommended?		Is WisDOT a Responsible Party?	
		Yes	No	Yes	No
N/A					

Phase 2 Subsurface Investigations will not be performed for the official mapping stage. Subsurface investigations would be done for future projects as part of the environmental analysis and documentation process.

4. Describe the results of any additional investigations performed by WisDOT or others: (Include the number of sites investigated, the level of investigation and results for each site):

None known at this time.

5. Describe proposed action to avoid hazardous materials contamination

This will be determined after the Phase 2 Subsurface Investigations are completed when the project is programmed for construction.

6. Describe the remediation and waste management practices to be included in the design for areas where contamination cannot be avoided (e.g., waste handling plan, remediation of contamination, design changes to minimize disturbances):

This will be determined after the Phase 2 Subsurface Investigations are completed when the project is programmed for construction.

7. List any parcels with known contamination, proposed for acquisition:

Site 40/41.

8. Bridge Projects Only: Has the structure been inspected for the presence of asbestos containing materials (ACMs)?

No - Explain:

The purpose and this project is to map right of way for future improvements. Mapping in itself will not result in disturbance of the structure. The bridge over the Sheboygan River may be removed with the realignment and construction of the proposed County TT interchange. Asbestos inspections would need to be performed prior to demolition and during future environmental review.

Yes:

Were regulated ACMs identified?

No

Yes:

State the standard language to be incorporated in the special provisions of the project:

STORMWATER EVALUATION

Factor Sheet D-5

Alternative West Segment: W2 North and South Central Segment: C4 East Segment: E4	Total Length of Center Line of Existing Roadway (WIS 23): 10.2 miles Length of This Alternative: (Local Roads) W2: 2.46 miles C4: 3.19 miles E4: 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. Indicate whether the affected area may cause a discharge or will discharge to the waters of the state (Trans 401.03).

Special consideration should be given to areas that are sensitive to water quality degradation. Provide specific recommendations on the level of protection needed.

- No water special natural resources are affected by the alternative.
- Yes - Water special natural resources exist in the project area.
 - River/stream
 - Wetland
 - Lake
 - Endangered species habitat
 - Other – Describe

2. Indicate whether circumstances exist in the project vicinity that require additional or special consideration, such as an increase in peak flow, total suspended solids (TSS) or water volume.

- No additional or special circumstances are present.
- Yes - Additional or special circumstances exist. Indicate all that are present.
 - Areas of groundwater discharge Areas of groundwater recharge
 - Stream relocations Overland flow/runoff
 - Long or steep cut or fill slopes High velocity flows
 - Cold water stream Impaired waterway
 - Large quantity flows Exceptional/outstanding resource waters
 - Increased backwater
 - Other - Describe any unique, innovative, or atypical stormwater management measures to be used to manage additional or special circumstances. _____

Further drainage analysis will be performed during the final design phase prior to construction. Increased peak flow, TSS or water volume will be analyzed in future phases of the project and storm water evaluation will be performed as part of future environmental analysis.

3. Describe the overall stormwater management strategy to minimize adverse effects and enhance beneficial effects.

Guidelines and regulations for storm water management include:

- WisDOT Facilities Development Manual, Chapter 10, Erosion Control and Storm Water Quality
- Wisconsin Administrative Code – Chapter TRANS 401, Construction and Erosion Control and Storm Water Management procedures for Department Actions
- WisDOT/DNR Cooperative Agreement Amendment – Memorandum of Understanding on Erosion Control and Storm Water Management

Storm water management strategies for future improvements to WIS 23 in Sheboygan County may include the following standard strategies:

Basic principles and best management practices will likely include:

- Limiting disturbance of natural drainage features and vegetation
- Prior to final design and construction, the preparation and implementation of an erosion and sediment control implementation plan consistent with the concepts and procedures outline in the Cooperative Agreement

between the Wisconsin Department of Natural Resources and the Wisconsin Department of Transportation and TRANS 401

- Protection of areas that provide important water quality benefits and/or that are susceptible to erosion and sediment loss
- Reduction of runoff velocities by running storm water in shallow flat-bottom swales, or by using weirs or other barriers to dissipate high velocities.

Geometric Design Features/Storm Water Facilities

- Vegetated grass strips or grass adjacent to the highway can remove a portion of suspended sediments.
- Infiltration trenches that consist of shallow ditches backfilled with stone, can remove a portion of suspended sediments.
- Wet detention ponds that temporarily store runoff and release it at a controlled rate could remove a portion of suspended sediments. Detention ponds located near the Sheboygan County Airport are required to meet FAA regulations. Storm water management facilities are anticipated to be required for the County TT Interchange
- Filtration basins and sand filters that are lined with filter media such as sand and gravel could remove a portion of suspended sediments.

4. Indicate how the stormwater management plan will be compatible with fulfilling Trans 401 requirements.

Sufficient engineering information and design development is not available to identify specific erosion control measures. Detailed erosion control plans will be developed in a future design phase and will be coordinated with DNR and other appropriate agencies and officials. If necessary, detention pond locations will be developed in future stages to meet compliance with regulations at the time of construction.

5. Identify the stormwater management measures to be utilized.

- | | |
|---|--|
| <input checked="" type="checkbox"/> Swale treatment (parallel to flow)
Trans 401.106(10) | <input type="checkbox"/> In-line storm sewer treatment, such as catch basins,
non-mechanical treatment systems. |
| <input type="checkbox"/> Vegetated filter strips
(perpendicular to flow) | <input checked="" type="checkbox"/> Detention/retention basins – Trans 401.106(6)(3) |
| <input type="checkbox"/> Constructed storm water wetlands | <input checked="" type="checkbox"/> Distancing outfalls from waterway edge |
| <input type="checkbox"/> Buffer areas – Trans 401.106(6) | <input type="checkbox"/> Infiltration – Trans 401.106(5) |
| | <input type="checkbox"/> Other |

Describe - _____

6. Indicate whether any Drainage District may be affected by the project.

- No - None identified
 Yes

Has initial coordination with a drainage board been completed?

- No - Explain _____
 Yes - Discuss results _____

7. Indicate whether the project is within WisDOT's Phase I or Phase II stormwater management areas.

Note: See Procedure 20-30-1, Figure 1, Attachment A4, the Cooperative Agreement between WisDOT and WisDNR. Contact Regional Stormwater/erosion Control Engineer if assistance is needed to complete the following:

- No - the project is outside of WisDOT's stormwater management area.
 Yes - The project affects one of the following and is regulated by a WPDES stormwater discharge permit, issued by the WisDNR:
- A WisDOT storm sewer system, located within a municipality with a population greater than 100,000.
 - A WisDOT storm sewer system located within the area of a notified owner of a municipal separate storm sewer system.
 - An urbanized area, as defined by the U.S. Census Bureau, NR216.02(3).
 - A municipal separate storm sewer system serving a population less than 10,000.

8. Has the effect on downstream properties been considered?

- No – Effects will be evaluated during the design phase of the project.
 Yes - Coordination is in process.

9. Are there any property acquisitions required for storm water management purposes?

- No – Future design may require property acquisition for storm water management purposes.
- Yes - - Complete the following:
 - Safety measures, such as fencing are not needed for potential conflicts with existing and expected surrounding land use.
 - Safety measures are needed for potential conflicts with existing and expected surrounding land use.
Describe:

EROSION CONTROL EVALUATION

Factor Sheet D-6

Alternative West Segment: W2 North and South Central Segment: C4 East Segment: E4	Total Length of Center Line of Existing Roadway: (WIS 23) 10.2 miles Length of This Alternative: (Local Roads) W2=2.46 miles C4=3.19 miles E4: 4.09 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. Give a brief description of existing and proposed slopes in the project area, both perpendicular and longitudinal to the project. Include both existing and proposed slope length, percent slope and soil types.

The existing slopes in the project area vary between 0% and 6.95% longitudinally. The slopes vary between 0% and 33% perpendicularly. Roadway perpendicular slopes will be maximum 4:1 slopes within the roadway cross section and may increase to 2.5:1 where beam guard is necessary. Longitudinal ditch slopes will generally be a maximum of 8%, however depending on topography these slopes could increase to 2.5:1 at isolated locations.

Soil types along WIS 23 as described by the USDA are as follows:

From County P to WIS 67 – The soils are well drained soils that have a subsoil of mainly clay loam or silty clay loam and are underlain by gravel sandy loam glacial till.

From WIS 67 to WIS 32 – The soils are well drained to somewhat poorly drained soils that have a subsoil of mainly clay loam or silty clay loam and are underlain by loam or silty clay loam glacial till.

2. Indicate all natural resources to be affected by the proposal that are sensitive to erosion, sedimentation, or waters of the state quality degradation and provide specific recommendations on the level of protection needed.

- No - there are no sensitive resources affected by the proposal.
- Yes - Sensitive resources exist in or adjacent to the area affected by the project.
 - River/stream
 - Lake
 - Wetland
 - Endangered species habitat
 - Other - Describe _____

3. Are there circumstances requiring additional or special consideration?

- No - Additional or special circumstances are not present.
- Yes - Additional or special circumstances exist. Indicate all that are present.
 - Areas of groundwater discharge
 - Overland flow/runoff
 - Long or steep cut or fill slopes
 - Areas of groundwater recharge (fractured bedrock, wetlands, streams)
 - Other - Describe any unique or atypical erosion control measures to be used to manage additional or special circumstances _____

4. Describe overall erosion control strategy to minimize adverse effects and/or enhance beneficial effects.

Standard WisDOT erosion control methods will be used during construction as per WisDOT Standard Specifications for Highway and Structure Construction. Construction site erosion and sediment control would be part of the project's design and construction as set forth in Wisconsin administrative Code – Chapter TRANS 401 and the WisDOT/DNR prior to construction.

5. Erosion control measures reached consensus with the appropriate authorities as indicated below:

- WisDNR
- County Land Conservation Department
- American Indian Tribe
- US Army Corps of Engineers

Note: All erosion control measures (i.e., the Erosion Control Plan) shall be coordinated through the WisDOT-WisDNR liaison process and TRANS 401 except when Tribal lands of American Indian Tribes are involved. WisDNR's concurrence is not forthcoming without an Erosion Control Plan. In addition, TRANS 401 requires the contractor to prepare an Erosion Control Implementation Plan (ECIP), which identifies timing and staging of the project's erosion control measures. The ECIP should be submitted to the WisDNR and to WisDOT 14 days prior to the preconstruction conference (Trans401.08(1)) and must be approved by WisDOT before implementation. On Tribal lands, coordination for 402 (erosion) concerns are either to be coordinated with the tribe affected or with the U.S. Environmental Protection Agency (EPA). EPA or the tribes have the 401 water quality responsibility on Trust lands. Describe how the Erosion Control/Storm Water Management Plan can be compatible.

Specific and detailed erosion control plans and details will be developed during a future design and construction phase of the project in accordance with the applicable standards at the time of future design and construction.

6. Identify the temporary and permanent erosion control measures to be utilized on the project. Consult the FDM, Chapter 10, and the Products Acceptability List (PAL).

- | | |
|---|---|
| <input checked="" type="checkbox"/> Minimize the amount of land exposed at one time | <input type="checkbox"/> Detention basin |
| <input checked="" type="checkbox"/> Temporary seeding | <input type="checkbox"/> Vegetative swales |
| <input checked="" type="checkbox"/> Silt fence | <input type="checkbox"/> Pave haul roads |
| <input checked="" type="checkbox"/> Ditch checks | <input checked="" type="checkbox"/> Dust abatement |
| <input checked="" type="checkbox"/> Erosion or turf reinforcement mat | <input checked="" type="checkbox"/> Rip rap |
| <input checked="" type="checkbox"/> Ditch or slope sodding | <input type="checkbox"/> Buffer strips |
| <input checked="" type="checkbox"/> Soil stabilizer | <input type="checkbox"/> Dewatering – Describe method |
| <input checked="" type="checkbox"/> Inlet protection | <input type="checkbox"/> Silt screen |
| <input type="checkbox"/> Turbidity barriers | <input type="checkbox"/> Temporary diversion channel |
| <input type="checkbox"/> Temporary settling basin | <input checked="" type="checkbox"/> Permanent seeding |
| <input checked="" type="checkbox"/> Mulching | |
| <input type="checkbox"/> Other - Describe _____ | |

All erosion control measures above are assumed to be part of a future design based on current project and standards knowledge. A specific erosion control plan will be developed as part of future design and construction development and may or may not include all of the above erosion control measures.